**Municipality/Organization: Town of Hanson, MA**

**EPA NPDES Permit Number: MA041037**

**MaDEP Transmittal Number: W-035899**

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

# NPDES PII Small MS4 General Permit Annual Report

## Part I. General Information

Contact Person: **Richard Harris** Title: **Town Highway Surveyor**

Telephone #: **781-293-2822** Email: hansonhighway@hotmail.com

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: **Jesse McSweeney**

Title: **Board of Selectmen, Chair**

Date: **April 27, 2007**

**Part II. Self-Assessment**

In general, the Town of Hanson's stormwater management activities for the second year of the General Permit (March 2004 through March 2005) were in conformance with the Notice of Intent (Massachusetts DEP form BRP WM 08A) and schedule submitted in July 2003. The Town has developed a Stormwater Management Plan with program priorities for 2003-2008 including:

1. Achieving regulatory compliance, particularly EPA and DEP Phase II NPDES permit requirements;
2. Incorporating storm water protection measures into municipal activities;
3. Focusing activities on target pollution reduction (e.g. Section 303.d. waters and protecting the Town's water supply);
4. Ensuring that the Program is current and innovative; and
5. Providing Program administration.

The Water Quality Stewardship element of the program will focus on the protection of the local water supply and addressing the State's Section 303.d waters located within the Town. To this end, staff will continue to develop and improve the Program activities to reduce storm water pollution to the maximum extent practicable and eliminate prohibited non-storm water discharges, while facilitating understanding and involvement in storm water management by various Town departments. Program priorities will also focus on increased efforts to reduce target pollutants and restore local water bodies.

The Town is committed to working with local watershed associations to advance their goals and objectives. Another high priority of staff will be to keep abreast of the latest technology and approaches to achieve storm water management. Program activities will also strive to encourage environmental stewardship and continue to build on partnerships with other agencies, neighboring towns, and the community for active participation in accomplishing the Program mission.

The activities performed during Permit Year Four focused on the continued development of a Town-wide Geographic Information System, including system connectivity. In addition, water quality testing continued, with the collected data compared with the applicable state and federal standards.

The Town also continued with control measures that were initiated during the previous permit year, including improving local good housekeeping programs; and communicating the Town's Plan to local watershed associations.

## 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 |
|---|---|---|---|---|---|
| 1 | Partnership with local Watershed Associations | Con. Comm., DPW, BOH | Regular Meeting Attendance | Continued updating, investigating alternative funding opportunities (such as 604b and 319 grants). | Continued updating, seek alternative funding opportunities (such as 604b and 319 grants). |
| Revised | | | | | |
| 2 | Develop Brochures | DPW | Quarterly Mailings | Water department mailings and water quality updates. | Continued mailings. |
| Revised | | | | | |
| 3 | WEB Site Public Service Postings | IT Dept., DPW | WEB Site Publication & Maintenance | NSRWA information transfer and data publication of data, local WEB updates | NSRWA information transfer and data publication of data, local WEB updates |
| Revised | | | | | |
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| Revised | | | | | |
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| 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 |
|---|---|---|---|---|---|
| 4 | Water Quality Testing | DPW | 2 Rounds of Water Quality Sampling of Priority Water Bodies | Continued water quality testing. | Continue water quality testing. |
| Revised | | | | | |
| 5 | Community Cleanup Days | DPW | Annually | Conducted in Spring 2006 | Scheduled for Spring 2007 |
| Revised | | | | | |
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| Revised | | | | | |
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| Revised | | | | | |
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| 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 |
|---|---|---|---|---|---|
| 6 | Catch Basin/Outfall and Receiving Water Mapping | DPW | GIS Mapping | Continued connectivity, outfall and catch basin mapping and completion of GIS mapping | Continue connectivity, outfall and catch basin mapping and completion of GIS mapping |
| Revised | | | | | |
| 4 | Water Quality Testing | DPW | Testing of Priority Water Bodies | Continued water quality testing. | Continue water quality testing. |
| Revised | | | | | |
| 7 | Regulatory Review | DPW, Planning Board, BOH, Con. Comm. | Regulatory Revisions and Action | Revisited consolidated regulations and investigate areas for revisions | Continue to revisit consolidated regulations and investigate areas for revisions |
| Revised | | | | | |
| 8 | Permit Enforcement | DPW, Planning Board, BOH, Con. Comm. | Local Construction Site Oversight and Enforcement | Ongoing to comply with local bylaws, state and federal requirements. | Ongoing to comply with local bylaws, state and federal requirements. |
| Revised | | | | | |
| 9 | Misconnection/Illegal Dumping and Correction | DPW, BOH | Connectivity Mapping, Bylaw Enforcement and Fines | Continue GIS mapping and local bylaw enforcement | Continue GIS mapping and local bylaw enforcement |
| 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 |
|---|---|---|---|---|---|
| 7 | Regulatory Review | DPW, Planning Board, BOH, Con. Comm. | Regulatory Revisions to Bylaws as Necessary | Revisited consolidated regulations and investigate areas for revisions | Continue to revisit consolidated regulations and investigate areas for revisions |
| Revised | | | | | |
| 8 | Permit Enforcement | DPW, Planning Board, BOH, Con. Comm. | Local Construction Site Oversight and Enforcement | Ongoing to comply with local bylaws, state and federal requirements. | Ongoing to comply with local bylaws, state and federal requirements. |
| Revised | | | | | |
| 10 | Improved As-Built Review | DPW, Planning Board | Electronic As-Built Submittals on Town GIS System | Continued GIS mapping | Continue GIS mapping and develop protocol for submitting as-builts electronically |
| Revised | | | | | |
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| 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 |
|---|---|---|---|---|---|
| 7 | Regulatory Review | DPW, Planning Board, BOH, Con. Comm. | Regulatory Revisions to Bylaws as Necessary | Revisited consolidated regulations and investigate areas for revisions | Continue to revisit consolidated regulations and investigate areas for revisions |
| Revised | | | | | |
| 8 | Permit Enforcement | DPW, Planning Board, BOH, Con. Comm. | Local Construction Site Oversight and Enforcement | Ongoing to comply with local bylaws, state and federal requirements. | Ongoing to comply with local bylaws, state and federal requirements. |
| Revised | | | | | |
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| 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 |
|---|---|---|---|---|---|
| 11 | Improved Street Sweepings | DPW | | Monthly | Monthly |
| Revised | | | | | |
| 12 | Improved Catch Basin Cleanings | DPW | | Semi-annual Collections | Semi-annual Collections |
| Revised | | | | | |
| 13 | Household Hazardous Waste Days | DPW | | Annual Collection | Annual Collection |
| Revised | | | | | |
| 14 | Drain Stenciling | DPW | Aquifer Protection Area | GIS Mapping continuing to locate catch basins and connectivity | Complete GIS mapping and stencil drains in Aquifer Protection Area |
| Revised | | | | | |
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| Revised | | | | | |
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| Revised | | | | | |

