

**Lewiston Stormwater Phase II  
Annual Report  
Permit Year 5 (June 3, 2007 - June 2, 2008)**

**1. Public Education and Outreach**

BMP Name

**BMP#1-1 Install Educational Kiosk**

*The Lewiston bike path runs along the Androscoggin River, and over trestle bridges. A new kiosk, with a locked Plexiglas covering, is planned for near the path to inform bikers of path improvements, usage rules, etc. Stormwater information will be updated on this kiosk twice annually, to minimize yellowing and keep information looking fresh. The information will include actions and the reasoning behind the actions, such as "no littering" (to minimize debris in stormwater and surface water), "stay on path" (to reduce erosion), and "catch basins are for stormwater only" (to prevent illegal dumping such as paint and oil into catch basins).*

Year 1    Year 2    Year 3    Year 4    Year 5

**Actions Completed During Permit Year 1**

Kiosk Design	<u>Responsible Party</u> Department of Public Services
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A kiosk design is being discussed for the bike path. Initial materials to be placed in the kiosk were reviewed by stakeholders at the 5/19/2004 meeting. Materials will be printed and the kiosk will be constructed early in Permit Year 2.

**Actions Completed During Permit Year 2**

Kiosk Installation	<u>Responsible Party</u> Department of Public Services
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The kiosk for the bike path was installed in June 2005. An additional kiosk has been constructed and will be installed at No Name Pond. A representative from the No Name Pond homeowners association will be provided with a key to the kiosk in order to replace materials. Informational posters for the kiosks were reviewed at the April 27, 2005 stakeholder meeting, and received positive reviews. There is excess space in the kiosks, and additional educational materials may be produced in the future.

**Actions Completed During Permit Year 3**

Update Material	<u>Responsible Party</u> Department of Public Services
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An informational poster was installed at the bike path kiosk on June 23, 2005. It was replaced with a UV laminated poster on November 21, 2005. This poster was replaced with a winter themed

poster on January 30, 2006. The kiosk at No Name Pond was installed during Permit Year 3. The informational poster that was reviewed at the April 27, 2005 stakeholder meeting was modified with a winter theme and was placed in the kiosk on February 6, 2006. This BMP also helps fulfill BMP 1-2.

#### **Actions Completed During Permit Year 4**

Update Materials Responsible Party  
Department of Public Services

The winter posters for the bike path kiosk (Railroad Park) and the No Name Pond kiosk installed during Winter 2005/2006 were replaced with the summer 2006 posters. The City of Lewiston has offered to make changes to the No Name Pond kiosk poster and have a new poster printed; however the No Name Pond Watershed Management Association has a graphic artist on their board that made two new signs for the No Name Pond kiosk. The City continues to change the information in the Railroad Park Kiosk three to four times a year with various messages and pictures.

#### **Actions Completed During Permit Year 5**

Update Materials Responsible Party  
Department of Public Services

The City continues to change the information in the Railroad Park Kiosk four times a year with seasonal stormwater friendly tips for residents and homeowners. The No Name Pond Watershed Management Association keeps the kiosk at No Name Pond updated.

#### BMP Name

#### **BMP#1-2 Support No Name Pond Association**

*Original BMP Text: In the No Name Pond Watershed Management Plan, the City Council approved workshops to be held in conjunction with the No Name Pond Collaborators Group, No Name Pond Watershed Management Association (NNPWMA), MDEP, NRCS, and City staff. Although the classes may be held more often, stormwater topics, such as vegetated buffers, and erosion control for camp road improvements, will be included in the class at least once per year.*

*This BMP has been modified from the original Plan to account for all activities the City completes in support of the No Name Pond Watershed Management Plan (not just workshops).*

Year 1    Year 2    Year 3    Year 4    Year 5

#### **Actions Completed During Permit Year 1**

No Name Pond Activities Permit Year 1 Responsible Party  
Department of Planning and Code  
Enforcement

The following summarizes the activities completed by the City of Lewiston in support of the No Name Pond Watershed Plan:

Assistance with Quarterly Newsletter: The No Name Pond Watershed Management Association publishes a newsletter on a quarterly basis to promote preservation of No Name Pond. The City of Lewiston provides postage for the quarterly mailings.

Contract for Annual Report of Volunteer Monitoring: The City of Lewiston pays the contract for Mr. Scott Williams to summarize data collected and prepare the annual monitoring report for No Name Pond.

Septic Survey of No Name Pond Properties: The City of Lewiston has hired Summit Environmental to complete a survey of septic systems for properties that are in the No Name Pond Watershed. The survey will identify failed septic systems, or properties that have no septic systems and will provide information on how the properties can repair or replace their septic systems. The survey will be completed in Permit Year 2.

The City may provide matching funds for a 319 grant that is being pursued by No Name Pond to address erosion issues.

AVSWCD completed a demonstration of the frontrunner grader equipment on a No Name Pond road in June.

### **Actions Completed During Permit Year 2**

No Name Pond Activities Permit Year 2	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The following summarizes the activities completed by the City of Lewiston in support of the No Name Pond Watershed Plan:

Assistance with Quarterly Newsletter: The City of Lewiston provided postage for the quarterly mailings again in Permit Year 2. The City provided general stormwater brochures to the Association for distribution at their annual meeting (July 26, 2005 25 brochures), with their newsletter (130 newsletters), and at the public library, city hall, and some local businesses.

Contract for Annual Report of Volunteer Monitoring: The City of Lewiston paid the contract for Mr. Scott Williams to summarize data collected and prepare the annual monitoring report for No Name Pond in 2004. Monitoring will be conducted bi-annually and will include volunteer data collected in the off-year.

Septic Survey of No Name Pond Properties: The survey of private septic systems in the No Name Pond Watershed was completed in Permit Year 2 by Summit Environmental. Two gray-water discharges were identified and eliminated, and one badly failing septic system was identified. The City is working with homeowners to correct the failures. The City may pay to connect the failing private septic system to a nearby community septic system.

The City is also supporting a Section 319 CWA grant that the Association received by providing in kind services during grant execution. Eric Cousens, Lewiston Code Enforcement Officer attended a

survey of the No Name Pond area to evaluate erosion sites, and attends most meetings for the grant. The City also provides permitting assistance for any permits required as part of the project.

The City is providing a workshop speaker to introduce small conservation practices to the association. Planning Activities for this workshop have occurred during Permit Year 2.

**Actions Completed During Permit Year 3**

No Name Pond Activities Permit Year 3	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The following summarizes the activities completed by the City of Lewiston in support of the No Name Pond Watershed Plan:

The No Name Pond Watershed Management Association (NNPWMA) has received outstanding support from the City of Lewiston. A member of the NNPWMA attended a City Council Meeting on June 21, 2005 to update the City Councilors on grant activities and to thank them for supporting their efforts in implementing the Watershed Management Plan by providing a match to the 319 Clean Water Act grant they received. Eric Cousens, Land Use Inspector, attends the NNPWMA meetings.

The No Name Pond Association requested and the City approved \$17,000 from the No Name Pond Designated fund for erosion and sediment control improvements along Shore Road at No Name Pond. These funds will be transferred to the Androscoggin Valley Soil and Water Conservation District for management of the projects.

The Public Works Department cleaned out blocked and sand filled storm drains on No Name Pond Road, and placed the road on an annual clean out list. No Name Pond Road will also be swept to prevent sand from entering the storm drains.

No Name Pond watershed residents attended a workshop outlining conservation practices for homeowners. The workshop was held on September 14, 2005 and was lead by Kristie Rabasca of Aquarion Engineering Services (currently Edwards and Kelcey).

The City is working with the NNPWMA to dedicate City owned land within the watershed as permanent conservation land along with some gifted land.

Also, The City installed a kiosk and poster at the No Name Pond Beach (see BMP 1-1) and continued to assist with the Volunteer Monitoring Program at No Name Pond (see BMP 2-3 for details).

#### **Actions Completed During Permit Year 4**

No Name Pond Activities Permit Year 4

Responsible Party  
Department of Planning and Code  
Enforcement

The following summarizes the activities completed by the City of Lewiston in support of the No Name Pond Watershed Plan:

The City helped fund repairs to Shore Road. Shore Road has been repaired except for the flat upper portion that is in legal limbo and does not have significant environmental issues. All of the funds (City funds and grant money) have been expended, except for the Road Association match, which will be put in an escrow account to be used for future maintenance. The portion of the road that has been corrected is working well.

The City Council voted in favor of keeping the seven acre piece of City owned land that is within the watershed intact and not for sale. At a future date, the City will be dedicating the land as permanent conservation land.

The City continued to perform street sweeping and catch basin cleaning in the No Name Pond area. Also, the City continued to assist with the Volunteer Monitoring Program at No Name Pond (see BMP 2-3 for details).

#### **Actions Completed During Permit Year 5**

No Name Pond Activities Permit Year 5

Responsible Party  
Department of Planning and Code  
Enforcement

The following summarizes the activities completed by the City of Lewiston in support of the No Name Pond Watershed Plan:

The City is repairing and re-paving portions of Old Greene Road and No Name Pond Road. This will lessen the amount of roadside erosion into the pond.

The City Council voted in favor of keeping the seven acre piece of City owned land that is within the watershed intact and not for sale. At a future date, the City will be dedicating the land as permanent conservation land.

The City continued to perform street sweeping and catch basin cleaning in the No Name Pond area. Also, the City continued to assist with the Volunteer Monitoring Program at No Name Pond (see BMP 2-3 for details).

Jan Patterson, City of Lewiston stormwater manager, attended a meeting of NNPWMA to provide information on the city's stormwater program and how the city can help NNPWMA.

The City of Lewiston paid the contract for Mr. Scott Williams to perform water sampling and to summarize data collected by volunteers and to prepare the annual monitoring report for No Name Pond in 2008.

City of Lewiston is working with NNPWMA to implement an informational webpage that would be accessed from the City's stormwater website.

The City of Lewiston's stormwater website contains a link to the NNP Watershed Management Plan and the annual water quality report.

BMP Name

**BMP#1-3 Distribute Educational Information**

*Educational information might include: The Watershed Management Plan, brochures on phosphorus control, vegetative buffers, septic maintenance, alternative lawn, gardening, and car washing techniques and products, such as the use of phosphate free products, wash vehicles on the lawn, etc, information regarding shoreland zoning, the Natural Resource Protection Act, and other relevant state and/or Federal regulations. Distribution may be by the City website, the NNPWMA website, newsletter, posters, classes and/or regular watershed status reports to Lewiston's Planning Board and the NNPWMA. By the end of Permit Year 2, distribution of educational information will be expanded to residents of the No Name Brook, which travels from No Name Pond to the Sabattus River, and is listed as an impaired waterbody by the state.*

Year 1    Year 2    Year 3    Year 4    Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 Activities	<u>Responsible Party</u> Department of Public Services Department of Development Division of Planning
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The following activities have been completed during Permit Year 1 for this BMP:

Development of a General Public Education Brochure: A general brochure designed to raise awareness of stormwater issues was prepared for distribution via the following avenues: the City website, the kiosk at Railroad Park (see BMP 1-1), the Public Services/Public Works Department, and City Hall. The brochure was reviewed by the Lewiston Stakeholder Group at the May 19, 2004 Stakeholder Meeting and comments were addressed. The brochure will be translated into French, Spanish, and Somali for distribution during Permit Year 2.

Contribution to Mass Media Campaign: The MDEP focus groups held in the summer of 2003 identified, "most individuals lack basic knowledge about where stormwater goes and so stormwater is not a concern for them. They must first be aware of the issue. This suggests that a comprehensive mass communications effort is necessary before grass roots efforts are likely to have much of an impact." Based on this finding, the MDEP coordinated an effort to develop a statewide education program aimed at raising awareness about storm water issues. All 28 regulated

municipalities were asked to contribute to a Mass Media Campaign. The City of Lewiston contributed \$4,450 to the MDEP's Mass Media Campaign. The contribution will be used to broadcast statewide media messages using radio, television and newspaper.

Mass Media Planning Meetings: The City of Lewiston's storm water consultant (Aquarion Engineering Services) and Mr. Michael LePage (City of Lewiston Project Engineer) participate in the planning meetings for the mass media messages hosted by MDEP. Mr. LePage and Ms. Rabasca have participated in three meetings this permit year: March 16, 2004, April 13, 2004, and May 10, 2005. Information from these meetings was distributed to Lewiston stakeholders at the stakeholder meeting held May 19, 2004.

### **Actions Completed During Permit Year 2**

Permit Year 2 Activities

Responsible Party  
Department of Public Services  
Department of Development  
Division of Planning

The following activities have been completed during Permit Year 2 for this BMP:

The general awareness brochure created in Permit Year 1 was finalized, and was modified to become a regional brochure for distribution in Lewiston and Auburn. The brochure was shared with the Portland area Interlocal Stormwater Working Group for consideration as a media piece to disseminate. A modified regional stormwater awareness brochure was developed for distribution. The brochure was also shared with the New Hampshire Seacoast Coalition for possible use. No information was available regarding how many of these brochures the groups printed or distributed. The general awareness brochure was translated into Spanish, French, and Somali. Brochures were printed and distributed in June 2005. Brochures will be placed in the Public Services/Public Works Department, City Hall, Androscoggin Valley Soil and Water Conservation District, and Androscoggin Valley Council of Governments.

The City of Lewiston participated in the Mass Media Campaign during Permit Year 2 by approving a contribution of \$3,400 through the Androscoggin Transportation Resource Center (ATRC). The "Ducky" commercials will run in July in the Bangor area and in September in the Central and Southern Maine area. In conjunction with this effort, each community contributed \$82.15 to provide match to a Maine Outdoor Heritage Fund Grant to upgrade the ThinkBlueMaine.org website with better content. The commercials identify the website as a place to visit for additional information on how individuals can prevent stormwater pollution.

### **Actions Completed During Permit Year 3**

Permit Year 3 Activities

Responsible Party  
Department of Public Services  
Department of Development  
Division of Planning

According to the Maine DEP's "2005 NPS & Stormwater Media Campaign Assessment (Omnibus Phone Survey)" there has been an increase in awareness and stewardship in

Maine. The recollection of the ads is up by 10% from last year (24% surveyed recall the ad) and 35% of those surveyed will do something protection of stormwater.

The City of Lewiston participated in the Mass Media Campaign during Permit Year 3 by approving a contribution of \$915. Eighty percent of the contribution was through the Androscoggin Transportation Resource Center (ATRC). The "Ducky" commercials are anticipated to air during June and July of Permit Year 4.

The opening of the Western Maine Environmental Depot was advertised in the Sun Journal and on the AVCOG website. A stormwater component was included on the AVCOG website promoting the use of the Depot as a way to protect local waterbodies (see BMP 2-2 for more details).

#### **Actions Completed During Permit Year 4**

Permit Year 4 Activities

Responsible Party  
Department of Public Services  
Department of Development  
Division of Planning

Four Maine DEP "In Our Back Yard" articles related to stormwater were distributed to the No Name Pond Watershed Management Association for use in their newsletter or elsewhere. Links to the four articles were also added to the City's stormwater webpage. The four articles were "Close the Cottage with Care", "Are you LakeSmart?", "Dirt Ranks #1 Water Polluter", and "Green Cleaning".

