City of Medford

DEPARTMENT OF PUBLIC WORKS

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SEP 21 2005

September 13, 2005

Ref: 08776.00

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

Re: NPDES Phase II Permit Year 2 - Annual Report 2004-2005
Permit No. MA 041049
MA DEP Transmittal Number W-035578
Medford, Massachusetts

Dear Sir or Madam:

The City of Medford, Massachusetts is submitting the enclosed NPDES Small MS4 General Permit Annual Report to the Environmental Protection Agency (EPA) Region 1, with a copy to the Massachusetts Department of Environmental Protection. Vanasse Hangen Brustlin, Inc. (VHB) has assisted the City of Medford Public Works Department in the preparation of this report. As indicated in our letter of June 2, 2005 (and our telephone message updating our progress on August 16, 2005), the City underwent changes in departmental staff which resulted in the delay of this Annual Report. We thank you for your notification of August 11, 2005 and are pleased to submit the full Annual Report at this time.

Medford is an urban City, approximately five miles northwest of Boston, with a population of close to 55,000 residents. Various industrial and commercial uses occur within the City. The City's priorities for stormwater management include the elimination of geese droppings at Wright's Pond, the reduction of dog pet waste citywide and reduction of litter in high traffic areas, particularly around City Hall and the taxi stand in Medford Square. Medford's Five-Year Plan includes a focus on these priority areas. During the 2004/2005 Permit Year the City of Medford worked diligently on the preparation of Draft Ordinances to address the issues previously mentioned as well as Illicit Connections, Stormwater Management for Construction

Activities as well as Post Construction/Long Term Stormwater Management as required. Draft Ordinances have been completed and are currently undergoing final review by the City Council and Stormwater Advisory board. These will be presented to the City Council in the 2005/2006 Permit year.

The City continues to educate municipal employees and citizens relative to stormwater issues, specifically the awareness of proper animal waste control and illicit dumping. The City is pleased with the progress in the implementation of Year 2 Stormwater Management Practices and looks forward to greater progress in following years.

Very truly yours,

Brian W. Kerins
Deputy Commissioner of Public Works

CC: Paul Gere, Commissioner of Public Works
Bethany Eisenberg, VHB
MA DEP Division of Watershed Management

Municipality/Organization: City of Medford

EPA NPDES Permit Number: MA041049

MaDEP Transmittal Number: W- 035578

Annual Report Number & Reporting Period: No. 2: March 04-March 05

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Paul Gere Title: Commissioner of Public Works

Telephone #: 781-393-2476 Email: pgere@medford.org

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Brian W. Kerins

Printed Name: Brian Kerins

Title: Deputy Commissioner of Public Works

Date: September 13, 2005

Part II. Self-Assessment – City Of Medford NPDES Compliance

Part II.F. As described below, the City failed to submit an Annual Report on May 1st. The City Notified the EPA on June 2, 2005 of the failure to submit a completed Report and has filed this completed Report herein on August 29, 2005.

During the 2004-2005 permit year the City of Medford has expended considerable time, money, and effort towards drafting three new Ordinances. These include 1) Illicit Discharge, 2) Construction Site Stormwater Management, and 3) Post Construction Stormwater Management. Medford has exceeded its goals in terms of the level of detail included in these Ordinances as well as the level of money expended on private consultants to assist in their development and related follow-on activities. Coordination with most of the major City Departments including Fire and Police were required to come up with the comprehensive Ordinances and detailed corresponding regulations. Due to the high level of effort spent by City employees, as well as consultants and volunteers, on the ordinances, certain BMPs proposed for year 2 of the permit were not fully complied with. These BMPs are currently underway as priorities for the Year 3 permit term.

The BMPs that were modified or not completed during the 2004-2005 year are shown in the following Section (Part III) and Table II-A below. No BMPs were eliminated from the submitted plan. The extended time frames for those items not completed are due primarily to the lack of staff and changing staff in the Cities Departments as well as the high commitment to Ordinance development as described above.

Consistent with the findings produced in the Year 1 Annual report, only one maintenance BMP was revised in terms of measurable goals included in the original NOI. This is the catch basin cleaning goal of twice per year. As with the Year 1 program, the majority of the catch basins have been cleaned once this year and collection in catch basins do not indicate that a second cleaning is required. The City has determined through this self assessment that it is not currently deemed necessary to clean every single catch basin City-wide twice per year. If there are areas identified with excessive accumulation in following years a second cleaning will be proposed for such areas. It is proposed to evaluate the cleaning requirements via inspections and the data on quantities collected in these first two permit years in order to determine the Year 3 required cleaning schedule based on need. This is not considered a revision for the Year 2 Permit term as it was included as a revision to this measurable goal in the Year 1 Annual Report.

Those BMPs that have revisions are presented in Table 1 below in addition to their identification in Part II, the Summary of BMPs.

Part II – Table 1 – Revisions to Specific Measures for Permit Year 2

BMP ID #	BMP Description	Responsible Dept.	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activity for Permit Year 3
1D	Bilingual Education Information	DPW/ High School translator	Translate recycling pamphlet in Spanish and make available in DPW office	Translation of Pamphlet was completed. Will be printed and made available in Permit Year 3	
1D Revision	*Translation was completed, not yet printed*	*DPW/Environmental Agent*	*Print and distribute Pamphlet*	*Translated but not printed or distributed.*	*Print and Display Spanish Translated Recycling Pamphlet at DPW office and Town Hall information stands.*
1L	Pet Waste Article in Newspaper	DPW/Environmental Agent	Place one article in the paper Years 1,2 and 4	Delayed to Year 3	See below.
1L Revision	*Article was delayed because Ordinance describing fees for Pet Waste Pollution not yet not finalized & approved.*	*DPW/Environmental Agent*	*Year 2 article delayed to Year 3*	*See above.*	*Place Article in the Paper indicating new fines and ordinances relative to Pet Waste*
1M	Stormwater Video on Local Cable Channel	DPW/Local Cable Access Staff	City will buy a stormwater educational Video and Play on a regular basis the second year.	City obtained the Video from EPA	N/A
1M Revision	*The Video was obtained but the airing schedule was not worked out due to changes in Cable Access Staff and DPW Staff.*	*DPQ/Local Cable Access Staff*	*The EPA "After the Storm Video" was provided by VHB, the airing schedule will be prepared and implemented in Permit Year 3*	*See above.*	*The EPA "After the Storm Video will be played in Year 3 on a regular basis. (Is currently being aired)*
1O	Publicize fines for littering, illegal dumping and failure to pick up pet waste in newspaper.	DPW	Publish fines in paper once.	Discussed how to structure fines and who will enforce. Proposals are included in the draft Ordinances currently under review.	Determine what the final fines will be and structure for enforcement. When finalized will be published in the paper.
1O Revision	*Fines have not yet been determined as Ordinances are not Final yet.*	*Stormwater Advisory Committee*	*Publish fines in paper when Ordinances are approved and established.*	*See above.*	*See above.*

Part II – Table 1– Revisions to Specific Measures for Permit Year 2 (continued)

BMP ID #	BMP Description	Responsible Dept.	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activity for Permit Year 3
3B	Enforcement of Fines for Littering and Pet Waste	Police	More stringent enforcement of Fines for Littering and Pet Waste	Fines are proposed but aggressive enforcement is delayed until Ordinances are finalized.	Finalize and publicize fees and then implement stringent enforcement program with Police.
3B Revision	*Enforcement effort was put on hold until fines are finalized as ordinances*	*Police*	*See above.*	*See above.*	*See above.*
3C	Expand storm sewer map to include all outfalls.	DPW/Engineering	Expand existing map to include all outfalls by the end of Year 2.	City has purchased GPS equipment, and has had some training with new equipment.	See below.
3C Revision	*Expanded Map is not complete due to lack of DPW trained staff availability and finances.*	*DPW/Engineering*	*Revise date for completion and aim for expanded Mapping to be complete by Year 5.*	*Staff and financial constraints prohibited GPS location of outfalls.*	*Attempt to include in Annual Budget monies for completing some of the outfall mapping.*
6D	Employee Training	DPW/Engineering	Continue existing training; determine necessary personnel and topics; schedule training	Began preparing new training course.	Complete new stormwater training course.
6D Revision	*New Course preparation was placed on hold until after completion of the Draft Ordinances. New course will require all parts of the ordinances in the curriculum.*	*DPW/Engineering*	*See above.*	*Same as above, but delayed until Permit Year 3*	*See above. To be implemented in Year 3*

In terms of priority, the City has been focused on the Ordinances. The outfall mapping and inspections are currently the next priority with a focus on areas suspected of stormwater illicit discharges.

