**Municipality/Organization: Littleton, MA**

**EPA NPDES Permit Number: MA041204**

**MassDEP Transmittal Number: W-035458**

**Annual Report Number & Reporting Period: No.4: March 06-March 07**

P
05-01-07

# NPDES PII Small MS4 General Permit Annual Report
## (Due: May 1, 2007)

**Part I. General Information**

Contact Person: **Donald Armstrong** Title: **Acting Town Administrator**

Telephone #: **978 – 952 - 2311** Email: **armstrong@littletonma.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: Kenneth P. Eldridge

Printed Name: Kenneth P. Eldridge

Title: **Chairman of the Board of Selectmen**

Date: 4/23/2007

**Part II. Self-Assessment**

The Town of Littleton has completed the required self-assessment and has determined that
Our municipality is in compliance with all permit conditions except for the following provisions:

| BMP ID | COMMENT |
| --- | --- |

## 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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|---|---|---|---|---|---|
| A | REQUIRED: Annual Report to EPA | Highway / Selectmen | Annual report due on May 1, 2007 | Report submitted. | Submit report as required. |
| Revised | | | | | |
| 1D | Stormwater Media Campaign | Water Dept | Media Info Package delivered to Media | Continued campaign including newsletter articles in LELWD Watts and Drop and newspaper, and information to Watershed Associations through Clean Lakes Committee. | Continued Public Relations including town wide program for rain gardens and rain barrel purchase/installation. |
| Revised | | | | | |
| 1-G | Community Education: Hazardous Waste Day and Recycling advertised | Highway / Water Dept. | Continue to write At Least One Article Per Year in the Local Paper and post announcements elsewhere | On going hazardous materials collection at Transfer Station. Conducted Hazardous Waste Day | On going hazardous materials collection at Transfer Station. Conduct hazardous waste day subject to approval of proposed funding. |
| Revised | | | | | |
| 1-H | Business Education | Water Dept | Expand Commending Businesses for Environmental Practices | New LID/BMP Stormwater Manual to environmental consulting firms and companies looking to move in to town and/or expand business in town. | Newsletter to all businesses through LELWD Watts and Drops quarterly newsletter |
| Revised | | | | | |

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|---|---|---|---|---|---|
| 1-K | Education via the Internet | Water Dept | Provide storm water links by year 2; provide Littleton specific information by year 4 | LELWD Wed Site has link to all materials published for Clean Lakes Committee and stormwater management programs over last 4 years. | Continued use of Internet for publication of programs and stormwater improvements. |
| Revised | | | | | |
| 1-J | Education by media | Water Dept | Write at least one article in Watts and Drops news letter and newspaper per year | Numerous articles in local paper on stormwater management program in various watersheds of town.<br>Large front page article on stormwater retrofits at Long Lake in Late Summer Independent | On going |
| Revised | | | | | |

**1a. Additions**

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## 2. Public Involvement and Participation

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|---|---|---|---|---|---|
| 2-A | Stormwater Traveling Display | Water Dept. | Display circulates for a min of 3 months per year; Display is posted at a min of 3 locations per year | Kiosks on display at Boat Launch Area/Town Beach and Wetland Park Area of Long Lake outlining strategies being utilized to manage stormwater intrusion. | Continued use of Kiosks and new pamphlet on watershed management of stormwater |
| Revised | | | | | |
| 2-D | Stormwater Summit Special Event | Water Dept | Hold Local or multi community stormwater summit year 4 | Clean Lakes Committee has annual meeting on strategies being utilized for stormwater management and in lake restoration efforts. Planning Board Public Hearing on LID/BMP Stormwater Manual | Town Meeting, Spring 2007 to approve LID/BMP Stormwater Manual as part of zoning change. |
| Revised | | | | | |
| 2-F | Annual Public Meeting/Hearing Regarding Plan Status and Reports to EPA | Selectmen | Hold meeting in April prior to May 1 submission of report | Public Hearing held by Selectmen on use of LID/BMP Manual with Planning Board. | Additional Meetings Planned |
| Revised | | | | | |
| 2-G | Involve Watershed Groups: Clean Lakes Committee, Spectacle, Mill, Long, & Forge Ponds | Water Dept. & Local Groups | Continue meetings at least 4 times/yr; Continue annual cleanup days; Educational Information Shared by Town; | Ongoing – Clean Lakes Committee composed of 5 watershed associations of Town and very much involved with stormwater management issues. Monthly Meetings | Same |
| Revised | | | | | |

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| 2-H | Involve Children's groups (such as 4H, scouts) | Water Dept | Children's groups at least once per year help distribute or display educational information | Undertaken through Clean Lakes Committee – Watersheds have received stormwater identification kits that will be used this spring to educate public as to how stormwater flows towards lakes and ponds and "not to dump" | Same |
| Revised | | | | | |
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| Revised | | | | | |

