

**Municipality/Organization:** Town of Bedford, NH

**EPA NPDES Permit Number:** NHR041036

**MaDEP Transmittal Number:** N/A

**Annual Report Number**

**& Reporting Period:** No. 1: March 03-March 04

2005 MAY -3 A 1:11

## **NPDES PII Small MS4 General Permit Annual Report**

### **Part I. General Information**

**Contact Person:** James Stanford, P.E.

**Title:** Director of Public Works

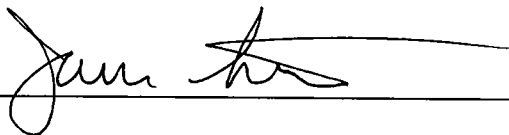
**Telephone #:** (603) 472-3070

**Email:** jstanford@ci.bedford.nh.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:** James Stanford

**Title:** Director of Public Works

**Date:** 4-30-04

## **Part II. Self-Assessment**

**The Town of Bedford, NH has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:**

**Part I.B.2(e)(vi)**

The Town of Bedford, NH permit eligibility with regard to the Endangered Species Act was pending at the time of our NOI submission. At this point the Town has not completed our town-wide system mapping and this item is still pending.

### 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 1<br>(Reliance on non-municipal partners indicated, if any)                                                                           | Planned Activities – Permit Year 2                                   |
|----------|-----------------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 1-1      | Maintain storm water Info and links on Town of Bedford website        | DPW/ J. Stanford              | Review and update each year; add reference links to NHDES storm water site                                                                   | The Town of Bedford will be launching a new/updated town website. Within the Public Works icon, links have been developed and will be incorporated into the new website | Additional info on Group Meetings will be incorporated into the site |
| Revised  |                                                                       |                               |                                                                                                                                              |                                                                                                                                                                         |                                                                      |
| 1-2      | Publish info on storm water program and practices in local newspapers | DPW/ J. Stanford              | Publish articles each year in town bulletin and local newspapers<br>Town Bulletin will only be published once a year due to funding cutbacks | First publication to be sent this Summer                                                                                                                                | Continue publication                                                 |
| Revised  |                                                                       |                               |                                                                                                                                              |                                                                                                                                                                         |                                                                      |
| 1-3      | Broadcast Public meetings (see BMP 2-2)                               | DPW/ J. Stanford              | 1 meeting per year                                                                                                                           | First meeting to be conducted this year                                                                                                                                 | Broadcast meeting annually                                           |
| Revised  |                                                                       |                               |                                                                                                                                              |                                                                                                                                                                         |                                                                      |
| Revised  |                                                                       |                               |                                                                                                                                              |                                                                                                                                                                         |                                                                      |

#### 1a. Additions - None

## 2. Public Involvement and Participation

| 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        |
|----------------|----------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 2-1<br>Revised | Conduct public meetings on storm water program and solicit public feedback             | DPW/ J. Stanford              | Conduct 4 meetings over the 5-year permit term                                       | Development of meeting format -- Storm water group literature will be included in the presentation                                              | Conduct first meeting                      |
| 2-2<br>Revised | Establish a storm water management group to oversee the storm water management program | DPW/ J. Stanford              | Establish group of volunteers during the first 2 years -- include residents on group | Storm water group has been established with several other communities in Southern NH. The group meets monthly to discuss program implementation | Continue participation in group activities |
| Revised        |                                                                                        |                               |                                                                                      |                                                                                                                                                 |                                            |
| Revised        |                                                                                        |                               |                                                                                      |                                                                                                                                                 |                                            |
| Revised        |                                                                                        |                               |                                                                                      |                                                                                                                                                 |                                            |
| Revised        |                                                                                        |                               |                                                                                      |                                                                                                                                                 |                                            |
| Revised        |                                                                                        |                               |                                                                                      |                                                                                                                                                 |                                            |