The majority of stormwater discharges in the City are to the Mystic and Malden Rivers which are both listed on the States 303(d) list as currently impacted in Category 5 (requiring a TMDL). The City is working diligently to identify potential sources of Bacteria at four outfalls discharging to the Mystic River and has engaged the Firm of Vanasse Hangen Brustlin, Inc. (VHB) to investigate potential sources of bacteria at these four outfalls. VHB is currently working with the City to form a plan for eliminating identified sources.

As stated in the March 2003 Notice of Intent submittal, according to information found at the U.S. Fish and Wildlife website, no endangered or threatened species, or critical habitat are located within the City of Medford limits. When all outfalls have been located in subsequent years, a follow up letter will be sent to the National Marine Fisheries Service for confirmation.

Additionally, according to the listing on the National Register of Historic Places website, there are numerous historic properties listed or eligible in Medford. Because the outfalls within the city have not been definitively located with the GPS equipment the information is still listed as pending per the Notice of Intent for this permit. Once all the locations have been identified, a letter will be sent to the Massachusetts Historical Commission to verify that stormwater discharge related activities will not result in an adverse effect on any archeological resources or historic properties of National Significance.

In terms of recharge, in highly urbanized areas such as Medford, recharge is generally not feasible. Small lots, underground utilities and potential impacts to basements and neighboring properties often prohibit this practice. Additionally, the City is not dependent on groundwater for its drinking water supply or to support extensive wetland systems. The City is at the end of the Mystic River watershed and is close to the Rivers that it discharges to and base flow to these rivers is not dependent on recharge in this area. However, the proposed Post Construction Ordinance to be adopted by the City will address recharge potential and promote good practices where feasible.

The City has been successful in educating municipal employees and engaging every department in the implementation of the Stormwater Management Plan as submitted. The level of understanding regarding stormwater pollution prevention amongst all departments, from Police to the City Tree Warden, is outstanding.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
1A	Recycling/household hazardous waste information on website.	DPW	Update website throughout year.	Website was updated to include dates for the 2004/2005permit year.	Continue to update website with event dates.
1B	Recycling/household hazardous waste information on pamphlet in DPW Office.	DPW	Make pamphlet available daily in the DPW Office.	Pamphlet is available in the DPW Office.	Continue to display pamphlet in DPW Office.
1C	Recycling/household hazardous waste information on pamphlet to be mailed.	DPW	Mail pamphlet to 75% of residents.	Pamphlet was mailed to approximately 18,000 residents.	Mail pamphlet for the 2005/2006 permit year.
1D	Bilingual Education Information	DPW/ High School translator	Translate recycling pamphlet in Spanish and make available in DPW office	Translation of Pamphlet was completed. Will be printed and made available in Permit Year 3	See below.
Revised	*Translation of template was completed, not yet printed or distributed.*	*DPW*	*Print and distribute Pamphlet*	*See above.*	*Print and Display Spanish Translated Recycling Pamphlet at DPW office and Town Hall information stands.*
1E	Arbor Day Talks at Medford School	DPW/Tree Warden	One talk will be given to one elementary school.	The Medford Tree Warden planted a tree at a Forest Park School. Educational information provided.	Medford Tree Warden will speak either at Earth Day event or at a local school.
1F	"No Dumping Allowed" Signs	DPW/Parks Department	Existing signs in parks.	Existing signs were maintained.	Existing signs will be maintained.
1G	"No Dogs or Animals Allowed" Signs	DPW/Parks Department	Existing signs in parks.	Existing signs were maintained.	Existing signs will be maintained.
1H	"Do not feed the Geese" Signs	DPW/Board of Health	Design and install one sign in permit Year 3	None required	Design and install 1 "Do not feed the Geese" sign with fines at Wrights pond in Permit Year 3
1I	"No Littering" signs	DPW/Parks	Design and Install "No Littering" signs in Permit Year 3	None required	Design and install a minimum of 1 "No Littering" signs with fines in high trash areas in City

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
1J	"No Household Trash" signs	DPW/Parks	Install City owned barrels that read "No household Trash"	None Required, however yellow signs for trash receptacles were placed in the City Square this year saying "No Household Trash"	Install barrels with "No Household Trash" signs in a minimum of 5 high traffic areas.
1K	Geese Dropping Article in Newspaper	DPW/Environmental Agent	Place one article in the paper Years 1, 3 and 5	None required for Year 2	Place Article in the Paper about Geese Droppings, include information on Fines
1L	Pet Waste Article in Newspaper	DPW/Environmental Agent	Place one article in the paper Years 1, 2 and 4	Delayed to Year 3	See below.
Revised	*Article was delayed because Ordinances describing fees for Pet Waste Pollution was not finalized & approved*	DPW/Environmental Agent	Same – delayed to year 3	See above.	Place Article in the Paper indicating new fines and ordinances relative to Pet Waste
1M	Stormwater Video on Local Cable Channel	DPW/Local Cable Access Staff	City will buy a stormwater educational video and play on a regular basis the second year.	City obtained the Video from EPA	N/A
Revised	*The Video was obtained but the airing schedule was not worked out due to changes in Cable Access Staff and DPW Staff.*	DPQ/Local Cable Access Staff	Play video in Year 3	The EPA "After the Storm Video" was provided by VHB, the airing schedule will be prepared and implemented in Permit Year 3	The EPA "After the Storm Video will be played in Year 3 on a regular basis. (currently being aired as of August 2005)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
1N	Stormwater Display	DPW/Library	Stormwater Display on effects of everyday life on stormwater in Library	None required.	Prepare display and place in Library for the year.
1O	Publicize Fines for littering, illegal dumping and failure to pick up pet waste in Newspaper	DPW	Publish fines in paper annually.	Discussed how to structure fines and who will enforce. Proposals are included in the draft Ordinances currently under review.	Determine what the final fines will be and structure for enforcement. When finalized will be published in the paper
Revised	*Fines have not yet been determined as Ordinances are not final yet.*	*Stormwater Advisory Committee*	*Publish fines in paper when Ordinances are approved and established.*	*See above.*	*See above.*
1P	Educate Local Businesses	DPW/Environment Agent	The city will educate local businesses with fleets and restaurants about good housekeeping for stormwater management.	None required. However, began collecting materials for Year 3 effort.	Prepare Educational materials for Businesses and hold some type of educational forum.
1Q	Assess stormwater information at existing City Events.	DPW	Assess one existing City event for opportunities to include stormwater information.	The City provided stormwater information at Arbor Day in October event, at the Energy and Environment Department Clean Energy Events on February 17, March 12 and April 27 of 2005.	Provide materials at Arbor Day and/or other City events to be determined for 2005/2006 permit year.