**2a. Additions**

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### 3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|---|---|---|---|---|---|
| 3-A | REQUIRED: Illicit Discharge Bylaw / Regulatory Mechanism | Water Dept / Highway | Develop draft bylaw; involve and educate public, municipal officials etc | Changes made to bylaws include:<br><br>LID/BMP Stormwater Manual to maximize the attenuation and infiltration of stormwater.<br><br>Board of Health Reg. on floor drains in manufacturing facilities and containment areas. | Possible additional bylaw changes to promote better stormwater management |
| Revised | | Water Dept has assumed lead role in this activity. | | | |
| 3-B | REQUIRED: Storm Drain Map | Highway | Compile existing record plans and surveyed data. Find and locate drainage outfalls in the field. | Continued to compile plans and map additional areas of Town. Mapped approximately 60% of town drainage system using as built plans and field GPS locations | Continue to compile plans and map additional areas of Town. Continue GPS locations of outfalls/drain system and "catch up" with proposed 20% / yr mapping schedule. |
| Revised | | | | | |
| 3-C | REQUIRED: Illicit Discharge Detection and Elimination Plan | Highway | Determine Priority Areas and Discuss Plan<br>Visually Screen Outfalls During Dry Weather (at least 20% each year) | Visually screened drain structures for illicit discharges during annual cleaning. None reported.<br><br>35-40 outfalls inspected during routine maintenance; no illicit discharge observed. | Continue visual screening and awareness for illicit discharges.<br><br>Continue ongoing hazardous materials collection at transfer station. |

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| Revised | | | | | |
| 3-D | REQUIRED: Illicit Discharge Education for General Public & Businesses | Water Dept. | Include illicit discharge education in the community, business, and Littleton specific flyers. | Numerous articles in newspapers and LELWD newsletter on this subject | Ongoing |
| Revised | | | | | |
| 3-E | REQUIRED: Illicit Discharge Education for Municipal Employees | Water Dept. | Include illicit discharge education in training under measure 6 | Same as 3-D and Environmental Analyst for Water Dept has developed new spill response/containment plan for LELWD and Highway employees. | ongoing |
| Revised | | | | | |
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| Revised | | | | | |

**3a. Additions**

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## 4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|---|---|---|---|---|---|
| 4-A | REQUIRED: Construction Site Runoff Bylaw / Regulatory Mechanism | Water Dept / Planning | Initial discussions; Review current local/state regulations; Review proposed samples. Develop draft bylaw, involve and educate public etc. Implement bylaw by year 3. | Bylaws changes to be enacted at Spring 2007 Town Meeting and incorporated in BMP/LID Stormwater Manual | No further activity planned |
| Revised | | | | | |
| 4-B | REQUIRED: BMP's for Construction Site Erosion, Sediment, and Waste Controls | Water Dept / Planning | Assess existing and brainstorm proposed. Prepare draft to include in bylaw. Implement bylaw by year 3. | See 4-A | See 4-A |
| Revised | | | | | |
| 4-C | REQUIRED: Construction Site Plan Review Procedures | Water Dept / Planning | Assess existing and brainstorm proposed Prepare draft to include in bylaw. Implement review by year 3. | See 4-A | See 4-A |
| Revised | | | | | |

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| 4-D | REQUIRED: construction Site Inspection and Enforcement Procedures | Water Dept / Planning | Assess existing and brainstorm proposed Prepare draft to include in bylaw. Implement inspections by year 3. | See 4-A | See 4-A |
| Revised | | | | | |
| 4-E | REQUIRED: Response to Public – "Stormwater Hotline | Water Dept | Implement "storm water hotline". Advertise and test hotline. Implement hotline by year 3. | . Stormwater Management issues responsibility of Highway and Water Departments through 7 x 24 hour call center. | ongoing |
| Revised | | | | | |
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| Revised | | | | | |

**4a. Additions**

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## 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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|---|---|---|---|---|---|
| 5-A | REQUIRED: Post-Construction Site Runoff Bylaw / Regulatory Mechanism | Water Dept / Planning | Initial discussion; Review current local/state regulations; Review proposed samples. Develop draft bylaw, involve and educate public. Float new bylaw by year 3 for one year comment period. | Completed – see 4-A | Completed |
| Revised | | | | | |
| 5-B | REQUIRED: Choose Structural and Non-Structural BMP's | Water Dept / Planning | Assess existing and brainstorm proposed. Prepare draft to include in draft bylaw. Implement bylaw in year 3. | Completed – See 4-A | Completed |
| Revised | | | | | |

