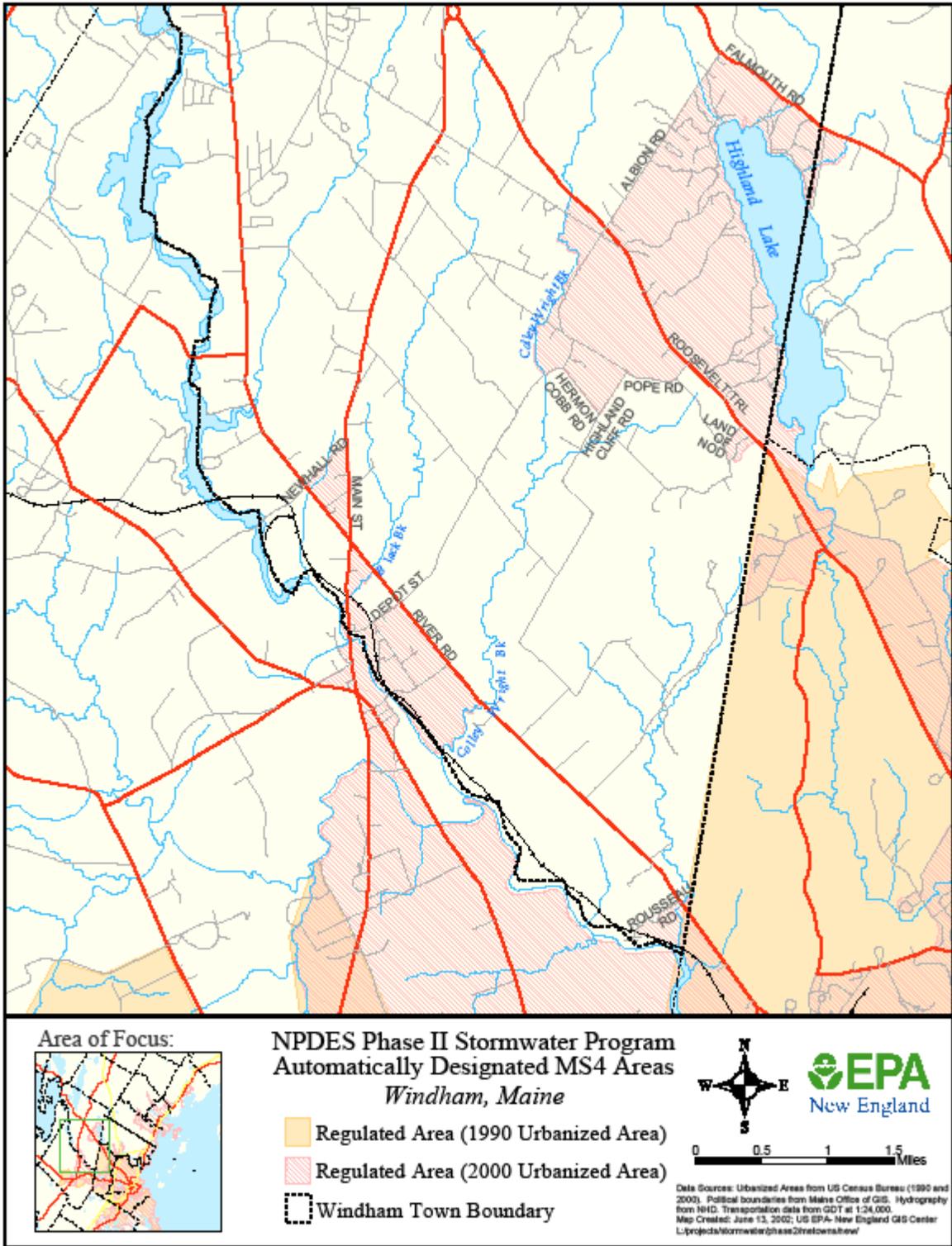


**Windham Stormwater Phase II
Permit Cycle II
Summary Report Permit Year 1
July 1, 2008 – June 30, 2009**



MINIMUM CONTROL MEASURES

I. Public Education and Outreach

The Town of Windham will fulfill the requirements for Public Education and Outreach through participation in the Interlocal Stormwater Working Group (ISWG) and the Town's provision of funding to the ISWG for Public Education and Outreach services, as described in this section of the plan.

BMP 1.1 - Continue Awareness Outreach Efforts from the Previous MS4 Permit Cycle.

Measurable Goal 1.1.1 – In Permit Year 1, the ISWG will continue to provide a thinkbluemaine.org link on their individual municipal websites to raise awareness of stormwater issues.

Actions Completed During Permit Year 1

Responsible Party: Roger Timmons, Director Code Enforcement in cooperation with ISWG Education Coordinator.

- 1) The Town also continues to provide a thinkbluemaine.org link on their individual website to raise awareness of stormwater issues.

Measurable Goal 1.1.2 – All YardScaping and stormwater outreach materials proximately feature the Think Blue Maine ducky logo.