1a. Additions –

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Permit Year 3
Added	***ARBOR DAY IN OCTOBER 2004*** *Added a City –Wide Arbor Day Festival with a main focus on Stormwater Outreach and Education – effort included multiple environmental and educational organizations city wide with lead coordination by the Stormwater Committee and Environmental Agent*	DPW/Environment Agent/Tree Warden Participating groups included:: City of Medford Energy & Environment Office, Medford Conservation Commission, Medford-Brooks Estate Land Trust, Medford Family Network, Friends of the Mystic River, Medford Garden Club, Medford Arts Center, Inc., Medford Health Matters, Medford Bipeds, Mystic River Watershed Association, Medford Climate Action Network, Royall House Association, Medford Community Street Tree Advisory Group, Vanasse Hangen Brustlin, Inc.	Large Arbor Day Festival with large Stormwater education and outreach Component to be held in October 2004	A Town wide Arbor Day Festival was completed in October. Events focused on general awareness of the environment as well as specific information on trees and stormwater management. Multiple trees were planted and information was available from many organizations regarding stormwater.	N/A

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
2A	Oil-Based Paint Collection at DPW Yard	DPW/Recycling	DPW to accept Latex/oil-based paint from residents at DPW Yard once a month between May and October.	Residents were able to bring latex and oil-based paint to the DPW Yard. 295 participants Approx. 1,200 gallons latex Approx. 800 gallons oil	DPW will continue to collect these materials at the DPW Yard.
2B	Hazardous Waste Drop-off in Lexington	DPW/Recycling	Advertise the hazardous waste drop-off in Lexington in mailer and daily in DPW office as a pamphlet.	Advertised this service in the recycling/HHW pamphlet. Medford relies on the Town of Lexington to collect these materials at the Minuteman Hazardous Household Products Facility. 28 Vehicles participated from Medford.	Continue to advertise this service.
2C	Curbside Recycling	DPW/Recycling	DPW to pick up recyclables once every two weeks year-round.	The DPW picked up recyclables every other week for Year 2.	Continue to provide this service.
2D	Mercury Exchange	DPW/Recycling/Board of Health	DPW to accept mercury at the DPW Yard once/month May-October.	Residents were allowed to drop off mercury products at the DPW Yard on specified days.	Continue to provide this service.
2E	Nickel-Cadmium Recycling	DPW/Recycling	DPW to accept rechargeable nickel-cadmium batteries in the DPW office.	Residents were allowed to drop off batteries at the DPW office daily during regular office hours.	Continue to provide this service.
2F	Leaf and yard waste collection	DPW/Recycling	DPW to collect leaf and yard waste for 13 Weeks.	DPW collected leaf and yard waste for 13 weeks total. (see attached collection data information)	Continue to provide this service.
2G	Mystic River Cleanup	Friends of the Mystic River Watershed Association/DPW	DPW to collect trash volunteers pick up at the Mystic River Clean up Day.	DPW collected and disposed of trash picked up by volunteers at the Mystic River Clean up Day held October 16, 2004. Stormwater issues are a focus of the Mystic River Watershed program.	Continue to provide this service and support Mystic River Watershed Events.
2H	Public Meetings/Notification	DPW	Hold one public meeting to present stormwater program progress.	DPW held one public meeting on January.	Hold a public meeting in Year 3.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
2I	Stormwater Contact to receive and address public complaints or concerns	DPW	Establish a Stormwater Contact	The Energy and Environment Department was determined to be the Stormwater Contact, this was posted on the City Website.	Expand publicity regarding stormwater contact (paper, etc.)
2J	Earth Day Activity	DPW – Energy and Environment Department	Include a stormwater activity into Earth Day Events	The Energy and Environment Department included stormwater information at their "Earth Day" related Clean Energy events on April 27, March 12 and February 17 of 2005.	Continue to include stormwater activity/information at Earth Day and Clean Energy Events organized by the City

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
3A	Fines for Illegal Dumping	DPW	Establish fines for illegal dumping.	Proposed fines for illegal dumping have been reviewed. They are awaiting approval as part of the entire Ordinance development process.	Finalize fines for illegal dumping. Publicize with general ordinance information as revisions to existing ordinances.
3B	Enforcement of Fines for Littering and Pet Waste	Police	More stringent enforcement of Fines for Littering and Pet Waste	Fines are proposed but aggressive enforcement is delayed until Ordinances are finalized.	Finalize and publicize fees and then implement stringent enforcement program with Police.
Revision	*Enforcement effort put on hold until fines published.*	*Police*	*See above.*	*See above.*	*See above.*
3C	Expand storm sewer map to include all outfalls.	DPW/Engineering	Expand existing map to include all outfalls by the end of Year 2.	City has purchased GPS equipment, and has had some training on new equipment.	Locate and map a portion of the remaining outfalls.
Revision	*Expanded Map is not complete due to lack of DPW trained staff time and finances.*	*DPW/Engineering*	*Revise to aim for expanded Mapping to be complete by Year 5.*	*See above. Staff and financial constraints prohibited GPS location of outfalls.*	*Request Annual Budget monies for completing some of the outfall mapping in Year 3.*
3D	Illicit Discharge Ordinance	DPW/Engineering/ Building/Law	Draft new wording, educate public, municipal officials and private sector.	Draft Ordinance is completed and undergoing final review.	Distribute Draft Ordinance for Review and comment for one year.
3E	Detection and Elimination Plan	DPW/Engineering	Determine priority areas; visually screen outfalls during dry weather (Years 1 and 2)	City concentrated efforts on outfalls thought to have illicit discharges. Further investigations underway.	Determine additional priority areas and visually screen outfalls not completed in Years 1 & 2.
3F	Illicit Discharge Education for Public	DPW/Engineering	Included in Measure 1	Included In Measure 1	
3G	Illicit Discharge Education for Municipal Employees	DPW	Included in Measure 6	Included In Measure 6	

3a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
3D	*Hired outside consultant to help draft Ordinance.*	DPW/Engineering		Contracted Vanasse Hangen Brusltin, Inc. to assist in Ordinance Drafting.	Continue contracted assistance with VHB to finalize Ordinance.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
4A	Erosion and Sediment Control Ordinance "Construction Ordinance"	DPW/Engineering/ Building/Legal	Prepare Draft Ordinance.	Draft Ordinance is complete and under review.	Distribute Draft Ordinance for one year review and comment period.
4B	Erosion and Sediment Control BMPs/ Requirements	DPW/Engineering/ Building/Legal	Prepare Draft requirements to be referenced or incorporated into the Construction Ordinance.	Draft BMP criteria are defined and/or referenced in the Construction Ordinance,	Distribute Draft BMP criteria as part of Ordinance for one year review and comment period.
4C	Construction Site Plan Review Procedures	DPW/Engineering/ Building/Legal	Prepare draft Construction Site Plan Review Procedure to be included or referenced Ordinance.	Draft Construction Site Plan Review Procedures are included or referenced in the completed Draft Construction Ordinance.	Distribute Construction Site Plan Review Procedures as part of Ordinance for one year review and comment period.
4D	Construction Site Inspection and Enforcement Procedures	DPW/Engineering/ Building/Legal	Prepare draft Site Inspection and Enforcement Procedure to be included or referenced in Ordinance.	Draft Site Inspection and Enforcement Procedures are included or referenced in Draft Construction Ordinance.	Distribute Draft Site Inspection and Enforcement Procedure as part of the Ordinance for one year review and comment period.
4E	Stormwater Contact to receive and address public complaints or concerns	DPW	Expand publicity regarding stormwater contact (paper, etc.)	Stormwater contact was determined to be City Environment and Energy Department head. Name and department is provided on City website and to project proponents.	Continue expanding publicity regarding stormwater contact (paper, etc.)
4X	Minimum BMPs to Consider and thresholds	Stormwater Advisory Committee	Finalize City's decision on thresholds and minimum BMP requirements and include information in Draft Ordinances.	Finalized thresholds for Erosion and Sediment Controls and Post-Development requirements, as well as BMPs. This is included in the Draft Ordinances.	Distribute Draft criteria as part of Ordinances for one year review and comment period. Continue to review new and improved recommendations for thresholds and BMPs.

