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April 30, 2005

AUG 29

Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd Floor
Worcester, MA 01608

United State Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

Subject: Hamilton, MA
NPDES Phase II Stormwater Management Plan
Annual Evaluation – Stormwater Year 2

To Permit Reviewers:

On behalf of the Town of Hamilton, we are submitting the following NPDES Phase II Stormwater Management Plan Annual Evaluation as required by the United States Environmental Protection Agency (US EPA) and the Massachusetts Department of Environmental Protection (MA DEP) for coverage under the US EPA NPDES Stormwater General Permit.

If there are any questions or comments with respect to any of the information contained in the Year 2 - Annual Evaluation or the accompanying plan, please do not hesitate to contact the undersigned.

Very truly yours,

Earth Tech, Inc.

Abigail Charest
Environmental Engineer

cc: Town of Hamilton w/ attachments

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cc: Town of Hamilton w/ attachments

Municipality/Organization: **Town of Hamilton**

EPA NPDES Permit Number: **MA 041196**

MaDEP Transmittal Number: **W- 045925**

Annual Report Number & Reporting Period: **No. 1: March 04-March 05**

NPDES Phase II Small MS4 General Permit

Annual Report

Part I. General Information

Contact Person: Candace Wheeler Title: Town Administrator

Telephone #: 978-468-5572 Email: cwheeler@hamiltonma.gov

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Candace R. Wheeler

Printed Name: Candace Wheeler

Title: Town Administrator

Date: 7/7/05

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B. SMART GROWTH TECHNICAL ASSISTANCE GRANT APPLICATION
C. DETAIL: SECTIONAL VAULT DETENTION BASIN

1.0 INTRODUCTION AND BACKGROUND

In 1990, The United States Environmental Protection Agency (EPA) began implementing a stormwater management program under the National Pollutant Discharge Elimination System (NPDES). This program, known as Phase I of the NPDES stormwater program, was intended to reduce pollution in stormwater discharges for large urban areas with populations of 100,000 or greater.

On December 8, 1999, the Phase II Rule of the NPDES stormwater program was published to address Municipal Separate Storm Sewer Systems (MS4s) within urban areas of populations less than 100,000 that were not addressed under the Phase I program. Objectives of the Phase II rule is for the MS4s to develop, implement, and enforce a stormwater program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

On May 1, 2003 the EPA issued the General Permit for Stormwater Discharges from MS4s. The general permit requires that the stormwater program for each MS4 submit an annual evaluation. The following report contains information regarding the activities on the stormwater program for the previous calendar year. The report contains the information required in the general permit as follows: (a) Self-Assessment Review of Compliance with the Permit Conditions; (b) Assessment of the Appropriateness of the selected Best Management Practices (BMPs); (c) Assessment of the Program towards Achieving the Measurable Goals; (d) Summary of the Results of Any Information that has been Collected and Analyzed; (e) Discussion of Activities for the Next Reporting Cycle; (f) Discussion of any Changes in Identified BMPs or Measurable Goals; and (g) Reference any Reliance on another Entity for Achieving any Measurable Goal.

2.0 SELF-ASSESSMENT REVIEW OF COMPLIANCE WITH THE PERMIT CONDITIONS

The town of Hamilton filed a NPDES Phase II Stormwater Management Plan in June 2003. The EPA responded with a letter of deficiencies on September 24, 2003. The deficiencies included identification of other regulated MS4s within municipal boundaries, and the Notice of Intent (NOI) signature. A letter was sent to the EPA in response to the deficiencies on October 23, 2003. On November 24, 2003, the EPA sent a letter to the town stating that the stormwater program was administratively complete and in compliance with the conditions of the General Permit. In order to remain in compliance, the Town submitted the Annual Report for Stormwater Year 1 on May 1, 2005.

The town of Hamilton continued to work on improving stormwater management over the past year. Hamilton is a small, affluent community without a townwide wastewater treatment system. Therefore, the town of Hamilton does not find that it has many issues with illicit discharge to their storm drain system. In addition, there is not a lot of new construction that takes place in town, so the town does not have many issues with construction stormwater runoff. The town and the Department of Public Works (DPW) strive to incorporate improvements to stormwater management whenever possible.

3.0 ASSESSMENT OF THE APPROPRIATENESS OF THE SELECTED BMPS

Most of the BMPs selected for the stormwater program were appropriate for the town of Hamilton. The following describes a revision to the Stormwater Management Plan (SWMP).

Comments on Appropriateness

BMP ID Number	BMP	BMP Description
1.1	Public Education of Stormwater Collection Systems & Illicit Connections	Distribute Informational Flyers

The Town's initial Stormwater Management Plan detailed using the Assessor's database to create a list of people to receive stormwater informational flyers. The Town has decided to expand this BMP and create an informational poster board, and fact sheet in addition to the stormwater flyer. The town will place the stormwater poster along with the fact sheet and informational flyer in the Town Hall, Library, Building Inspector's Office and School System.

