

**Municipality/Organization:** Town of Lynnfield

**EPA NPDES Permit Number:** MA041045

**MaDEP Transmittal Number:** W- 040948

**Annual Report Number**

**& Reporting Period:** No. 7: May 1, 2009 – April 30, 2010.

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** Charles L. Richter, P.E.

**Title:** Town Engineer

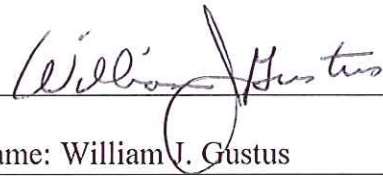
**Telephone #:** 781-334-9503

**Email:** crichter@town.lynnfield.ma.us

#### 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:**



**Printed Name:** William J. Gustus

**Title:** Town Administrator

**Date:** 4/29/2010

## Part II. Self-Assessment

The Town of Lynnfield has completed the required annual self-assessment of compliance for the Phase II Stormwater Program. In accordance with the NPDES Phase II Stormwater requirements, the following topics were evaluated for the completion of this Annual Report:

1. Compliance with the Phase II Permit Conditions
2. Appropriateness of the Selected BMPs
3. Progress Towards Achieving the Program's Measurable Goals
4. Results of Any Information that has been Collected and Analyzed
5. Activities for the Next Reporting Cycle
6. Changes in Identified BMPs or Measurable Goals

The Town of Lynnfield has determined that our municipality complies with all permit conditions except for the following provisions.

Part II.2d

Catch basin stenciling has not been finished but critical area addressed.

Part II.2e

A stream cleanup was not performed in year 7.

Part III.3c

Illicit discharge and detection plan has not been developed.

### 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 7<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 8                                                                                   |
|---------------|------------------------------------------------------|--------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1a<br>Revised | Distribute/post nonpoint source pollution posters.   | Public Works                   | Post in all public schools & town buildings.               | No posters were planned for distribution.                                                     | No posters are planned for year 7.                                                                                   |
| 1b<br>Revised | Air stormwater message on local cable access channel | Public Works                   | Once a year.                                               | 3 Stormwater messages were aired last year                                                    | A stormwater event will be planned and aired on cable.                                                               |
| 1c<br>Revised | Add stormwater information to the town website       | Information Technology Systems | Update information quarterly to address seasonal concerns. | Maintained stormwater information on the Town's website.                                      | Maintain and update stormwater information.                                                                          |
| 1d<br>Revised | Distribute nonpoint source brochures.                | Public Works                   | 1000 to be distributed over 5 years.                       | Brochures are available for pick up at Town Hall and the Library.                             | The brochures will be displayed and available throughout the year at the Town Hall, Library, and on the DPW website. |

#### 1a. Additions

|      |                                     |              |                         |                                                               |                                                                                |
|------|-------------------------------------|--------------|-------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------|
| 1a-1 | Send out stormwater press releases. | Public Works | Copies of the releases. | No press releases were needed or distributed during the year. | Use press releases as needed with other Public Education activities in year 7. |
|      |                                     |              |                         |                                                               |                                                                                |

## 2. Public Involvement and Participation

| BMP ID #      | BMP Description                             | Responsible Dept./Person Name            | Measurable Goal(s)                     | Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)          | Planned Activities – Permit Year 8                                                                |
|---------------|---------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 2a<br>Revised | Form a Stormwater Advisory Committee.       | Conservation Commission<br>Town Engineer | Hold meetings twice a year.            | The Stormwater Advisory Committee and Drainage Committee met formally and informally several times. | The Stormwater Advisory Committee and Drainage Committee will continue to meet on a regular basis |
| 2b<br>Revised | Hazardous waste collection.                 | Public Works                             | Hold annual waste collections.         | A hazardous waste collection day was held in November 2009.                                         | A hazardous waste & waste oil collection is scheduled to be held in the fall of 2010.             |
| 2c<br>Revised | Waste oil Collection.                       | Public Works                             | Collect waste oil annually.            | See BMP 2b.                                                                                         | See BMP 2b.                                                                                       |
| 2d<br>Revised | Implement a catch basin stenciling program. | Conservation Commission                  | Stencil 33% of catch basins each year. | Catch basin stenciling has continued around Pillings Pond and other critical areas.                 | Stenciling will continue in summer focusing on environmentally sensitive areas.                   |
| 2e<br>Revised | Hold a stream clean-up day.                 | Conservation Commission                  | Hold a clean-up every other year.      | No stream clean-up was held in year 7.                                                              | Scheduled for year 8.                                                                             |