- 1) *The Ducky logo* continues to be used in all Yardscaping materials to reinforce the connection between lawn care activities and stormwater issues.

Measureable Goal 1.1.3 – In Permit Year 1, the ISWG will continue to provide informational material in municipal buildings to raise awareness of stormwater issues.

- 3) The Town of Windham continues to provide informational material in municipal buildings that include the “Do you want a lush green lawn safe for kids and pets?” brochure, Surface Water Protection Ordinance brochure, “Is your Lawn Truly Green” fact sheet and a link to the CCSWCD website for Yardscaping information.

BMP 1.2 – Work with existing partners and seek out partners to help raise awareness of stormwater issues.

Cooperative efforts with Maine YardScaping Partnership (Maine Board of Pesticides Control, Friends of Casco Bay, Casco Bay Estuary Partnership, University of Maine Cooperative Extension, Maine DEP, etc.):

- YardScaping Display at the Portland Flower Show, March 12-15; assisted with booth set up; provided pertinent YardScaping fact sheets(mow better, water wisely, overseed, grubs); staffed the booth. This was an excellent opportunity to work cooperatively to reach a large segment of our target audience. Approximately 1400 YardScaping book marks were distributed at the event, and they provided a good “hook” to draw people into the booth to discuss their lawn care habits. This was also an excellent opportunity to collect some anecdotal information. For example, one gentleman stopped by the booth and said he had attended a YardScaping adult education class. He decided to maintain a portion of his lawn as recommended in the class –aerating, topdressing with compost and overseeding with YardScaping seed mix. He said that portion of his lawn was noticeably improved over the area that was not “YardScaped.” He was so pleased with the results that he decided to continue the process on the remainder of his lawn.
- Back Cove Demonstration Project – Provided assistance with the planning and installation of approximately 300 native perennials, shrubs and trees for the establishment of four demonstration landscapes at Back Cove in Portland. The demonstration landscapes were created in response to the need to provide a publicly accessible demonstration that showcases appropriate plantings for both urban and rural settings in a beautiful, homeowner-doable way in order to convince people that they can reduce their impact on the environment while still retaining a look that is appealing. The implementation phase of this project started in June 2008, and already people are starting incorporate some of the recommendations into their own landscapes. An architect designing a LEED-certified home in Portland contacted the Maine YardScaping Partnership to tell them that his client took him to the demonstration site. The client said he wanted his landscape to be similar to the demonstration site. The project has also generated press coverage both in the *Portland Press Herald* and on television.
- YardScape certification for yard care professionals – Worked with the Maine Board of Pesticides Control, UMCE, Maine Landscape & Nursery Association (MeLNA), and yard care professionals to begin exploring the establishment of a certification program for yard care practitioners. Two meeting were held with partners to discuss potential program structure and administration. Details are still being fleshed out, but preliminary discussions centered on an educational program offered through UMCE and a test and certification administered through MeLNA. There was also discussion of requiring a site visit to ensure certified individuals/companies are following the YardScape principles. Development of this program will continue into the future.

A database of regional partners has been started. The database includes contact information for conservation commissions, drinking water utilities, non-governmental organizations and school service learning coordinators. The database will be complete during Permit Year 2.

BMP 1.3 – Develop and implement Stormwater Awareness Plan.

Plan Development

The Stormwater Awareness Committee, which included representatives from each MS4 area/cluster, Maine DEP (MDEP), and the University of Maine Cooperative Extension (UMCE) determined that existing assessments of the target audience (statewide Omnibus survey and Bangor Area Stormwater

Group's intercept survey) offered sufficient data to determine a baseline level of awareness. Based on the two surveys referenced, 35% of our target audience already understands that stormwater is an issue.

ISWG education staff developed the Statewide Awareness Plan in conjunction with the Stormwater Awareness Committee. The plan was submitted to MDEP on March 2, 2009. MDEP's comments were incorporated and the plan was resubmitted on April 30, 2009. The plan was approved by MDEP on May 27, 2009.

Plan Implementation

Message Development & Testing

The ISWG education coordinator, on behalf of the MS4 communities statewide, developed potential messages to convey the following goal of the Statewide Awareness Plan: *Homeowners will understand that water does run off their property, not all is absorbed, and it will carry with it pollutants, such as lawn chemicals, pet waste and oil drops. This polluted water will enter the storm drain system, and discharge, untreated, directly to waterbodies used for drinking, fishing and swimming.*

Two unique messages ("Follow the flow" and "What happens in your yard doesn't stay in your yard") were tested against products from an existing awareness campaign from North Carolina ("Know where it goes").



Draft poster for "Follow the flow"

To aid in testing, MDEP, University of Maine Cooperative Extension (UMCE), and ISWG staff developed standardized message testing forms. The forms asked people to describe, in their own words, the take away message for each of the poster options. They also asked people to rank, on a scale from one to five, the clarity of the message, the anticipated community response to the poster and the overall quality of the message. The forms were distributed to representatives from all of the MS4 communities with instructions to collect feedback from the target audience. The data gathered was entered into a database and analyzed to determine which option best conveyed our message.