4.0 SUMMARY OF MINIMUM CONTROL MEASURES

In order to meet the six control measures required by the EPA, the town proposed to supplement their existing BMPs with the following BMPs. The following outlines the progress of the town in achieving the measurable goals for the second stormwater year. The annual evaluation of BMPs is also detailed in Table 4-1 – Annual Evaluation. Table 4-1 also discusses activities for the next reporting cycle, and identifies any changes in the identified BMPs or measurable goals.

4.1 PUBLIC EDUCATION AND OUTREACH

Over the past year Hamilton's DPW incorporated public education and outreach into their stormwater program. The DPW drafted several stormwater pollution educational materials including a stormwater brochure, fact sheet and poster. The stormwater pollution educational materials will be displayed and distributed to the Town Hall, Library, Building Inspector's Office and the School System in Stormwater Year 3. The DPW also worked on the catch basin stenciling program. The DPW individually spoke with local business to gain support for the stenciling program, and reviewed stencils for the catch basins, which lead to local water resources. In Stormwater Year 3, the Town will work with private groups and the schools to stencil the catch basins. The DPW also distributed a Manure Management Fact Sheet to the local horse owners and horse farms. A copy of the fact sheet in included in Attachment A.

4.2 PUBLIC PARTICIPATION AND INVOLVEMENT

The DPW continued to hold events, which allowed for public participation in stormwater pollution prevention. For instance, the DPW continued previous stormwater goals including annual hazardous waste collection, recycling program, mercury recovery program. In regards to public participation, the DPW worked with the Chebacco Lake Association and the local boy scouts during town clean up days. The DPW also requested public participation through the school system, selectman's meeting, and the town newspaper. In the upcoming year, the Town will have the public participate in the catch basin stenciling program and work through the media to educate the Town about the need for this program.

Table 4-1

Table 4-1 continued

Table 4-1 continued

4.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The DPW progressed on the town's detection and elimination of illicit discharge. The DPW's initial goals in detection are to create a townwide Geographical Information System (GIS) map. In 2003, Hamilton contracted a consultant to create a base GIS map. In Spring 2005, the town completed a flyover of the town to create the GIS base map. The DPW is also working on the GIS layer for stormwater infrastructure. The DPW identified all the culverts and half of the catch basins and they are working with their GIS Consultant to incorporate the culverts and catch basins into the GIS system.

The town also worked to eliminate potential illicit discharge through substandard wastewater disposal systems. The DPW and BOH worked with the Asbury Grove Association to resolve Title 5 issues in 90 summerhouses, and replaced 30 wastewater disposal systems to upgrade them to Title 5 standards. In order to investigate for current illicit discharge violations, the DPW hired an outside contractor to clean and inspected 100 percent of the catch basins in town. The DPW distributed stormwater information to staff members and conducted a stormwater training meeting alerting the employees of the importance of stormwater management. And, the Planning Board submitted a Smart Growth Technical Assistance Grant application to the Massachusetts Executive Office of Environmental Affairs (EOEA) to review Town Bylaws and Regulations in regards to illicit discharges. A copy of the grant application is included in Attachment B.

The DPW continues to work with the Conservation Commission (Con Com) to incorporate identification of contamination through erosion control and Title 5 management. Furthermore, the public education program has alerted the public to the negative impacts of illicit discharges. The DPW has received several calls from the public concerning observed discharges. In one case, a citizen reported that a plumbing company was dumping water from hot water heaters into a catch basin. The Town acted on the information and reprimanded the plumbing company.

4.4 CONSTRUCTION SITE RUNOFF CONTROL MEASURES

Hamilton had several construction site runoff controls measures in place prior to the Stormwater Management Plan. For example, the Con Com incorporates construction site run off controls into the NOI process. The site plan review incorporates the NPDES SWPPP regulations. The DPW controls site runoff into town roadways. The Con Com hands out stormwater information with the NOI Order of Conditions. In addition, all town stormwater runoff control changes and improvements are noted at the monthly, televised Selectman's Meetings.

The Planning Board submitted a Smart Growth Technical Assistance Grant application to the Massachusetts Executive Office of Environmental Affairs (EOEA) to review Town Bylaws and Regulations in regards to construction and post construction site runoff controls measures. The Town anticipates receiving the grant to be able to work with several town departments including the Planning Board, Board of Health, Conversation Commission and the DPW to coordinate and update construction and post construction site runoff controls measures to be in alignment with the Stormwater Management Plan and Stormwater General Permit.

4.5 POST-CONSTRUCTION RUNOFF CONTROL MEASURES

The town is working towards post-construction runoff control measures. The submitted a Smart Growth Technical Assistance Grant application in order to obtaining funding to review current Bylaws and Regulations in regards to the Stormwater Management Plan and Stormwater General Permit. The town also distributed information on post construction controls to contractors at the issuance of their building permit. In addition, the Con Com continues to require contractors to place silt barriers around and over all catch basins in the area of construction projects.