2a. No additions.

### 3. Illicit Discharge Detection and Elimination

| BMP ID #      | BMP Description                                                     | Responsible Dept./Person Name | Measurable Goal(s)                                                   | Progress on Goal(s) – Permit Year 7<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 8                                                                       |
|---------------|---------------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 3a<br>Revised | Map Outfalls.                                                       | Public Works                  | Map approx. 33% outfalls each year.                                  | Mapping of outfalls has been completed but not cataloged.                                     | Integration of subdivisions into master drainage map and cataloging of outfall pipes planned for year 8. |
| 3b<br>Revised | Review existing bylaws and regulations.                             | Stormwater Advisory Committee | Determine if existing bylaws & regulations fulfill EPA requirements. | Review of the existing bylaws and regulations have been completed.                            | Completed.                                                                                               |
| 3c<br>Revised | Develop & implement illicit discharge detection & elimination plan. | Public Works                  | Compile recommendations for inclusion in plan.                       | Development of plan was continued in year 7.                                                  | Continue development of plan for implementation in year 8.                                               |
| 3d<br>Revised | Develop/modify general illicit discharge bylaw.                     | Stormwater Advisory Committee | Propose recommendations for modifying/developing bylaw.              | New stormwater by-law was approved at the April 26, 2010 Town Meeting.                        | Completed                                                                                                |
| 3e<br>Revised | Present Illicit Discharge Bylaw for Town Meeting Action.            | Stormwater Advisory Committee | Make presentations for Town Meeting action.                          | New stormwater by-law was approved at the April 26, 2010 Town Meeting.                        | Completed.                                                                                               |

3a. No additions.

#### 4. Construction Site Stormwater Runoff Control

| BMP ID #      | BMP Description                                    | Responsible Dept./Person Name | Measurable Goal(s)                                                     | Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)                                                                                                            | Planned Activities – Permit Year 8 |
|---------------|----------------------------------------------------|-------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 4a<br>Revised | Review existing site inspection practices.         | Town Administrator            | Determine if existing practices fulfill EPA requirements.              | Completed.                                                                                                                                                                                            | Completed.                         |
| 4b<br>Revised | Develop/modify the site inspection program.        | Town Administrator            | Make recommendations for modifications in the site inspection program. | Completed.                                                                                                                                                                                            | Completed.                         |
| 4c<br>Revised | Review existing bylaws & regulations.              | Town Administrator            | Determine if existing bylaws & regulations fulfill EPA requirements.   | Completed.                                                                                                                                                                                            | Completed.                         |
| 4d<br>Revised | Develop/modify bylaw for construction site runoff. | Town Administrator            | Propose recommendations for modifying/developing bylaw.                | Planning Board Rules and Regulations were modified to fulfill EPA requirements. New bylaw for all construction sites not in jurisdiction of Conservation Commission and Planning Board was developed. | Completed                          |
| 4e<br>Revised | Present bylaw for Town Meeting Action.             | Town Administrator            | Make presentations for Town Meeting Action.                            | Construction site runoff bylaw was presented and approved at the April 26, 2010 Town Meeting.                                                                                                         | Completed                          |
| Revised       |                                                    |                               |                                                                        |                                                                                                                                                                                                       |                                    |

4a. No additions.