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|---|---|---|---|---|---|
| 5-C | REQUIRED: Long-Term BMP Operation and Maintenance Procedures | Water Dept / Planning | Assess existing and brainstorm proposed. Prepare draft to include in draft bylaw. Implement bylaw in year 3. | Completed See 4 A | Completed |
| Revised | | | | | |
| 5-D | REQUIRED: Structural BMP Implementation Procedures | Water Dept / Planning | Assess existing and brainstorm proposed. Prepare draft to include in the draft bylaw. Implement bylaw in year 3. | Completed See 4A | |
| Revised | | | | | |
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| Revised | | | | | |
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| Revised | | | | | |

**5a. Additions**

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## 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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|---|---|---|---|---|---|
| 6-A | REQUIRED: Employee Training to Prevent/Reduce Stormwater Pollution | Highway / Water Dept. | Assess who, when, and what topics; Create schedule and checklist. Sample/test training. | SPCC identified personnel and subjects for training. No training was conducted. | Schedule and conduct training. |
| Revised | | | | | |
| 6-B | REQUIRED: Maintenance/Inspection of Storm Sewers and Structural/Non Structural Controls | Highway | Develop New/Improved Schedules and Procedures. | Determined existing schedule and procedures for annual cleaning and inspection of storm sewer structures is adequate. Conducted annual sweeping and cleaning of municipal lots and streets. Repairs as necessary. No reported illicit discharges. | Continue to maintain and inspect storm water system under existing schedules and procedures. |
| Revised | | | No change to existing operational procedures warranted. | | |
| 6-C | REQUIRED: Pollutant Source Reduction/Elimination from Municipal Facilities & Activities | Highway | Fully Implement proposed BMP's | Maintenance and operation of BMP's | Maintenance and operation of BMP's |
| Revised | | | This activity was completed in year 1. | | |
| 6-D | REQUIRED: Waste Disposal Procedures from Storm Sewers & Municipal Facilities/Activities | Highway | Assess existing waste disposal procedures. Develop draft procedures. | Continue to sweep streets/municipal facilities and clean storm drainage systems in accordance with established procedures | Continue to sweep streets/municipal facilities and clean storm drainage systems in accordance with established procedures. |
| Revised | | | This activity was completed in year 3 | | |

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| Revised | Reduction of Sand in De-icing Operations | Highway | Reduction/elimination of sand in de-icing operations to reduce street sweeping/catch basin waste. | Began using pre-wetting agent, calibrated spreading equipment to reduce application rates, implemented de-icing operation to minimize use of sand. | Continue to refine new de-icing operation though trail and error and additional training. |
| Revised | | | | | |

**6a. Additions**

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## 7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 2 |
|---|---|---|---|---|---|
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

## 7a. Additions

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## 7b. WLA Assessment

## Part IV. Summary of Information Collected and Analyzed

## Part V. Program Outputs & Accomplishments (OPTIONAL)

### Programmatic

| | | |
|---|---|---|
| Stormwater management position created/staffed | (y/n) part-time | |
| Annual program budget/expenditures | ($) 50,000 | 25,000 |
| | | |
| | | |

### Education, Involvement, and Training

| | | |
|---|---|---|
| Estimated number of residents reached by education program(s) | (# or %) | 100% |
| Stormwater management committee established | (y/n) | Y (CLC) |
| Stream teams established or supported | (# or y/n) | Y |
| Shoreline clean-up participation or quantity of shoreline miles cleaned | (y/n or mi.) | Y N/A |
| Household Hazardous Waste Collection Days | | |
| ▪ days sponsored | (#) | 1 |
| ▪ community participation | (%) | 100 % |
| ▪ material collected | (tons or gal) | |
| School curricula implemented | (y/n) | Y |

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|---|---|---|
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| | | |

**Legal/Regulatory**

| | In Place Prior to 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 | (#) | |
| System-Wide mapping complete | (%) | |
| Mapping method(s) | | |
| ▪ Paper/Mylar | (%) | |
| ▪ CADD | (%) | |
| ▪ GIS | (%) | |
| Outfalls inspected/screened | (# or %) | |
| Illicit discharges identified | (#) | |
| Illicit connections removed | (# )<br>(est. gpd) | |
| % of population on sewer | (%) | 0 |
| % of population on septic systems | (%) | 100 |

| | | |
|---|---|---|
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| | | |

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

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

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

| | | |
|---|---|---|
| Anti-/De-Icing products and ratios | % NaCl<br>% $CaCl_2$<br>% $MgCl_2$<br>% CMA<br>% Kac<br>% KCl<br>% Sand | |
| Pre-wetting techniques utilized | (y/n) | |
| Manual control spreaders used | (y/n) | |
| Automatic or Zero-velocity spreaders used | (y/n) | |
| Estimated net reduction in typical year salt application | (lbs. or %) | |
| Salt pile(s) covered in storage shed(s) | (y/n) | |
| Storage shed(s) in design or under construction | (y/n) | |
| | | |
| | | |