4.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING

The town of Hamilton prevents stormwater pollution and maintains good housekeeping procedures. The DPW continually works to improve the stormwater drain lines. In 2004, the town installed a sectional vault detention basin on the main stormwater line in Bay Road/Route 1. A detail of the basin is included in Attachment C. Additionally, the DPW installed twelve grease/oil hoods on catch basins in town. The DPW will continue to install grease/oil hoods in catch basins that receive repairs. The town also hired an outside contractor to clean all of the catch basins and to conduct street sweeping in town. Finally, the DPW incorporated road shoulder into the road improvement program improvements. The DPW cut back 1.5 miles of road shoulders.

5.0 PROGRAM OUTPUTS AND ACCOMPLISHMENTS

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	($)	$75,700

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	50%
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	100
▪ material collected	(tons or gal)	47 full car loads and 69 half car loads

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	**In Place Prior to Phase II**	**Under Review**	**Drafted**	**Adopted**
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management	X			
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management	X			

Mapping and Illicit Discharges

Outfall mapping complete	(%)	0
Estimated or actual number of outfalls	(#)	17
System-wide mapping complete	(%)	0
Mapping method(s)		
▪ Paper/Mylar	(%)	0

▪ CADD	(%)	0
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	17
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	0
% of population on septic systems	(%)	100%

Construction

Number of construction starts (>1-acre)	(#)	4
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and $)	0
Complaints/concerns received from public	(#)	6

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100%

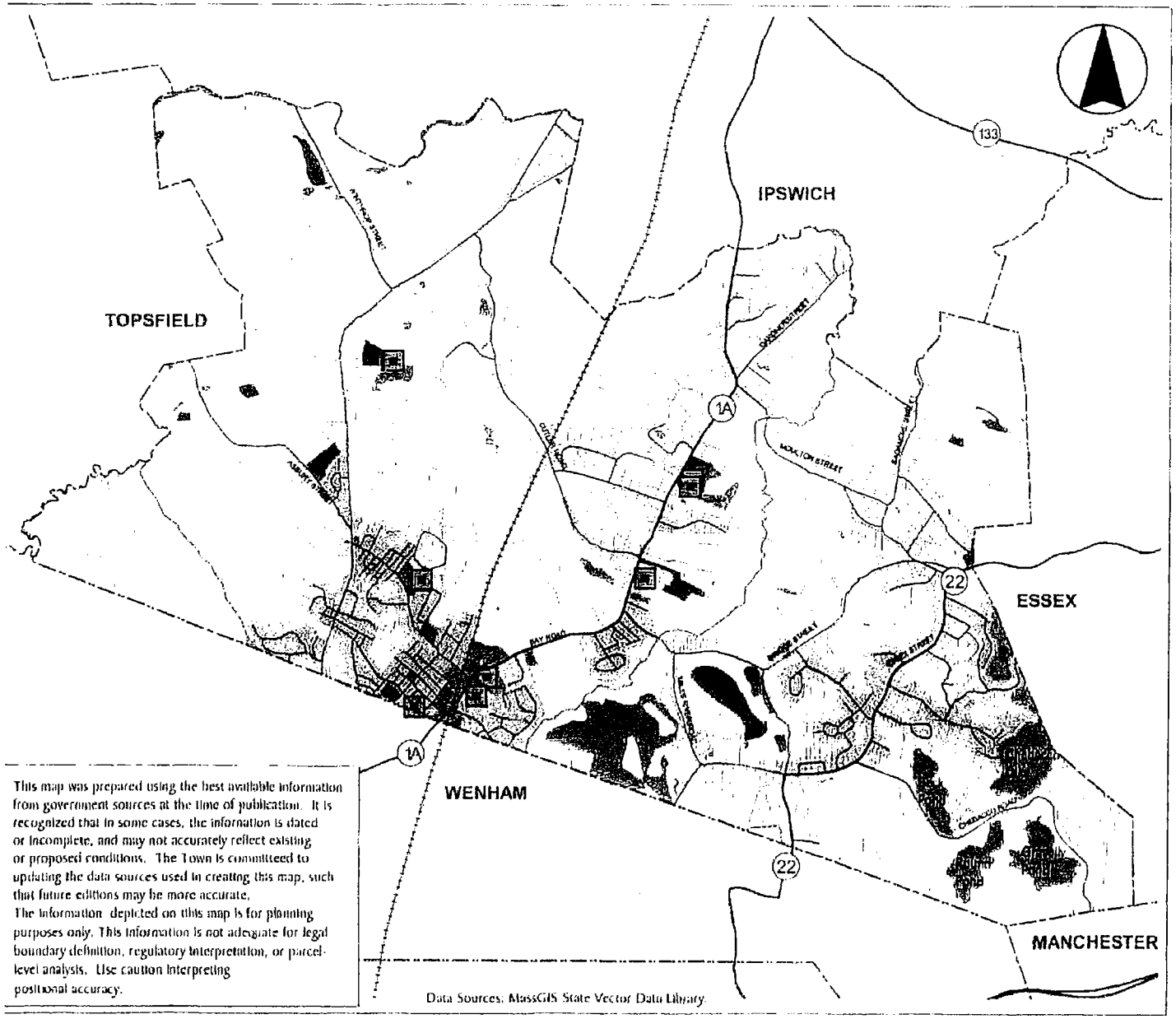
Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	773; 100%
Storm drain cleaned	(LF or mi.)	550 linear feet (L.F.)
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	0
Disposal or use of sweepings (landfill, Public-owned Treatment Works [POTW], compost, recycle for sand, beneficial use, etc.)		Fill/gravel – loam mix
Cost of screenings disposal	($)	$3,000
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	($)	$8,500
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	N