The City posted an announcement for their Spring Clean-up on the events calendar on the ThinkBlueMaine website. The City maintains a link to the ThinkBlueMaine website on the City's stormwater webpage.

Since the mass media campaign (the ducky ad) was so successful in previous years, the Interlocal Stormwater Working Group (ISWG) is soliciting funds from the regulated MS4s, other Think Blue Maine Partners as well as corporate sponsors to be able run the ads in 2007. Marketing consultants believe that it is worth continuing the ducky ads because they continue to be effective at getting the audience's attention, conveying the message, and having people retain the message. On behalf of the City of Lewiston, Androscoggin Transportation Resource Center (ATRC), agreed to support the Mass Media Campaign during Permit Year 4 with a contribution of approximately \$915. The Ducky ads are anticipated to air during the summer of 2007 (Permit Year 5).

#### **Actions Completed During Permit Year 5**

Permit Year 5 Activities

Responsible Party  
Department of Public Services  
Department of Development  
Division of Planning

The city posted announcements for a yardscaping class offered by the Androscoggin Valley Soil and Water Conservation District.

The city held an event for stenciling catch basins and handed out stormwater information to the residents.

The City of Lewiston continues to promote the Western Maine Environmental Depot as a location for disposing of household hazardous waste. The depot helps to keep hazardous waste from being disposed of improperly, allowing the potential for it to enter the stormwater system.

The City helped promote the MeDEP Maine Water Quality Reclassification meeting by sending email to the City Council and other city officials and announcing the meeting at a City Council meeting. The city also provided a location for this meeting.

The City of Lewiston submitted the following press releases:

1. to inform residents of a water shed survey being done in the Hart Brook watershed
2. to solicit volunteers for having demonstration stormwater project done at their home
3. to inform of and solicit volunteers for World Water Monitoring Month.
4. to inform of the catch basin stenciling event
5. to inform of the yardscaping class offered by the Androscoggin Valley Soil and Water Conservation District

Jan Patterson, City of Lewiston stormwater manager, gave a presentation with hand-outs to the City Council on June 17, 2008, regarding the MePDES PH II permit.

Jan Patterson, City of Lewiston stormwater manager, submits a short article to the monthly Public Works/Public Services newsletter, providing information on the city's stormwater program and tips on storm water friendly practices.

#### BMP Name

#### **BMP#1-4 Pooper-Scooper Ordinance**

*Lewiston currently has a pooper-scooper ordinance, requiring pet owners to properly dispose of pet waste. This BMP was modified to remove the Plan's original component of conducting a review of the effectiveness of the ordinance in the first Permit Year. In place of this activity, a fact sheet will be generated describing the ordinance and the negative impacts pet waste has on water bodies. This fact sheet will be distributed to individuals when they purchase their dog licenses. This work will be completed during Permit Year 2.*

Year 1     Year 2     Year 3     Year 4     Year 5

#### **Actions Completed During Permit Year 1**

Modified BMP

Responsible Party  
Department of Public Services  
Police Department

Comment [r1]:

This BMP was modified to remove the component of conducting a review of the effectiveness of the ordinance. In place of this activity, a fact sheet will be generated describing the ordinance and the negative impacts pet waste has on water bodies. This fact sheet will be distributed to

individuals when they purchase their dog licenses. The work will be completed during Permit Year 2.

**Actions Completed During Permit Year 2**

Modified BMP

Responsible Party  
Department of Public Services  
Police Department

A tri-fold fact sheet describing the ordinance and the negative impacts pet waste has on water bodies was generated during Permit Year 2. This fact sheet was sent to all resident dog owners along with their notice to reapply for dog licenses. The brochure was shared with the Cities of Auburn, Maine and Somersworth, New Hampshire who distributed it with their dog license renewal notices.

**Actions Completed During Permit Year 3, 4, & 5**

Permit Year 3, 4, & 5 Activities

Responsible Party  
Department of Public Services  
Police Department

This BMP was completed in Permit Year 2.

BMP Name

**BMP#1-5 Education to Businesses**

*The Department of Public Services will contact industrial, commercial, institutional, and governmental establishments in the City twice annually regarding stormwater management. In the fall, contact will likely consist of a brochure or fact sheet requesting that the establishment cover any salt or sand piles, use appropriate amounts of salt and sand (i.e. no over-use), and keep trash receptacles well maintained, including closing the dumpster lid to keep stormwater out. In the spring, contact will likely consist of a brochure or fact sheet requesting that establishments consider sweeping large parking lots, maintain trash receptacles, inspect private catch basins for excess debris or poor conditions, and prevent illegal dumping by employees. Both spring and fall communications will be available in French, Spanish, and Somali in conjunction with the City's Limited English Proficiency Plan (LEP), and will include links to State and EPA web pages for an explanation of "why" these practices benefit surface water quality. The City will also consider conducting a review/survey of random businesses to determine the effectiveness of the brochures.*

Year 1    Year 2    Year 3    Year 4    Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 Brochure

Responsible Party  
Department of Public Services

The City of Lewiston stakeholders discussed preparation of an initial brochure targeting carpet cleaners to inform them of proper procedures to use in discharging trucks (not into the storm drain system). The City will prepare the brochure and distribute it early in Permit Year 2.

## **Actions Completed During Permit Year 2**

Permit Year 2 Brochure

### Responsible Party

Department of Public Services

Funds dedicated to development and distribution of the carpet cleaners' brochure planned for Permit Year 2 were set aside to be used in cooperation with the City of Auburn. On March 30 and April 28, 2005; students from the Androscoggin Valley Educational Collaborative (AVEC) conducted a survey of local businesses to evaluate their impact on stormwater quality. The students visited and evaluated 42 high priority businesses (commercial, industrial, and retail) belonging to the Androscoggin Valley Chamber of Commerce. Practices reviewed by the students included vehicle operations; outdoor material storage, use, and handling; waste management; impervious and pervious surfaces; and stormwater infrastructure. Information collected from these surveys is being evaluated and will be used to generate public education materials during Permit Year 3 for selected businesses from both Cities.

## **Actions Completed During Permit Year 3**

Permit Year 3

### Responsible Party

Department of Public Services

The data collected from the Androscoggin Valley Educational Collaborative (AVEC) Hot Spot Investigations (HSI) were evaluated and combined with the findings from the Moose Brook Watershed Survey to create a public education program titled "L/A Think Blue Business Program" which will target select auto service businesses in both Lewiston and Auburn.

Current practices in the auto services sector observed during the AVEC HSI and Moose Brook Watershed Survey contribute to an increase in stormwater pollution. The results from these surveys identified that the activity that is impacting stormwater the most is outdoor material storage, the presence of impervious surfaces, and vehicle operations which all fall within the public education category of Pollution Prevention and Good Housekeeping.

The goal of the L/A Think Blue Business Program is to raise awareness of stormwater pollution prevention while fostering stormwater friendly best management practices (BMPs) at auto service businesses. The project will consist of five tasks: Contact Businesses, Create a Business Commitment Packet, Hold the Kickoff Workshop, Communicate with Participating Business, and Evaluate and Report on Program. The program will be implemented during Permit Year 5.

## **Actions Completed During Permit Year 4**

LA Think Blue Business

### Responsible Party

Department of Public Services

The goal of the LA Think Blue Business program is to raise awareness of stormwater pollution prevention while fostering stormwater friendly best management practices at auto services businesses. It was modeled after a similar program in Florida (Cocoa Beach Green Business). Eight businesses in Lewiston were invited to participate in the program. Businesses were first contacted via phone beginning the week of March 19, 2006 from personnel of Edwards and Kelcey and followed up with a formal invitation signed by the Mayor of Lewiston.

Materials created for the program include an online directory/webpage on the ThinkBlueMaine website, a brochure sent to the businesses with the invitation, multiple press releases, an advertisement in the Sun Journal, promotional products for the businesses to give to their customers (funnels and service reminder static-clings), window static-cling stickers for the businesses (to identify them as participating businesses), a poster of stormwater best management practices, and a binder of materials for each participating businesses that contains suggested training briefings and videos.

A press release was submitted to local papers on March 19, 2007. The press release was also posted on the City of Lewiston's website. The LA Think Blue Business kickoff workshop was held April 25, 2007 at Auburn Hall. The workshop consisted of the background of stormwater regulations, an overview of the LA Think Blue Business program, the benefits of participating in the program, review of the simple stormwater practices for auto services, feedback from the businesses, and an opportunity to commit to the program and become an LA Think Blue Business. Four businesses attended the program (two from Lewiston) and all four businesses who attended plus the Auburn Water and Sewerage District committed to become an LA Think Blue Business. In addition, one Public Service Department employee from the City of Lewiston attended the workshop.

Hart Brook WMP Public Meetings	<u>Responsible Party</u> Department of Public Services
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As a result of the development process for the Hart Brook Watershed Management Plan (WMP) a direct mailing was sent to all properties within the commercial/industrial zone which included approximately 300 landowners (200 of which were businesses). The letter provided introduction of the Hart Brook WMP project and an invitation to attend the Hart Brook WMP public meeting. It also included a map of the watershed and link to the Hart Brook WMP webpage on the City's website. Nine commercial/industrial representatives attended the public meeting held on April 5, 2007 and six business representatives attended the May 7, 2007 stakeholder workgroup meeting. A representative from the Lewiston-Auburn Economic Growth Council also attended both meetings. See BMP 3-2 for more information regarding the Hart Brook WMP development process.

#### **Actions Completed During Permit Year 5**

LA Think Blue Business	<u>Responsible Party</u> Department of Public Services
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The four LA Think Blue Businesses and the Auburn Water and Sewer Department continued to participate in the program. The LA Think Blue Business website continues to list the participants in the program. Participants were contacted in October 2007 to determine if they needed additional promotional materials. Additional promotional materials were provided to two of the participants (the other two participants did not need additional materials). Three additional participants were contacted and provided packages to see if they would join the program also. An evaluation will be prepared, during permit year 1 of the follow-on permit to determine the effectiveness of the program and the value of continuing.

BMP Name

**BMP#1-6 Add Stormwater Information to City Website**

*Information and links to websites giving additional educational information about stormwater quality will also be added to the website, including steps intended to reduce stormwater pollution from existing and new development. Information will be available in French, Spanish, and Somali in conjunction with the City's Limited English Proficiency Plan (LEP).*

*This BMP is being modified to include the development of a webpage dedicated to stormwater protection in addition to posting materials and links.*

Year 1      Year 2      Year 3      Year 4      Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 Additions to Website	<u>Responsible Party</u> Department of Public Services Management Information Services
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The City of Lewiston will be developing a Stormwater Awareness web page for their website, and will add public education material to the website as it is generated. Materials that are currently planned for the website include: An introduction to Stormwater, the General Public Education Brochure, and the Five Year Stormwater Management Plan.

**Actions Completed During Permit Year 2**

Permit Year 2 Additions to Website	<u>Responsible Party</u> Department of Public Services Management Information Services
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The website is currently being revised to work in conjunction with the ThinkBlueMaine.org website, which was paid for by all 28 Maine communities regulated by Phase II. The website is planned to be fully operational during Permit Year 3.

**Actions Completed During Permit Year 3**

Permit Year 3 Additions to Website	<u>Responsible Party</u> Department of Public Services Management Information Services
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The Stormwater Phase II Information was launched onto the City website as a webpage on August 12, 2005. The webpage includes an introduction to stormwater, Permit Year 1 & 2 Reports, the Non-Stormwater Discharge Ordinance, and the General Public Education brochure, as well as a Customer Service telephone number. The direct URL: <http://ci.lewiston.me.us/stormwater>. The link to this webpage is made from the Public Services Department's Engineering and Water & Sewer Divisions webpages. An announcement for the L/A Think Blue Business Logo Competition was added to the webpage on November 16, 2005

#### **Actions Completed During Permit Year 4**

Permit Year 4 Additions to Website

Responsible Party  
Department of Public Services  
Management Information Services

During Permit Year 4, several additions were made to the City's stormwater webpage. The Permit Year 3 Annual Report was posted to the webpage on July 18, 2007. The links to four (4) Maine DEP stormwater related articles were posted on August 17, 2007 (see BMP 1-3). The Hart Brook Watershed Management Webpage was added as a subfolder under the stormwater webpage on March 19, 2007. Information on the Lewiston's Stormwater Utility Fee was also added to the stormwater webpage.

#### **Actions Completed During Permit Year 5**

Permit Year 5 Additions to Website

Responsible Party  
Department of Public Services  
Management Information Services

During Permit Year 5, the Permit Year 4 Annual Report was added to the website. Links to the No Name Pond Watershed Management Plan and No Name Pond annual water quality reports were added. The website provides a link to MeDEP "In Our Backyard" articles and other storm water related information.

#### BMP Name

#### **BMP#1-7 Additional Items Completed**

This BMP tracks items that were not originally part of the Lewiston Stormwater Management Plan, but were completed.

Year 1     Year 2     Year 3     Year 4     Year 5

#### **Actions Completed During Permit Year 1**

Permit Year 1 Activities

Responsible Party  
Department of Public Services

The following additional activities were not part of the Lewiston Plan, but were completed during Permit Year 1.

10/1/2003 Leaf Collection: The City of Lewiston collects leaves for composting in October and November each year. Curbside collection is offered. This activity is publicized on the City Website, and through the Public Works Quarterly Calendar.

3/1/2004 Article in Lewiston DPW/DPS Newsletter: The Department of Public Services published the "In Our Back Yard" Article from the MDEP as a follow up to the MDEP survey on stormwater. The article was titled, "The Real Truth about Storm Drains". The monthly newsletter is distributed to all DPW/DPS employees, and to the City Council.

4/1/2004 MDEP Surveys: MDEP developed a survey to assess the general awareness of stormwater as a potential water quality issue. MDEP requested that all 28 regulated MS4 communities distribute the survey to municipal employees and return the completed surveys to MDEP for tabulation. The City of Lewiston distributed 360 surveys to municipal employees at City Hall, and in the following departments: public works, public services, fire, and police. 150 surveys were completed and returned to MDEP for tabulation.

4/1/2004 Spring Cleanup: Spring Cleanup occurred during the month of April during Permit Year 1. The City offers curb side removal of bulk waste items such as wood, brush, furniture, carpet, and appliances. 527.88 tons of waste material was collected and properly disposed of under this program in 2004. Since this program began, the City has noticed a decrease in illegal dumping of these items. This activity is publicized through the City Website and the Public Works Quarterly Calendar.

4/24/2004 Community Clean Up and Celebration: A "Community Clean Up and Celebration", sponsored by Project Neighborhood, was held on Saturday, April 24, 2004.

Cleaning supplies were distributed to volunteer participants, who after being assigned to a teamleader, cleaned up a green space and/or sidewalk. Free t-shirts were given to the first 50 volunteers.

6/1/2004 Source to the Sea Sponsorship: The City of Lewiston is cooperating with the City of Auburn to sponsor a speaker for the Lewiston/Auburn stop on the Source to the Sea Trek. The trek is organized by the Androscoggin River Watershed Council each year. Planning and coordination activities for this event took place during Permit Year 1. The trek will occur during Permit Year 2.