Analysis showed that North Carolina's "Know where it goes" campaign was slightly favored over the other options, with a mean clarity rating of 4.00. However, because "Follow the flow" was only slightly lower (mean clarity rating of 3.87), and the open answer responses indicated that the message more closely summarized the goal stated in the Statewide Awareness Plan, the

final message selection was "Follow the flow."

Feedback associated with the "Follow the flow" option indicated that the original graphic, showing runoff from a residential property entering a local water body, was too busy and difficult to understand. An artist was hired to take the original concept and simplify it. The new image was modified to show a traditional New England-style home and more potential pollutants. The new image also more clearly shows the water flowing into a storm drain.

Outreach Materials

Website:

The ISWG education coordinator, on behalf of all MS4 communities, began to redesign and update the ThinkBlueMaine.org website. The new design is more user-friendly and better organized, making the information contained on the site easier to find. The new look of the site is cleaner and more appealing. It also prominently features the image of the rubber ducky.

The new website has a new section – the stormwater managers’ toolbox. This page serves as a clearinghouse for all educational materials developed. All materials will be available for download to assist in the distribution of materials statewide.



The redesigned site was staged on Cumberland County Soil & Water Conservation District’s (CCSWCD) website (www.cumberlandswcd.org/thinkbluemaine) in order for MDEP and the MS4 communities to view the site and provide comments before it went live on www.ThinkBlueMaine.org.

Ducky Ad:

CCSWCD staff worked with a media buyer to purchase ad space to run the Think Blue Maine ducky ads. Staff secured financial commitments from all MS4 communities/clusters and MDEP to purchase the ad space on local stations statewide. The ads will run the final three weeks in August.

Partner Networks:

A database of statewide partners has been started. The database includes contact information for conservation commissions, drinking water utilities, non-governmental organizations and school service learning coordinators.

Press:

- August 18, 2008 – *Portland Press Herald*, John Richardson, “Rains wash pollutants into ocean, prompt advisories”
- November 22, 2009 – *Portland Press Herald*, John Richardson, “The scoop on what to do, and not do, with poo”
- June 13, 2009 – *Portland Daily Sun*, Casey Conley, “Grate Expectations”

BMP 1.4 - Continue Targeted Best Management Practices Adoption efforts from previous MS4 permit cycle.

Grants Submitted

The ISWG Education Coordinator worked in cooperation with the Bangor Area Stormwater Group and the seven other regulated MS4s to submit a grant proposal to the Maine Outdoor Heritage Fund to support the statewide expansion of the point of sale program. Unfortunately, this grant was not funded.

Outreach Materials

- Developed YardScaping four-step brochure – timing of recommendations is aligned with conventional four-step programs. This was developed based on feedback from staff at

point of sale stores who suggested a natural four-step program would help the YardScaping program compete with conventional lawn care practices. See more information about the four-step in the point of sale section below.

- Revised fact sheets: aerate, ants, compost tea, fertilizer, grubs, lawn care calendar, mow better, overseed, topdressing, water wisely, why YardScape?
- Developed additional fact sheets: common weeds, groundcovers, compost tea instructions, soil test instructions
- Developed visual aids for adult education classes
- Designed posters for point of sale stores to advertise program
- Updated adult education instructor manual
- Established online mailing list
- Updated YardScaping website (www.cumberlandswcd.org/yardscape). New additions include listing of point of sale stores, fact sheet page, and events calendar

Point of Sale

This permit year straddles the second and third years of the point of sale program. Sixteen stores in 10 communities (nine of which are MS4s) participated in the program these years. At the end of the second pilot year, staff met with representatives from each store individually to solicit feedback on the program and discuss possibilities for the future.



Feedback from participating stores indicated that additional outreach and advertisement of the program would be beneficial. Large posters were designed for in-store promotion of “ducky approved” items. The posters were distributed to participating stores at the beginning of the third pilot year (which straddles permit years one and two). The stores were asked to display the posters in store windows or near lawn care products. A listing of participating stores was added to the CCSWCD YardScaping website (www.cumberlandswcd.org/yardscape). Links to store websites were added when available.

Staff began to address the need for a more robust tracking system for the point of sale program. While stores indicated after the end of the second pilot year that they would be willing to offer a coupon on recommended products, each store wanted the coupon to be slightly different. This delayed the coupon tracking system while staff work with stores to develop an acceptable coupon.

Tracking product sales as an indicator of behavior change is also being explored. In preparation of the third pilot year, staff asked stores to provide three years of information on product sales, specifically grass seed, weed and feed and fertilizer. Most stores have a computerized inventory and sales system, which makes it easy for them to provide this information. The hope is to

develop a baseline of sales information and hopefully see a change in sales trends as the program continues.