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	Organic only
▪ Herbicides	(lbs. or %)	Used Sparingly
▪ Pesticides	(lbs. or %)	N/A
Anti-/De-icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	20 80
Pre-wetting techniques utilized	(y/n)	0
Manual control spreaders used	(y/n)	0
Automatic or Zero-velocity spreaders used	(y/n)	0
Estimated net reduction in typical year salt application	(lbs. or %)	0
Salt pile(s) covered in storage shed(s)	(y/n)	Y

BMP Category in Notice of Intent (NOI)	BMP	als	Revisions or Additions
1.0	**Public Education and Outreach**		
1.1	Public Education of Stormwater Collection Systems & Illicit Connections	own Administrator board on the Town's	The town plans on supplying the Town Hall, Library, Building Inspector's Office and School system with educational materials instead of doing a mass mailing. This goals was revised to the original goal in the SWMP.
1.2	General Public – Knowledge of Stormwater Issues and their Environmental Interaction	ry/ Schools with	
1.3	Private Groups – Identify Catch Basins leading to Open Waters	sins	
1.4	Non Point Pollution Awareness		
2.0	**Public Involvement and Participation**		
2.1	Work with private/volunteer groups	pply manpower to ps	
2.2	Request Public Participation for Inspection/Monitoring	rticipation at town	
2.3	Promote Stenciling Program	le TV and letter to nteers for stenciling	

ATTACHMENT A



This map was prepared using the best available information from government sources at the time of publication. It is recognized that in some cases, the information is dated or incomplete, and may not accurately reflect existing or proposed conditions. The Town is committeed to updating the data sources used in creating this map, such that future editions may be more accurate.
The information depicted on this map is for planning purposes only. This information is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analysis. Use caution interpreting positional accuracy.

Town of Hamilton Master Plan

MAP 2

Land Use Pattern (1999)

LEGEND

- Municipal Boundaries
- Open Water
- Rivers
- Roads
- Railroad
- Community & School Facilities

Land Use (1999)

- Agriculture
- Commercial
- Forest
- Industrial
- Low-Density Residential
- Moderate-Density Residential
- Urban-Institutional Open Space
- Recreation

0.5 0 0.5 Miles

Community Opportunities Group, Inc.
Boston, Massachusetts
February 2004

Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Community Preservation Initiative

Print Close Window

Northeast Region: Town of Hamilton

Community Data Profile

This data profile includes summary statistics that are a component of a buildout map and analysis series. The analysis starts with available land in each zoning district and makes projections of additional housing units and commercial/industrial space according to each district's minimum lot size and other regulations. The projections only account for as of right development and do not include development by special or comprehensive permit that may increase the amount of development. These buildout projections were combined with 2000 Census and other data to create a profile of each community at buildout according to its current zoning.

Buildout Analysis Summary

Buildout completion date: 2001

Demographic Projections

Population	
1990	7,280.00
Current	8,315.00
Buildout	12,321.00
Students	
1990	1,126.00
Current	1,379.00
Buildout	2,229.00
Households	
1990	2,437.00
Current	2,825.00
Buildout	4,309.00
Water Use(gallons/day)	
Current	657,041.10
Buildout	957,499.10

Buildout Impacts

Additional Residents	4,007.00
Additional School Children	850.00
Additional Residential Units	1,484.00
Additional Developable Land Area(sq ft)	114,001,271.00
Additional Developable Land Area(acres)	2,617.00
Additional Commercial/Industrial Buildable Floor Area(sq ft)	0.00
Additional Water Demand at Buildout(gallons/day)	300,458.00
Residential	300,458.00
Commercial and Industrial	0.00
Additional Solid Waste(tons/yr)	2,055.00

ATTACHMENT B

APPENDIX B

Smart Growth Technical Assistance Grant Application

TOWN OF HAMILTON
SMART GROWTH TECHNICAL ASSISTANCE GRANT APPLICATION
ENV 06 POL 01

INTRODUCTION

This document will serve as the Town of Hamilton's Application for a Smart Growth Technical Assistance Grant, ENV 06 POL 01. The Town of Hamilton is working to improve the town's Sustainable Development and is seeking a Smart Growth Technical Assistance Grant in order to implement goals in Hamilton's Master Plan and Stormwater Master Plan.