5/2/2004 Lake Auburn Protection: The City of Lewiston holds a seat on the Board of Directors for the Lake Auburn Watershed Protection Commission and as such participates in protection of the Lake Auburn Watershed from stormwater pollution. The City has participated in the following activities in this respect: land purchase for riparian zone preservation, implementation of erosion control measures around the lake, development and implementation of a Forestry Management Plan for the Conservation Lands around the lake, and development and implementation of a Watershed Management Plan for the Lake. In addition, a brochure was sent to all 9,000 Lewiston customers describing the watershed and protection of the water body.

AVEC Program: The City of Lewiston Education Department participates in the Auburn Land Lab/Androscoggin Valley Educational Collaborative (AVEC). Gifted high school students attend and participate in a special curriculum monthly at the Auburn Land Lab. This year the students focused on stormwater as a learning area. 32 students from Auburn, Lewiston and Sabattus participate in the program. The students completed surveys of Auburn residents to assess their awareness of stormwater issues, and compared the results to the Maine Department of Environmental Protection survey completed by the 28 MS4 regulated communities. The students have conducted GPS surveying and water quality sampling and analysis to broaden their understanding of stormwater issues. The students also participated in a Stormwater Fair (April

30, 2004) by preparing educational materials for younger students (to be presented to the students in the morning of the fair), and preparing educational displays of their activities throughout the past school year.

### **Actions Completed During Permit Year 2**

<b>Permit Year 2 Activities</b>	<b><u>Responsible Party</u></b> <b>Department of Public Services</b>
7/20/2004 Source to the Sea Sponsorship: The City of Lewiston cooperated with the City of Auburn to sponsor a speaker for the Lewiston/Auburn stop on the Source to the Sea Trek. The trek is organized by the Androscoggin River Watershed Council each year. The two cities hired Aquarion Engineering Services to give a presentation on Stormwater Pollution Prevention. The presentation took place on the July 20, 2004 at Festival Plaza (the Lewiston Auburn stop on the Trek). Approximately 10 paddlers were present for the presentation.	
10/1/2004 Leaf Collection: The City of Lewiston curbside leaf collection program was offered to citizens again during Permit Year 2 and was publicized on the City Website, and through the Public Works Quarterly Calendar.	
11/1/2004 Through its Stormwater consultant, the City provided the Androscoggin River Watershed Council with an article on Stormwater Pollution Prevention titled, "Why we should all Think Blue". The article was published in the Fall 2004 Flowing Waters Newsletter. 2005 Spring Cleanup: Spring Cleanup occurred from April 11, 2005 through May 6, 2005 during Permit Year 2. The City offers curb side removal of bulk waste items such as wood, brush, furniture, carpet, and appliances. 512.7 tons of waste material was collected and properly disposed of under this program in 2005. Since this program began, the City has noticed a decrease in illegal dumping of these items. This activity is publicized through the City Website and the Public Works Quarterly Calendar.	
5/7/2005 Community Clean Up and Celebration: A "Community Clean Up and Celebration", sponsored by Project Neighborhood, was held on Saturday, May 7, 2005. Cleaning supplies were distributed to volunteer participants, who after being assigned to a team leader, cleaned up a green space and/or sidewalk. Free t-shirts were given to the first 50 volunteers. The Cities of Lewiston and Auburn assisted by removing and disposing of all trash collected by volunteers.	
5/2/2005 Lake Auburn Protection: The City of Lewiston continued to participate in the Board of Directors for the Lake Auburn Watershed Protection Commission.	
6/1/2005: Storm Drain Stenciling – Ten AVEC students stenciled storm drains with the message "Keep It Clean – Drains To River". The stencil incorporated the image of the rubber ducky, which was featured in the TV service announcement concerning stormwater quality. Fifty one storm drains were stenciled along River Street, Oxford Street, Lincoln Street, and at Lewiston High School. More stenciling will be planned later in Year 3. The event was featured in the Lewiston Sun Journal, the local daily paper.	

6/1/2005 Great Falls TV aired the “Ducky” video 5-10 times per week for approximately one month during the Spring 2005 until they had a personnel shortage. It is planned that the “Ducky” video will resume airing in June and continue to run two to three times a week for the duration of the summer. The “After the Storm” and AVEC videos may also be aired one a week over the summer of Permit Year 3.

### **Actions Completed During Permit Year 3**

	<u>Responsible Party</u>
Permit Year 3 Activities	Department of Public Services
6/13/2005 K. Rabasca of Aquarion Engineering Services (currently Edwards and Kelcey) completed a presentation about stormwater pollution issues and water quality of the Androscoggin River at the ARWC Meeting.	
11/13/2005 Art Teachers at Lewiston High School, Spurwink School, and Lewiston Regional Technical Center were invited to have their students to participate in a logo art competition for the L/A Think Blue Business Award Program. Provided with the invitation was a letter briefly describing the program a submission form, and a link to the Lewiston Stormwater Phase II information webpage where they could view the general awareness stormwater brochure that was created in Permit Year 2. The invitation letter was posted on the City's Stormwater Phase II information webpage.	
4/18/2006 – 5/8/2006 The Spring Clean Up offers curb side removal of bulk waste items such as wood, brush, furniture, carpet, and appliances. In 2006, more than 550 tons of solid waste were collected and properly disposed of under this program which is a 7.5% increase from last year. This activity was publicized through the City Website and the Public Works Quarterly Calendar.	
5/4/2006 the ThinkBlueMaine Partnership (including Lewiston/Auburn/Sabattus Stormwater Working Group): The Partnership was awarded with an EPA 2006 Environmental Merit Award in recognition of its exceptional work and commitment to the preservation and protection of New England’s natural resources in 2005. A press release regarding the EPA Environmental award was posted on the Lewiston website on 5/1/2006 and printed in the Sun Journal on 5/4/2006.	
5/13/2006 The Community Cleanup and Celebration: Volunteers cleaned up litter in the City's parks. Public Works helped with the disposal of collected trash. This activity was posted on the thinkbluemaine.org events calendar.	
5/22/2006 LAWPCA Tour: Forty five third-grade students from Petengill Elementary School attended a tour of the LAWPCA (Lewiston/Auburn Water Pollution Control Authority) treatment plant. During the tour, students were informed of the difference between the stormwater vs. sanitary sewer.	

## **Actions Completed During Permit Year 4**

Permit Year 4 Activities Responsible Party  
Department of Public Services

Twelve chemistry students from Bates College toured the LAWPCA (Lewiston/Auburn Water Pollution Control Authority) on October 5, 2006 and nine watershed planning students from Bates College toured the facility on October 13, 2006. In addition, more than 30 third graders from the Montello School in Lewiston and four people from the Androscoggin River Alliance also toured the facility.

4/17/2007 – 5/11/2007 The Spring Clean Up offers curb side removal of wastes including bulky items (mattress, carpet, furniture), television or computer monitor, appliances, as well as solid waste (construction debris, trash, brush and yard debris). In 2007, approximately 585 tons of solid waste were collected and properly disposed of under this program which is a 2.5% increase from last year. (Note: Permit Year 3 totals did not include the fifth week of the cleanup which included an additional 20 tons of material). This activity was publicized through the City Website and the ThinkBlueMaine.org calendar of events.

5/10/07 The Bangor Stormwater Group hosted the Maine Multi-Cluster Stormwater Management Roundtable. The purpose of the roundtable was designed to facilitate sharing of initiatives of the various clusters, identification opportunities to coordinate activities among clusters, and intercluster networking. The City of Lewiston's Director of Public Services (David Jones) and stormwater manager (Jan Patterson) participated in the Roundtable by presenting information on the Lewiston Stormwater Utility Fee and the Hart Brook Watershed Management Plan, respectively.

4/28/2007 The Fifth Annual Twin Cities Community Cleanup sponsored by the L/A Trails and the Androscoggin Land Trust, in conjunction with the Lewiston Recreation Department and the Auburn Parks and Recreation Department was held to cleanup litter that accumulated over the winter in Lewiston and Auburn parks, streets, and open spaces. Over 50 volunteers participated in the cleanup. Two groups cleaned up city parks in Lewiston and Auburn, while the third cleaned up Androscoggin Land Trust's newly-acquired Androscoggin River Preserve in Lewiston. The collected trash from the city parks was handled by personnel from the respective city's recreation departments. Trash from the Androscoggin River Preserve was taken to MMWAC where the tipping fees were waived per an agreement with Lewiston City council. The Maine DEP did not conduct the Municipal Survey during Permit Year 4 because by waiting until Permit Year 5, the survey will provide more feedback on the effectiveness of raising awareness (since many of the public education and training programs were implemented towards the end of Permit Year 4). The Maine DEP will be asking the communities again to help distribute the surveys to municipal employees.

## **Actions Completed During Permit Year 5**

Permit Year 5 Activities Responsible Party  
Department of Public Services

10-18-07 the 2<sup>nd</sup> Maine Multi-cluster Stormwater Management Roundtable was held in Hallowell ME. Jan Patterson, City of Lewiston stormwater manager, participated in the meeting discussions.

11-14-07 State of Maine Watershed Roundtable was held in Hampden, ME as an opportunity to share information with others involved in storm water statewide. Jan Patterson, City of Lewiston stormwater manager, presented on the interface of watershed planning and Phase II implementation in an Urban Impaired Stream watershed.

3-19-08 Maine Water Conference was held in Augusta ME. Jan Patterson, City of Lewiston stormwater manager, participated as a panel member on the panel discussing “Watershed Management, the Local Perspective”

The Lewiston/Auburn Water Pollution Control Authority (LAWPC) hosted tours during PY 5 with students from Bates College, Pettingil School and USM/LA campus as well as the University of Maine Compost School.

4/22/2008 – 5/12/2008 The Spring Clean Up offers curb side removal of wastes including bulky items (mattress, carpet, furniture), television or computer monitor, appliances, as well as solid waste (construction debris, trash, brush and yard debris). In 2008, approximately 955 tons of solid waste were collected and properly disposed of under this program which is a 60% increase from last year. This activity was publicized through the City Website and the ThinkBlueMaine.org calendar of events.



Several City Council public hearings on the amendment of the Utilities Ordinance regarding stormwater management were held in Permit Year 4. The Stormwater Utility was enacted on July 27, 2006 and serves as the primary funding mechanism to assist with the Stormwater Phase II program.

Planning Board and City Council meeting announcements as well as Planning Board meeting minutes, and City Council meeting agendas and minutes are posted on the City's website. In addition, City Council meetings are broadcast through Great Falls TV.

### **Actions Completed During Permit Year 5**

Public Notice in Year 5 Responsible Party  
City Clerk, Various Departments

Two public notices were released and three public hearings were held regarding the City's efforts to regain delegated review authority from the State of Maine Department of Environmental Protection (DEP) for purposes of storm water management and to maintain site law delegated review.

At the June 17, 2008 Planning Board meeting it was announced that there were two meetings scheduled for June 18, 2008 with the MeDEP to discuss and get public input on re-classification of streams, generally; and to discuss and get public input, specifically on local Urban Impaired Streams (Hart Brook and Jepson Brook).

At the June 17, 2008 City Council meeting, Public Services made a PowerPoint presentation to the Council regarding the stormwater management program and urban impaired streams, specifically Hart Brook and Jepson Brook. They are working with Maine DEP regarding classification of these waters.

#### BMP Name

#### **BMP#2-2 Household Hazardous Waste Collection Day**

*Original BMP Text: The City will hold a hazardous waste collection day once a year for residents to drop off hazardous waste for proper disposal. The Household Hazardous Waste Day is a joint effort between Lewiston and Auburn. The City will monitor the number of people who participate, before and after promotional materials, to determine what the beneficial methods are for the collection program to be successful.*

*This BMP has been modified because a permanent facility, Western Maine Environmental Depot, was built in Lewiston in 2005. The Depot accepts a variety of household hazardous waste from across the region. The City will continue to monitor the number of people who participate and the amount of waste collected.*

Year 1     Year 2     Year 3     Year 4     Year 5

### **Actions Completed During Permit Year 1**

HHHW Day Permit Year 1

Responsible Party  
Department of Public Services

Household hazardous waste was collected from the public on Saturday, September 27, 2003. The program is sponsored jointly by the Androscoggin Valley Council of Governments, the City of Lewiston, and the City of Auburn. The following methods were used to publicize the event:

8,000 brochures were distributed by AVCOG advertising the event. An announcement was printed in the July-September 2003 Public Works Quarterly Calendar, which is distributed to the public.

93 Lewiston Residents brought in 895 gallons of hazardous materials during this program.

### **Actions Completed During Permit Year 2**

HHHW Day Permit Year 2

Responsible Party  
Department of Public Services

Household hazardous waste was collected from the public on Saturday, September 25, 2004. The event was held at the Lewiston Public Works facility and pre-registration was required. 125 Lewiston residents brought in 1,400 gallons of hazardous materials and universal wastes this year. This was a 25% increase in participation from Permit Year 1. The program was advertised by press release to local newspapers, radio and new stations. A permanent facility for accepting hazardous waste is being built at the Lewiston Waste Facility and Landfill, and will be owned by AVCOG and operated by Environmental Projects Inc. Construction of the facility began in Permit Year 2. Operation will begin in Permit Year 3. The facility will be open one day per week during, spring, summer, and fall. The residents of the City of Lewiston will be able to use this facility to dispose of their hazardous waste based on a voucher system. An official stormwater component will be added to the advertisement of the new facility on the [www.avcog.org](http://www.avcog.org) website in Permit Year 3.

### **Actions Completed During Permit Year 3**

HHHW Depot Permit Year 3

Responsible Party  
Department of Public Services

A permanent facility for accepting household hazardous waste was built in Lewiston and opened September 10, 2005. The Western Maine Environmental Depot is located at 424 River Road (at the City's Solid Waste Facility) and is open 1st and 3rd Saturdays April through November from 8:00 a.m. to Noon. The construction of the Depot was made possible through a grant from the Maine State Planning Office. It is owned by the Androscoggin Valley Council of Governments (AVCOG), hosted by the City of Lewiston, operated by Maine Environmental Depot, LLC a subsidiary of Environmental Projects, Inc., and sponsored by Pine Tree Waste and Aramsco.

The Depot accepts a variety of wastes, from across the region, including household cleaners, solvents, oil based paint, auto fluids, gasoline, fertilizer and pesticides, mercury-containing products, swimming pool chemicals, etc. Since the Depot opened, there have been 90 participants from the City of Lewiston totaling 870 gallons of waste.

The opening of the Western Maine Environmental Depot was advertised in the Sun Journal and on the AVCOG website. A stormwater component was included on the AVCOG website promoting the use of the Depot as a way to protect local waterbodies.

**Actions Completed During Permit Year 4**

HHW Depot Permit Year 4 Responsible Party  
Department of Public Services

Lewiston residents continue to dispose of household hazardous waste at the Western Maine Environmental Depot located at 424 River Road (at the City's Solid Waste Facility). During Permit Year 4, 1,975 gallons of household hazardous waste were collected from Lewiston residents.

An announcement for the Household Hazardous Waste Depot is posted on the City's online calendar for every first and third Saturday of the month between April 7, 2007 and November 17, 2007. Examples of acceptable household hazardous waste listed in the announcement include oil based paint, pesticides, anti-freeze, old pool chemicals, waste gasoline and fuels, and solvent based cleaners.

**Actions Completed During Permit Year 5**

HHW Depot Permit Year 5 Responsible Party  
Department of Public Services

Lewiston residents continue to dispose of household hazardous waste at the Western Maine Environmental Depot located at 424 River Road (at the City's Solid Waste Facility). During Permit Year 5, 2,090 gallons of household hazardous waste were collected from Lewiston residents.