2a. Additions - None

### 3. Illicit Discharge Detection and Elimination

| BMP ID #       | BMP Description                                                                      | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                    | Progress on Goal(s) – Permit Year 1<br>(Reliance on non-municipal partners indicated, if any)                     | Planned Activities – Permit Year 2                                                             |
|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 3-1<br>Revised | Map storm water drainage system and outfalls                                         | DPW/ J. Stanford              | Complete mapping by end of 5 year permit term                                                                                         | Reviewed existing GIS base map and had DPW personnel collect field data. Review of existing plan files continues. | Continue with in-house review of plans. Purchase GPS instrument to identify outfall locations. |
| 3-2<br>Revised | Maintain map database on GIS system                                                  | DPW/ J. Stanford              | Complete with system mapping (BMP 3-1)                                                                                                | Consultant has begun to evaluate future maintenance options                                                       | Maintenance will be ongoing as data is received                                                |
| 3-3<br>Revised | Visually inspect outfalls for dry weather flows                                      | DPW/P. Belanger               | Inspect a representative number of outfalls each year. Complete inspection of all outfalls by the end of 5 year permit term           | DPW system inventory started                                                                                      | Continue with Inventory                                                                        |
| 3-4<br>Revised | Implement a sampling and analysis program for dry weather flows                      | DPW/ J. Stanford              | Sample any outfalls identified with dry weather flows under BMP 3-3 above. Complete sampling at identified outfalls as budget permits | Reviewed surrounding community programs                                                                           | Develop and implement program                                                                  |
| 3-5<br>Revised | Train DPW personnel to recognize illicit discharge                                   | DPW/P. Belanger               | Annual training to include information on recognizing and reducing illicit discharges<br>Training to begin in summer 2004             | Program designed but not implemented                                                                              | Implement training Program                                                                     |
| 3-6<br>Revised | Review and update Town bylaws and regulations to include illicit discharge ordinance | DPW/ J. Stanford              | Years 1 and 2 – review existing ordinances                                                                                            | Review of existing ordinances started                                                                             | Continue with review                                                                           |

#### 3a. Additions - None

#### 4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description                                                         | Responsible Dept./Person Name | Measurable Goal(s)                                                                                 | Progress on Goal(s) – Permit Year 1<br>(Reliance on non-municipal partners indicated, if any)                                                     | Planned Activities – Permit Year 2       |
|----------|-------------------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 4-1      | Storm water impact and design review process                            | Planning Board/K. White       | Continue current new-construction review process involving all appropriate departments             | Reviewed new subdivision and site plans for storm water impact. Requested design changes to control development storm water discharge             | Continue design review process           |
| Revised  |                                                                         |                               |                                                                                                    |                                                                                                                                                   |                                          |
| 4-2      | Visually inspect construction sites for proper erosion control measures | Planning Board/K. White       | Continue to inspect sites, record inspections and track violations                                 | Inspected construction sites. Submitted deficiency reports to owners and contractors who were in violation of design storm water control measures | Continue with inspection process         |
| Revised  |                                                                         |                               |                                                                                                    |                                                                                                                                                   |                                          |
| 4-3      | Construction Site Runoff Control                                        | Planning Board/J. Stanford    | Review existing regulations to require sediment and erosion control measures on construction sites | Reviewed existing regulations. Determined that existing requirements are in place.                                                                | Recommend minor revisions to regulations |
| Revised  |                                                                         |                               |                                                                                                    |                                                                                                                                                   |                                          |
| Revised  |                                                                         |                               |                                                                                                    |                                                                                                                                                   |                                          |
| Revised  |                                                                         |                               |                                                                                                    |                                                                                                                                                   |                                          |
| Revised  |                                                                         |                               |                                                                                                    |                                                                                                                                                   |                                          |

4a. Additions - None

## 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 1<br>(Reliance on non-municipal partners indicated, if any)    | Planned Activities – Permit Year 2                                                              |
|----------------|-------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 5-1<br>Revised | Conduct storm water impact and design review process (in conjunction with BMP 4-1)                          | Planning Board/K. White       | Continue current review process involving all appropriate departments | Conducted reviews on all newly submitted applications                                            | Continue review process                                                                         |
| 5-2<br>Revised | Review and update Town bylaws and regulations regarding post construction storm water management provisions | Planning Board/K. White       | Years 1 and 2 – review existing ordinances                            | Reviewed existing regulations and received input from engineering department on possible changes | Collect all department recommendations and begin implementation process with the Planning Board |
| Revised        |                                                                                                             |                               |                                                                       |                                                                                                  |                                                                                                 |
| Revised        |                                                                                                             |                               |                                                                       |                                                                                                  |                                                                                                 |
| Revised        |                                                                                                             |                               |                                                                       |                                                                                                  |                                                                                                 |
| Revised        |                                                                                                             |                               |                                                                       |                                                                                                  |                                                                                                 |
| Revised        |                                                                                                             |                               |                                                                       |                                                                                                  |                                                                                                 |