4a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
	Hired outside consultant	DPW/Engineering		Contracted VHB to prepare Draft Ordinance.	Additional assistance may be requested to finalize.

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
5A	Encouragement of "Better Site Design"	DPW/Engineering/ Building/Law	Formal document on better site design by the end of Year 5	Continued discussions on current better site design practices and evaluated more material for expanding practices through conservation commission, building dept. and Stormwater Ordinance.	Expand material City offers relative to better site design. Discuss incorporating information into site plan review process and Stormwater Manual.
5B	Post-Construction Runoff Ordinance	DPW/Engineering/ Building/Law	Prepare Draft Ordinance.	Draft ordinance was completed.	Distribute Draft Ordinance for one year review and comment period.
5C	Choose Structural and Non-Structural BMPs	DPW/Engineering	Prepare Draft Ordinance.	Proposed requirements are completed and included in Draft Ordinance.	Continue to refine information to be included in a Stormwater Manual.
5D	Procedures for Long-Term Operation and Maintenance (O&M) Plans	DPW/Engineering	Prepare Draft Ordinance.	Procedures for Long term O&M Plans are defined in the Draft Ordinance.	Distribute Draft Ordinance for one year review and comment period.
5E	Procedures for Implementation of Structural BMPs	DPW/Engineering	Prepare draft procedures to include in Ordinance.	Proposed procedures for implementation are included in the completed Ordinance.	Distribute Draft Ordinance for one year review and comment period.

5a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2	Planned Activities – Permit Year #
5A	Encouraged use of drywells and water quality treatment measures on new development projects.	DPW/ Engineering	Promote Better Site Design	Requested and achieved inclusion of drywells for residential roof drains on the Gibson Street Development. Requested and achieved water quality units on new development projects, higher level of review for stormwater management in place even though Ordinances are not finalized.	Continue to request and evaluate Better Site practices for inclusion in the City's Stormwater Management Recommendations and Requirements to be finalized with the Stormwater Ordinances.
	Hire outside consultant to help prepare ordinance.	DPW/Engineering		Contracted Vanasse Hangen Brusltin, Inc. to assist in Ordinance development.	

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
6A	Regular Street Sweeping	DPW/Highway	Sweep main Streets year-round; Sweep all streets and municipal lots twice per year.	DPW swept all streets twice in Year 2, and swept main streets throughout the year, some areas are swept everyday as sweepers are on the road every dry day. Also sweep at construction sites and special events and kept close track of location and volumes on new Street Sweeping logs.	Continue existing sweeping schedule and using street sweeping logs to track volumes.
6B	Regular Catch Basin Cleaning	DPW/Highway	Cleaned catch basins once per year as stated in the revisions for the 2003/2004 Annual Report.	The catch basin cleaning information for the 2004/2005 was collected using the new procedure with catch basin collection forms. The tracking of volumes and cost is now possible	Evaluate two years of catch basin cleaning information to determine if more frequent cleaning in specific areas is required.
6C	SPCC Plan	DPW/Highway	Implement SPCC Plan at DPW Yard	SPCC Plan implemented at DPW yard.	Continue to follow procedures in SPCC Plan.
6D	Employee Training	DPW/Engineering	Continue existing training; determine necessary personnel and topics; schedule training	Began preparing new training course.	Complete new stormwater training course.
Revised	New Course preparation was delayed until Ordinances finalized.	DPW/Engineering	See above,	See above, but delayed until Permit Year 3	See above. To be implemented in Year 3

6E	Municipal O&M	DPW/Highway/ Parks/ Engineering	Develop Draft BMPs for Pollution Source Reduction/Elimination from Municipal Activities including waste disposal procedures	The city cut back on fertilization on al fields and no longer use weed killers on infields. Hired students to manually pull weeds on baseball fields.	Develop Draft Maintenance Activities and Schedules and Long-Term Inspection Procedures for Structural and Non-Structural BMPs
6F	SWPPP for Municipal Yard	DPW/Highway	Implement SWPPP at DPW yard.	SWPPP implemented at DPW yard.	Continue to follow procedures in SWPPP.
6G	SWPPP for Oak Grove Cemetery	DPW/Cemetery Division	Implement SWPPP at Oak Grove Cemetery.	SWPPP implemented at Oak Grove Cemetery.	Continue to follow procedures in SWPPP.

6a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) Permit Year 2	Planned Activities Permit Year 3
	Geese Maintenance Contract	DPW/Engineering	Reduce permanent geese populations near water bodies.	Contracted an outside vendor with dogs to control geese Wrights pond, Play stead Park, Oak Grove Cemetery and Hormel Stadium. Use the dogs from early March before the nesting season through October.	Continue with Geese Maintenance Control Contract

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) – Not Applicable

The Mystic River and Malden River are in Category 5, requiring TMDL but with none approved to Date

8. BMPs General

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2	Planned Activities – Permit Year 3
	Monitoring	DPW	Evaluation of program compliance	Records were kept of activities conducted for program compliance. Submission of Annual Report	Continue monitoring.
	Annual Report	DPW	Submit Annual Report to EPA	Submitted Annual Report	Submit Annual Report May 1, 2006
Revised	*Annual Report submitted late due to changes in staff at DPW office.*	*See above.*	*See above.*	*See above.*	*See above.*
	Annual Public Meeting	DPW	Hold One Public Meeting	DPW held a public meeting.	Hold one public meeting.
	Recordkeeping	DPW	Keep records of activities conducted for program compliance for 5 years.	Records were kept of activities conducted for program compliance.	Continue recordkeeping.

Part IV. Summary of Information Collected and Analyzed

The City of Medford keeps records of operation and maintenance activities, such as catch basin cleaning and street sweeping. A summary of these records are included on the attached Tables provided. Public education materials collected, developed or distributed during Permit Year 2 are also attached. A summary of materials collected from yards and streets is as follows.

The City collected 50 loads of street sweepings at $190 per load ($9,500 total) between February and March 2005. This includes a mix of debris, leaves and litter.

The City collected 3,803 cubic yards of leaves and 3,720 cubic yards were mulched. The City also collected 1,082 tons of yard waste between April and November.

The City Cleaned 1,272 catch basins for a total cost of, $25,440. (Approximately $20 dollars per basin)

Only 252 cubic yards of solids were removed from the 1,272 basins.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	($)	Not known at this time.