An announcement for the Household Hazardous Waste Depot is posted on the City's online calendar for every first and third Saturday of the month between April 5, 2008 and November 15, 2008. Examples of acceptable household hazardous waste listed in the announcement include oil based paint, pesticides, anti-freeze, old pool chemicals, waste gasoline and fuels, and solvent based cleaners.

BMP Name

**BMP#2-3 Volunteer Monitoring Program at No Name Pond**

*The No Name Watershed Management Plan (adopted July 2001) includes a strategy of establishing a citizen-based water-quality monitoring program, with consistent quality control and program evaluation. Such a program will be very useful in helping residents gain an understanding of their impacts on the water quality, as well as giving them a personal stake in the water body - two of the goals of Control Measure 2 - Public Participation.*

Year 1    Year 2    Year 3    Year 4    Year 5

### **Actions Completed During Permit Year 1**

Permit Year 1 Support

Responsible Party  
Department of Planning and Code  
Enforcement

The volunteer monitoring program for No Name Pond is conducted in accordance with the No Name Pond Watershed Management Plan. The City of Lewiston assists with this program through paying for the annual monitoring report as described in BMP 1-2.

### **Actions Completed During Permit Year 2**

Permit Year 2 Support

Responsible Party  
Department of Planning and Code  
Enforcement

The City of Lewiston continued to assist with this program through paying for the annual monitoring report as described in BMP 1-2.

### **Actions Completed During Permit Year 3**

Permit Year 3 Support

Responsible Party  
Department of Planning and Code  
Enforcement

The City of Lewiston continued to assist with the Volunteer Monitoring Program at No Name Pond through payment of \$1,500 to Scott Williams at the Volunteer Lake Monitoring Program for monitoring and reporting on water quality for the summer of 2006. An additional \$3,000 has also been slated for the summers of 2007 and 2008 subject to annual approval.

### **Actions Completed During Permit Year 4**

Permit Year 4 Support

Responsible Party  
Department of Planning and Code  
Enforcement

The City of Lewiston continued to assist with Volunteer Monitoring Program. Monitoring will be performed this summer by the Volunteer Lake Monitoring Program, and the City will provide funds for the monitoring (\$1,500).

### **Actions Completed During Permit Year 5**

Permit Year 5 Support

Responsible Party  
Department of Planning and Code  
Enforcement

The City of Lewiston continued to assist with Volunteer Monitoring Program. Monitoring was completed this summer by Scott Williams of the Volunteer Lake Monitoring Program and the City will provide funds for the monitoring (\$1,500). Jan Patterson, City of Lewiston stormwater manager, assisted Scott with monitoring.



#### **Actions Completed During Permit Year 4**

Stormwater Complaints

Responsible Party  
Department of Public Works

The Customer Service number continues to be posted on the City's Stormwater webpage as being the number to call regarding stormwater pollution. During Permit Year 4, 11 issues were reported under "Pollution Water". Details of the complaints are discussed in BMP 3-4.

#### **Actions Completed During Permit Year 5**

Stormwater Complaints

Responsible Party  
Department of Public Works

The Customer Service number continues to be posted on the City's Stormwater webpage as being the number to call regarding stormwater pollution. During Permit Year 5, four (4) issues were reported under "Pollution Water". Details of the complaints are discussed in BMP 3-4.

#### BMP Name

#### **BMP#2-5 Accept Public Comment of Stormwater Plan**

*The state encourages Lewiston to accept public comment on the stormwater management plan. During the first permit year, a presentation on the Stormwater Program Management Plan will be made at a public meeting of the City Council. The public will have the opportunity to comment at that time, or to submit written comments. Any necessary modifications/additions will be addressed at that time. In addition, a public presentation will be made of the Plan in the final year of the permit term, so that the public can comment on programs that should be continued or discontinued for the next permit term. At the presentation, the City will encourage the public to form volunteer groups that will maintain local streams or hold volunteer cleanup days.*

*This BMP has been modified to also include Lewiston Stakeholder Meetings.*

Year 1    Year 2    Year 3    Year 4    Year 5

#### **Actions Completed During Permit Year 1**

Preparation for Public Meeting

Responsible Party  
Department of Public Services  
Department of Public Works

The City Council Meeting will be held early during Permit Year 2. Planning for this meeting occurred during Permit Year 1. It should be noted that the City's Stormwater Management Plan will be posted on the website for public information.

## **Actions Completed During Permit Year 2**

Scheduling of Public Meeting

Responsible Party  
Department of Public Services  
Department of Public Works

The date of this meeting was delayed due to the number of other items that were planned for Council Workshops during Permit Year 2 (Attempts to get on the agenda began in August 2004). The City's Stormwater Management Plan has been added to the website that is currently being developed and should be completed early in Permit Year 3. Presentation of the Stormwater Management Plan has been scheduled for June 21, 2005.

## **Actions Completed During Permit Year 3**

Scheduling of Public Meeting

Responsible Party  
Department of Public Services  
Department of Public Works

The City's Stormwater Management Plan was presented at the City Council workshop on June 21, 2005.

8/27/2005, 10/26/2005, 1/25/2006: Three stakeholder meetings for Lewiston and Auburn were held during Permit Year 3. Seven stakeholders attended the July 27, 2005 meeting and eight attended the October 26, 2005 and January 25, 2006 meeting with a minimum of two representatives from the City of Auburn. At all stakeholder meetings progress and updates were discussed on selected action items for the five-year stormwater management plans. Meeting minutes were kept and mailed to all stakeholders. Invitations to attend stakeholder meetings were extended to eight new stakeholders: Jan Patterson, City of Lewiston stormwater manager; Lincoln Jeffers, Assistant to the Administrator; Ferg Lea, Androscoggin Valley Council of Government; Churchill Barton and Gregory DeAugustine, Androscoggin River Alliance; Chip Morrison, Androscoggin County Chamber of Commerce; Jim Horn, Lewiston Regional Technical Center, and Roy Krout Maine Department of Environmental Protection Small Business Technical Assistance Program.

## **Actions Completed During Permit Year 4**

Stormwater Management Plan  
Stakeholder Meetings

Responsible Party  
Department of Public Services  
Department of Public Works

7/19/2006, 10/18/2006, 1/17/2007: Three stakeholder meetings for Lewiston and Auburn were held during Permit Year 4. At least one representative from the City of Lewiston attended each stakeholder meeting except for the July meeting. Progress and updates were discussed on selected action items for the five-year stormwater management plans at each stakeholder meeting. Meeting minutes were kept and mailed to all stakeholders. The stakeholder lists is kept current as staff change positions or as positions are filled with new personnel (including not-for-profit organizations). Invitations to attend the stakeholder meetings area extended as appropriate.

## **Actions Completed During Permit Year 5**

Stormwater Management Plan  
Stakeholder Meetings

Responsible Party  
Department of Public Services  
Department of Public Works

8-22-07, 3-6-08: Two stakeholder meetings for were held during Permit Year 5. Both were facilitated by the stormwater representatives of the City of Lewiston and the City of Auburn. Agendas were forwarded to stakeholders prior to the meetings and minutes were forwarded following the meetings. Thirteen stakeholders attended the August meeting and sixteen attended the March meeting. Progress and updates were discussed on selected action items for the five-year stormwater management plans at each stakeholder meeting. Input is welcomed from all attendees. The stakeholder lists is kept current as staff change positions or as positions are filled with new personnel (including not-for-profit organizations). Invitations to attend the stakeholder meetings area extended as appropriate.

In June 08 three meetings were held with the MeDEP to discuss and get public input on local Urban Impaired Streams (Hart Brook and Jepson Brook).

### 3. Illicit Discharge Detection and Elimination

BMP Name

**BMP#3-1 Develop and Present Draft Storm Sewer Ordinance**

*The City will review existing ordinances and determine the needs for additional authority. If required, a storm sewer ordinance prohibiting illicit connections will be drafted. The City Council must approve the draft storm sewer ordinance for it to take effect. As such, the draft ordinance will be presented to the City Council in the spring of 2005, and each spring thereafter until it is approved.*

Year 1      Year 2      Year 3      Year 4      Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 Activities      Responsible Party  
Department of Public Services

The Lewiston Legal Counsel, Mr. Martin Eisenstein of Brann & Isaacson reviewed and commented on the Sample Ordinance prepared by Jim Katsiaficas of Maine Municipal Association (MMA). Comments included

1. A recommendation to include an illicit connection definition, and a prohibition of illicit connections, and
2. Addition of a section titled, "ultimate liability of discharger" which states that the ordinance sets minimum standards, but that compliance does not guarantee that no pollution will occur, and that the municipality assumes no liability, and
3. Adding a requirement for a discharger to monitor (currently the ordinance says the enforcement authority may monitor a discharge).

In Lewiston, prohibition of illicit discharges will be developed through a policy referenced by Article II Sewers & Drains in Chapter 74 of the Lewiston Code of Ordinances. The MMA Sample Ordinance will be the basis for the Lewiston Policy.

**Actions Completed During Permit Year 2**

Permit Year 2 Activities      Responsible Party  
Department of Public Services

The City of Lewiston will not use a policy approach to prohibiting illicit discharges, they will use the Sample MMA Ordinance, and incorporate it into Chapter 74, Sewer and Drains as a new Section 74-69. The ordinance is in final draft form and will be presented to the Planning Board and City Council in Permit Year 3 prior to adoption.

### **Actions Completed During Permit Year 3**

Permit Year 3 Activities

Responsible Party  
Department of Public Services

A public hearing of the amendments to the Utilities Ordinance regarding Non-Stormwater Discharge received first passage at the July 19, 2005 City Council Meeting. A public hearing and final passage of the Non-Stormwater Discharge portion of the Utilities Ordinance occurred on August 9, 2005. The Ordinance became effective on September 8, 2005. A copy of the Ordinance is on the City's Stormwater Phase II Information webpage.

### **Actions Completed During Permit Year 4 & 5**

Permit Year 4 & 5 Activities

Responsible Party  
Department of Public Services

This BMP was completed during Permit Year 3.

#### BMP Name

#### **BMP#3-2 Prioritize Watersheds, Waterbodies, and Streams**

*The City will review its watersheds, waterbodies, and streams to determine "sensitive areas". Sensitive areas will include the Androscoggin River, Jepson Brook, No Name Pond Brook and Stetson Brook, which are located on the 303(d) list of impaired waters for Lewiston. These will also include swimming beaches, recreational sites, wellhead protection areas, or surface waters of public concern. Outfalls in higher priority watersheds, waterbodies, and streams will be screened first (BMP #3-3). Similar to BMPs 1-2, 1-3, and 23, appropriate BMP(s) will be added to improve the water quality of the state listed impaired waterbodies by the end of Permit Year 3.*

*Note: A new BMP has been added in MCM 5 to help improve the water quality of Hart Brook (a state listed impaired waterbody). Additional BMPs based on the recommendations and implementation of the Hart Brook Watershed Management Plan will be considered in Permit Year 5.*

Year 1      Year 2      Year 3      Year 4      Year 5

### **Actions Completed During Permit Year 1**

No Work Required Permit Year 1

Responsible Party  
Department of Public Services

No work is required to be completed during Permit Year 1.

### **Actions Completed During Permit Year 2**

Watershed Priorities Complete

Responsible Party  
Department of Public Services

Aquarion Engineering Services completed an evaluation of eight drainage areas in the City of

Lewiston. The evaluation was completed using a protocol described by the Center for Watershed Protection, as a basis.

Ten criteria were evaluated for each of the eight areas to assess which drainage area has the highest potential for illicit discharges. Each drainage area received a final score between 1 (low priority) and 3 (high priority). The resulting priority list is shown below (scores for each area evaluated are shown in parentheses):

1. Jepson Brook Drainage Area (2.9)
2. Gully Brook Drainage Area (2.7)
3. Hart/Dill/Goff Brooks Drainage Area (2.7)
4. No Name Brook Drainage Area (2.0)
5. Stetson Brook Drainage Area (1.6)
6. Intermittent Brook A Drainage Area (1.5)
7. Intermittent Brook B Drainage Area (1.0)
8. Moody/Salmon Brooks Drainage Area (1.0)

This evaluation will be updated periodically as new data becomes available. The information will be used to develop a schedule of inspections for the system and to identify BMPs that could improve water quality in the drainage areas.

### **Actions Completed During Permit Year 3**

	<u>Responsible Party</u>
Watershed Priorities Complete	Department of Public Services

The prioritization of waterbodies was adjusted slightly during Permit Year 3. The Hart/Dill/Goff area was given priority for mapping and illicit discharge detection and elimination over Jepson and Gully Brooks. Hart Brook is listed on the 303(d) list as an impaired water and is subject to additional regulation under the new Chapter 500 regulations which became effective in November 2005. The Maine DEP met with the City of Lewiston to promote and discuss development of a Watershed Management Plan for this watershed. As such the prioritization has been adjusted to place this watershed first in the list as follows:

1. Hart/Dill/Goff Brooks Drainage Area (2.9)
2. Jepson Brook Drainage Area (2.9)
3. Gully Brook Drainage Area (2.7)
4. No Name Brook Drainage Area (2.0)
5. Stetson Brook Drainage Area (1.6)
6. Intermittent Brook A Drainage Area (1.5)
7. Intermittent Brook B Drainage Area (1.0)
8. Moody/Salmon Brooks Drainage Area (1.0)

#### **Actions Completed During Permit Year 4**

Watershed Management Plan

Responsible Party  
Department of Public Services

The City of Lewiston is in the process of developing a Watershed Management Plan (WMP) for the Hart Brook watershed. The project is being funded by a grant from the USEPA with both a monetary and in-kind-service match from the City.

The goal of the Hart Brook WMP is to return the water quality of Hart Brook to Class B standards and to conduct repairs and identify restoration or development opportunities that will allow the waterbody to continue to meet the Class B criteria as commercial development continues in the watershed. The City has hired their stormwater consultant Jacobs Edward and Kelcey (previous Edwards and Kelcey) to develop the WMP.

To date, there have been multiple meetings held both with City staff and the public. A general overview of the WMP development process was presented to City staff on March 14, 2007 with the first public meeting held on April 5, 2007. A total of 25 people representing businesses, residents, non-profit organizations, the City, and the City's stormwater consultant attended the April 5 meeting. As a result of the first public meeting, a Hart Brook WMP stakeholder workgroup was developed for interested residents and industrial/commercial representatives. A Hart Brook WMP stakeholder workgroup meeting was held on May 7, 2007 to discuss the watershed runoff evaluations performed by Jacobs Edwards and Kelcey. A total of 20 people attended the May 7 meeting. The next Hart Brook WMP stakeholder workgroup meeting is scheduled for July 16, 2007 to discuss the findings of the targeted field assessments as well as the cost/benefit evaluation of the structural and nonstructural BMPS and to develop the priority mitigation measures for the WMP.