## 6a. Additions

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| 18 | Employee Training | DPW | Seminar Attendance | Seven employees attended storm water training seminar held at Holy Cross | Will continue to identify and attend appropriate training sessions |
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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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|---|---|---|---|---|---|
| 6 | GIS Mapping | DPW | GIS Mapping of Priority Waters and Drainage Patterns | Mapping of drainage structures ongoing | Continue drainage structure mapping and development of GIS mapping |
| Revised | | | | | |
| 4 | Water Quality Testing | DPW | Semi-Annual Water Quality Testing | Continued water quality testing. | Continue water quality testing. |
| Revised | | | | | |
| 15 | Stormwater Modeling | DPW | Needs Assessment for Category 5 Water Bodies | Continued mapping connectivity of outfall locations. | Continue outfall and catch basin mapping, and connectivity |
| Revised | | | | | |
| 16 | Misc. Structural BMPs as Needed | DPW | i.e. Construction Improvements | None to date (scheduled for Permit Year Five as needed) | To be determined |
| Revised | | | | | |
| 17 | Misc. Non-Structural BMPs as Needed | DPW | i.e. Bylaw Enforcement, Fees and Fines | None to date (scheduled for Permit Year Five as needed) | To be determined |
| Revised | | | | | |

## 7a. Additions

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## 7b. WLA Assessment

To date, the Town has focused on available funding sources. GIS mapping of the drainage system and receiving waters is ongoing and water quality testing began during Year 2. WLA assessment will follow.

## Part IV. Summary of Information Collected and Analyzed

**Permit Year 1 Activities and Information**

During Permit Year 1, the Town reviewed the local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they adequately regulated, and were in conformance with the Massachusetts Stormwater Management Policy. Minor revisions may be required for informing local project proponents of the Phase II one-acre NPDES requirement.

The Town received a project approval certificate from the Massachusetts Water Abatement Trust State Revolving Fund for $238,000 and continued the process of mapping its storm drainage system. The Town also began field screening of outfalls for both dry and wet conditions under the SRF program.

**Permit Year 2 Activities and Information**

During Permit Year 2, an outfall inspection program identified 170 outfall locations, and performed dry and wet weather field screening at 67 of the locations. These locations were field screened for the following:

1. pH;
2. Temperature;
3. Total Dissolved Solids;
4. Specific Conductance; and
5. Turbidity.

Based on the field data, 8 of the outfall locations were resampled for the following during 2004:

1. E-coli;
2. Total Phosphorous,
3. Dissolved Phosphorous,
4. Ammonia,
5. Surfactants, and
6. Total Suspended Solids.

Of these samples, one location had elevated levels of e-coli above the State's Secondary Maximum Contaminant level of 126 (colonies/100 mL). Elevated levels of e-coli may be representative of warm blooded animals (such as humans) or cold blooded animals. Following the wet weather testing and further discussions with the Town, additional testing of Fecal Coliform bacteria or Fecal Strep may be recommended to ascertain potential sources.

The Town will continue to provide updates to the public through water bill mailings and postings on the local WEB site, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism. The Town has also taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs. An employee training seminar has been schedule by the PCHA for Summer 2004.

**Permit Year 3 Activities and Information**

During the Permit Year 3, the Town continued its review of local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they continue to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. The Town also continued it's long range GIS mapping of its storm drainage system and increased its public awareness efforts. Work was conducted under Massachusetts Water Abatement Trust State Revolving Funds.

The Town will continue to provide updates to the public through water bill mailings and postings on the local WEB site, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism. The Town has also taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs. An employee training seminar was conducted by the PCHA during the Summer 2005.

**Permit Year 4 Activities and Information**

During the Permit Year 3, the Town continued its review of local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they continue to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. The Town also continued it's long range GIS mapping of its storm drainage system and increased its public awareness efforts. The Town also closed its expenditures from the Massachusetts Water Abatement Trust State Revolving Fund for its project and is currently seeking alternative funding sources from Town Meeting.

The Town will continue to provide updates to the public through water bill mailings and postings on the local WEB site, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism. The Town has also taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs. An employee training seminar was conducted by the PCHA during the Summer 2006 and one has been scheduled for Summer 2007.