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	Not Known
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes – Mystic River
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	8
▪ community participation	(%)	28 cars at Lexington for Has Waste Collection –
▪ material collected	(tons or gal)	Paint collected in Medford 295 participants 1,200 gals. Latex 800 gals. Oil
School curricula implemented	(y/n)	No

Legal/Regulatory

	In Place before Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination			X	
▪ Erosion & Sediment Control			X	
▪ Post-Development Stormwater Management			X	
Accompanying Regulation Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination			X	
▪ Erosion & Sediment Control			X	
▪ Post-Development Stormwater Management			X	

Mapping and Illicit Discharges

Outfall mapping complete	(%)	--
Estimated or actual number of outfalls	(#)	12
System-Wide mapping complete	(%)	--
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	---
▪ GIS	(%)	10
Outfalls inspected/screened	(# or %)	--
Illicit discharges identified	(#)	--
Illicit connections removed	(#) (est. gpd)	---
% of population on sewer	(%)	---
% of population on septic systems	(%)	---

Construction

Number of construction starts (>1-acre)	(#)	--
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	---
Site inspections completed	(# or %)	----
Tickets/Stop work orders issued	(# or %)	----
Fines collected	(# and $)	----
Complaints/concerns received from public	(#)	----

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	----
Site inspections completed	(# or %)	----
Estimated volume of stormwater recharged	(gpy)	----
		--

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	2
Total number of structures cleaned	(#)	1,272
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	252 c.y catch basins
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	($)	$25,440

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	Daily or weekly
Qty. of sand/debris collected by sweeping	(lbs. or tons)	50 loads
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	($)	9,500
Vacuum street sweepers purchased/leased	(#)	N/A
Vacuum street sweepers specified in contracts	(y/n)	N/A

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	90
▪ Herbicides	(lbs. or %)	100
▪ Pesticides	(lbs. or %)	90

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	No
Automatic or Zero-velocity spreaders used	(y/n)	No
Estimated net reduction in typical year salt application	(lbs. or %)	No
Salt pile(s) covered in storage shed(s)	(y/n)	No
Storage shed(s) in design or under construction	(y/n)	Yes

Attachments

- Public Education Information

■ Public Education Information

City of Medford

Energy and Environment Office
City Hall Room 300
Medford, MA 02155
P: 781-393-2137 F: 781-393-2477
TTY: 781-393-2516

October 18, 2004

Mrs. Nelida Lepore
Language Dept
Medford High School
489 Winthrop Street
Medford, MA 02155

Re: Spanish 5 Class Translation

Nelida:

Please extend my thanks to your Spanish 5 class from school year 2003-2004 for the fantastic work they did for the City of Medford. By translating the detailed recycling pamphlet that the City offers, your students not only learned of the importance of recycling, but have allowed the City to educate our Spanish speaking population on the laws and best practices related to recycling and household hazardous waste. This translation is an important part of the City of Medford's Stormwater Management Program, as required by the United States Environmental Protection Agency.

The quality of the students' work is excellent and I hope that my office can work with your language classes again in the future. On behalf of Mayor Michael J. McGlynn and the whole City please thank your students for their hard work.

Sincerely,

Kim Lundgren
Kim Lundgren
Environmental Agent

Lugar de Dejar los Reciclajes

Lugar de dejar la pintura
Pinturas de base petroleo o de látex se pueden dejar SOLAMENTE en el Cobertizo de Pintura en "City Yard" en la calle James (fuera de Mystic Ave., cerca de la estación de bomberos) de 9:00 de la mañana – 12:00 de la tarde los siguientes sábados: 24 de abril, 22 de mayo, 19 de junio, 17 de julio, 21 de agosto, 18 de septiembre, y 16 de octubre. Por favor fíjense: Hay un límite de cinco galones por persona para dejar. Si hay menos de un cuarto de lítro de pintura, quite la tapa, seque al aire libre, y tire la caja ó use arena higiénica de gatos/que se seca rápidamente para cubrir ¼ de la pintura. Los recipientes VACIOS pueden ser reciclados.

Pilas (Baterias) de Níquel Cadmio y Teléfonos Celulares
Pilas recargables de Ni-Cad pueden ser recicladas en la oficina de DPW en el salón 304 de la alcaldía (City Hall). Estas pilas frecuentemente se encuentran en cámaras de video, teléfonos inalámbricos y celulares, etc.

Mercurio
Aparatos pequeños conteniendo mercurio serán recogidos los mismos días que el Cobertizo de Pintura (vea arriba). Aparatos pequeños incluyen: termómetros, máquinas de presión de sangre, y termostatos.

Guías de la Basura

- Para garantizar recogida, la basura debe esar afuera en la esquina antes de las 7:30 de la mañana en su día de basura.
- La recogida de basura será RETRASADA UN DÍA durante una semana de festejo.
- Materiales de contrucción no serán recogidos; por ejemplo: puertas, ventanas, guijaros, tinas, fregaderos, lavamanos, inodoros, paneles, madera 2x4, llantas, setos, tocones, etc. Por favor llame a un transportista privado para estos materiales.
- Ningun desperdicio/material peligroso. El lugar más cercano para productos peligrosos del hogar está localizado en las avenidas Lexington y Hartwell (Llame al DPW para el horario y los detalles) 393-2419.
- Tanques de propano de parillas de gas pueden ser traídos a "BJ's Wholesale Club" por un precio bajo.
- Ramas pequeñas amarradas en bultos de 3' son aceptados en semanas de la recogida de desperdicio del patio SOLAMENTE.
- Muebles (por ejemplo: camas, mesas, sillas, escritorios, etc.) serán recogidos al bordillo sin costo.
- Alfombras tienen que estar en sus propios receptáculos, por ejemplo cubos metales de basura o un recipiente tipo Rubbermaid.

Esto fue impreso con tinta de base vegetal sobre papel reciclado hecho por 60% de material reciclado por el consumidor, diseñado por D. Beston.

2004 Horario de Reciclar

Semana de cubos verdes Semana de cubos azules
Semana de la colección de las hojas Día de fiesta Día de la recogida de pintura

Enero Febrero Marzo Abril Mayo Junio Julio Agosto Septiembre Octubre Noviembre Diciembre

D L M M J V S

<u>Como Usar Este Horario</u> * Hay 2 rutas en Medford

- Cubos azules serán recogidos en su día regular de la basura en las semanas sombreadas arriba.
- Cubos verdes serán recogidos en su día regular de basura en las semanas circuladas arriba.
- Reciclando es mandatorio* Capitulo 39A Revisado Decreto-ley de la Ciudad de Medford requiere separación y recogida de reciclajes.
- Las semanas de la recogida de hojas y desperdicios del patio son indicadas con este simbolo.
- Días de reciclaje de la pintura son los sabados de caja verde (vea la página 4 para los detalles).
- Por favor dejen los cubos de reciclaje si se muda, los cubos son la propiedad de la Ciudad de Medford.
- Cualquier preguntas con respeto a reciclaje o basura, por favor llame a 781-393-2419.

Que va en el cubo de Reciclaje	Cómo Prepararlo
Se recicla todo	Preparación
Vidrio Blancos, de colores, todos los tamaños.	Enjuagarlos, quite las tapas, las etiquetas están bien.
Latas de estaños Latas de estaño en todos tamaños, latas de acero en todos tamaños.	Quite todas las tapas, lávelas, los etiquetas están bien.
Aluminio Latas de aluminio, platos de pastel, bandejas, papel de aluminio, tostadores, latas de comida de animales.	Laven las latas y pónganlas en el cubo.
Plástico Todos los plasticos marcados #1 (PETE), #2 (HDPE), #3, #4, #5, y #7.	Laven los plásticos y pónganlos en el cubo (aplasten todos los plásticos).
Periódicos y Revistas Todos los periódicos y encartes, revistas y catálogos.	Pónganlos en bolsas de papél o amarelos en bultos y pónganlos al lado del cubo de reciclaje.
Cartón y Papel Todos tipos de papel , guias telefónicas, sobres, cartón, cajas y papel brillante.	Igual que arriba. Aplaste las cajas.

No Se Aceptán

Bolsas plásticas que no están marcadas con las flechas siguiéndose, cristalería, bombillas, vidrio de ventanas, espejos, latas de espray, latas de aceite de motor, marcos de ventanas, apartaderos de casa, cubos quimicos.