The development process for the WMP also includes a public education and outreach component. Public education and outreach materials that have been distributed as a result of the WMP include a direct mailing to City Councilors, State Representatives, and State Senators for Lewiston; a direct mailing to all properties falling within the commercial/industrial zones (included some residents); a Hart Brook WMP webpage posted on the Lewiston website at [www.ci.lewiston.me.us/stormwater/hartbrook](http://www.ci.lewiston.me.us/stormwater/hartbrook) (includes meeting announcement/agendas/minutes); press release sent to select media outlets including Sun Journal, Twin City Times, Maine PublicRadio, City's press release webpage; and a Public Access Announcement for Great Falls TV. The public education and outreach materials also help fulfill portions are MCM 1.

#### **Actions Completed During Permit Year 5**

Watershed Management Plan

Responsible Party  
Department of Public Services

The watersheds were prioritized and action was taken on the two highest priorities, Hart Brook and Jepson Brook. The Hart Brook Watershed Management Plan will be completed in Permit Year 5. The city will begin implementation during the next five year permit cycle. Jepson Brook has been submitted to MeDEP with a request to downgrade the current classification. This request is currently in review. The prioritization was used to schedule the outfall inspections.

BMP Name

**BMP#3-3 Outfall Dry Weather Screening Program**

*Dry weather screening of outfalls is a relatively easy and efficient way to search for illicit discharges. The screening identifies suspect outfalls based on suspicious odors, colors, or constituents in discharge. The suspect outfalls are then prioritized for further investigation so the source of the discharge can be found. In addition, dry weather screening helps to identify and map the outfalls, also a requirement of the permit. Lewiston will screen each stormwater outfall greater than 18" during the permit term. As smaller outfalls are located, they too will be screened, but the program will not focus on the smaller outfalls. The City will use GPS equipment to get accurate information for the GIS mapping. Note that further dry weather screening (i.e. a second round) is recommended for future permit terms, as one visit to each outfall may not catch all illicit connections, and because conditions at the outfalls may change.*

Year 1       Year 2       Year 3       Year 4       Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 Dry Weather Screening      Responsible Party  
Department of Public Services

Although no dry weather screening of outfalls for illicit discharges was required to be completed during Permit Year 1, the City of Lewiston did complete some inspections during a dry weather (no precipitation for 3 days) mapping event in the Canal Area (see BMP 3-5). The condition and observations of flow were noted during the mapping event. No evidence of illicit discharges was obtained during this mapping event. Future mapping events will include notations of any evidence of illicit discharges.

**Actions Completed During Permit Year 2**

Permit Year 2 Dry Weather Screening      Responsible Party  
Department of Public Services

In November 2004, Aquarion Engineering conducted mapping and Dry Weather Inspection of 30% of Lewiston's estimated 370 stormwater outfalls along the Canal and the Androscoggin River. Four high-priority outfalls were identified during the inspection with light to steady discharge, foaming and/or growth. These outfalls are each being investigated. Nine other outfalls were identified as medium to low priority. These had low to no discharge and/or required maintenance. Additionally, eleven outfalls were identified that require modification to meet best management practices, such as replacing and stabilizing soils around the outlets that have eroded. The next priorities for inspection and mapping will be upper Androscoggin River, Gully Brook, and Jepson Brook.

**Actions Completed During Permit Year 3**

Permit Year 3 Dry Weather Screening      Responsible Party  
Department of Public Services

Dry weather outfall screening continues to be completed during outfall field checking. During

Permit Year 3, outfalls along Hart, Dill and Goff Brooks were screened for illicit discharges.

**Actions Completed During Permit Year 4**

Permit Year 4 Dry Weather Screening	<u>Responsible Party</u> Department of Public Services
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Dry weather outfall screening is anticipated to be completed during outfall inventory and characterization that is planned for Permit Year 5. A sub-meter accuracy GPS unit will be used to complete the mapping and all data will be entered into personal data assistant (PDA) forms in the field to make transfer to the database efficient.

**Actions Completed During Permit Year 5**

Permit Year 5 Dry Weather Screening	<u>Responsible Party</u> Department of Public Services
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All known stormwater outfalls have been inspected in a dry weather condition. One geodatabase, with all stormwater structure information will be developed with the inspection data maintained in an Access database.

BMP Name

**BMP#3-4 Detection and Elimination of Illicit Discharges**

*Lewiston has developed a system for detection and elimination of illicit discharges. City employees look for and notify supervisors of any illicit connections or illegal dumping found, and also use the closed circuit television "trailer" and other regularly scheduled inspections to look for illicit connection in the system. Once an illicit connection is found, the property owner is contacted for removal. Illegal dumping sites are cleaned up with the assistance of the fire department (if hazardous).*

Year 1    Year 2    Year 3    Year 4    Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 IDDE	<u>Responsible Party</u> Department of Public Services
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During the City's CSO program, illicit discharges are identified and corrected before separation of sanitary and storm sewers occurs. The City purchased smoke testing apparatus and smoke tested 31,000 lineal feet of sewer prior to separation this year.

In addition, during the CSO program, the City performs televising of selected lines to identify connections in selected problem areas prior to construction. During Permit Year 1, approximately 1,500 linear feet of sewer were televised prior to separation.

These activities ensure that laterals are correctly connected to either the storm drain or the sanitary sewer during construction, thus minimizing the potential for illicit connections in the storm drain system.

Specific illicit discharges identified during Permit Year 1 are summarized as follows:

Water Street Outfall: Two connections into a CSO overflow were identified on Lincoln Street to be bathroom connections. These laterals were reconnected to the main interceptor line.

EZ Rental: The facility spilled oil in the parking lot. The oil was transported into a catch basin. The MDEP was on site for the clean up. The owner has been instructed to place a trap in the catch basin, regularly clean the catch basin, and develop a Spill Prevention Control and Countermeasure Plan.

A complaint was logged by a citizen relating to a 3x7 box culvert on Gully Brook that is missing a head wall. This issue is being addressed.

### **Actions Completed During Permit Year 2**

Permit Year 2 IDDE	<u>Responsible Party</u> Department of Public Services
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The City did not conduct CSO work involving smoke testing during Permit Year 2. CSO work involving smoke testing is scheduled for Permit Year 3.

Specific illicit discharges identified during Permit Year 2 are summarized as follows:

Central Maine Medical Center helicopter pad:

The City of Lewiston received a notice from LAWPCA that CMMC was discharging de-icing fluids from their helicopter pad into the storm drain system. The SIC code for non-scheduled air transportation services, including air ambulance services, is 4522, which is regulated by the Multi Sector General Permit for Industrial Activities. As a requirement of the MSGP program, CMMC is required to notify the city they are discharging to the storm drain system. The City of Lewiston will notify the MDEP of the situation

### **Actions Completed During Permit Year 3**

Permit Year 3 IDDE	<u>Responsible Party</u> Department of Public Services
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The City of Lewiston continues to detect and eliminate illicit discharges in the following manner:

1. Detection through opportunistic inspections by public works employees as they perform their regular work duties: road reconstruction, street sweeping, catch basin cleaning, facilities maintenance, and brush cutting. No illicit discharges were detected in this manner this permit year.
2. Detection through the citizen call-in program described in BMP 2-2: three illicit discharges were identified and resolved in this manner this Permit Year.
3. Detection during dry weather inspections identified 39 potential illicit discharges in the Hart/Brook/Goff Watershed. These potential illicit discharges were divided into Tier one (high priority) Tier Two (medium priority) and Tier 3 (low priority) items. These items have been entered into the public services work order system and are being addressed in order of priority to the maximum extent practical.

4. The following is a summary of the resolution from the Permit Year 2 outstanding Illicit discharge:

Central Maine Medical Center helicopter pad: The director of Facility Maintenance at CMMC told Eric Cousens, Land Use Inspector, that the helicopter pad is radiant heated with a closed system, and that the system recirculates the same fluid repeatedly and does not drain to the City system. In inclement weather Lifeflight does not fly out of CMMC they relocated to a heated hanger at the Auburn Airport.

#### **Actions Completed During Permit Year 4**

	<u>Responsible Party</u>
Permit Year 4 IDDE	Department of Public Services

The City of Lewiston continues to detect and eliminate illicit discharges during opportunistic inspections by public work employees, detection through citizen call-in program, and detection during dry weather inspections. No illicit discharges were identified during catch basin cleaning or other routine maintenance.

All of the potential illicit discharges that were detected during dry weather inspections in the Hart Brook Watershed as documented in Permit Year 3, were reinspected. The responsible party to perform investigation (dye testing/television) or repair was identified. In addition, two outfalls were identified as needing to be cleaned up of debris either by the City or a privately hired firm.

The Customer Service number received 11 calls that were logged under "Pollution Water". 10 of the calls concerned accidental gasoline/oil spills all of which have been resolved. The other call concerned a resident dumping dog waste in the catch basin which has also been resolved. The Road Supervisor checked into this report. The City used their VacAll unit clean out the catch basin. The City was unsuccessful in trying to locate the dog owner.

#### **Actions Completed During Permit Year 5**

	<u>Responsible Party</u>
Permit Year 5 IDDE	Department of Public Services

The City of Lewiston continues to detect and eliminate illicit discharges during opportunistic inspections by public work employees, detection through citizen call-in program, and detection during dry weather inspections. No illicit discharges were identified during catch basin cleaning or other routine maintenance.

One potential illicit discharge was detected during dry weather inspections in the Hart Brook Watershed and is scheduled for reinspection in Fall 2008. The responsible party to perform more in depth investigation (dye testing/television) and/or repair will be identified.

The Customer Service number received 4 calls that were logged under "Pollution Water". All of the calls concerned accidental gasoline/oil spills all of which have been resolved.

BMP Name

**BMP#3-5 Map Outfalls and Receiving Waters**

*The City of Lewiston is constructing a Geographic Information System (GIS) electronic map of the storm sewer system. System attributes include all known outfalls, pipe size and material, flow direction, manholes, and catch basins. Receiving waters are shown. This map will be updated to include known outfalls and newly GPS located outfalls. It will also be updated to incorporate changes determined during future illicit connection, dry weather field screening, and combined sewer separation projects.*

Year 1    Year 2    Year 3    Year 4    Year 5

**Actions Completed During Permit Year 1**

	<u>Responsible Party</u>
Permit Year 1 Mapping	Department of Public Services

The City of Lewiston began GIS mapping of its infrastructure and systems in 1996. The mapping is available to the public on its internet site through Internet/Intranet Mapping Services, an interactive program that allows internet users access to the mapped information. The City has completed mapping of most of its storm drain system in Permit Year 1. Most catch basin locations were located from an aerial survey. The storm drain lines were imported to the GIS system from existing paper maps. The Canal Area was mapped in the Fall of 2003 using traditional survey equipment (Leica TCR 305 total station) and was imported into the GIS map for the City. This mapping event located approximately 80 outfalls in the Canal Area. The City of Lewiston estimates they have a total of 370 outfalls.

Subsequent mapping work to be completed includes confirmation of the catch basin, outfall and storm drain lines that were imported from the aerial photographs and paper maps. This work will be completed in conjunction with construction projects as they occur. In addition, future work includes development of a numbering system for outfalls and correlating the outfalls to a database for inspection information.

**Actions Completed During Permit Year 2**

	<u>Responsible Party</u>
Permit Year 2 Mapping	Department of Public Services

In November 2004, Aquarion Engineering conducted GPS mapping (field checking) of 30% of Lewiston's estimated 370 stormwater outfalls. Mapping occurred along the Canal and the Androscoggin River. The next priorities for inspection will be upper Androscoggin River, Gully Brook, and Jepson Brook.

### **Actions Completed During Permit Year 3**

Permit Year 3 Mapping

Responsible Party  
Department of Public Services

Field confirmation of outfalls in the Hart/Dill/Goff Brook Watershed was completed in December 2005. The locations of 24 existing outfalls were confirmed and 29 new outfalls were identified. Condition and design information was collected for all outfalls. Data files were created for the new outfalls to be incorporated into the City's GIS.

### **Actions Completed During Permit Year 4**

Permit Year 4 Mapping

Responsible Party  
Department of Public Services

A summer intern from the City of Lewiston and support staff will perform four weeks of mapping and outfall inventory including dry weather inspections during Permit Year 5 for the upper Androscoggin River, Gully Brook, Stetson Brook, No Name Brook, and lower Jepson Brook (as needed). The intern will be trained on dry weather inspections and outfall inventory. A sub-meter accuracy GPS unit will be used to complete the mapping and all data will be entered into personal data assistant (PDA) forms in the field to make transfer to the database efficient.

In preparation for a complete storm system map and as budget allows, a detailed inventory and field verification of the separated storm sewer system will be undertaken in portions of Hart Brook. The process will be used as a model for a complete storm sewer map for the City. The model will build on existing City stormwater infrastructure data as well as stormwater discharge/direction data that was collected by Maine DEP interns last summer. The mapping will include field verification of the City's catch basin/storm sewer system and expanded to include inventory of publicly-connected private systems (as possible), drainage system inlets accepting off-site runoff and drainage outlets and other public- ROW storm sewer system that has not yet been mapped. This mapping effort will focus on the impaired Hart Brook watershed and in particular the stormwater source areas that have been identified as priorities (directly connected impervious).

### **Actions Completed During Permit Year 5**

Permit Year 5 Mapping

Responsible Party  
Department of Public Services

During permit year 5, the mapping of all known and found outfalls was completed. A map was generated and all data was put into a single geo-database. This will be the basis for complete storm water system mapping through-out the second permit cycle.

## 4. Construction Site Runoff Control

### BMP Name

#### **BMP#4-1 Rely on MCGP for Construction Site Runoff Controls**

*The City of Lewiston will rely on the MCGP for compliance with construction site runoff for disturbed sites greater than one acre. The City will update their building permit to include a method for notifying construction site developers and operators of the requirements for registration under the MCGP for the discharge of stormwater associated with construction activities disturbing more than one acre.*

Year 1       Year 2       Year 3       Year 4       Year 5

#### **Actions Completed During Permit Year 1**

Building Permit Modified	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The City of Lewiston has modified their building permit application form to include a question to trigger awareness of the MCGP. The application asks if the applicant will disturb one acre or more of soil, and informs them they are subject to the MCGP if they do. The application states they should contact the MDEP to obtain a copy of the MCGP, and states they will need to prepare an Erosion and Sedimentation Control Plan, and submit a Notice of Intent to MDEP. The modified application will be used beginning early in Permit Year 2.

In addition, the City has modified their Design Development Standards Document to include the MCGP requirement. This document is used and distributed by all City employees to clarify the requirements for submitting development projects to the development review process.

#### **Actions Completed During Permit Year 2**

Building Permit Modified	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The City of Lewiston began using the modified Building Permit Application including information on the MCGP during Permit Year 2.

#### **Actions Completed During Permit Year 3**

Building Permit Modified	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The City continues to use the modified building permit application to notify contractors of the MCGP in Permit Year 3.

### **Actions Completed During Permit Year 4 & 5**

Building Permit Notification

Responsible Party  
Department of Planning and Code  
Enforcement

The City continued to use the modified building permit application to notify contractors of the MCGP in Permit Year 4 & 5. Projects that disturb one acre are likely to be going through some development review process, at which time the consultant or City typically flags the requirement. Beyond the permit and development review process, there is little follow up unless the City needs to take enforcement action.