Feedback from participating stores also indicated the need for a comprehensive list of recommended products. Staff worked in conjunction with the Maine Board of Pesticides Control to review product catalogs and identify preferred products. Staff then inventoried stores to determine what products stores already carry. A database of this information has been created in Access, and the goal is to make this available on the YardScaping website. Currently the database is being provided to stores so they have the information they need when ordering products.

Representatives from many of our partner stores have suggested that a YardScaping four-step program be developed to rival the conventional four-step lawn care systems. They felt that in order for the YardScaping program to be truly successful, a similar program would be needed because most homeowners are familiar with and follow a conventional four-step approach. Staff took the Yard Care Calendar, which was developed during permit year five, and boiled it down to four steps, the timing of which mirrors conventional four step programs. While the conventional program essentially consists of buying four different products and applying the fertilizer-pesticide combination four times throughout the summer months, the YardScaping four-step consists of the following steps:

Spring Greening (April – June)

- Topdress with compost
 - Seed bare spots
 - Mow at 2-inches to start then increase to 3-inches for the remainder of the season
 - Leave the clippings
2. Water Wisely (June – early August)
 - Water only when needed
 - Apply compost tea (optional)
 3. Bugs Out! (August – September 15)
 - Apply beneficial nematodes for grub control
 - Overseed after August 15
 - Fertilize with slow-release nitrogen
 4. Simply Soil (September 15 – October 15)
 - Test soil pH
 - Apply calcium rich lime if pH is less than 6.0

YardScaping 4-Step
Save time, save money and have a beautiful lawn safe for kids and pets!

Step 1: Spring Greening
(April - June)

- Topdress with compost to add nutrients if needed
- Seed bare spots with endophyte enhanced perennial ryegrass
- Mow grass at 2" to start, then increase to 3" for the rest of the season
- Always leave grass clippings on the lawn for free, natural fertilizer

Step 2: Water Wisely
(June - early August)

- Water only when needed: lawns need 1-1.5" of water per week
- Apply compost tea to add nutrients and improve soil health (optional)

Step 3: Bugs Out!
(August - September 15)

- In early August, apply beneficial nematodes for grub control if needed
- After August 15, overseed with endophyte enhanced tall and fine fescue mix
- Fertilize with slow-release nitrogen if needed (look for 10-0-0 on the bag)

Step 4: Simply Soil
(September 15 - October 15)

- Test soil pH
- Apply calcium rich lime if pH is less than 6.0

YardScaping will give you a lush, green lawn safe for kids and pets!

- Children take in more pesticides relative to body weight than adults!
- Some studies have found that dogs exposed to lawn pesticides are more likely to be diagnosed with health problems such as bladder cancer!
- Weed and insect controls are designed to be toxic. Just because they can be bought at a store doesn't mean they're safe.
- Fertilizers are often used unnecessarily. This wastes money and pollutes our waters.
- YardScaping will help you reduce the use of fertilizers, insecticides and herbicides.

For more information visit www.cumberlandswcd.org and click on the ducky!

Cumberland County Soil & Water Conservation District
www.cumberlandswcd.org

THINK BLUE MAINE

Front Back

YardScaping four-step

The four-step information was distributed to point of sale stores in June, and follow up with stores indicates that people are having a positive response to it. According to one store

representative, “People seem to be really excited to see a natural four-step option, but because most people bought all four steps of the conventional program in the spring, not many people have been taking the information. I expect more people follow the YardScaping four-step next spring.”

Point of sale in-store promotional efforts:

- April 18, 2009 – location: O’Donal’s Nursery, Gorham; event: Organic Gardening Day; audience: predominately residents of Gorham, Westbrook and Scarborough, but also included people from neighboring communities. The YardScaping display that was designed by the State YardScaping Partnership was used. All fact sheets were available to attendees. O’Donal’s allowed compost tea kits to be sold at the event, which proved to be very popular. This event was very well attended, with staff interacting with approximately 65 people.
- April 25, 2009 – location: Estabrook’s Greenhouses, Yarmouth; event: open house; audience: predominately Yarmouth residents. This event was pretty slow; very few people were shopping that day, and even fewer stopped by the YardScaping display (staff interacted with approximately 10 people). There were some good conversations with attendees, but they were few and far between. Staff has a similar experience with this event the previous year, but the low turnout was attributed to the date (it was Easter weekend) and poor weather. This year’s event did not coincide with Easter and the weather was sunny and warm, yet there was still a disappointing turn out. Staff will likely research another weekend if this store requests another in-store appearance.

Adult/Community Education

Because of the past success of the adult education classes, they were continued in the fall and spring of permit year one. The following classes were held in the fall: Scarborough – 9/18 (7 students); South Portland – 9/20 (5 students); Gorham – 9/23 (5 students); Cumberland – 9/25 (9 students); Cape Elizabeth – 10/22 (7 students). Additional classes were scheduled in Windham, Biddeford and Yarmouth but had to be cancelled due to low registration. In-store trainings offered at point of sale stores have been quite successful in the fall. Staff are planning to schedule these types of classes rather than going through adult education departments in the fall. The hope is to get more class attendance and help promote our partner stores by drawing people to the class.