## 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 7<br>(Reliance on non-municipal partners indicated, if any)                                                                                                                    | Planned Activities – Permit Year 8 |
|---------------|----------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 5a<br>Revised | Review existing site inspection practices.                     | Town Administrator            | Determine if existing practices fulfill EPA requirements.                                                     | Completed                                                                                                                                                                                                        | Completed                          |
| 5b<br>Revised | Develop/modify inspection & maintenance practices.             | Town Administrator            | Recommendations for modifying existing practices, inspection form, template for operation & maintenance plan. | Completed.                                                                                                                                                                                                       | Completed.                         |
| 5c<br>Revised | Review existing bylaws and regulations.                        | Town Administrator            | Determine if existing bylaws & regs fulfill EPA requirements.                                                 | Completed.                                                                                                                                                                                                       | Completed.                         |
| 5d<br>Revised | Develop/modify/bylaws for post-construction runoff management. | Town Administrator            | Propose modified bylaw.                                                                                       | Planning Board Rules and Regulations were modified to fulfill EPA requirements. New bylaw for all post-construction site runoff not in jurisdiction of Conservation Commission and Planning Board was developed. | Completed                          |
| 5e<br>Revised | Present bylaw for Town Meeting action.                         | Town Administrator            | Make presentations for Town Meeting action.                                                                   | Post-construction runoff bylaw was presented and approved at the April 26, 2010 Town Meeting                                                                                                                     | Completed.                         |
| Revised       |                                                                |                               |                                                                                                               |                                                                                                                                                                                                                  |                                    |

**5a. No additions.**

## 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 7<br>(Reliance on non-municipal partners indicated, if any)               | Planned Activities – Permit Year 8                                                                                 |
|---------------|------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 6a<br>Revised | Street sweeping.                                                                                     | DPW Director                  | Sweep all streets once per year.            | All streets were swept and additional sweeping was done as needed after washouts or accumulation of debris. | All streets will be swept at least once with additional sweeping as needed based on sediment & debris accumulated. |
| 6b<br>Revised | Catch basin cleaning.                                                                                | DPW Director                  | Clean all catch basins once a year.         | All catch basins were cleaned.                                                                              | All catch basins will be cleaned in the spring of 2010.                                                            |
| 6c<br>Revised | Perform site visits to examine existing practices at facilities.                                     | DPW Director                  | Target all applicable municipal facilities. | Completed.                                                                                                  | Completed.                                                                                                         |
| 6d<br>Revised | Train municipal employees at each facility.                                                          | DPW Director                  | Target all applicable municipal facilities. | Training was performed in April 2010.                                                                       | Retraining of employees as necessary.                                                                              |
| 6e<br>Revised | Inspect facilities to verify training & updated practices are being properly & consistently applied. | DPW Director                  | Target all applicable municipal facilities. | Facilities were inspected however additional training is necessary.                                         | Follow-ups will be done to verify required practices are being applied in year 8.                                  |

6a. No additions

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 7 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 8 |
|----------|-----------------|-------------------------------|--------------------|--------------------------------------------------------------------------------------------|------------------------------------|
| Revised  |                 |                               |                    |                                                                                            |                                    |
| Revised  |                 |                               |                    |                                                                                            |                                    |
| Revised  |                 |                               |                    |                                                                                            |                                    |
| Revised  |                 |                               |                    |                                                                                            |                                    |

7a. Additions

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

7b. WLA Assessment

No TMDL waste load allocations have been developed for Lynnfield waters.