5a. Additions - None

## 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 1<br>(Reliance on non-municipal partners indicated, if any)                                       | Planned Activities – Permit Year 2                                          |
|----------------|--------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 6-1<br>Revised | Street Sweeping                                                                            | DPW/P. Belanger               | Continue to sweep selected streets annually and increase frequency of sweeping as budget allows                                           | Purchased new street sweeper. Continued street sweeping program targeting curbed street sections                                    | Continue with program                                                       |
| 6-2<br>Revised | Catch Basin cleaning                                                                       | DPW/P. Belanger               | Continue to clean catch basins annually and as needed in areas of high flooding                                                           | Performed catch basin cleaning of more than half the town-owned catch basins. Also performed street swale maintenance and cleaning. | Continue with program                                                       |
| 6-3<br>Revised | Collect household hazardous waste                                                          | DPW/S. Crean                  | Continue hazardous waste collection days at the transfer station<br>Funding will only allow conducting 1 special collection day this year | Conducted 2 hazardous Waste collection days.                                                                                        | Conduct 1 household hazardous waste collection day – Scheduled for May 2004 |
| 6-4<br>Revised | Collect yard waste                                                                         | DPW/S. Crean                  | Continue yard waste drop off at transfer station                                                                                          | Yard waste drop off was in operation throughout the year                                                                            | Continue with drop off program                                              |
| 6-5<br>Revised | Maintain the storm water management program                                                | DPW/J. Stanford               | Maintain written program summary; update as necessary; submit reports annually in accordance with the permit                              | Created a folder of BMP's and tracked annual performance. Completed annual update in compliance with Permit.                        | Continue with tracking and compliance.                                      |
| 6-6<br>Revised | Implement Storm Water Pollution Prevention Plan for DPW garage and transfer station        | DPW/ J. Stanford              | Maintain plan at each facility                                                                                                            | Continued review of existing plans to determine if updates are required                                                             | Continue to review and update plan as necessary                             |
| 6-7            | Develop and implement training program for proper installation of erosion control barriers | DPW/ J. Stanford              | Review existing procedures                                                                                                                | Reviewed existing procedures and developed training program materials                                                               | Implement training                                                          |

6a. Additions - None

## 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 |
|----------|------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------|
| 7-1      | Monitor and sample discharges to impaired water ways | DPW/ J. Stanford              | Monitor discharges and collect samples of discharges to impaired waters as budget allows | Scheduled to begin in 2004                                                                 | Begin monitoring program           |
| Revised  |                                                      |                               |                                                                                          |                                                                                            |                                    |
| Revised  |                                                      |                               |                                                                                          |                                                                                            |                                    |
| Revised  |                                                      |                               |                                                                                          |                                                                                            |                                    |

### 7a. Additions - None

### 7b. WLA Assessment

Determination of discharges to impaired waters has not been completed as of yet. Upon completion of outfall mapping, determinations will be made.

## Part IV. Summary of Information Collected and Analyzed

At this point our program is focused on organizing all existing data. The program has been aided by our participation in the storm water group created with other southern New Hampshire communities. The group meets regularly to discuss progress and share resources.

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

### Programmatic

|                                                                                                         |       |          |
|---------------------------------------------------------------------------------------------------------|-------|----------|
| Stormwater management position created/staffed                                                          | (y/n) | no       |
| Annual program budget/expenditures                                                                      | (\$)  | \$12,000 |
| <i>amount represents outside consulting help and does not reflect actual implementation of programs</i> |       |          |
|                                                                                                         |       |          |

### Education, Involvement, and Training

|                                                                         |               |          |
|-------------------------------------------------------------------------|---------------|----------|
| Estimated number of residents reached by education program(s)           | (# or %)      | 0 %      |
| 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.)  | N/A      |
| Household Hazardous Waste Collection Days                               |               |          |
| ▪ days sponsored                                                        | (#)           | 2 days   |
| ▪ community participation                                               | (%)           | 5 %      |
| ▪ material collected                                                    | (tons or gal) | 2500 Gal |
| School curricula implemented                                            | (y/n)         | no       |
|                                                                         |               |          |
|                                                                         |               |          |