For the spring classes, staff scheduled classes in fewer communities, but advertised them in multiple community education bulletins. This increased the cost effectiveness of the program. The following classes were held in the spring: Scarborough – 3/12 (4 students); Cumberland – 3/26 (5 students); Gorham – 4/1 (3 students); Portland 4/2 – (6 students); Cape Elizabeth – 5/6 (30 students).

The Cape Elizabeth class held on May 6th was the best attended class to date. Following this class, the CCSWCD YardScaping website experienced its greatest volume of traffic permit year one. The class evaluation for this course was revised to include an area for participants to indicate if they would be willing to host a YardScaping Social in their neighborhood. Three participants indicated that they would be interested and requested more information. Staff are hopeful the adult education classes will serve as a mechanism for developing the neighborhood social model.

Staff are also exploring other venues for adult education. For example, a National Semiconductor employee visited the YardScaping booth at Windham Summerfest in June 2009. He was very interested in YardScaping and felt many of his co-workers would be as well. Staff have scheduled a “lunch & learn” at National Semiconductor in South Portland for August 2009. This opportunity will allow the program to reach many in our target audience, since National Semiconductor employs people from all over the Greater Portland area. Staff is exploring this opportunity with other large employers in the area.

A number of materials used for adult education classes were revised or created. As mentioned previously, the final class evaluation was revised to include an area for participants to indicate that they would be willing to host a YardScaping social in their neighborhood. In addition, the instructor notes were revised to improve the flow of the class and emphasize practical concepts more. Visual aids were created to better illustrate key concepts presented in the class. Visuals were also created to help participants identify common weeds in their lawns, since this is a question that is frequently discussed in the classes.

Fall 2008 class highlights:

- Eleven of the class participants documented on the evaluation that they use weed and 10 indicated that they were going to stop.
- Most participants (31 of 33 responses) indicated that they thought there was a connection between lawn care and water quality.

Fall 2008 YardScape class statistics from the completed evaluation forms:

Lawn Care Practice	Plan to implement	Currently do not implement	% planning to implement
Set Mower to a height of 3"	18	19	95
Leave grass clippings	10	12	83
Sharpen mower blades	16	20	80
Aerate	30	32	94
Topdress	28	33	85
Overseed	29	29	100
Use low maintenance seed	34	36	94
Get a soil test	31	35	89
Use nitrogen-only fertilizer	26	30	87
Use compost tea	25	34	74

Spring 2009 class highlights:

- Ten of the class participants documented on the evaluation that they use weed and feed and each indicated that they were going to stop.
- Most participants (39 of 44 responses) indicated that they thought there was a connection between lawn care and water quality.

Spring 2009 YardScape class statistics from the completed evaluation forms:

Lawn Care Practice	Plan to implement	Currently do not implement	% planning to implement
Set Mower to a height of 3"	24	24	100
Leave grass clippings	17	18	94
Sharpen mower blades	19	19	100
Aerate	28	32	88
Topdress	35	38	92
Overseed	34	36	94
Use low maintenance seed	33	34	97
Get a soil test	31	33	94
Use nitrogen-only fertilizer	28	35	80
Use compost tea	22	34	65

Data on the actual number of people who adopted the practices indicated has not yet been collected. Follow up phone calls will be made in the fall of 2009 to allow class participants time to implement the recommended practices.

Fall 2008 follow up:

Based on follow up phone calls from previous rounds of adult education classes, it appeared that many people did not follow through with plans to have their soil tested prior to making lawn care decisions. In the fall of 2008, staff called participants from spring 2008 classes to determine if they had indeed done a soil test. Surprisingly, approximately 71% of people reached stated that they did follow through with having a soil test done for their lawn. When asked what they did with the results of the soil test, an overwhelming majority (80%) stated that they found the recommendations confusing and were not sure how to proceed. This points to the need for resources to assist landowners with interpreting the recommendations from their soil test. Staff will explore resources available or create new materials if none exist.

BMP 1.5 – Develop and implement BMP Adoption Plan

It was determined that data collected through a 2006 phone survey offered sufficient data to determine the target audience’s baseline lawn care practices. Based on this survey, one-third of our target audience is using weed and feed products, and one-quarter of our target audience is over fertilizing (fertilizing more than once per year).

ISWG Education Coordinator developed BMP Adoption Plan as part of the 5-year MS4 municipal permit. The plan includes budget and timeline of activities for March 2008 through June 2013. The plan was submitted to the Maine Department of Environmental Protection (MDEP) on March 2, 2009. MDEP’s comments were incorporated and the plan was resubmitted on May 28, 2009. The plan was approved by MDEP on June 23, 2009.

6. School Outreach

a. Actions

Actions Completed During Permit Year 1

Responsible party - ISWG Education Coordinator and Roger Timmons, Director Code Enforcement

Total students: 244

Total contact hours: 2,237

- **Lesson topics:** Water quality; bioaccumulation of pesticide runoff in an aquatic food chain; local water bodies - current status, concerns, and actions; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change, Southern Maine Children's Water Festival*.