In February, 2004, the Hamilton Planning Board adopted the Hamilton Master Plan. The Preface of the Master Plan reads in part as follows:

From the outset, the priority was to actively engage citizen participation to identify key priorities, and carefully evaluate options to ensure broad-based support of workable recommendations. To this end, the Planning Board formed the Citizens Action Planning Committee (CAPC) comprised of over 50 public-spirited volunteers with interest and expertise in the key planning areas: land use, economic development, open space preservation, capital planning, housing, and historic and natural resource preservation. Town-wide participation and input were encouraged at every stage of the two-year process, through:

- *A detailed questionnaire sent to every household in town, with a 21% response rate*
- *A questionnaire specific to downtown businesses*
- *A forum with the large landowners, farmers, and equestrian business owners*
- *Two half-day, town wide forums at the Miles River Middle School*
- *Over 100 open public meetings of the 7 separate CAPC subcommittees*
- *Progress reports and issue-discussion articles placed in the Hamilton-Chronicle*
- *A formal public hearing on the draft plan*
- *Individual discussions and presentations to land use boards, the Finance Committee, and the Board of Selectmen*
- *Progress updates at relevant Town Meetings*
- *Public access to all documents and CAPC members via a dedicated website.*

The Town utilized funds from the Commonwealth's EO418 Program in order to create the "Phase I Master Plan Report, Growth and Change: Hamilton, Massachusetts", and to supplement an appropriation of Town funds in order to complete the Master Plan. As brief background, we have printed the following excerpt from the Land Use section of the Master Plan:

II. Land Use Analysis

Hamilton's regional setting, water resources and unusual social history have influenced the land use pattern that exists today. The town's 14.9-mi2 area contains significant views, a number of large, uninterrupted wetland areas associated with rivers and streams, and a mix of forested, agricultural and institutional open space. Not surprisingly, the Massachusetts Department of Environmental Management (OEM) classifies nearly three-fourths of the town as a scenic resource. Hamilton is a strikingly beautiful, pleasant place to live, work and visit, although the character of late 20th-century development has altered the town's open, rural feel. Noteworthy features of Hamilton's land use pattern include a wealth of open space, the cluster of well-preserved, historic built assets around Hamilton Center, an inviting, attractive downtown and its adjacent traditional neighborhoods.

The distribution and arrangement of land uses in Hamilton have helped to preserve many of the town's rural qualities despite changes that have occurred in the past 25 years. Most of Hamilton's existing development is concentrated in three areas, and a vast amount of open space extends across the western half of town (Map 2, Attachment A). Developed land uses and roads cover about 22% of the town's land area, excluding farms, institutional uses and land occupied by family estates. More than one-fourth of the town consists of wetlands, streams and open water. Just as the location of Bay Road has shaped Hamilton's development history, so have wetland and water resources. This is plainly evident in the southwestern comer of Hamilton, where the Ipswich River forms part of the town line and a large expanse of wetlands (Wenham Swamp) constrains development.

The Miles River and its associated wetlands form a natural break between the central and east sections of town, and influenced the location of Bay Road, which parallels the Miles River from Wenham to Ipswich. Similarly, Black Brook and the wetlands connected to it track the course of Cutler Road. While the Ipswich River defines most of Hamilton's border to the west and north, the Miles River separates eastern Hamilton from Ipswich and Essex. Finally, Chebacco Lake and three other ponds in East Hamilton help to explain the relatively higher density of development nearby. At the same time, they have acted as a barrier against the creation of east-west roadways between Hamilton and neighboring Manchester.

From colonization through the early 1800s, Hamilton developed as an agricultural settlement with a few mills and shops. Those who did not own or work on one of the town's farms were employed in a variety of trades. As was the custom before the separation of home from workplace in the 19th century, Hamilton's people built cabinets, boats, chairs and shoes on their own property. Their travel about town was made possible by a limited number of trails, which eventually became roadways that connected the best of farmland and followed the contours of the natural landscape. Bay Road was the organizing feature of Hamilton's transportation system, as suggested by the cluster of buildings around the church and town meeting building constructed by settlers in the Hamilton Parish of Ipswich.

In 1830, farmers co-existed with mill workers, shopkeepers and tradesmen across the town and the idea that communities ought to be divided into distinct areas for residences and businesses was utterly alien. By the turn of the century, Hamilton had changed significantly. The founding of Myopia Hunt Club in 1876 and the development of many large family estates gave rise to Hamilton's image as a rural retreat, installing a new class structure that endured through much of the 20th century. South Hamilton's commercial center grew up around the junction of two rail lines, one serving Essex's ship building industries and the ice export industries and hotels around Chebacco Lake and the other established to carry summer

residents to the Asbury Grove Camp Meeting Ground (1863). New residential areas grew up around churches located in Hamilton Center, at the cross roads of Walnut and Essex Street and schools.

Equating land use records from the past with today's geographic data is difficult because the information is not organized systematically and descriptive land use classifications have changed. Still, the MacConnell Resource Mapping Project (1951) shows that at mid-century, 60% of the town's land was forested and some 2,100 acres remained in use for farming. Hamilton's year-round population of 2,746 was housed in fewer than 1,000 dwelling units and aggregate residential development covered slightly more than 850 acres of land, excluding farm homes and large estates. Table 1 tracks land use changes that have occurred in Hamilton since 1971.