### Legal/Regulatory

|                                                 | In Place<br>Prior to<br>Phase II | Under<br>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               |  | (%)        | unknown |
| Estimated or actual number of outfalls |  | (#)        | unknown |
| System-Wide mapping complete           |  | (%)        | 10%     |
| Mapping method(s)                      |  |            |         |
| ▪ Paper/Mylar                          |  | (%)        | 10%     |
| ▪ CADD                                 |  | (%)        | 10%     |
| ▪ GIS                                  |  | (%)        | 80%     |
| Outfalls inspected/screened            |  | (# or %)   | 0%      |
| Illicit discharges identified          |  | (#)        | 0       |
| Illicit connections removed            |  | (#)        | 0       |
|                                        |  | (est. gpd) |         |
| % of population on sewer               |  | (%)        | 10%     |
| % of population on septic systems      |  | (%)        | 90%     |
|                                        |  |            |         |
|                                        |  |            |         |

### Construction

|                                                                                                   |            |      |
|---------------------------------------------------------------------------------------------------|------------|------|
| Number of construction starts (>1-acre)                                                           | (#)        | 5    |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control | (%)        | 100% |
| Site inspections completed                                                                        | (# or %)   | 100% |
| Tickets/Stop work orders issued                                                                   | (# or %)   | 2    |
| Fines collected                                                                                   | (# and \$) | 0    |
| Complaints/concerns received from public                                                          | (#)        | 1    |

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

### Post-Development Stormwater Management

|                                                                                                                          |          |         |
|--------------------------------------------------------------------------------------------------------------------------|----------|---------|
| Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control | (%)      | 30%     |
| Site inspections completed                                                                                               | (# or %) | 90%     |
| Estimated volume of stormwater recharged                                                                                 | (gpy)    | unknown |
| <i>Public Works Director has regularly requested engineers to implement recharge into their designs</i>                  |          |         |
|                                                                                                                          |          |         |

### 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                                                             | (#)            | 83      |
| Storm drain cleaned                                                                            | (LF or mi.)    | 240 lf  |
| Qty. of screenings/debris removed from storm sewer infrastructure                              | (lbs. or tons) | unknown |
| Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.) |                | recycle |
| Cost of screenings disposal                                                                    | (\$)           | unknown |
|                                                                                                |                |         |
|                                                                                                |                |         |

|                                                                                      |                |         |
|--------------------------------------------------------------------------------------|----------------|---------|
| Average frequency of street sweeping (non-commercial/non-arterial streets)           | (times/yr)     | 1/year  |
| Average frequency of street sweeping (commercial/arterial or other critical streets) | (times/yr)     | 4/year  |
| Qty. of sand/debris collected by sweeping                                            | (lbs. or tons) | unknown |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)                | (location)     | recycle |
| Cost of sweepings disposal                                                           | (\$)           | unknown |
| Vacuum street sweepers purchased/leased                                              | (#)            | 0       |
| Vacuum street sweepers specified in contracts                                        | (y/n)          | no      |
|                                                                                      |                |         |
|                                                                                      |                |         |

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

|                                                                                                                                                                     |                     |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------|
| Anti-/De-Icing products and ratios                                                                                                                                  |                     |         |
| <i>The Town uses mostly sand however we will use a sand/salt mixture in our winter operations when conditions necessitate (we use a 4:1 ratio of sand to salt).</i> |                     |         |
|                                                                                                                                                                     | % NaCl              | 40 %    |
|                                                                                                                                                                     | % CaCl <sub>2</sub> | 0%      |
|                                                                                                                                                                     | % MgCl <sub>2</sub> | 0%      |
|                                                                                                                                                                     | % CMA               | 0%      |
|                                                                                                                                                                     | % Kac               | 0%      |
|                                                                                                                                                                     | % KCl               | 0%      |
|                                                                                                                                                                     | % Sand              | 60 %    |
| Pre-wetting techniques utilized                                                                                                                                     | (y/n)               | no      |
| Manual control spreaders used                                                                                                                                       | (y/n)               | yes     |
| Automatic or Zero-velocity spreaders used                                                                                                                           | (y/n)               | yes     |
| Estimated net reduction in typical year salt application                                                                                                            | (lbs. or %)         | unknown |
| Salt pile(s) covered in storage shed(s)                                                                                                                             | (y/n)               | yes     |
| Storage shed(s) in design or under construction – <i>funding for new shed appropriated</i>                                                                          | (y/n)               | yes     |
|                                                                                                                                                                     |                     |         |
|                                                                                                                                                                     |                     |         |