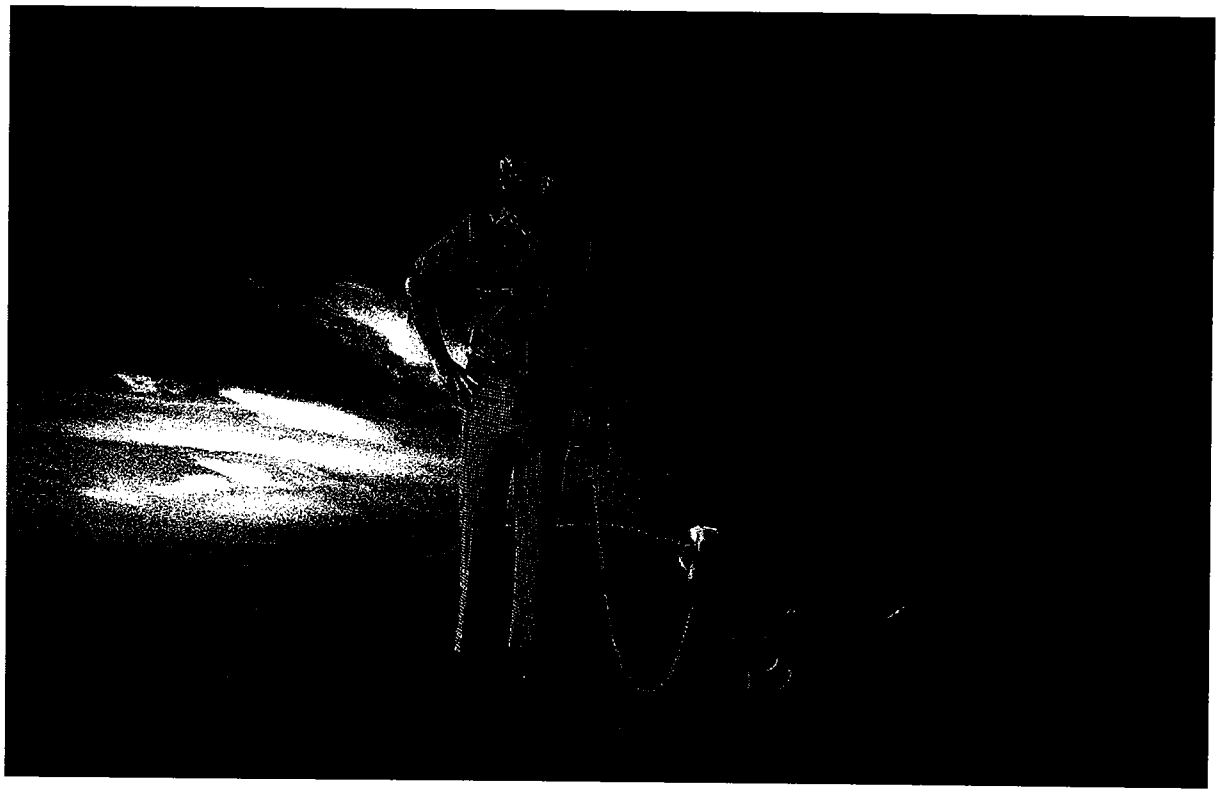
1. Por favor pongan todo el vidrio, aluminio, latas de acero, en su cubo.
2. Pongan todos los periódicos, papel, cartón (aplastados) revistas y catálogos, al lado del cubo de reciclaje en bolsas de papel o amaradas en bultos.

Colección de grama y hojas del 2004
En 2004, habrá 13 semanas de recogida de grama y hojas empezando en la primavera. Las recojidas solamente serán hechas en semanas marcadas con una hoja (vea el calendario).

- Por favor NO pongan hojas/grama (basura del patio) afuera en las semanas que no esten marcadas en el calendario.
- Basura del patio deben ser puestas en BOLSAS DE PAPÉL DE HOJAS, o en BARRILES ABIERTOS. Basura del patio en bolsas plásticas, NO SERAN RECOGIDAS.
- No mezclen basura y hojas.
- Las hojas se pueden mezclar con la grama.
- No se acepta tierra o piedras/rocas.
- Recortés de arbustos y pequeños palos están bien.

3. Pongan los reciclables afuera el mismo día que la basura (los dos antes de las 7:00 de al mañana) durante las semanas marcadas en el calendario. Por favor sigan el horario para su color de cubo (azul o verde).
4. El Centro de Dejar esta localizado en el patio de la cuidad (City Yard) en 21 James Street y estó abierto para los residentes para reciclar Lunes-Sabado 7-4.

When your pet goes on the lawn
Remember
it doesn't *just* go on the lawn.



When our pets leave those little surprises, rain can wash pet waste and bacteria into our storm drains that can pollute our waterways. So what to do? Simple! Dispose of it properly. Then that little surprise gets treated like it should.

Massachusetts Department of Environmental Protection

Clean water is important to all of us.

It's up to all of us to make it happen. In recent years, sources of water pollution like industrial wastes from factories have been greatly reduced. Now, more than 60 percent of water pollution comes from things like cars leaking oil, fertilizers from farms and gardens, and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too—and that adds up to a pollution solution!

Why do we need clean water?

Having clean water is of primary importance for our health and economy. Clean water provides recreation, commercial opportunities, fish habitat, drinking water, and adds beauty to our landscape. All of us benefit from clean water—and all of us have a role in getting and keeping our lakes, rivers, streams, marine, and ground waters clean.

What's the problem with pet waste?

It's a health risk to pets and people, especially children. It's a nuisance in our neighborhoods. Pet waste is full of bacteria that can make people sick. If it's washed into the storm drain and ends up in a lake, stream, or marine water, the bacteria ends up in shellfish. People who eat those shellfish can get very sick. The waste produced by cats and dogs in the Charles River Watershed adds up to nearly 3 tons per day! Unless people take care of it, the waste enters our water with no treatment.

MDC
617/727-5114

617/626-1540

EPA New England
617/918-1111

Massachusetts Department of Environmental Protection
617/292-5500

CZM
617/626-1250

MDFA
617/626-1700

Massachusetts Department of Environmental Management
617/626-1395

Communities Connected by Water
Massachusetts Watershed Initiative
617/626-1000

MassWildlife

Living With Wildlife

Canada Geese in Massachusetts

Photo © by Bill Byrne

Perhaps no sound more clearly evokes an image of wildness than the honking of migrating geese. Canada geese have passed through Massachusetts on their journeys to and from their arctic breeding grounds for centuries. Prior to the 1930s, it was unusual for geese to nest here, yet today in Massachusetts you can find Canada geese any time of the year. In fact, in some areas, people feel that there are too many geese! Why the change?

Description: Canada geese are large birds, averaging 10-14 pounds. Among waterfowl (ducks, geese & swans) of North America, Canada geese are second only to swans in size. Their long black neck and white cheek markings are particularly distinctive.

Life History: The Canada goose is a grazer. Geese form permanent pair bonds, but if one bird dies, the other will seek a new mate in the next breeding season. Most Canada geese don't begin nesting until they are three years old. Adult females lay 4-6 eggs in a clutch. If the clutch is destroyed, geese generally don't re-nest, but with two large birds guarding a nest, the chances of success are good. Usually by the time the young are 4-6 weeks old, the broods begin gathering in large flocks. Non-breeders and yearlings form separate flocks. By fall they all gather into one large flock for the winter.

There are two different populations of Canada geese in Massachusetts. The first is the migratory population which passes through in the spring and fall. Massachusetts is one of many resting areas for these migrating birds. The second is the resident population: descendants of captive geese used by waterfowl hunters. When live decoys were outlawed in the 1930s, many captive birds were liberated. With no pattern of migration, these geese began nesting. Lawns at houses, golf courses and mowed parks, well-watered, fertilized and bordering water, provided an excellent source of food. In suburban areas, there were few predators. The habitat for grazers was perfect. In the 1960s and early '70s a "translocation" project carried out by MassWildlife involved moving birds from the coast into central and western Massachusetts to the applause of both hunters and non-hunters. No one imagined the population explosion which followed.