Schools: Windham High School, Windham Middle School

Educators: CCSWCD, PWD

II. PUBLIC INVOLVEMENT AND PARTICIPATION

The Town will fulfill the requirements for Public Involvement and Participation through participation in the Interlocal Stormwater Working Group (ISWG) and the Town's provision of funding to the ISWG for Public Involvement and Participation services, or through directly fulfilling the requirements, as described in this section of the plan.

A. Goal.

Involve the public in both the planning and implementation process of improving water quality and reducing quantity via the stormwater program.

B. Required Best Management Practices

1. Public Notice Requirement

Actions completed during Permit Year 1

Responsible party – ISWG Stormwater Program Coordinator and/or Roger Timmons, Director Code Enforcement

- 1) In June of 2008, Roger Timmons summarized the five year plan and informed the council that the Notice of Intent (NOI) had been submitted.
- 2) In May of 2008, Roger Timmons gave a presentation summarizing the status of the Stormwater Phase II Program and requested funding for Permit Year 1.
- 3) The Town of Windham provides public notices for all Town Activities and projects and follows applicable public notice requirements.

2. Host Public Events

Actions completed during Permit Year 1

Responsible party – ISWG Stormwater Program Coordinator and/or Roger Timmons, Director Code Enforcement

- 1) The Department of Public Works coordinated with the Cumberland County Soil & Water Conservation District to complete storm drain stenciling with a youth group. The stenciling occurred in July of 2008 and the group stenciled 186 storm drains.
- 2) The Department of Public Works hosted a household hazardous waste collection day was held on July 12, 2008 with 160 cars participating. 1,255 lbs of material was collected. The event was advertised through flyers that were distributed in the recycling bins prior to the event and on the Town website. The cost to the Town to host this event was \$10,097.
- 3) The Town of Windham considers it a high priority to protect Highland Lake water quality and a result supports the Highland Lake Conservation Project.

Highland Lake Conservation Project – Phase III

The primary purpose of this project is to significantly reduce erosion and export of sediment and phosphorus into Highland Lake. This project began in April 2008 and will continue until March 2010. Conservation practices that reduce erosion and polluted runoff will be installed at 8 high and medium impact NPS sites throughout the watershed. This project also aims to raise awareness about watershed problems through technical assistance to watershed landowners and work to foster long-term watershed stewardship. During Permit Year I the project;

- Completed 6 technical assistance visits
- Accomplished 1 road improvement project – 300' of reclaimed asphalt installed along with a new culvert, ditching and stone lined spillway.
- Conducted 34 best management practices inspections throughout watershed
- Provided two presentations to the Windham & Falmouth town councils

While we often hear about the cumulative impact of all the small and large problems that cause lake water quality to decline, we must also remember the cumulative benefits for lake water quality when community members join forces to solve erosion problems in their neighborhoods. Thanks to the commitment of the Highland Lake Association, the Towns of Windham and Falmouth and all the residents in the watershed.

Forest Lake Conservation Project – Phase II

The project aims to raise awareness about watershed problems and foster long term watershed stewardship and to significantly reduce erosion and export of sediment and phosphorus into

Forest Lake. Project partners include Forest Lake Association, Cumberland County Soil & Water Conservation District, and the Towns of Windham, Gray and Cumberland. During Permit Year I;

- 23 technical assistance visits completed
- 3 road improvement projects completed that included two large culvert installations, ditching, turnouts, and another smaller culvert.
- 5 sites addressed by the Casco Bay Regional Youth Conservation Corps
- 10 residential matching grants implemented
- “Buffers Benefit” pilot program continued; an additional 10 residents pledged to plant

Thanks to the commitment of the Forest Lake Association, the Towns of Windham, Cumberland and Gray and all the residents in the watershed. The success of projects like these is due to the established partnerships within the watershed.

Little Sebago Lake Conservation Project

The Phase I Little Sebago Lake Conservation Project is complete after three years of on-the-ground improvements. The project raised awareness about watershed problems through technical assistance to landowners and worked to foster long term watershed stewardship. The Phase II Conservation Project is slated to be completed by March of 2009. The primary purpose of these projects was to significantly reduce erosion, export of sediment and phosphorus into the lake. Project partners include the Cumberland County Soil and Water Conservation District, the Little Sebago Lake Association, the Maine Department of Environmental Protection and the Towns of Windham and Gray. Accomplishments for 2008 include:

- 20 technical assistance visits completed
- 7 road and residential improvement projects completed
- 17 sites addressed by the Little Sebago Lake Youth Conservation Corps

Thanks to the commitment of the Little Sebago Lake Association, the Towns of Windham and Gray and the watershed community. Together, we can accomplish great things as we work together to reduce the cumulative impacts of all the problems that can cause lake water quality to decline.

III. Illicit Discharge Detection and Elimination

Goal

Develop, implement and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges.