#### BMP Name

#### **BMP#4-2 Receipt and Consideration of Public Comment**

*Site operators are required to notify abutters as part of the plan approval process. The public has the opportunity to comment on projects that go through Development Review. Residents may also voice concerns through a phone call to the Department of Public Works or City Hall. This procedure will be reviewed and updated, as necessary, to address construction sites disturbing more than one acre in conjunction with the stormwater and combined sewer hotline (BMP #2-4).*

Year 1    Year 2    Year 3    Year 4    Year 5

### **Actions Completed During Permit Year 1**

Permit Year 1 Planning Board Activities

Responsible Party  
Department of Planning and Code  
Enforcement

During Permit Year 1, approximately 31 projects went through the Development Review Process. Some of the projects that go through Development Review are less than one acre. A portion of the Development Review Projects require submittal of a Sedimentation and Erosion Control Plan (but not all, approximately 20 projects were for major buildings and subdivisions, and required Sedimentation and Erosion Control Plans). All abutters were notified of these projects as required by the City, and were invited to comment on the activities presented to the Board.

Review of notification and comment procedures showed that no revisions to the procedures are necessary this permit year.

### **Actions Completed During Permit Year 2**

Permit Year 2 Planning Board Activities

Responsible Party  
Department of Planning and Code  
Enforcement

During Permit Year 2, approximately 47 projects went through the Development Review Process. Some of the projects that go through Development Review are less than one acre. A portion of the Development Review Projects require submittal of a Sedimentation and Erosion Control Plan (but not all, approximately 28 projects were for major buildings and subdivisions, and required

Sedimentation and Erosion Control Plans). All abutters were notified of these projects as required by the City, and were invited to comment on the activities presented to the Board.

Review of notification and comment procedures showed that no revisions to the procedures are necessary this permit year. The City also adopted a local erosion and sediment control ordinance so they can conduct their own enforcement.

### **Actions Completed During Permit Year 3**

Permit Year 3 Planning Board Activities	<u>Responsible Party</u> Department of Planning and Code Enforcement
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During Permit Year 3, approximately 56 projects went through the Development Review Process. Some of the projects that go through Development Review are less than one acre. A portion of the Development Review Projects require submittal of a Sedimentation and Erosion Control Plan (but not all, approximately 27 projects were for major buildings and subdivisions, and required Sedimentation and Erosion Control Plans). Some of the smaller projects also required erosion and sediment control plans. All abutters were notified of these projects as required by the City, and were invited to comment on the activities presented to the Board.

Review of notification and comment procedures showed that no revisions to the procedures are necessary this permit year. The City also adopted a local erosion and sediment control ordinance so they can conduct their own enforcement.

### **Actions Completed During Permit Year 4**

Permit Year 4 Planning Board Activities	<u>Responsible Party</u> Department of Planning and Code Enforcement
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Approximately 34 projects went through the Development Review Process. Some of the projects that go through Development Review are less than one acre. A portion of the Development Review Projects require submittal of Sedimentation and Erosion Control Plan (but not all, approximately 21 projects were for major buildings and subdivisions, and required Sedimentation and Erosion Control Plans). Some of the smaller projects also required erosion and sediment control plans. All abutters were notified of these projects as required by the City, and were invited to comment on the activities presented to the Board.

There is no direct evidence that this process has reduced polluted stormwater runoff; however an obvious benefit from this process has been limiting erosion to the specific site of disturbance.

## Actions Completed During Permit Year 5

Permit Year 5 Planning Board Activities

Responsible Party  
Department of Planning and Code  
Enforcement

Approximately 21 projects went through the Development Review Process. As in previous years, not all disturb more than one acre. The City of Lewiston does enforce an erosion and sediment control ordinance for all projects and also requires controls of stormwater quantity, ie stormwater discharged from site post-construction may not exceed stormwater discharged pre-construction. All abutters were notified of all projects going through development review, as required by the City, and were invited to comment on the activities presented to the Board.

### BMP Name

#### **BMP#4-3 Construction Site Inspection**

*Currently, the City conducts routine site inspections of construction sites prior to, during, and after construction. The Site operator is also required to conduct regular inspections to ensure erosion controls are functioning properly. Erosion and sediment controls, such as silt fences and hay bales, and construction material storage, such as sand piles and cement, will be added to the list of items City site inspectors investigate during a routine site inspection of construction sites disturbing more than one acre. To coordinate this work, the City will prepare a checklist of stormwater issues and potential water quality impacts for developers and contractors, including proper installation, inspection and sequencing of erosion and sediment controls, and management of construction materials and construction wastes, including keeping out of surface water bodies, in accordance with the MCGP. In this way, developers and contractors would be aware of the things for which site inspectors will be looking.*

Year 1    Year 2    Year 3    Year 4    Year 5

#### **Actions Completed During Permit Year 1**

No Work Required Permit Year 1

Responsible Party  
Department of Planning and Code  
Enforcement

No work is required to be completed for this BMP during Permit Year 1.

#### **Actions Completed During Permit Year 2**

Work Completed Permit Year 2

Responsible Party  
Department of Planning and Code  
Enforcement

The City developed a checklist of stormwater issues and potential water quality impacts for developers and contractors, including proper installation, inspection and sequencing of erosion and sediment controls, and management of construction materials and construction wastes, including keeping out of surface water bodies, in accordance with the MCGP.

According to the Maine Department of Environmental Protection, six sites in Lewiston issued Notices of Intent for the MCGP. Lewiston's Code Enforcement Officer has seen all 6 of these NOIs, and has conducted 37 inspections on these sites. Most erosion/sediment control issues identified by the Code Enforcement Officer were corrected voluntarily by the contractor. Twelve (12) sites were referred to the MDEP for enforcement because the contractor would not voluntarily correct the sediment/erosion control issue.

### **Actions Completed During Permit Year 3**

Work Completed Permit Year 3	<u>Responsible Party</u> Department of Planning and Code Enforcement
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According to the Maine Department of Environmental Protection, three sites in Lewiston issued Notices of Intent for the MCGP. Two NOIs were initially deficient, but one of those was accepted after resubmittal. Lewiston's Code Enforcement Officer has seen the 2 approved NOIs, and has conducted 1 inspection on one of the sites. Both of these projects just began and the Code Enforcement Officer will conduct additional inspections as the projects progress.

### **Actions Completed During Permit Year 4**

Work Completed Permit Year 4	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The City of Lewiston's Department of Planning and Code Enforcement did not received any NOIs for MCGPs during Permit Year 4. There were five construction sites in the City of Lewiston that received a Stormwater Permit under Chapter 500 (three of which were permit by rule). Two of the five projects were also Site Law projects. One of the five sites required erosion control corrections which were voluntarily corrected by the contractor; it was not necessary to contact the Maine DEP for enforcement.

The City of Lewiston's primary inspector for these projects is no longer with the City, and the position has been vacant for over a year and hopefully will be filled in Permit Year 5. With the position vacant, the City has approved a few larger projects with the condition of third party inspections. Inspections typically take 15-45 minutes, depending upon the project size. At this time, there is no cost associated with the inspection program.

### **Actions Completed During Permit Year 5**

Work Completed Permit Year 5	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The City of Lewiston's Department of Planning and Code Enforcement did not receive any NOIs for MCGPs during Permit Year 5. Eight (8) construction sites received Stormwater Permits under Chapter 500 (three (3) of which were permit by rule).

The City of Lewiston's primary inspector for these projects is no longer with the City, and the position continues to be vacant. As this position is vacant and may not be filled, the City now approves projects with the condition of third party inspections.

## 5. Post Construction Runoff Control

### BMP Name

#### **BMP#5-1 Runoff Controls for Projects Disturbing More Than One Acre**

*The Phase II regulations require stormwater runoff controls in new developments and re-development projects disturbing more than one acre of land. Lewiston recently adopted an expansion of review authority to cover stormwater controls. The City's current ordinances and authority will be reviewed to determine if they meet the intent of Phase II, including requirements for long-term operation and maintenance of installed BMPs. If necessary, the ordinance will be revised to ensure long-term operation and maintenance of BMPs. The ordinance will also reference an appropriate, Maine specific, BMP manual.*

Year 1      Year 2      Year 3      Year 4      Year 5

#### **Actions Completed During Permit Year 1**

No Work Required Permit Year 1	<u>Responsible Party</u> Department of Public Services
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Although no work was required to be completed for this BMP during Permit Year 1, the City of Lewiston completed the following:

The City provided Mr. David Ladd (MDEP) with copies of the relevant ordinances related to Post Construction Runoff Control (From Appendix A of the Zoning and Land Use Code, Article XIII Development Review and Standards, and Article XII Performance Standards).

Mr. Ladd gave verbal approval that these modifications fulfill the requirements of the Post Construction Minimum Control Measure for this General Permit. The City is awaiting written approval from MDEP.

#### **Actions Completed During Permit Year 2**

Impact of Chapter 500 Revisions	<u>Responsible Party</u> Department of Public Services
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The Chapter 500 Regulations went before the Maine Legislature in February 2005. Aquarion presented a table outlining the Chapter 500 Stormwater regulations at the April 27, 2005 stakeholder meeting, and described how it would impact the Stormwater Phase II Program. The Chapter 500 regulations may meet the Post Construction Runoff Control minimum measure for the Phase II communities. The communities will need to revise their ordinances to reflect the new state requirements. The Chapter 500 Regulations are anticipated to become Rules in the Fall 2005 (Permit Year 3).

### **Actions Completed During Permit Year 3**

Chapter 500 Revisions

Responsible Party  
Department of Public Services

The revised Chapter 500 Regulations became effective on November 16, 2005; however there are two issues that need to be resolved. (1) Volume III BMPs Technical Design Manual, January 2006, conflicts with the Chapter 500 Appendices and (2) the Maine DEP intended that the urban impaired stream standard (of Chapter 500) be triggered for redevelopment only if the project would adversely impact water quality; however the language in the urban impaired stream standard is more stringent than intended. Therefore, the Maine DEP suggested that delegated communities, including Lewiston, hold off on their ordinance revisions until Chapter 500 is again revised. Because of this the Maine DEP is extending the one-year time limit for ordinance revisions and they will continue to review projects under the Stormwater Law. It is anticipated that the Chapter 500 stakeholder group will reconvene to work on these issues in spring 2006 with formal rulemaking to follow. The City of Lewiston intends to retain their delegated authority not just for local control but also to insure economical development by knowing that projects can go forth quicker. Lewiston intends to hold off on ordinance revisions until the Chapter 500 revisions have been completed.

### **Actions Completed During Permit Year 4**

Chapter 500 Revisions

Responsible Party  
Department of Public Services

The effective date for the revisions to the Maine Stormwater Rules (Chapters 500 and 502) was December 27, 2006. Delegated communities have one year from this date to revise their ordinances to retain their delegated authority. The City is moving toward aligning their ordinances with Chapter 500.

Model Post Construction Ordinance

Responsible Party  
Department of Public Services

The Maine Municipal Association hired Jim Katsiaficas of Perkins Thompson to draft a Sample Post-Construction Stormwater Management Ordinance. The ordinance attempts to satisfy the minimum requirements for post construction.

The Maine DEP made an announcement that they have granted the regulated MS4s with an extension on fulfilling the Post Construction MS4 requirements and will require an ordinance be enacted by the end of Permit Year 1 of the next permit cycle (June 30, 2009).

The Maine DEP has organized a stakeholder workgroup to further discuss the Sample Post-Construction Ordinance. The group met on May 7, 2007. Due to a scheduling conflict, a planner from the City of Auburn attended to represent both Lewiston and Auburn. Prior to the organized stakeholder workgroup two Public Services/Planning employees from the City of Lewiston attended a Post-Construction Ordinance Meeting hosted by the Interlocal Stormwater Working Group on May 2, 2007.

In addition to the sample ordinance, the City of Lewiston looked at options for dealing with longterm maintenance of best management practices (BMPs). The City generated an estimate of the number of projects that would require inspections for a given year based on projects for the past couple of years. Between December 2005 and October 2006, there were 34 reviews, 11 of which disturbed =1 acre. All 11 of these projects were in the urbanized area.

### **Actions Completed During Permit Year 5**

	<u>Responsible Party</u>
Chapter 500 Revisions	Department of Public Services

The new revised Chapter 500 rules were effective in December 2006. The City of Lewiston began the process of updating their ordinances working toward a date of December 2007. The new wording has been approved by the MeDEP and has been presented to and approved by the City Council. The ordinances will be revised and upon formally being enacted, the City will resume delegated review of stormwater. These ordinance revisions address runoff controls for development and re-development but do not address maintenance and inspection of post-construction stormwater BMPs.

The Maine Municipal Association, MMA, has hired a law firm to draft a Sample Post-Construction Stormwater Management Ordinance which the municipalities could modify to meet their specific requirements. This ordinance will address post-construction BMP maintenance and inspections. As this action was in process, MeDEP granted an extension to the regulated MS4s on having their ordinances, regarding post-construction BMPs, revised and approved, until one year from the issuance of the 2008-2013 permit, July 2009.

MeDEP has organized a stakeholder workgroup to further discuss the Sample Post-Construction Ordinance. The group met on May 7, 2007. Due to a scheduling conflict, a planner from the City of Auburn attended to represent both Lewiston and Auburn. Prior to the organized stakeholder workgroup two Public Services/Planning employees from the City of Lewiston attended a Post-Construction Ordinance Meeting hosted by the Interlocal Stormwater Working Group on May 2, 2007. A representative of the City of Lewiston will attend future meetings and continues to follow the process.

While maintaining active involvement with the draft ordinance, the City of Lewiston has also continued to investigate options for dealing with long-term maintenance of best management practices (BMPs).

It is the City's intention to modify, adopt and enforce the Stormwater Management ordinance when it is determined to be worded such that it will meet the MCM #5 requirements.

#### BMP Name

**BMP#5-2 BMP Manual for Use by Planners and Developers**

*The City currently recommends that planners and developers use MDEP's standards, as described in the recently updated MDEP publication "Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices" (March 2003). This publication should be reviewed to*

ensure that it is specific as to construction and long-term maintenance of BMPs, for instance describing the proper way to install a silt fence, appropriate locations of detention ponds, etc. Site inspectors and plan reviewers should each receive a copy of the applicable sections of the selected BMP manual. Examples of other appropriate manuals include the US EPA's Menu of BMPs ([www.epa.gov/npdes/menuofbmps](http://www.epa.gov/npdes/menuofbmps)).

Year 1     Year 2     Year 3     Year 4     Year 5

#### **Actions Completed During Permit Year 1**

BMP Manual Selected	<u>Responsible Party</u> Department of Planning and Code Enforcement
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The "Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices" (March 2003) has been selected. The City Ordinance referencing this manual will need to be updated to refer to the "current version" of the Handbook, or the Ordinance will need to be updated to reflect revised versions as they are published.

In addition, the City has modified their Design Development Standards Document to include the requirement to use the BMP Handbook. The Design Development Standards are used by and distributed by all City employees to clarify the requirements for submitting development projects to the development review process.

#### **Actions Completed During Permit Years 2-5**

No work was required to be completed for this BMP during Permit Years 2-5.