With the above factors and town-imposed restrictions on hunting, resident goose flocks grew. In 1983, MassWildlife biologists estimated 10-12,000 of the geese were probably year-round residents. By 1997, surveys estimated 38,000 geese statewide. As goose numbers increased, so did problems, especially with goose droppings (poop). Canada geese produce from a half pound to a pound and half of droppings per day. Now geese are on golf courses, in gardens, over shellfish beds, on lawns, beaches, water supplies and cranberry bogs. What can be done?

PREVENTING GOOSE GRIEF

Here are a few suggestions to prevent goose grief. Keep in mind that *persistence* and a *combination of tactics* will keep geese from becoming pests:

DON'T FEED GEESE — Geese (and ducks) concentrate wherever people feed them. Feeding encourages birds to stay in one place and build up flock sizes the habitat can't support. Water quality may suffer. Feeding makes geese less wary of people. It is in the birds' best interest to stop providing them with food.

SCARE TACTICS — Putting out flags, tying aluminum pie plates along strings, using scarecrows all may help keep geese away from an area until they learn these objects pose no threat. Full bodied swan or coyote decoys sometimes work because geese perceive the decoys as threats. It's important to move decoys periodically or the geese will realize the decoys aren't real. For an active approach, try walking up to the birds then flapping a tablecloth. Trained dogs are especially effective. Loud noises may also work, but geese can adapt to noise.

BARRIERS — Geese walk to their feeding sites from water, and will rarely fly over a fence, especially during the molting period (summer) when the birds are flightless. A 3-foot chicken wire fence is an effective barrier. Geese like to be able to see around them, therefore, planting a hedge or leaving a wide swatch of uncut weeds between water and mowed grass creates a natural, low maintenance barrier.

HUNTING — The problem is not the presence of geese but the number of birds. Even when geese are discouraged by the above tactics, they still move elsewhere, bringing problems to other areas. To achieve a reasonable comfort level for both geese and people, the number of geese must be reduced. Geese have been hunted for centuries and their tasty meat is prized. Timing of hunting seasons, length, number of birds that can be taken, and hunting methods are strictly regulated. Some municipal ordinances effectively prohibit hunting, inadvertently creating "sanctuaries" that allow buildup of flocks. In 1995, the Massachusetts Fisheries & Wildlife Board instituted special "early" and "late" goose seasons designed specifically to reduce only the resident goose population. Recent studies indicate that for populations to be controlled, at least 30-35% of the birds need to be harvested annually. Currently the hunting harvest is at 25%.

Creative solutions allowing for hunting geese in season include: golf clubs and race tracks inviting waterfowlers on to their grounds at designated hours; towns networking with sportsmen's clubs to find waterfowl hunters to hunt municipal properties and reservoirs within certain guidelines; and landowners opening their lands to hunters willing to abide by any restrictions the landowner may impose.

Canada geese are important and valuable birds in Massachusetts. They are classified as waterfowl species for which a regulated hunting season and management program have been established. If you are experiencing problems with geese or have any question regarding them, contact your nearest MassWildlife District Office. Further information on geese and other wildlife is also available on our website ***www.masswildlife.org***.

(6/04)

For more information contact *MassWildlife* at:

Western Wildlife District, Pittsfield: (413) 447-9789

Connecticut Valley Wildlife Dist., Belchertown: (413) 323-7632

Central Wildlife District, West Boylston: (508) 835-3607

Northeast Wildlife District, Acton: (978) 263-4347

Southeast Wildlife District, Bourne: (508) 759-3406

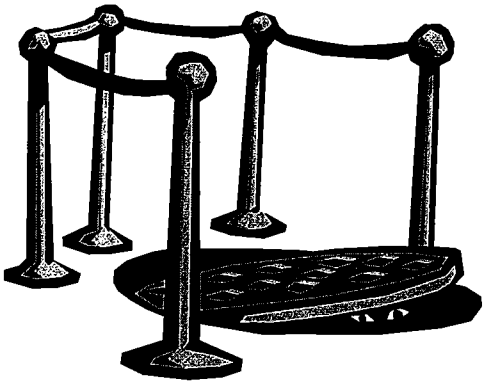
or visit our website at **www.masswildlife.org**

MassWildlife **"Balancing the needs of wildlife with the needs of people."**

HELP STOP POLLUTION FROM ENDING UP IN MEDFORD'S RIVERS!!!!

Do you know the difference between a catchbasin and a sewer??? There is a difference!!!

This is a sewer manhole



DRAFT

The water waste from your home goes through the local sewer system and ties into the MWRA system and ends up at Deer Island to be treated

This is a catchbasin

Did you know it is illegal to dump ANYTHING down a catchbasin, that includes oil and petroleum products!!!

Anything that ends up in this catchbasin ends up in one of the streams and rivers of our City-usually with NO TREATMENT AT ALL! That is in direct violation of the Federal Clean Water Act and will soon be illegal locally because of upcoming new stormwater ordinances.

DO NOT DUMP IN CATCHBASINS!!!! YOU ARE POLLUTING THE MYSTIC RIVER, THE MALDEN RIVER, and their tributaries!!

■ Arbor Day Information

Special Thanks to:

- Bartlett Consolidated, Inc.
- Bethany Eisenberg & Colleen Collins (VHB)
- Boston Tree Preservation
- City of Medford Department of Public Works
- Dan Bybell
- Massachusetts Department of Conservation & Recreation
- Royall House Association
- Trader Joe's of Arlington
- Wild Oats of Medford
- Wilson Farm

TREE CITY USA.

Agenda

12:00	Welcome & Dedication Mayor McGlynn
12:15	Planting of Trees* Along Mystic River, near parking lot
12:30	Live Entertainment Crystal Pan Jammers
1:00	Dan the Magician walking around event
2:00	Scavenger Hunt at Boy Scout table
2:30	Who wants to be a Treellionaire GAME
2:45	Raffles

* Trees generously provided by Bartlett Consolidated, Inc.

Medford's Arbor Day Festival

October 2, 2004

12-3pm

Condon Shell

Participating Organizations

1 City of Medford Energy & Environment Office
Medford's Urban Forestry Calendar: $8 each, $5 for seniors; Information on Tree City USA

2 Vanasse Hangen Brustlin, Inc.
Trees and Stormwater Issues
Face Painting

3 Medford Garden Club
Get your FREE Tree Seedlings

4 Royall House Association
Historical Significance and Heritage Trees

5 Mystic River Watershed Association
Trees and Water Quality

6 Friends of the Mystic River
Knotweed Removal Project and Fall Cleanup

7 Medford Family Network
Apple Activities; Face Painting; Finger Plays; Poems; Giving Trees

8 Medford Health Matters
Trees and Air Quality
Prostate Walk (11 am-12 pm)

9 Medford Community Street Tree Advisory Group
"Put some shade in your Neighborhood"

10 Medford Conservation Commission
Trees and Wetland Resources

11 Andrews Middle School
Leaf Imprints

12 Boy Scout Troop 416
Scavenger Hunt

13 Medford Climate Action Network
Trees and Urban Heat Island Effect

14 Medford Clean Energy Committee
Information and Brochures

15 Medford Arts Center, Inc
Open Canvas; Found Art Project; Local Artist's Work; Word Games

16 Brooks Estate Land Trust
Information and Brochures

17 Medford BiPed Group
Survey and Street Improvement Information

18 Sarah Beardslee
Educational Books on the Environment

1 Table numbers as indicated

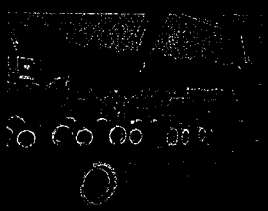
Activities at specific tables have been highlighted in BOLD.

What happened when we paved over it?