Prior actions: The Town of Windham passed a Non-Stormwater Discharge Ordinance on February 11, 2005.

B. Required Best Management Practices

1. Develop a watershed based storm sewer system infrastructure map.

Actions completed during Permit Year 1

Responsible Party – Douglas Fortier, Director Public Works

- 1) Reviewing of maps has been completed which identifies all stormwater infrastructures.
- 2) **Additional Activities:** The Town of Windham completely mapped all junk yards within the town and maintains a list which includes owner name, location and map and lot.
- 3) **Additional Activities: “Public Complaint Hotline”** The Town has a formal system to address public complaints. Complaints are received thru email and phone calls to the Code Enforcement Department and Public Works Department. A complaint was logged (see attachment) within the Highland Lake Watershed. Inspection of the site determine that there were only leaves in a decaying state and no violation was found.

2. Develop dry weather outfall inspection program.

Prior Actions:

The Town of Windham has:

- Developed a SOP for dry weather outfall inspection program;
- Developed forms and put a data collection system in place for dry weather outfall inspections;
- Established a mechanism to train staff, as needed, on how to conduct and record dry weather inspections; and
- Established a protocol that identifies the steps that must be taken when an illicit discharge is encountered.

The Town of Windham has 40 outfalls in the urbanized area.

Actions Completed During Permit Year 1

Responsible Party - Douglas Fortier, Director Public Works

- 1) The Town completed their dry weather outfall inspections between October 22, 2008 and November 20, 2008. One small 4 inch drain pipe was found, no odor or suspicious color was detected. There were no major illicit discharges or concerns identified in Permit Year 1. Opportunistic inspections are completed in the course of daily work.

4. Open ditch Illicit Discharge Program

Actions Completed During Permit Year 1

Responsible Party - Douglas Fortier, Director, Public Works

- 1) No work was required for Permit Year 1.

IV. Construction Site Stormwater Runoff Control

Goals

Develop, implement, and enforce a program, to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. For specific permit requirements and suggestions, refer to MDEP's General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems Part IV(H)(4).

Per General Permit Part IV(H)(4a.), the permittee will rely on the Maine Construction General Permit or Chapter 500, Stormwater Management.

B. Required Best Management Practices

1. Notification to construction site developers and operators of the requirements for registration under the Maine Construction General Permit or Chapter 500, Stormwater Management for the discharge of stormwater associated with construction activities;

Actions Completed During Permit Year 1

Responsible party - Roger Timmons, Director Code Enforcement

- 1) The Town continued notification procedures currently in place using the modified building permit and shoreland zoning applications that alert applicants to the MCGP triggers.
 - 2) The Town received and issued thirty Shoreland Zoning Permits, nine Internal Plumbing Shoreland Permits, ten septic system shoreland permits, five Shoreland application review permits and eighteen Soil & Erosion Shoreland Permits.
 - 3) The Town currently has eight Shoreland Zoning unresolved violations and or complaints. One complaint was a result of a septic malfunction the remaining violations ranged from illegal tree cutting, to setback violations and an illegal apartment.
 - 4) The Town also evaluates the current system and modifies if needed.
2. **Develop and implement a mechanism to annually document every construction activity that disturbs one or more acres within the Urbanized Area.**

Actions Completed During Permit Year 1

Responsible party - Roger Timmons, Director Code Enforcement

1) A tracking system is in place for all activity that disturbs one or more acres. The Town continues to utilize third party inspections.

3. Develop and implement a construction site inspection program.

Prior Actions:

The Town of Windham has:

- Developed a procedure for construction site inspections by either a municipal official or a contracted third party to meet the terms and conditions of the MS4 General Permit.
- Developed a standardized inspection form to ensure documentation of all required inspections.
- Developed a process for tracking and notifying the site developer or contractor of noncompliance issues. For sites that are not in compliance, the inspector(s) will provide site operators with guidance on how to come into compliance. Sites that are not brought into compliance within the inspector's specified time period shall be issued a written notice of deficiencies. Continued noncompliance will be reported to the DEP with supporting documentation.
- Developed and implemented (as needed) a training program for municipal inspectors.

Actions Completed During Permit Year 1

Responsible party –Roger Timmons, Director Code Enforcement

1) The Town continues to implement its inspection program for each activity that disturbs one or more acres. Results are documented in a record keeping system and during Permit Year 1 the Town did not inspect have any sites to inspect.

V. Post-Construction Stormwater Management

A. Goal (within the Urbanized Area)

Develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acres that are part of a larger common plan of development or sale, that discharge into the City's MS4.

B. Required Best Management Practices

1. Implement ordinance or similar measure

Actions Completed During Permit Year 1

Responsible Party - Roger Timmons, Director Code Enforcement

- 1) The Town of Windham adopted and passed a Post Construction Ordinance in May of 2009.
 - 2) The Town adopted a new Shoreland Zoning Ordinance in May of 2009.
2. Develop and implement an inspection program for post-construction BMPs for which the owner or operator has not hired a qualified third party inspector, and which are located in the direct watershed of a lake most at risk from new development or in watersheds of an urban impaired stream.