#### BMP Name

#### **BMP#5-3 Support Efforts to Improve Management of Existing and New Stormwater Runoff in Hart Brook Watershed**

*This BMP was added in Permit Year 4 based as a result of BMP #3-2. The City will support efforts that improve stormwater management in the Hart Brook Watershed including the development and implementation of strategies that combine both structural and/or non-structural best management practices.*

Year 1     Year 2     Year 3     Year 4     Year 5

#### **Actions Completed During Permit Year 4**

The City of Lewiston developed a Maine DEP-approved Compensation Fee Utilization Plan (CFUP) for the Hart Brook Watershed. The CFUP contains four projects: Shade Tree Planting within Concrete Channel ROW, USM-LA Parking Area Retrofits, Day Property Parking Lot Retrofits, and Stream Erosion Mitigation. An account has been established by the City of Lewiston to manage CFUP funds, and the projects will be funded as compensation fees generated from new development become available. Additional projects will be added to the CFUP as appropriate.

### **Actions Completed During Permit Year 5**

Compensation funds were received for one project constructed in the Hart Brook watershed and deposited in the CFUP account. As the balance in this accounts increases, the City will begin restoration projects in the watershed. A Hart Brook Watershed Management Plan was completed. Implementation of the plan will begin during the second five year permit.

## 6. Pollution Prevention/Good Housekeeping

### BMP Name

#### **BMP#6-1 Catch Basin Cleaning Program**

*Lewiston's catch basins are cleaned on a rotating schedule, with high priority catch basins, near ponds or other environmental resources, cleaned annually. Catch basins tending to fill up more frequently are also cleaned more regularly than others. The City will continue this program. In addition, the City plans to continue to keep good records of when catch basins were cleaned and how full they were, to better schedule regular cleaning. Information on catch basin cleaning will be logged into the Asist database.*

Year 1     Year 2     Year 3     Year 4     Year 5

#### **Actions Completed During Permit Year 1**

Permit Year 1 CB Cleaning	<u>Responsible Party</u> Department of Public Works
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The City tracks catch basin cleaning from April through November for the entire City (inside and outside the urbanized area). For the time period April 2003 to November 2003, 1718 Catch basins were cleaned. 319 cubic yards of material were removed from the catch basins during this cleaning.

The current listing of catch basin cleaning priorities is dated 1994. The listing will be updated using 2003 and 2004 data collected to ensure: (1) the listing contains all catch basins in the urbanized area, not just CSO catch basins, and (2) that the priorities are still appropriate (e.g., that catch basins with higher accumulations of sediment have higher priority than those with less sediment).

The City purchased a new catch basin vacuum truck to replace an older unreliable unit. This \$150,000 piece of equipment is expected to be delivered in July 2004.

#### **Actions Completed During Permit Year 2**

Permit Year 2 CB Cleaning	<u>Responsible Party</u> Department of Public Works
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Between April 2004 and November 2004, the City of Lewiston cleaned 1923 catch basins, removing 407.5 cubic yard of material. Catch basin cleaning that began on April 5, 2005 will be reported for Permit Year 3.

During the May 2004 Lewiston Stakeholder meeting it was identified that the priorities for catch basin cleaning have not been evaluated since 1994, and should be re-evaluated. During Permit Year 2, the City reviewed catch basin cleaning logs completed by the City in 2004, and summarized the results. While the results were initially inconclusive, Aquarion did work with the City to modify data collection procedures so that 2005 data collected will be more reflective of quantities of material removed, and may be more informative. During Permit Year 3, the City will review and summarize the 2005 data collected and will compare the results to the 2004 data. The

City will also compare the results to the areas where the City uses sand to assess whether there is a direct correlation between sand use and quantity of material collected.

### **Actions Completed During Permit Year 3**

Permit Year 3 CB Cleaning	<u>Responsible Party</u> Department of Public Works
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Between April 2005 and November 2005, the City of Lewiston cleaned 1379 catch basins, removing 577 cubic yards of material. Catch basin cleaning that began in April 2006 will be reported for Permit Year 4.

At a meeting with the City and Edwards and Kelcey (EK, formerly Aquarion Engineering Services), EK presented a map of the catch basins in the City that were cleaned in 2004. EK used the quantity sheets documenting the number of catch basins cleaned and total quantity of material removed to develop the map. The map classified catch basins according to how much material had been removed. Because the depth of the sump varies from one catch basin to another, it was not possible to assess whether the catch basins were full or partially full when they were cleaned. The map also contained a layer showing the current priorities that were determined in 1994. The map showed that the catch basins in the high priority areas did not have as much material in them as the areas outside the priority area this is because the City cleans the priority areas every year; the catch basins in the outer areas sometimes do not get cleaned for several years.

The usefulness of repeating this task for the 2005 data that had been collected was discussed, and it was decided that the task may not be useful. It would take several years of data acquisition to produce a meaningful data set. In addition, the quantity removed would need to be evaluated based on how long it has been since the last cleaning, so that a uniform unit of cy/year could be developed for each catch basin.

A revised catch basin cleaning procedure was agreed upon to determine which catch basins need to be cleaned every year as follows: The personnel conducting catch basin cleaning will attempt to open all the catch basins in the city once in the following year. The crew will observe the distance between the top of the sediment in the catch basin and the invert of the outlet. They will use the following criteria in making a decision whether to clean the catch basin once opened. If the crew observes:

One foot or less of “free space”, they will clean the catch basin and mark it “full”. One to two feet of “free space” they will not clean the catch basin and will mark it “partial”. More than two feet of “free space” they will not clean the catch basin and will mark it as “clean”.

To assist in this new procedure and prepare to complete data entry next year, EK developed a map book of the City of Lewiston by applying a grid to the overall City. The map book has an index sheet on top, identifying the page numbers of the following sheets. The detail sheets show the catch basin locations and unique identifier name for the catch basin at a larger scale in an aerial view. The catch basin cleaning personnel will note their observations on a revised log sheet. EK will enter the data into a database to evaluate the results and determine a new priority.

Areas where sanding is heavy may need to be set as a priority area. To help determine which areas are sanded, the City listed the salt route and indicated that all other areas are sanded. EK generated a GIS layer showing the Lewiston Salt Route as transcribed from the meeting for use in comparison to the catch basin data that is acquired.

**Actions Completed During Permit Year 4**

Permit Year 4 CB Cleaning Responsible Party  
Department of Public Works

The City continued to use the catch basin cleaning procedure developed in Permit Year 3 to determine which catch basins needed to be cleaned. The catch basin cleaning procedure is working very well and has helped increase the number of catch basins that are inspected and cleaned each year. Last season, the City of Lewiston inspected 3,260 catch basins (more than half of the City's catch basins), removing 651 cubic yards of material. Since the City anticipates that every catch basin on City property or in the right-of-way will be inspected within a two-year cycle; no designated priority has been established. Except for high sand areas and known trouble areas will be inspected each year. Catch basin cleaning that began in April 2006 will be reported for Permit Year 5. See BMP 6-6 for more discussion on the catch basin cleaning priority program.

**Actions Completed During Permit Year 5**

Permit Year 5 CB Cleaning Responsible Party  
Department of Public Works

The City continued to use the catch basin cleaning procedure developed in Permit Year 3 to determine which catch basins needed to be cleaned. The catch basin cleaning procedure is working very well and has helped increase the number of catch basins that are inspected and cleaned each year. However, last season, the City of Lewiston inspected only 1279 catch basins, removing 540 cubic yards of material due to continued equipment failures during this cleaning season.

BMP Name  
**BMP#6-2 Street Sweeping Program**

*The City currently sweeps streets and publicly owned parking lots continually from spring to winter until freezing conditions prevent sweeping. In the spring, sweeping occurs as soon as possible after winter snowmelt, generally finishing sweeping of all streets by the end of July. Throughout the rest of the year, streets are swept on an as-needed basis, with some streets swept two or three times per week. The current program meets the Phase II requirements, and will continue.*

Year 1    Year 2    Year 3    Year 4    Year 5

### **Actions Completed During Permit Year 1**

Permit Year 1 Street Sweeping

Responsible Party  
Department of Public Works

All public roads and parking areas are swept once per year by the end of June. From July to October, the downtown areas are swept weekly at night. Approximately 3,650 cubic yards of material was removed from streets through street sweeping during Permit Year 1 (Based on data in the Lewiston CSO report for the summer of 2003).

New Street Sweeper:

The City of Lewiston purchased a new, efficient street sweeper in April 2003.

### **Actions Completed During Permit Year 2**

Permit Year 2 Street Sweeping

Responsible Party  
Department of Public Works

By October 2004 approximately 3,350 cubic yards of material was removed through street sweeping. The City continues to sweep all public roads and parking areas once per year by the end of June, and downtown areas weekly from July to October.

### **Actions Completed During Permit Year 3**

Permit Year 3 Street Sweeping

Responsible Party  
Department of Public Works

By October 2005 approximately 3,725 cubic yards of material were removed through street sweeping. The City continues to sweep all public roads and parking areas once per year by the end of June, and downtown areas weekly from July to October.

### **Actions Completed During Permit Year 4**

Permit Year 4 Street Sweeping

Responsible Party  
Department of Public Works

Last season approximately 3,450 cubic yards of material were removed through street sweeping. The City continues to sweep all public roads and parking areas once per year by the end of June, and downtown areas weekly from July to October.

### **Actions Completed During Permit Year 5**

Permit Year 5 Street Sweeping

Responsible Party  
Department of Public Works

Last season approximately 1,998 cubic yards of material were removed through street sweeping. The City continues to sweep all public roads and parking areas once per year by the end of June, and downtown areas weekly from July to October.

BMP Name

**BMP#6-3 Disposal of CB Cleaning and Street Sweeping Residuals**

*The residuals generated from street sweeping and catch basin cleaning are currently transported to the City's landfill for processing, decanting, and proper disposal. The City will continue to follow these standard operating procedures (SOPs).*

Year 1      Year 2      Year 3      Year 4      Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 Activities Responsible Party  
Department of Public Works

Catch basin cleaning residuals were managed in accordance with the City's SOPs.

**Actions Completed During Permit Year 2**

Permit Year 2 Activities Responsible Party  
Department of Public Works

Catch basin cleaning residuals were managed in accordance with the City's SOPs (at the Lewiston Solid Waste Facility's secured landfill). This method for disposal is described in the Lewiston Solid Waste Facility's Operation Manual, which was revised and approved by MDEP in 2004.

**Actions Completed During Permit Year 3, 4, & 5**

Permit Year 3, 4, & 5 Activities Responsible Party  
Department of Public Works

Catch basin cleaning residuals were managed in accordance with the City's SOPs as outlined in Permit Year 2.

BMP Name

**BMP#6-4 Minimize Sand Usage and Maintain Cover over Salt Storage Area**

*Lewiston currently minimizes the use of salt and sand on winter streets by calibrating the sanders annually. The City will continue to follow this policy. In addition, the City maintains a covered salt shed for storage of road salt. The City will also monitor industry standards and practices to evaluate new technologies that may cost-effectively minimize salt and sand usage and associated environmental impact.*

Year 1      Year 2      Year 3      Year 4      Year 5

### **Actions Completed During Permit Year 1**

Permit Year 1 Activity

Responsible Party  
Department of Public Works

Calibration of the salt/sand trucks is completed every fall. The salt/sand trucks are calibrated to control the amount of sand or salt spread on streets depending upon the weather conditions during each individual storm. The City applies sand or salt to streets as recommended by the Maine Department of Transportation and the Salt Institute. Depending upon the weather conditions and type of storm, this amount can vary from 100 to 800 pounds of salt or sand per lane mile of road.

The City of Lewiston uses an aggressive salt priority program, where straight salt is used on many of the City's streets instead of a sand/salt mix. This program greatly reduced the amount of sand placed upon City streets during the winter. By doing this, the City:

1. Saved resources by limiting the amount of sand needed. (Only 3,000 cubic yards of sand was used during the winter of 2003-2004 as opposed to 12,000 - 14,000 cubic yards in past years)
2. Significantly reduced the amount of sand on the streets needing to be swept up in the spring
3. Significantly reduced the amount of sand, which was transported to the City's storm drain system reducing the amount of material needing to be cleaned out of stormwater catch basins and structures.
4. Significantly reducing the amount of sand transported to surrounding streams, waterbodies, and the environment

### **Actions Completed During Permit Year 2**

Permit Year 2 Activity

Responsible Party  
Department of Public Works

The City calibrated its salt/sand trucks in the Fall of 2004 as they did for 2003.

### **Actions Completed During Permit Year 3**

Permit Year 3 Activity

Responsible Party  
Department of Public Works

This past year weather and precipitation patterns allowed the City to use less sand in its residential areas. Arterials and collector streets did not require sand because the temperatures were not cold enough. The City calibrated its salt/sand trucks in the fall of 2005 as described in Permit Year 1.

### **Actions Completed During Permit Year 4 & 5**

Permit Year 4 & 5 Activity

Responsible Party  
Department of Public Works

The City of Lewiston calibrated their salt/sand trucks and tries to minimize sand usage whenever possible which is dictated by the type of precipitation, temperature, and the number of storms.

BMP Name

**BMP#6-5 Snow Disposal**

*The City currently disposes of snow in a MDEP approved and licensed snow-dumping area on River Road (approved July 18, 2002 Permit number BEP LK/L20867 AN/L20867 BN). The area is enclosed by a dike and cleaned up each year after snow melts entirely.*

Year 1    Year 2    Year 3    Year 4    Year 5

**Actions Completed During Permit Year 1**

Permit Year 1 Activity Responsible Party  
Department of Public Works

The snow dump area consists of a detention pond with a controlled outlet device. The snow is dumped directly into the detention pond as it is removed from city streets. After the snow has melted, the detention pond is cleaned of litter and debris that had accumulated from the collected snow. This practice prevents the debris and sediments from discharging into the Androscoggin River. During Permit Year 1, the snow was completely melted in August 2003. The area was cleaned as soon as the snow melted.

**Actions Completed During Permit Year 2**

Permit Year 2 Activity Responsible Party  
Department of Public Works

Lewiston managed snow and residuals as described under Permit Year 1 Actions. During Permit Year 2, the snow was completely melted in August 2004. The area was cleaned as soon as the snow was completely melted.

**Actions Completed During Permit Year 3**

Permit Year 3 Activity Responsible Party  
Department of Public Works

Lewiston managed snow and residuals as described in Permit Year 1. During Permit Year 3, the snow was completely melted in July 2005. The area was cleaned as soon as the snow was completely melted.

**Actions Completed During Permit Year 4**

Permit Year 4 Activity Responsible Party  
Department of Public Works

Lewiston managed snow and residuals as described in Permit Year 1. In addition, Edwards and Kelcey provided the City Project Engineer with guidance documents regarding snow removal. The documents included "The Snowfighter's Handbook" and "Snow, Road Salt, and the Chesapeake Bay".

### **Actions Completed During Permit Year 5**

Permit Year 5 Activity

Responsible Party

Department of Public Works

Lewiston managed snow and residuals as described in Permit Year 1. During Permit Year 5, the snow was completely melted in August 2008. The area will be cleaned by mid-October 2008.

BMP Name

**BMP#6-6 Inspect Stormwater Structures**

The City will develop a program to inspect stormwater structures, such as catch basins, trash racks, pipes, box culverts and concrete and outfalls. The program will likely be incorporated into existing inspection programs.

Year 1       Year 2       Year 3       Year 4       Year 5

### **Actions Completed During Permit Year 1**

No Work Required Permit Year 1

Responsible Party

City Of Lewiston Maine

Although no work was required to be completed for this BMP during Permit Year 1, the City of Lewiston does have existing inspection and maintenance systems in place. These existing programs are discussed as follows:

Catch Basin Cleaning: As discussed in BMP 6-1, the City has an existing catch basin cleaning program that will be re-evaluated as part of this Stormwater Management Plan during Permit Year 2.