**Part IV. Summary of Information Collected and Analyzed**

- Stormwater Management Plan
- Press releases and public information publications
- Drainage maps
- Land Development Bylaws
- DPW Operational practices

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

**Programmatic**

|                                                |                |    |
|------------------------------------------------|----------------|----|
| Stormwater management position created/staffed | (y/n)          | No |
| Annual program budget/expenditures             | (\$)<br>10,000 |    |
|                                                |                |    |
|                                                |                |    |

**Education, Involvement, and Training**

|                                                                         |               |     |
|-------------------------------------------------------------------------|---------------|-----|
| Estimated number of residents reached by education program(s)           | (# or %)      | 100 |
| Stormwater management committee established                             | (y/n)         | Yes |
| Stream teams established or supported                                   | (# or y/n)    | No  |
| Shoreline clean-up participation or quantity of shoreline miles cleaned | (y/n or mi.)  | No  |
| Household Hazardous Waste Collection Days                               |               |     |
| ▪ days sponsored                                                        | (#)           | 1   |
| ▪ community participation                                               | (%)           | 5%  |
| ▪ material collected                                                    | (tons or gal) | n/a |
| School curricula implemented                                            | (y/n)         | No  |
|                                                                         |               |     |
|                                                                         |               |     |

## Legal/Regulatory

| Regulatory Mechanism Status (indicate with "X")    | In Place<br>Prior to<br>Phase II | Under<br>Review | Drafted | Adopted |
|----------------------------------------------------|----------------------------------|-----------------|---------|---------|
|                                                    |                                  |                 |         |         |
| ▪ 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               | (%)        | 95%  |
| Estimated or actual number of outfalls | (#)        |      |
| System-Wide mapping complete           | (%)        | 85%  |
| Mapping method(s)                      |            |      |
| ▪ Paper/Mylar                          | (%)        | 100% |
| ▪ CADD                                 | (%)        | 5%   |
| ▪ GIS                                  | (%)        | 85%  |
| Outfalls inspected/screened            | (# or %)   | 0%   |
| Illicit discharges identified          | (#)        | 2    |
| Illicit connections removed            | (#)        | 1    |
|                                        | (est. gpd) |      |
| % of population on sewer               | (%)        | 1%   |
| % of population on septic systems      | (%)        | 99%  |
|                                        |            |      |
|                                        |            |      |

## 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/yr    |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets)      | (times/yr)     | 1/yr    |
| Total number of structures cleaned                                                             | (#)            | 1660    |
| Storm drain cleaned                                                                            | (LF or mi.)    | 3000 lf |
| 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.) |                | Compost |
| Cost of screenings disposal                                                                    | (\$)           |         |
|                                                                                                |                |         |
|                                                                                                |                |         |

|                                                                            |            |      |
|----------------------------------------------------------------------------|------------|------|
| Average frequency of street sweeping (non-commercial/non-arterial streets) | (times/yr) | 1/yr |
|----------------------------------------------------------------------------|------------|------|

|                                                                                      |                |         |
|--------------------------------------------------------------------------------------|----------------|---------|
| Average frequency of street sweeping (commercial/arterial or other critical streets) | (times/yr)     | 1/yr    |
| Qty. of sand/debris collected by sweeping                                            | (lbs. or tons) |         |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)                | (location)     | Compost |
| Cost of sweepings disposal                                                           | (\$)           | 0       |
| Vacuum street sweepers purchased/leased                                              | (#)            | 0       |
| Vacuum street sweepers specified in contracts                                        | (y/n)          | Yes     |
|                                                                                      |                |         |
|                                                                                      |                |         |

|                                                                                        |             |
|----------------------------------------------------------------------------------------|-------------|
| 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 45%             |
|                                                          | % CaCl <sub>2</sub> 5% |
|                                                          | % MgCl <sub>2</sub> 0% |
|                                                          | % CMA 0%               |
|                                                          | % Kac 0%               |
|                                                          | % KCl 0%               |
|                                                          | % Sand 50%             |
| Pre-wetting techniques utilized                          | (y/n) N                |
| Manual control spreaders used                            | (y/n) Y                |
| Automatic or Zero-velocity spreaders used                | (y/n) N                |
| Estimated net reduction in typical year salt application | (lbs. or %)            |
| Salt pile(s) covered in storage shed(s)                  | (y/n) Yes              |
| Storage shed(s) in design or under construction          | (y/n) No               |
|                                                          |                        |
|                                                          |                        |