Actions Completed During Permit Year 1

Responsible Party - Roger Timmons, Director Code Enforcement

- 1) Inspections have been made conditions of approval through the planning process.

VI. Pollution Prevention/Good Housekeeping for Municipal Operations

A. Goal

This program has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

B. Required Best Management Practices

1. Operations at municipally owned grounds and facilities.

Actions Completed During Permit Year 1

Responsible Party - Douglas Fortier, Director of Public Works

The Town of Windham has developed the inventory tracking documents necessary for all municipal operations.

- 1) Inventory of municipal operations and facilities in the urbanized area includes:
 - South Windham Fire Station off Route 202
- 2) Inventory of municipal operations and facilities outside of the urbanized area includes:
 - Arlington Cemetery off 302 North Windham
 - Anderson Cemetery off River Rd. by Anderson Rd.
 - Austin Cemetery off Nash Rd.
 - Chase Cemetery off Highland Cliff Rd.
 - Chute Cemetery off Chute Rd.

- Dolly Cemetery off Varney Mill Rd.
- Mayberry Cemetery off Park Rd.
- Morrell Cemetery off 202 by rotary
- Smith Cemetery off 202 by rotary
- Windham Hill Cemetery off Windham Center Rd
- Hunnewell Cemetery off River Road So end
- Brown Cemetery off Chute Road
- Loveitt Cemetery off River Road upper
- Mudford Cemetery off River Road
- Knight Cemetery off Pope Road lower
- Friends Cemetery off Route 202 central
- Quaker Cemetery off Route 200 & Pope Road
- MacIntosh Cemetery off Falmouth Road
- Gould Cemetery off Nash Road
- Stevens Cemetery off Stevens Road
- Purinton Cemetery off Route 202
- Knight Cemetery off Brand Road
- Lakehurst Cemetery off Route 302
- Landfill off Route 302
- Public Works off Windham Center Rd.
- Town Office off Route 202 and Windham Center Rd.
- Old Town Gravel Pit off Windham Center Rd.
- East Windham fire station off Falmouth Rd
- North Windham fire station off Route 302
- Central fire and police off Route 202
- Human Services off Route 202 beside police
- Skate park off Route 202 beside police
- Lowell Preserve off Falmouth Rd
- Otterbrook preserve off River Rd
- Dundee Park off River Rd on the Presumscott River

2. Municipal employee training.

Actions Completed During Permit Year 1

Responsible Party - Roger Timmons, Director Code Enforcement

1) Roger Timmons attended four and Douglas Fortier attended one ISWG meeting during Permit Year 1.

3. Street sweeping.

Actions Completed During Permit Year 1

Responsible Party - Doug Fortier, Director Public Works

1) All municipal streets that have winter sand accumulation and are in need of street sweeping are swept annually between April and June or July depending on spring rains. All school grounds are also swept. Approximately 2300 cubic yards of material was collected through street sweeping. Residuals are deposited in the old town gravel pit.

4. Cleaning of stormwater structures including catch basins.

Actions Completed During Permit Year 1

Responsible Party - Doug Fortier, Director Public Works

1) The Town cleaned 673 basins in 2008.

5. Maintenance and upgrading of stormwater conveyances and outfalls.

Actions Completed During Permit Year 1

Responsible Party - Doug Fortier, Director Public Works

1) The Town inspected and cleaned 673 basins.

2) The Town installed 2400' of ditching on Route 202 and discovered a basin which was cleaned and inspected. The Town continues to inspect and evaluate all stormwater structures and outfalls in the MS4 area and prioritizes repairs and upgrades in conjunction with their paving schedule.

6. Stormwater Pollution Prevention Plans (SWPPP's)

Actions Completed During Permit Year 1

Responsible Party - Doug Fortier, Director Public Works

- 1) The Town Public Works facility has a Stormwater Pollution Prevention Plan completed by Environmental Engineering and Remediation, Inc in February 2003.
- 2) The Town will partner with the Cumberland County Soil & Water Conservation District to develop a SWPPP for the South Windham Fire Barn which is the only facility in the designated area.

7. NEMO Training for staff employees and boards

Actions Completed During Permit Year 1

Responsible Party - Roger Timmons, Director Public Works in collaboration with Cumberland County Soil & Water Conservation District

1) A Non-point source Education for Municipal Officials (NEMO) entitled “Linking Land Use to Water Quality” was held on March 31st, 2009 at the Falmouth Town Office Council Chambers. This presentation was conducted by LaMarr Clannon of Maine NEMO and included an overview of the Highland Lake Watershed Project by Betty Williams and Heather True of the Cumberland County Soil and Water Conservation District. Attendees included members from both the Town of Falmouth and the Town of Windham. A total of 7 participated and 5 were from the Town of Windham, one from the Town of Falmouth, one from Highland Lake Association.

APPENDICES

- A. Illicit Discharge Hotline incident Tracking Sheet