Maintenance schedule for major structures: Stormwater structures at Jepson Brook and Hart Brook are inspected and maintained on a regular basis. Condition of the structures is noted and any simple repairs or maintenance is completed at the time of inspection. Moderate and major repairs are reported back to the office and are completed when time and funding allows.

The City of Lewiston completes inspections of outfalls during brush cutting activities each spring and fall. Repairs and maintenance items are reported back to the office and are typically completed relatively quickly (within a week or two). These repairs are summarized in monthly reports either as outstanding items to be completed or as completed items.

During Permit Year 2, these programs will be reviewed in more detail to ensure inspections of stormwater structures are completed in accordance with the General Permit Requirements

## **Actions Completed During Permit Year 2**

Permit Year 2 Activity Responsible Party  
Department of Public Works

The catch basin cleaning prioritization (BMP 6-1) and the watershed prioritization (BMP 3-2) were completed in Permit Year 2 and provide the basis for developing a maintenance schedule for the storm drain system structures. Because additional work is necessary to revise the catch basin cleaning prioritization, this BMP will be further evaluated in Permit Year 3. In the interim, the City will continue conducting maintenance as described for Permit Year 1.

## **Actions Completed During Permit Year 3**

Permit Year 3 Activity Responsible Party  
Department of Public Works

The new priority areas for catch basin cleaning will be determined after evaluation of the catch basin cleaning data from the new cleaning procedures described in BMP 6-1. The personnel conducting catch basin cleaning will attempt to open all the catch basins in the city once in the following year.

## **Actions Completed During Permit Year 4**

Permit Year 4 Activity Responsible Party  
Department of Public Works

The City continued to use the new catch basin cleaning procedure developed in Permit Year 3. In 2006, the crews were able to inspect 3,200 catch basins which is more than half of the City's catch basins. Compared to last year, this is more than twice the number of catch basins that were inspected. It is expected that crews will inspect and clean accordingly the remainder of the catch basins this cleaning season (2007). Since the City anticipates that every catch basin on City property or in the right-of-way will be inspected within a two-year cycle; no designated priority has been established. Except for high sand areas and known trouble areas will be inspected each year. During catch basin cleaning inspections, crews also inspect for maintenance issues and illicit discharges and follow up as necessary. Jacobs Edwards and Kelcey will update the map book during the Winter 2007/2008, and have it ready for the 2008 cleaning season. The City will consider a digital, streamlined inspection form in Permit Year 5.

## **Actions Completed During Permit Year 5**

Permit Year 5 Activity Responsible Party  
Department of Public Works

The City continued to use the new catch basin cleaning procedure developed in Permit Year 3. In Permit Year 5, the crews were able to inspect 1279 catch basins, which is much less than the previous year due to continuous equipment break downs. However, by continued use of this procedure, the City still intends that every catch basin on City property or in the right-of-way will be inspected within a two-year cycle; therefore, no designated priority has been established. However, catch basins located in high sand areas and known trouble areas will be inspected each



David Hediger and Eric Cousens attended the February 3, 2005 MDEP training on Sedimentation/Erosion control for Contractor Certification.

### **Actions Completed During Permit Year 3**

Permit Year 3 Activity	<u>Responsible Party</u> Department of Public Works
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The Manual titled "Guidelines for Standard Operating Procedures for Stormwater Phase II Communities" was finalized September 2005. Trainings based on the Manual occurred during Permit Year 3. Nine employees from Lewiston attended the training that was held October 25, 2005 and seven employees attended the training that was held March 27, 2006. This training included Illicit Discharge Detection and Elimination and Pollution Prevention and Good Housekeeping.

The City (through Cannon Cochran Management Services, Inc.) trained 40 employees on December 13, 31 employees on December 14, and 16 employees on December 21 in personal protective equipment. The City also trained 36 employees on December 20 and 49 employees on December 21, 2005 in Hazard Communication & Hazmat. These trainings reinforce general good housekeeping practices for City employees.

In addition, the City trained 2 employees on December 15 and 7 employees on December 20, 2005 at the Snow & Ice Control Workshop offered by Maine DOT's Maine Local Roads Center. This workshop covered topics including establishing a winter maintenance policy, calibrating procedures for spreaders, and salt/sand storage buildings.

### **Actions Completed During Permit Year 4**

Permit Year 4 Activity	<u>Responsible Party</u> Department of Public Works
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As required in the Solid Waste Facility's DEP issued operations permit, the crew and the Superintendent of Solid Waste performed in-house training on October 19, 2006. The training was provided by the Maine DEP's project manager for the facility (Eric Hamlin). The training included pollution prevention, good housekeeping, spill control and countermeasure, etc.

In addition, the City trained all public works employees in a 2-hour HazCom/HazMat/PPE training (March 07) and a 1-hour Bloodborne Pathogens/Back Safety (April 07); one employee in an 8-hr OSHA/EPA ER Resp/Site training (Jan '07); one employee in an 8-hour Maintaining Gravel Roads (Feb 07); and one employee in an 8-hr Haz/Toxic Waste Mgmt (Dec 06) training.

### **Actions Completed During Permit Year 5**

Permit Year 5 Activity	<u>Responsible Party</u> Department of Public Works
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In accordance with MeDEP regulations, all members of Solid Waste Facility staff received training on December 5 & 7, 2007 in the management of solid waste. Topics covered in the training session included:

- Universal Waste handling & recycling,
- Storm water management and
- Landfill operations.

The City of Lewiston’s stormwater manager completed the following US EPA Stormwater Program Webcasts:

- Conducting Illicit Discharge and Detection and Elimination Investigations – July 11, 2007
- BMP Performance – February 6, 2008
- The Art and Science of Stormwater Retrofitting – April 9, 2008
- Assessing the Effectiveness of your Municipal Stormwater Program – June 4, 2008
- Tools and Guidance for Developing your Post Construction Stormwater Mgmt Program – September 3, 2008

BMP Name

**BMP#6-8 Hazardous Material Storage and Disposal Program**

Lewiston recently completed a hazardous material audit and spill control plan. All hazardous material is clearly labeled, and stored in a fenced off area away from high-traffic paths. The amount of hazardous material stored is minimized. In addition, the City collects used waste oil from the public and contracts with an outside company (Clean Harbors) to dispose of municipally generated and public drop-off oil. This BMP will be to verify the plan is posted and waste oil management program remains in place.

Year 1    Year 2    Year 3    Year 4    Year 5

**Actions Completed During Permit Year 1**

Review of BMP recommendations	<u>Responsible Party</u> Department of Public Services
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The Department of Public Services reviewed the audits and recommended BMPs to ensure proper implementation. The following is a summary of the activities that were recommended and have been completed:

Vehicles and equipment are now stored on paved areas

Floor drains in the Public Works buildings that previously drained to the storm drain system were closed

A Spent Fluorescent Lamp storage and lead-acid battery storage area has been created.

**Actions Completed During Permit Years 2-5**

Permit Year 2 Activity	<u>Responsible Party</u> Department of Public Works
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No work was required to be completed for this BMP for Permit Years 2 through 5.

## SUMMARY OF 2003-2008 MEPDES PH II PERMIT PROGRAM

The City of Lewiston submitted a Notice of Intent (NOI) to comply with the 2003-2008 General Permit for the Discharge of Stormwater from Municipal Separate Storm Sewer Systems (MS4s) on September 4, 2003. The NOI contained a Stormwater Management Plan detailing how the City intended to meet the requirements of the general permit's six Minimum Control Measures (MCMs). Best Management Practices (BMPs) were developed for each MCM listing the responsible party for implementation and a proposed schedule. The spreadsheet below provides a description and completion status of all BMPs. The only BMP that has not been completed is BMP 5-1: Runoff Controls for Projects Disturbing More than One Acre.

	MINIMUM CONTROL MEASURE	DESCRIPTION	COMPLETE? (Y/N)
<b>#1</b>	<b>Education and Outreach</b>		
<b>BMP 1-1</b>	<i>Install Educational Kiosk</i>	maintain/update educational materials in kiosks	Y
<b>BMP 1-2</b>	<i>Support No Name Pond Association</i>	pay for annual monitoring report pay for postage for newsletter mailings catch basins cleaning/ street sweeping	Y Y Y
<b>BMP 1-3</b>	<i>Distribute Educational Material</i>	maintain general information brochures contribute to "Ducky" ads as requested	Y Y
<b>BMP 1-4</b>	<i>Pooper-Scooper Ordinance</i>	brochure provided with issuance of dog license	Y
<b>BMP 1-5</b>	<i>Education to Businesses</i>	Think Blue Business program	Y
<b>BMP 1-6</b>	<i>Add Stormwater Info to Website</i>	update as needed	Y
<b>BMP 1-7</b>	<i>miscellaneous items</i>		
<b>#2</b>	<b>Public Participation/Involvement</b>		
<b>BMP 2-1</b>	<i>Comply with State Public Notification Guidelines</i>	Public Notices and Public Hearings	Y
<b>BMP 2-2</b>	<i>Household Hazardous Waste Collection Day</i>	OBE, permanent facility complete	Y
<b>BMP 2-3</b>	<i>Volunteer Monitoring at No Name Pond</i>	annual monitoring of No Name Pond	Y
<b>BMP 2-4</b>	<i>Publicize Stormwater Hotline</i>	hotline number included in public ed mat'l	Y
<b>BMP 2-5</b>	<i>Accept Public Comment on Stormwater Plan</i>	SWMP presented to Council, stakeholder mtgs held	Y
<b>#3</b>	<b>Illicit Discharge Detection and Elimination</b>		
<b>BMP 3-1</b>	<i>Dev and Present Draft Storm Sewer Ordinance</i>	implement ordinance	Y
<b>BMP 3-2</b>	<i>Prioritize Watersheds, Waterbodies and Streams</i>	prioritization complete	Y
<b>BMP 3-3</b>	<i>Outfall Dry Weather Screening Program</i>	program developed	Y
<b>BMP 3-4</b>	<i>Detection and Elimination of Illicit Discharges Program</i>	program developed	Y
<b>BMP 3-5</b>	<i>Map Outfalls and Receiving Waters</i>	locate/identify outfalls, input to GIS	Y
<b>#4</b>	<b>Construction Site Runoff Control</b>		
<b>BMP 4-1</b>	<i>Rely on MCGP for Construction Site Runoff Controls</i>	building permit revised	Y
<b>BMP 4-2</b>	<i>Receipt and Consideration of Public Comment</i>	done through Dev Review process	Y
<b>BMP 4-3</b>	<i>Construction Site Inspection</i>	dev draft checklist	Y

#5	<b>Post Construction Runoff Control</b>		
<b>BMP 5-1</b>	<i>Runoff Controls for Projects Disturbing More Than One Acre</i>	will be addressed in second permit	N
<b>BMP 5-2</b>	<i>Recommend BMP Manual for Use by Planners and Developers</i>	use MeDEP BMP manual	Y
#6	<b>Pollution Prevention/Good Housekeeping</b>		
<b>BMP 6-1</b>	<i>Catch Basin Cleaning Program</i>	program developed	Y
<b>BMP 6-2</b>	<i>Street Sweeping Program</i>	program developed	Y
<b>BMP 6-3</b>	<i>Disposal of CB Cleaning and Street Sweeping Residuals</i>	program developed	Y
<b>BMP 6-4</b>	<i>Min Sand Usage &amp; Maintain Cover over Salt Storage Area</i>	program developed	Y
<b>BMP 6-5</b>	<i>Snow Disposal</i>	program developed	Y
<b>BMP 6-6</b>	<i>Inspect Stormwater Structures</i>	program developed	Y
<b>BMP 6-7</b>	<i>Employee Education Program</i>	training done in PY 3	Y
<b>BMP 6-8</b>	<i>Hazardous Material Storage and Disposal Program</i>	program developed	Y

BMP#5-1: Runoff Controls for Projects Disturbing More Than One Acre was developed in response to Minimum Control Measure (MCM) #5: Post Construction Runoff Control. This MCM requires compliance with NPDES PH II Final Rule under which the operator of a regulated small MS4 must develop, implement and enforce a program aimed at reducing pollutants in post-construction runoff. The scope includes new and re-development projects disturbing greater than or equal to one (1) acre.

At the time this stormwater plan was being developed, the City of Lewiston had recently been granted delegated review authority for projects requiring a stormwater permit. This delegation requires the city have ordinances in place which are at least as stringent as the NPDES PH II Final Rule. The City of Lewiston's plan to meet this BMP included review of its existing ordinances with regard to runoff controls for projects disturbing one acre or more and post-construction runoff control, and additions or revisions as necessary to meet this MCM. During permit year one (1) an initial review of the ordinances, from Appendix A of the Zoning and Land Use Code, Article XIII Development Review and Standards, and Article XII Performance Standards was completed and a determination made by MeDEP that these ordinances would meet the intent of this MCM.

However, during permit year two (2), revisions were made to Chapter 500, proposed to become effective in November 2005, which dictated more stringent post construction controls, particularly in the watersheds of Urban Impaired Streams. These revisions made the city's ordinances no longer acceptable for this MCM. MeDEP determined that compliance with Chapter 500 would meet the PH II Final Rule requirements. Therefore, those municipalities wishing to maintain delegated review authority for stormwater, would have one (1) year to revise their ordinances to come in line with the Chapter 500 requirements. When Chapter 500 became effective in November 2005, some inconsistencies were noted which needed correction. MeDEP recommended municipalities that had planned to update their ordinances wait until the new Chapter 500 revisions came into effect. During this time MeDEP continued to review projects requiring a permit under the Stormwater Law.

The new revised Chapter 500 rules were effective in December 2006. The City of Lewiston began the process of updating their ordinances working toward a date of December 2007. The new wording has been approved by the MeDEP and is scheduled for presentation to the City Council. Upon Council approval, the ordinances will be enacted and the City will resume delegated review of stormwater. These ordinance revisions address runoff controls for development and re-development but do not address maintenance and inspection of post-construction stormwater BMPs.

The Maine Municipal Association, MMA, has hired a law firm to draft a Sample Post-Construction Stormwater Management Ordinance which the municipalities could modify to meet their specific requirements. This ordinance will address post-construction BMP maintenance and inspections. As this action was in process, MeDEP granted an extension to the regulated MS4s on having their ordinances, regarding post-construction BMPs, revised and approved, until one year from the issuance of the 2008-2013 permit, July 2009.

MeDEP has organized a stakeholder workgroup to further discuss the Sample Post-Construction Ordinance. The group met on May 7, 2007. Due to a scheduling conflict, a planner from the City of Auburn attended to represent both Lewiston and Auburn. Prior to the organized stakeholder workgroup two Public Services/Planning employees from the City of Lewiston attended a Post-Construction Ordinance Meeting hosted by the Interlocal Stormwater Working Group on May 2, 2007. A representative of the City of Lewiston will attend future meetings and continues to follow the process.

While maintaining active involvement with the draft ordinance, the City of Lewiston has also continued to investigate options for dealing with long-term maintenance of best management practices (BMPs).

It is the City's intention to modify, adopt and enforce the Stormwater Management ordinance when it is determined to be worded such that it will meet the MCM #5 requirements.