Table 1: Land Use Change, 1971-1999 (2)

	Acres of Land			Change
Land Use Classification	**1971**	**1985**	**1999**	**1971-1999**
Agricultural Land	1308	1247	1212	-96
Forest	5181	4996	4945	-237
Wetlands	786	786	646	-140
Recreation	195	195	177	-18
Moderate-Density Residential	742	742	781	39
Low-Density Residential	838	1078	1251	414
Commercial/Industrial	32	37	37	5
Institutional/Urban	113	134	167	53
Transportation (3)	0	1	1	1
Water	231	231	233	2
Other	144	123	120	-24
Total Acres	9570	9570	9570	
Summary Statistics	**1971**	**1985**	**1999**	
Residential	16.5%	19.0%	21.2%	
Commercial/Industrial	0.3%	0.4%	0.4%	
Agricultural	13.7%	13.0%	12.7%	
Forest	54.1%	52.2%	51.7%	

Source: MassGIS, Vector Data Library, "lull9ph.dbf." (2001)

(2) *Table 1 reports land use on the basis of coverage and required area, not total development. Example: "residential" includes land covered by buildings and site development features such as driveways, and for each home, sufficient land area to meet the town's zoning requirements. If measured by land in all developed parcels, the amount of residential land in Hamilton is about 4,200 acres, not including vacant/undeveloped.*

(3) Transportation refers to major transportation facilities such as a highway interchange, rail or inter-modal facility. Land used for local roadways is assigned to the closest land use class, e.g.,

residential for roads that serve predominately residential uses.

As of the 2000 Federal Census, the population of the Town was 8,315 residents. The Buildout Analysis completed by the Metropolitan Area Planning Council in 2001 indicates that a full buildout of 12,321 residents is possible. Additional developable land area is 2,617 acres, and additional roadway length at buildout is estimated at 29 miles. (See Attachment B for Buildout Analysis). Full buildout without adequate technical controls would have a very negative impact on water quality, natural resources, and safety of residents. Although subdivision activity has been minimal for the past several years, there is land available for development and interest in several large parcels currently for sale has been expressed. The Town must take a proactive approach in order to protect local watersheds and prevent flooding, stream channel erosion, and other adverse impacts to the environment.

On December 8, 1999, the Phase II Rule of the NPDES stormwater program was published to address Municipal Separate Storm Sewer Systems (MS4s) within urban areas of populations less than 100,000 that were not addressed under the Phase I program. Objectives of the Phase II rule is for the MS4s to develop, implement, and enforce a stormwater program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The town of Hamilton filed a NPDES Phase II Stormwater Master Plan in June 2003. The stormwater tasks outlined in this application are in accordance with the Stormwater Master Plan.

PROGRESS TO DATE

Implementation Plan Efforts

As a result of the Implementation Plan, which is an essential element of the Master Plan, the Town has funded several top-priority Zoning Bylaw Amendments. The Town has recently adopted the following as a result of Master Plan recommendations:

- Open Space and Farmland Preservation Development Zoning Bylaw, January 2005
- Inclusionary Housing Zoning Bylaw, May, 2005
  (A Home Rule Petition to establish an Affordable Housing Trust Fund in conjunction with this bylaw has been filed with the State Legislature).
- The Community Preservation Act, May, 2005
- Community Preservation Committee General Bylaw, May 2005
- Agricultural Commission, May, 2005

In addition, an Economic Development Committee (EDC) and a Housing Partnership Committee (HPC) have been established and appointed to deal with various needs of the town.

Economic Development

The Board of Selectmen, through the Economic Development Committee, has commissioned a Wastewater Treatment Study for the downtown area in order to try to maximize business development and support mixed uses in the downtown area. The EDC also was instrumental in preparation of a Planned Alternative Development Zoning Bylaw Amendment, which was passed over at the Annual Town Meeting in May, 2005 for further study. This zoning bylaw would provide for mixed-use development where a parcel meets specified criteria, subject to a Special Permit from the Planning Board.

The EDC is studying the closed landfill with the goal and intent of future mixed residential and commercial development, with an affordable component, in order to further economic development and increase the Town's housing stock. This is a long-term project which will require some involvement with neighboring towns.

Affordable Housing

In May, 2004, voters at Town Meeting approved an article to fund a housing plan in order to help increase the Town's Subsidized Housing Inventory. The Housing Partnership Committee has been working with a consultant on this plan, and is studying methods to increase the affordable housing stock.

In addition, the Planning Board is studying elements of an Accessory Apartment Zoning Bylaw, which would provide more diversity in housing stock and increase the stock of needed rental housing.

The Town's Master Plan Consultant has recently completed drafting a Land Clearing and Grading Zoning Bylaw, which the Planning Board has just started to review. Additional review and discussion with other departments and public officials is necessary in the near future. This bylaw was a Master Plan Recommendation.

The efforts outlined above demonstrate the Town of Hamilton's commitment and efforts to address and implement Smart Growth Principals and to address affordable housing needs.

Water Conservation Efforts

The Town of Hamilton has taken steps to address water quality and conservation as outlined below:

- The Town has adopted General Bylaw Chapter XXV "Water Use Restriction", which keys to both state and local definitions of serious water emergencies.
- In May of 2004, the Town adopted General Bylaw Chapter XXVI, "Irrigation/Outside Water Use Bylaw", to regulate outside irrigation and water usage.
- The Town distributes free water saving devices to residents.
- The Town has worked closely with the local schools to institute water conservancy programs.
- The Water Department has instituted a Leak Detection Program.

- The Town is working with a consultant on Phase II Stormwater Management Plan, and has filed an Annual Report for 2004 – Year 1, and an Annual Report for 2005 – Year 2. We continue to work on this project.
- With reference to the Master Plan for Stormwater, the Town has completed several of the Master Plan Goals and Best Management Practices (BMPs). The accomplishments are outlined in the Year 1 and 2 Annual Reports. The town and the Department of Public Works (DPW) strive to incorporate improvements to stormwater management whenever possible.
- The Town has adopted a "Groundwater Protection Overlay District Bylaw", which is Section V.D. of the Zoning Bylaw.
- An "Emergency and Terrorism Plan" has been implemented in conjunction with MEPA Comprehensive Emergency Management requirements and Homeland Security.

NEEDS

The Zoning Bylaw and the Subdivision Regulations of the Town of Hamilton are desperately in need of updating in the areas of technical requirements, best management practices, erosion control, and stormwater management. In addition, the Town has no mapping and GIS capabilities. Any GIS progress to date has been made in small efforts as needed using an outside consultant to prepare maps. Town Officials are trying to establish an in-house GIS program, and have researched purchase of software, consultants to assist with initial installation and training, and the ultimate goal of having employees familiar with the software and its capabilities. A citizen has donated a working large scale printer to the Town in order to complement our GIS effort, but we lack software, data and expertise to use it at this time. Mapping capability is important to our Stormwater Management Program, as well as a necessary tool for Land Use Boards.

The Stormwater Management Bylaw needs to be completed in order to be in compliance with the United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems issued on May 1, 2003. Objectives of the Phase II rule are for the MS4s to develop, implement and enforce a storm water program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. In order for an MS4 to meet these objectives, EPA has defined the following six "minimum control measures" that are to be addressed:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Controls
5. Post-Construction Runoff Controls

6. Pollution Prevention/Good Housekeeping for Municipal Operations

The intent is for the communities to address these six minimum controls measures by identifying and applying the appropriate Best Management Practices (BMPs).

Several of the requirements of the General Permit for Phase II communities such as Hamilton will be satisfied with this grant. Included are the minimum control measure for Illicit Discharge Detection and Elimination that requires that the town develop a storm sewer system map and create a Stormwater Bylaw to prohibit illicit discharges. In addition, the minimum control measures for Construction and Post Construction Runoff Controls require that the town develop a Stormwater Bylaw to require and maintain sediment and erosion control.

Each of these measures are detailed in the Hamilton Stormwater Master Plan and need to be accomplished by May 1, 2008 to be in compliance with the EPA's General Permit.

We are applying for funding as follows:

Budget and Scope of Work

TASK ONE

Develop Stormwater Management Bylaw

The purpose of this task would be to develop a Stormwater Management Bylaw. The bylaw will be in compliance with the goals in Hamilton's Stormwater Master Plan. In addition, the Bylaw is a requirement of the EPA NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems issued on May 1, 2003.

The town and the towns's consultant will prepare a Stormwater Management Bylaw to be used in conjunction with the draft Land Clearing and Grading Bylaw which has been prepared by our Master Plan Consultant. This task responds to the environmental elements of sustainable development. Such a bylaw is in the best interest of the town as a whole and of the relevant boards and commissions who will implement it. Further, it is consistent with the needs of the town. A public forum will be held in order to educate the public and public officials, in addition to the statutory public hearing requirement, and the public hearing requirement of the EPA Stormwater General Permit. Articles in the local newspapers and on the Town's website will also serve to make residents aware of this effort.

The purpose of developing the regulatory mechanisms is to provide for the sustainable development of Hamilton and to be in compliance with the Best Management Practice (BMPs) outlined in the Town's Stormwater Master Plan.

The bylaw would:

- Provide the Town of Hamilton with the necessary authority to effectively prohibit non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures,

- Provide the Town with the necessary authority to require operators of construction sites to implement a sediment and erosion control program which includes BMPs that are appropriate for the conditions at the construction site, including efforts to minimize the area of land disturbance. The construction sites will also have to control construction wastes such as discarded construction materials, concrete truck wash out, litter, and sanitary wastes, and

- Provide the Town with the necessary authority to require developers to implement BMPs to minimize the impact on water quality from developed or redeveloped sites. The developers will also be required to specify what entity will be responsible for the long-term operation and maintenance of these BMPs. The regulatory mechanism will provide the Town the authority to request Operation and Maintenance inspection reports from private drainage systems that connect to the Town's drainage system.

Enforcement procedures will be considered including monetary fines and non-monetary against violators to enforce the requirements.

The town will create a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls. The purpose of the mapping BMP is to provide a tool that can be effectively used for illicit connection detection and elimination. Mapping of outfalls will be key in serving as a means of both identifying and prioritizing problem areas. The mapping of pipes, manhole and catch basins will provide a tool for tracing contamination found at outfalls to the source. This information will be a most valuable tool for all land use boards when evaluating submittals for approval, and for implementation of future bylaws.

Deliverable: A Stormwater Management Bylaw that can be presented to Town Meeting, with corresponding maps. which can then be incorporated into the GIS system.

Consultant(s) selected will research existing and model Stormwater Management Bylaws and develop a proposed outline for a new bylaw for the town of Hamilton. This will be reviewed by the towns various land use boards and committees for comment and evaluation. Based on this input, a draft bylaw will be crafted and circulated to all of the relevant local boards. A meeting will be held with the relevant boards to review the draft bylaw and make suggestions for revisions. A final draft of the bylaw will then be produced.

Members of the Planning Board will review the final draft and submit it to Town Counsel for review prior to inclusion on the Town Meeting Warrant.

At each meeting the appropriate professional staff of the Town of Hamilton will be present to provide input based on their knowledge of Town rules and regulations. The Director of

Public Works, as Water Superintendent, Conservation Coordinator, Health Agent, and Planning Board Coordinator will be called upon for their professional expertise, as well as the volunteer board members they represent.

Task One Budget

	Consultant Cost	Tow
search bylaws and develop a draft outline	1,200	
nduct a meeting with the Land Use Boards	600	
velop draft Stormwater Bylaw for Hamilton	2,400	
et with Land Use Boards to review draft bylaw	800	
visions to create final Stormwater Bylaw	2,200	
al review meeting and final revisions to bylaw		
Meeting	650	
Revisions	1,000	
view draft Land Clearing and Grading Zoning Bylaw for compatibility with proposed amendments	300	
rmwater Mapping	12,000	
sk 1 Total Request	21,150	
sk 1 Town Match, 15%		3,

TASK TWO - Revisions to Subdivision Regulations for Low Impact Development Guidelines

Develop Low Impact Development guidelines for subdivisions. As stated above, the Subdivision Regulations are very inadequate as to stormwater management and erosion control, and technical requirements. Subdivision Regulations have not been significantly updated since 1990. This task responds to the environmental elements of sustainable development as they relate to housing and potential mixed-use development. In Spring of 2002, the Master Plan Committee circulated a survey to residents. 543 responses were received out of 3,200 forms delivered to households. In that survey, residents expressed strong interest in preserving and protecting open space, and felt that more could be done to address the supply and quality of drinking water. These feelings were also expressed at the public workshops held as part of the Master Plan process. Members of the Planning Board and other public officials attended a workshop sponsored by Essex County Community

Foundation in November, 2004, and learned of Low Impact Development Techniques through a presentation at the forum. They were very excited about the concept and its application in order to preserve the natural features of the Town, and to conserve resources.

Deliverable: LID revisions to the Subdivision Regulations.

The Consultant will research Low Impact Development techniques and develop a draft set of proposed measures that could be incorporated into the town's Subdivision Regulations. A meeting will be held with the Planning Board to review the options and decide on the town's priorities and preferred approaches. Based on this, the Consultant will review the town's existing Subdivision Regulations and develop draft revisions that will implement the agreed upon Low Impact Development principles. The draft revisions will also include graphics providing examples of Low Impact Development techniques that could be added to the town's Subdivision Regulations. An All-Board meeting will be scheduled to review the proposed draft regulations, following which any necessary revisions will be made and a final draft will be prepared. A final meeting will be held with the Planning Board to assist in implementing and adopting the revised Subdivision Regulations.

The integration of LID principles into the Subdivision Regulations will require the input of the Board of Health, Conservation Commission, the Department of Public Works as Water and Highway Departments, and the Planning Board, since they must all must comment or act on their jurisdictional areas of a definitive subdivision plan. The principles to be developed must be acceptable to these boards as well, so their professional staff will participate in this part of the project.

Task Two Budget

	Consultant Cost	Town Cost
Research LID Techniques and develop draft outline	2,400	
Meet with Planning Board to review the outline	300	
Develop draft LID guidelines for Subdivision Regulations	3,000	
Meet with Boards to review draft regulations	300	
Revise draft and produce final Subdivision Regulations	1,200	
Task 2 Total	7,200	
Task 2 Town Match, 15%		1,080

<u>Project Budget Summary</u>

Task One - Develop Stormwater Bylaw	$21150.00
Task Two - LID Guidelines for Subdivision Regulations	$ 7200.00
Project Total	**$28350.00**
Less 15% Town Match	**(4252.50)**
Amount Requested	**$24097.50**

The Town of Hamilton Department of Public Works has committed funds for the required 15% match. That Letter of Commitment is attached. In addition, employees of the town boards and committees will be involved in all aspects of these two projects.

Timeline

We anticipate approximately 120 days or four months to complete the tasks outlined above. The Planning Board is responsible for conducting public hearings for zoning bylaw and subdivision regulation amendments, and will schedule such hearings to allow time for review and revision of a zoning bylaw amendment prior to Town Meeting in May, 2006. Planning Board members and the Planning Coordinator are committed to implementation of the Stormwater Management Zoning Bylaw and Low-Impact Development Regulation in order to protect natural resources, and they have the support of various town boards and committees. There is also great support from boards, departments, and committees for mapping capabilities and updated maps.