Flooding
Pollution into the river - Salt, sand, oil, grease, metals
Heating up of River water -
Reduced groundwater recharge - for aquifer, plant life, stream base flow

Stormwater Benefits From Trees

Reduced Runoff!
Reduced Stormwater Volumes = Reduced drainage system requirements!
Reduced thermal Impacts w/ cooler surfaces and infiltration



Pollutants For Water : Nutrients For Trees:

VHB

Trees for Stormwater Management

■ First Page of Draft Ordinances and Regulations

Proposed Language for Pet Waste Ordinance

Section 1 - Purpose

This ordinance to establishes requirements for the proper disposal of pet solid waste in the City of Medford, so as to protect public health, safety and welfare, and to establish penalties for failure to comply.

1.1. Applicability

This ordinance shall apply to all property within the City of Medford as defined herein.

1.2 Severability

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

Section 2 - Definitions

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Ordinance clearly demonstrates a different meaning. The word "shall" is always mandatory and not merely directory.

Immediate – as related to this ordinance means that the pet solid waste is removed at once, without delay.
Owner/Keeper – any person who shall possess, maintain, house or harbor any pet or otherwise have custody of any pet, whether or not the owner of such pet.
Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.
Pet - a domesticated animal (other than a disability assistance animal) kept for amusement or companionship.
Pet solid waste – waste matter expelled from the bowels of the pet; excrement.
Proper disposal – placement in a designated waste receptacle, or other suitable container, and discarded in a refuse container which is regularly emptied by the municipality or some other refuse collector; or disposal into a system designed to convey domestic sewage for proper treatment and disposal.

Section 3 - Requirement for Disposal

All pet owners and keepers are required to immediately and properly dispose of their pet's solid waste deposited on any property, public or private, not owned or possessed by that person. Waste may not be left on any street, property, public or private way or any open space, park, or land. Waste may never be discarded in catch basins, sewers or storm drains and may not be left on sidewalks, streets or the street right of way.

Section 4 - Exemptions

DRAFT

Proposed Language for Waterfowl Control Ordinance

Section 1 - Statement of Purpose
To prevent such conduct that may attract and concentrate migratory and domestic waterfowl to properties in the City of Medford. It has been determined that the presence of large numbers of waterfowl cause a public health nuisance by contaminating drinking water supplies, beaches, swimming facilities and by causing loss of vegetation at parks and other facilities where geese congregate.

1.2. Applicability
This ordinance shall apply to all property within the City of Medford as defined herein.

1.3 - Severability

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

Section 2 – Definitions

Migratory Waterfowl - ducks, geese, and swans native to North America.
Domestic Waterfowl - -Non-native ducks, geese, and swans not retained in agricultural operations.
Feed or Feeding - The act of or the furnishing of food or other sustenance which is essential for growth or maintenance of waterfowl.

Section 3 - Prohibition of Feeding
No person shall feed, cause to be fed, or provide food for domestic or migratory waterfowl within City limits on land either privately or publicly owned.

No person shall create or foster any condition, or allow any condition to exist or continue, which results in a congregation or congestion of domestic or migratory waterfowl.

Section 4 - Enforcement
The Police Department, Engineering Department, Conservation Commission and members of the Department of Health/Parks and Recreation are hereby authorized and directed to enforce this Ordinance.

Section 5 - Violations and Penalties
Persons found to be violating any provisions of this Ordinance shall be charged $15 for the first offense. Any subsequent violations of the Ordinance shall be punishable by imposition of a fine not to exceed $50.00

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LITTER CONTROL ORDINANCE

Section 1 - General Provisions

1.1. Purpose and Intent

The purpose of this ordinance is to protect the public health, safety, environment, and general welfare through the regulation and prevention of litter. The objectives of this ordinance are:

(1) Provide for uniform prohibition throughout the City of Medford for any and all littering on public or private property; and,

(2) Prevent the desecration of the beauty and quality of life of the City of Medford and prevent harm to the public health, safety, environment, and general welfare, including the degradation of water and aquatic resources caused by litter.

1.2. Applicability

This ordinance shall apply to all public and private property within the City of Medford.

1.3. Compatibility with Other Regulations

This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, stature, or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

1.4. Severability

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this ordinance shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this ordinance.

Section 2 - Definitions

Litter - any organic or inorganic waste material, rubbish, refuse, garbage, trash, hulls, peelings, debris, grass, weeds, ashes, sand, gravel, slag, brickbats, metal, plastic, and glass containers, broken glass, dead animals or intentionally or unintentionally discarded materials of every kind and description.

Public or private property - the right of way of any road or highway; any body of water or watercourse or the shores or beaches thereof; any park, playground, building, refuge, or conservation or recreation area; timberlands or forests; and residential, commercial, industrial, or other properties.

ORDINANCE

Illicit Discharge and Illegal Connection Ordinance

PURPOSE:

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Medford and to protect the water quality of watercourses and water bodies consistent with the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.) through the regulation of non-stormwater discharges to the municipal storm drain system to the maximum extent practicable as required by federal and state law. This ordinance requires effective implementation of the Medford Illicit Discharge and Illegal Connection Regulations (hereinafter referred to as the "Regulations") by way of further definition; explanation and specification; and illustration and example of the Regulation's provisions.

The Regulations set forth the methods for controlling the introduction of pollutants into the municipal separate storm drain system (MS4) in order to comply with the National Pollutant Discharge Elimination System (NPDES) permit process. The ordinance and corresponding regulations objectives are as follows:

1) To regulate the contribution of pollutants to the municipal separate storm drain system;
2) To prohibit Illicit Connection and Discharges to the municipal storm drain system;
3) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

This ordinance is intended to clarify but not expand, extend, modify, or replace any provision of the Medford Illicit Discharge and Illegal Connection Regulations.

JURISDICTION

This ordinance shall apply to all discharges as flows or solid materials, or other, as defined in the Regulations to the City of Medford storm drain system. This includes runoff, direct discharges or materials as a result of illicit dumping activity or illicit connections to the system.

A person commits an offense if the person introduces or caused to be introduced into the MS4 any discharge that is not entirely composed of stormwater.

FINES

Fines for the unauthorized discharge of anything other than stormwater to the municipal storm drain system will be enforced as outlined in the regulations.

Flat rate...? Based on remediation cost? Both?

ORDINANCE

City of Medford Stormwater Management Ordinance

PURPOSE

The purpose of this ordinance is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects that may occur as a result of improper stormwater management in the City of Medford. This ordinance requires the consistent and effective implementation of the Medford Stormwater Management Regulations (hereinafter referred to as the "Regulations") by way of further definition; to protect private water supply, ground water supply, flood control, erosion control and sedimentation control, storm damage prevention, other water damage prevention, prevention of pollution, protection of surrounding land and other homes or buildings, wildlife protection, plant or wildlife habitat, aquatic species and their habitats, and the natural character or recreational values of the wetland resources.

This ordinance is intended to clarify but not expand, extend, modify, or replace any provision of the Medford Stormwater Management Regulations.

JURISDICTION

(a) These regulations are applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Subsection (b) below. These standards apply to any new development or redevelopment site that meets one or more of the following criteria:

(1) *New development that involves the creation of 5,000 square feet or more of impervious cover and/or the disturbance or 10,000 square feet or more;*

(2) *Redevelopment that includes the creation, addition or replacement of 5,000 square feet or more of impervious cover, with no modifications to the existing landscape;*

(3) *Any new development or redevelopment, regardless of size, that is defined by the Massachusetts Stormwater Management Policy to be an area of potential higher pollutant loading, also termed as a "hotspot" land use; or,*

(4) *Land development activities that are smaller than the minimum applicability criteria set forth in items (1) and (2) above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.*

(b) The following activities are exempt: