

Department of Public Works

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RICHARD F. STINSON
Director of Public Works



April 30, 2015

Glenda Velez
US EPA
5 Post Office Square – OEP06-01
Boston, MA 02109-3912

RE: NPDES Stormwater Phase II Permit
Annual Report Permit Year Twelve
Wakefield, Massachusetts

Dear Sir or Madam:

The Town of Wakefield, Massachusetts is pleased to submit this Annual Report covering Permit Year Twelve (May 1, 2014 through April 30, 2015.) This submittal is in accordance with the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Stormwater Phase II Regulations and the Massachusetts DEP requirements.

The format of this report follows the Section F listing of information items under Part II Massachusetts Small MS4 Storm Water Management Program. See the Table of Contents following this cover letter for identification of each report section.

In summary, the Town of Wakefield has met compliance with the Town's permit application submittal dated July 28, 2003.

The only permit component that was changed was the Adopt-A-Stream Program. In lieu of this program, the Department of Public Works (DPW) implemented a stream-cleaning program, starting in the spring of 2007.

It should also be noted, that in 2014 into 2015 during permit year twelve, the Town engineering consultant continued to perform a drainage study of the Town. The study, which will include a drainage model of the Town's drainage system components, will hopefully result in changes to the existing drain system being recommended and

implemented which will in turn reduce the degree of flooding that occurs, thus reducing the potential uptake and wash off of pollutants and other materials to the receiving waters.

During this permit year the Lake Quannapowitt Committee formed in early 2014 continued compiling and reviewing available information on the lake and its watershed, in particular causes or blue-green algae blooms. Evaluating watershed land use and control measures (including green infrastructure and other measures) to reduce pollutant loadings to the lake (phosphorous being one of the primary pollutants of concern); and in-lake approaches to enhance water quality and eliminate blue-green algae blooms. It is planned that the eventual completion of the committees' work will provide recommendations for the purpose of developing and implementing a plan that will preserve this valuable resource for future generations.

In addition to the permit activities, we corresponded with the Massachusetts Historical Commission (MHC) and National Heritage and Endangered Species Program (NHESP) to ensure that the guidance provided in the Addendum A and B of the NPDES Stormwater Permit is followed. **Correspondence has been received from both MHC and NHESP that verifies that we have no active projects at this time that will require their review and certification.** Their correspondence goes further to provide guidance on what type of projects would require their review and certification, and the process for submitting a proposed project for review.

If you have any questions or comments, please contact me at 781-246-6301.

Very truly yours,



Richard F Stinson
Director of Public Works

cc: Fred Civian, MA Department of Environmental Protection
Stephen P. Maio, Town Administrator
Carol Antonelli, DPW Business/Operations Manager
Michael P. Collins, P. E., Town Engineer
Wakefield NPDES Committee

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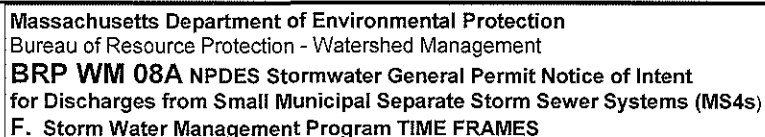
EXECUTIVE SUMMARY

During the Permit Year Twelve (May 1, 2014 through April 30, 2015) the Town of Wakefield complied with the Town's permit application submittal dated July 28, 2003. The overall five-year permit planned permit program is presented on the charts following this page.

During Permit Year Twelve, work activities occurred for each of the six planned Best Management Practices, primarily as an extension of the permit year five activities. The details of work activity conducted for each BMP are presented in Section I of this report.

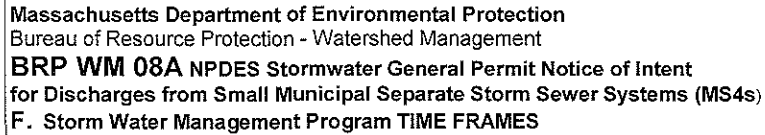
We do not recommend as of this date, that the identified BMP's or measurable goals be changed with the exception of the Adopt-A-Stream Program, which has been changed to a Department of Public Works Annual Stream Cleaning Program.

The formation of the Lake Quannapowitt Committee with the Town Engineer serving as Chairman has helped local officials better understand water quality impacts and their causes; and approaches to mitigating or eliminating the sources of these impacts.



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SECTION I.

SELF-ASSESSMENT OF COMPLIANCE WITH THE PERMIT CONDITIONS.

The purpose of this section is to perform a self-assessment of the work undertaken during Permit Year Twelve (May 1, 2014 through April 30, 2015) in terms of compliance with permit conditions.

The chart presented on the following pages presents an identification of each of the activities scheduled under each BMP, the scheduling of work within Permit Year Twelve and a Self-Assessment of Compliance with Permit Conditions.

WAKEFIELD, MA NPDES STORMWATER PHASE II PERMIT

ANNUAL REPORT COVERING MAY 2014 through APRIL 2015

SECTION I. SELF-ASSESSMENT OF COMPLIANCE WITH PERMIT CONDITIONS

BMP ID #	Task	PERMIT YEAR TWELVE				BRIEF DESCRIPTION OF ACTIVITY
		Spring 14	Summer 14	Fall 14	Winter-Spring 14-15	
	Education / Materials					
1.4	Press Release (1/year)				X	Press release in local paper describing program and inviting residents to a Stormwater Forum
1.5	Public Works Newsletter Article	X		X		Articles on Town's Stormwater Management Program in Spring and Fall DPW Newsletters
1.7	Fact Sheets	X				Fact sheets developed and maintained in DPW office, available to public
	Event Education & Outreach					
1.11	Festival by the Lake	X				Held June 21, 2014, with Citizen Participation
1.12	FOLQ (Lake Cleanup)	X		X		Held May 10, 2014 and October 25, 2014, with Citizen Participation
1.13	Library Date		X			Newsletter and Literature display at Library late spring into early summer 2014
1.14	Household Hazardous Waste Day (1/year)	X		X		Held May 31, 2014 and Sep. 13, 2014 with Citizen Participation
	Public Involvement & Participation					
2.1	FOLQ (Lake Clean up)	X				Held May 10, 2014 and October 25, 2014, with Citizen Participation
2.2	Hazardous Waste Day (1/year)	X		X		Held May 31, 2014 and Sep. 13, 2014 with Citizen Participation
2.3	Citizens Volunteer Group					Involved in 1.11 and 1.12, above
	Steering Committee					
2.6	Annual Mtg				X	Meeting conducted April 14, 2015 positive input received
2.7	Annual Town SW Forum/Workshop				X	Conducted April 23, 2015
	Distribute Educational Materials					
2.8	Newsletter Article (Annual)	X		X		Articles on Town's Stormwater Management Program in Spring and Fall DPW Newsletters
2.11	Stream cleaning program					DPW personnel with boat/motor and barge remove debris from rivers and streams
	Illicit Discharge Detection & Elimination					
3.2	Identify & Characterize Illicit Discharges					Upstream drainage system investigations during mapping, none were identified during this past reporting year
3.3	Map Locations of Illicit Discharges					None found yet for mapping
3.5	Ongoing Mapping of MS4s					Ongoing mapping of trunk drains, also upstream lateral drains, all available paper plans used as general reference for field investigations, investigating for indicators of illicit discharges
3.8	Storm drain system bylaw					Codified and added new Town bylaw to Town code books, administered as needed
3.10	Potential Funding Programs					DPW continuing to investigate possible sources
	Construction Site Runoff Control					
4.5	Storm drain system bylaw					Codified and added new Town bylaw to Town code books, administered as needed
	Post-Construction Runoff Control					
5.4	Storm drain system bylaw					Codified and added new Town bylaw to Town code books, administered as needed
	Pollution Prevention / Good Housekeeping					
6.2	Catchbasin Cleaning Guidelines		X			In place, being followed
6.3	Street Sweeping Guidelines		X			In place, being followed
6.4	Maintain Streams & Channels Guidelines		X			DPW crews with boat/motor and barge remove debris from streams and channels
6.5	Calibrating Salt/Sand Spreaders Guidelines		X			In place, being followed
6.7	Recycling Refuse Program Guidelines		X			In place, being followed
6.8	Employee Training Program					NPDES Program training provided for DPW Staff April 9, 2015
6.10	Fertilizers/Pesticides Recommended Use Guidelines		X			Conforms to State guidelines / Child Protection Act
6.12	Identify Sensitive Waterway & Waterbodies		X			Results of work under BMP above provides this information
6.13	Identify Non-Stormwater Discharges		X			Thus far field sampling testing has not found any non-stormwater discharges

WAKEFIELD, MA NPDES STORMWATER PHASE II PERMIT						
ANNUAL REPORT COVERING MAY 2014 through APRIL 2015						
SECTION I. SELF-ASSESSMENT OF COMPLIANCE WITH PERMIT CONDITIONS						
PERMIT YEAR TWELVE						
BMP ID #	Task	Spring 14	Summer 14	Fall 14	Winter-Spring 14-15	BRIEF DESCRIPTION OF ACTIVITY
6.14	Good Housekeeping monitoring Program					Ongoing DPW activity at Municipal Facilities continues, as well as learning under 6.8 above

SECTION II.

ASSESSMENT OF THE APPROPRIATENESS OF THE SELECTED BMP'S.

The selected items of work as included in the NPDES permit application for each of the BMP's were derived from an extensive review by the Department of Public Works and the NPDES Phase II Committee during the period prior to the July 30, 2003 permit submittal.

During the Permit Year Twelve (May 1, 2014 through April 30, 2015) the Town of Wakefield did identify that all of the pre-planned work items including the Department of Public Works Annual Stream Cleaning Program (implemented in lieu of the Adopt-A-Stream Program) will provide benefit to the Town.

SECTION III.

ASSESSMENT OF PROGRESS TOWARDS ACHIEVING MEASURABLE GOALS.

This section presents an assessment of progress toward achieving the permit related measurable goals from work performed during NPDES Permit Year Twelve (May 1, 2014 through April 30, 2015.)

WAKEFIELD, MA NPDES STORMWATER PHASE II PERMIT

ANNUAL REPORT COVERING MAY 2014 through APRIL 2015

SECTION III. ASSESSMENT OF PROGRESS TOWARD ACHIEVING MEASURABLE GOALS

BMP ID #	Task	BRIEF DESCRIPTION OF ACTIVITY
	<u>Education / Materials</u>	
1.4	Press Release (1/year)	Twelfth year goal achieved
1.5	Public Works Newsletter Article	Twelfth year goal achieved
1.7	Fact Sheets	Twelfth year goal achieved
	<u>Event Education & Outreach</u>	
1.11	Festival by the Lake	Held June 21, 2014 with citizen participation
1.12	FOLQ (Lake Cleanup)	Held May 10, 2014 and October 25, 2014 with citizen participation
1.13	Library Date	Newsletter and material at Library late-spring into early summer 2014
1.14	Household Hazardous Waste Day (1/year)	Held May 31, 2014 and Sept. 13, 2014
	<u>Public Involvement & Participation</u>	
2.1	FOLQ (Lake Clean up)	Held May 10, 2014 and October 25, 2014 with citizen participation
2.2	Hazardous Waste Day (1/year)	Held May 31, 2014 and Sept. 13, 2014
2.3	Citizens Volunteer Group	Twelfth year goal achieved
	<u>Steering Committee</u>	
2.6	Bi-annual Mtgs (future years)	Held April 14, 2015
2.7	Annual Town SW Forum/Workshop	Held April 23, 2015
	<u>Distribute Educational Materials</u>	
2.8	Newsletter Article (Annual)	Twelfth year goal achieved
2.11	Stream cleaning program	Twelfth year goal achieved
	<u>Illicit Discharge Detection & Elimination</u>	
3.2	Identify & Characterize Illicit Discharges	Twelfth year goal achieved
3.3	Map Locations of Illicit Discharges	Twelfth year goal achieved
3.5	Ongoing Mapping of MS4s	Twelfth year goal achieved
3.8	Storm drain system bylaw	Twelfth year goal achieved
3.10	Potential Funding Programs	Work completed under recent Flood Hazard Mitigation Grant program
	<u>Construction Site Runoff Control</u>	
4.5	Storm drain system bylaw	Twelfth year goal achieved
	<u>Post-Construction Runoff Control</u>	
5.4	Storm drain system bylaw	Twelfth year goal achieved
	<u>Pollution Prevention / Good Housekeeping</u>	
6.2	Catchbasin Cleaning Guidelines	Twelfth year goal achieved
6.3	Street Sweeping Guidelines	Twelfth year goal achieved
6.4	Maintain Streams & Channels Guidelines	Twelfth year goal achieved
6.5	Calibrating Salt/Sand Spreaders Guidelines	Twelfth year goal achieved
6.7	Recycling Refuse Program Guidelines	Twelfth year goal achieved
6.8	Employee Training Program	Held April 9, 2015
6.10	Fertilizers/Pesticides Recommended Use Guidelines	Twelfth year goal achieved
6.13	Identify Non-Stormwater Discharges	Twelfth year goal achieved
6.14	Good Housekeeping monitoring Program	Twelfth year goal achieved

SECTION IV.

SUMMARY INFORMATION COLLECTED AND ANALYZED. (INCLUDING DATA)

This section illustrates how the Town of Wakefield has catalogued all the information and material that was collected during the first twelve Permit Years (through April 30, 2015) related to the NPDES Phase II Stormwater Regulations.

Information and material shall be continually gathered and logged into the spreadsheet shown on the following pages, and filed in the NPDES Phase II Stormwater library at Town Hall. An area at the Wakefield Town Hall is reserved for the Municipal Stormwater Management Library consisting of reports, technical data, forms, workbooks, guidelines, fact sheets, instructions, product specifications, pamphlets, posters, articles, lists, manuals, maps, letters, memos, emails, magazines, videos, compact discs, seminar material, miscellaneous notes and information. Each item is categorized under an appropriate BMP for ease of reference throughout the permit process.

**Town of Wakefield, MA
NPDES Phase II Stormwater Permit**

Reference Information Collected

File: 0027

(Typical Document Types: Report/Study, Tech. Data, Form, Workbook, Guidelines, Fact Sheet, Instructions, Product Spec, Pamphlet, Poster, Article, List, Manual, Map, Letter, Memo, Email, Magazine, Video, CD, Seminar Material, Misc. Notes, Misc. Info)

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
1	After The Storm (2 copies)		co-produced by the EPA & The Weather Channel	1/2 hours T.V. program about watersheds	Video	http://www.epa.gov/weathchannel/announcement	2/4/2004	1.6					
2	The Snout	Best Management Products, Inc. (T.J. Mullen, President)	BMP, Inc.	Oil-Water-Debris Separator, Affordable Stormwater Quality	Letter & Product	www.bestmp.com						5.2	6.6
3	Stormwater Symposium - Phas II: How to DO it all (well almost)	Comprehensive Environmental, Inc.		Material distributed at symposium (Design guidelines and criteria for	3-Ring Folder	www.celengineers.com	3/24/2004		2.7				
4	Stormwater - The Journal for Surface Water Quality Professionals				Magazine	www.stormh2o.com	May/June 2004						6.1
5		Friends of Lake Quannapowitt		Letter to the Board of Selectmen regarding lake cleanup	Letter		3/16/2004		2.1	3.4			
6	Wakefield/ENV: Explanation & Analysis of Clean Water Act Section 303(d) Listing of	RSS ?			Memo		11/1/2002			3.4			
7	Stormwater Management - Volume One: Stormwater Policy Handbook	DEP & MA Office of Coastal Zone Management			Manual		3/1/1997				4.1		
8	Stormwater Management - Volume Two Stormwater Technical Handbook	DEP & MA Office of Coastal Zone Management			Manual		3/1/1997				4.1		
9	Massachusetts Year 2002 Integrated List of Waters - Part 1: Context & Rationale for	Commonwealth of Massachusetts: Executive		Proposed Listing for Public Comment	Report		10/1/2002			3.4			
10	Massachusetts Year 2002 Integrated List of Waters - Part 2: Proposed Listing of Individual Categories of Waters	Commonwealth of Massachusetts: Executive Office of Environmental Affairs, MA DEP, Bureau of Resource Protection, Division of Watershed Management		Proposed Listing for Public Comment	Report		10/1/2002			3.4			
11	FINAL - Massachusetts Section 303(d) List of Waters, 1998	Commonwealth of Massachusetts: Executive Office of Environmental Affairs, MA DEP, Bureau of Resource Protection, Division of Watershed Management					February-99			3.4			
12	Lake Quannapowitt Bathymetrics				Map		None			3.4			
13	Stream Channel Reference Sites - An Illustrated Guide to Field Technique	Cheryl C. Harrelson, C.L. Rawlins & John P. Potyondy	U.S. Dept of Agriculture, Forest Service, Rocky Mountain Forest & Range Experiment Station	Document is a guide to establishing permanent reference site for gathering data about the physical characteristics of streams and rivers	Report		April-94		2.11				
14	(Report) "Ambient Water Quality Criteria for Chloride-1998", (monitoring data), (newspaper article) "Lake Quannapowitt is Getting Saltier", (newspaper article) "Salt Not So Great for Lake", (public record) Topical Applications of Copper Sulfate & Sodium Arsenite in Lake Quannapowitt, 1922-1964", (study) "Lake Quannapowitt Diagnostic/Feasibility Study Final Report July 1986", (data) "Lake Quannapowitt Elevations, Outflow, Inflow & Water Quality, (data) "Water-Quality Sampling of Ground Water from Private Wells in the Lake Quannapowitt Watershed", (data) "Lake Testing Data Reporting Sheet 2001", (article) "Arsenic & Old Weeds"	Doug Heath / EPA		Packet sent by Doug Heath	Various					3.4			
15	Is your property on the National Register of Historic Places?				List	http://www.wakefieldma.org/nationalregister.html		file 0027.0.4					
16	Certified Professional in Erosion & Sediment Control - CPESC Exam Review Course Workbook	CPESC Council			Workbook		October-02				4.1		

Town of Wakefield, MA
NPDES Phase II Stormwater Permit

Reference Information Collected

File: 0027

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
17	Massachusetts Erosion & Sediment Control Guidelines for Urban & Suburban Areas, A Guide for Planners, Designers and Municipal Officials	MA DEP, Executive Office of Environ. Affairs, State Commission for Conservation of Soil, Water and Related Resources, Natural Resources Conservation Service U.S. Dept. of Agriculture	Franklin, Hampden, Hampshire Conservation Districts	Table of Contents Only	Guidelines		March-97				4.1		
18	DEP's Proposed Total Maximum Daily Loads (TMDL's) Strategy to Improve the Water Quality of Massachusetts Rivers and Lakes				Report					3.4			
19	NPDES Phase II Stormwater Regulations Compliance Assistance, Instructions for 5-Step Process to Facilitate Stormwater Management Program Planning			EPA BMPs	Instructions						4.1		
20	MA DEP website information (Stormwater, Industrial Wastewater, Watersheds, Chapter 91 Watersheds)	MA DEP		website print outs	Misc Info	http://www.mass.gov/de/p/brp/stormwtr/stormpub.htm		1.2					
21	Stormwater Management Policy	MA DEP			Policy						4.1		
22	MA DEP - WPA Appendix C - Stormwater Management Form (MA Wetlands Protection Act M.G.L. c 131, Section 40)	MA DEP			Form						4.1		
23	MA DEP - BRP WM 08A NPDES Stormwater General Permit, Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) / Permit Fact Sheet	MA DEP			Instructions								
24	National Pollutant Discharge Elimination System (NPDES) Phase II Rule	Thomas Hayes, P.E. (Wakefield Town Engineer)			Fact Sheet		3/14/2000	file 0027.0.1					
25	Bay Savers, Stormwater Quality Systems That Make Sense	Bay Saver		Technical And Design Manual	Folder	www.baysaver.com	10/2/2004				4.1	5.1	
26	Erosion Control Blankets and Mats	CONTECH			Folder, Pamphlets	www.armortec.com					4.1		
27	Stormwater Management	SYNTHETIC INDUSTRIES		Stormwater, Drainage and Erosion Prevention Reference guide	Three ring binder	www.fixsoil.com	6/22/1905				4.1	5.1	
28	Storm Water / Combined Sewer Overflow	CDS Technologies		Performance review,info packet,pollutant traps,Design examples	Three ring binder	www.cdstech.com	10/29/2002				4.1	5.1	
29	Stormwater Management	Hydro International	H.I.L Technology	Stormwater Management design catalog containing reference materials and design information	Three ring binder	hiltech@hil-tech.com	6/23/1905				4.1	5.1	
30	Phase II Up Date	Camp Dresser & McKee Inc	CDM	Phase II update. Improving water quality in Norwood	Three ring binder,		3/1/2001	file 0027.0.1					
31	Office Of Wastewater Management	EPA	Office of Wastewater Management	Stormwater Pollution , Guides, stormwater outreach materials	Folder	www.epa.gov/npdes/stormwater	9/1/2002			3.4			
32	EPA Info. NPDES Phase II Final Rule	NPDES	NPDES	Phase II final rule, Phase II fact sheets, Municipal Tech fact sheets	Three ring binder		12/8/1999	file 0027.0.1					
33	Phase II NPDES Stormwater Regulation Workshop	Comprehensive Environmental, Inc.	NPDES	Phase II Stormwater Regulation Workshop	Three ring binder			file 0027.0.1					
34	NPDES Stormwater Phase II Regulations	NPDES	Vanasse Hangen Brustlin, Inc	Phase II Stormwater Regulations. Presentation, fact sheets	Three ring binder			file 0027.0.1					
35		Christine Odiaga		Phase II General Info, Planning Structural Non-Structural BMP's. Overview of reference manuals	Three ring binder						4.1	5.1	

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
36	Plastic Septic and Stormwater Chambers	Cultec	Contact and Recharger	Fabric Interface, Test method and Test results. Info about Plastic Leaching Chambers. Design tools CD	Three ring binder	www.cultec.com	6/25/1905				4.1	5.1	
37	The Complete Stormwater Treatment Solution	StormTreat Systems		Technology assessment report,. StormTreat Systems Price Sheet, Specification Sheet of StormTreat Tank. Pollutant Removal Effectiveness and Storm Water Technology Fact Sheet.	Folder	www.eco-cycle.com	September 1997-1999				4.1	5.1	
38	Stormdrain Solutions is Committed to Clean Water			A Better Solpotion For Treating Runoff.....Details, Installation, Performance, And Inceptors Design,Report of Analysis and Certificate of Analysis	Folder		8/6/2003				4.1	5.1	
39	CONTECH Construction Products	Mark H. McCormick		CONTECH's Underground Stormwater Detention Systems software. Underground System Design Program User Manual and Tutorial, With Technical Commentary.	Packet (Downloads)	water-detention-system@contech-cpi.com					4.1	5.1	
40	Water Quality Structures and Systems		ADS	EPA Phase II Compliance. Helping you through Phase II, Water quality units, Sediment Control, Nyloplast Catch it,Nyloplast Interat Hood, Hydro-Kleen Filtration System.	Pamphlet	www.ads-pipe.com	6/25/1905				4.1	5.1	
41	Storm Drain Filtrtion System DrainPac		New England Environmental Equipment	Document is a guide to establishing permanent reference site for gathering data about the physical characteristics of streams and rivers	Packet -CD		9/8/2000		2.11	3.4			
42	The Premium Water Application		PETRATECH	Geolink's premium design inhibits the transport of soil during the erosion process and help on the cos keep our waterways free from silt and hazardous pollutants. Design and research, Installation, Placement Techniques.	Booklet	www.petraflex.com	6/24/1905				4.1	5.1	
43	Erosion Control Service		Bark Tech Express	Erosion control. , Non-Vegetative uses of organic materials for soil erosion control,DEP information sheet.Organic soil mulches, Filter berms for sediments control, compost, rules of thumb	Folder						4.1	5.1	
44	Engineered for Excellence		EcreoFib	Stormwater management ,Erosion and dust control, New technology that is being applied to construction sites, that will eliminate sediment loss from rainfall and storm events and aid in dust control	Brochure	www.hydrograsstech.com	9/19/2001				4.1	5.1	
45	MODULAR GABION SYSTEMS		Erosion Control Specialists	Design guide for gabion retaining walls, Diaphragms,	Booklet	grmobile@aol.com					4.1	5.1	
46	ECO-Stone Permeable Pavement for Stormwater Managemeny		Ideal Concrete Block CO., INC	Guide yand research summar, Magazine on landscaping, Garden products, Concrete Pavers	Folder, Magazine	www.idealconcreteblock.com	9/30/2003				4.1	5.1	
47	Storm Water Sampler Information		VORTOX	Instructions for the Assembly and installation of the VORTOX SAMPLER. City expands stormwater surveillance with in-pipe sampling device. Computer-monitored rain gauge	Sampler Package					3.4			

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
48	Hydrocarbon Test Kit For soil		PetroFlag	How to... Comparison to laboratory Test Methods.Strategies, Test Methodology	Folder	www.DEXSIL.COM				3.4			
49	DEXSIL Accurate, Cost-Effective, Environmental		DEXSIL	How to... Performing field testing, Methods and Results. Quantitative test for water content. Chlorine in used oil. Used oil and PPM levels in waste water. On-site Lubricant test kits. Acid Number determination. Comparisons of ASTM Laboratory methods with titra-lube TBN and titra-lube Tan. Field Instrumentation, Environmental Laboratory Services.	Catalog	http://www.dexsil.com				3.4			
50	The global Authority in erosion control technology		North American Green	Global erosion control has never been more important or as advanced.North American Green is the leading product technology provider assisting engineers and contractors in complying with erosion and sediment control regulations. Throughout this catalog is extended-term and long-term degradable Erosion Blankets in many designs and forms.	Catalog	www.nagreen.com					4.1	5.1	
51	Jensen Precast Stormvault Development and Monitoring 2003 Report	Steve Phelps	Storm Vault	Developing and Monitoring Report 2003 . Idealize stormwater Mitigation System, Jensen Precast Stormvault Stormwater Mitigation System. Water Quality Capture Volume sizing, Mean Storm Sizing Methodolgy. Results in field testing. Also is included REFERNCES	Report	www.jensenprecast.com	6/24/1905			3.4	4.1	5.1	
52	Contact Directory, Making Every Drop Count	Debbra Strokes-Haglund DRIWATER,INC	DRIWATER	Erosion Control, Agriculture Replants, Mitigation, Revegetation, Reclamation, Award winning project.100-acre Mitigation Planting for Talega Development, Vineyard Planting.User guide. Plant Detail for shrubs and trees.Testimonials	Report						4.1	5.1	
53	CONTECH , TENSAR Geogrids for Soil Reinforcement			TENSAR— Economical, Efficient soil reinforcement .Increases soil stability, Performance options, proven performance, Slope management, Retaining wall options, Integrated foundation support system, soft soil solutions.Installation Guide, Tensar Biaxial Geogrid V.S. Geotextiles for Construction over soft soil. Provided in packet is a SAMPLE PIECE of TENSAR.	Folder						4.1	5.1	

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
54	ARMORTEC		CONTECH	Interlocking Concrete Structural Grid Pavement System interlocking concrete Erosion Control System, Concrete Erosion Protection, Articulating Concrete Block Revetment System, ArmorStone - ArmorFlex - ArmorWedge - ArmorTurf - ArmorLoc - Features, Functions, Textures, Design Guidelines, Installation Diagrams, A - Jacks , Articulating Concrete Block Mat System..	Folder,Pamp hlets	www.conteck-cpi.com	2000-2002				4.1	5.1	
55	The Stormceptor System		CSR	Technical Manual ,Stormceptor - Applications, System Operation, Testing, Configuration of the Storm Drain System , Location in the Storm drain System, Technical Specifications, Design Parameters, Sizing Guidelines. Installation Procedures, Drawings and patent information	Catalog	www.csrstormceptor.com	10/1/2000				4.1	5.1	
56	Environmental Compliance Solutions		HYDRO COMPLIANCE MANAGEMENT, INC>	About HYDRO-KLEEN Storm Water Filtration System.. Tells about System.. Application Profile ,Analytical Test of Filtration System. Efficiency of System, Diagram, Specifications	Folder	www.hydrocompliance.com	10/22/2003				4.1	5.1	
57	Netting Trashtrap Systems		Fresh Creek Technologies, INC.	Cost-effective control of trash, floatables and solids in stormwater and combined sewer systems. Fact sheet, Modular prefabricated Design, Low operation and maintenance cost, Program and project details, Press Release, Diagrams.	catalog, pamphlets	www.freshcreek.com	7/2/2003			3.4	4.1	5.1	
58	OIL AND GREASE REMOVAL BY FLOATING SORBENT IN A CDS DEVICE	Michael K. Stenstorm Sim-Lin Lau	Civil and Environmental Engineering Department University of California, Los Angeles	Executive Summary, Introduction, Experimental Methods, Diagrams, Testing and the results, Fact sheets. Conclusions and recommendations, Appendix - Raw Data, Also included REFERENCES	Booklet		7/2/1998			3.4	4.1	5.1	6.6
59	Grassy Pavers		RK Manufacturing, INC.	Storm water management and green space compliance problem GRASSY PAVERS is all you need. Installation, diagrams	Packet,	www.rkmfg.com					4.1	5.1	
60	ULTRA TECH		ULTRA TECH international, INC.	Catalog of all there products	catalog	www.spillcontainment.com	2002-2003				4.1	5.1	6.6
61	Stormwater Management INC.			Treatment Solutions, Filter Media, The storm filter cartridge, Stormgate, Stormfilter	Folder	stowatermgt.com					4.1	5.1	
62	Invisible Structures		Invisible Structures,INC.	Invisible Structure Partner List, Grass Pave 2, Rain store 3, Slopetams 2, Draincore 2,	Info. Packet	www.invisiblestructures.com	8/4/2003				4.1	5.1	
63	Soil & Groundwater Sampling Technology Catalog		AMS	The world's finest Soil and groundwater Sampling Equipment	Catalog	www.ams-samplers.com	5/17/2001			3.4			
64	Total Stormwater Solutions		Vortechnics	Vortechn Systems, Coparisons, Product Performance, Work Sheets	Booklet	vortechnics.com					4.1		6.6
65	Environmental Sampling Technology		EST	Reliable Field Services For the Environmental Industry	Pamphlet	www.environmentalsampling.com				3.4			

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66	STABILATOR Erosion Prevention System		Water's Edge Technology, LLC	New Product Design For Erosion Control for , Streambank,/ Riverbank Stabilization, Bridge Pier, Channel Stabilization, slope Stabilization, Riverbed / Steamed Stabilization, Outfall Protection . Brochure on Installation, And Product Specifications;	Info. Packet	www.WatersEdgeTechnology.com			2.11		4.1		
67	Hickenbottom Inlet - Intake Products		Hickenbottom, INC.	General information for Installation inlet - Intake Products, Surface Inlets , Description & Uses, 8" intake Description and use , 10" , 12" , 5" , 6" , .. Ilet - Intake Capacity charts.	Folder					3.4			
68	Pollution Solution Sediments Control & Storm Drain Filtration		Pollution Solutions, INC.	Siltfilter , Effective & affordable solutions for a healthier environment , Product Price Sheet, Construction Phase , Controlling Stormwater Pollution.	Folder		6/25/1905				4.1	5.1	
69	Pro Bark Incorporated			Silt Fence Replacement (Phase II Compliant) , Slope Sabilization , Filtrexx , Filtersoxx , Compost Filter Berms , Ditch Checks , Compost Product Performance	Folder	www.probark.com						4.1	5.1
70	Getting In Step		United States Environment Protection Agency	A video guide for conducting watershed outreach campaigns.	Video	www.epa.gov/ncepihom/index.htm	6/1/2003	1.1					
71	Engineering Stormwater Products		Vortechnics Inc.	Product Literature and Specifications, Technical Bulletins, Testing Data, and News and Reviews	3 Ring Binder	www.vortechnics.com	Revised: 07/2002					5.1	
72	Design Guidelines and Criteria for Stormwater Management	Comprehensive Environmental, Inc.		Design Criteria for communities, states, engineers, and other who are trying to minimize the impacts of stormwater management systems on the end users.	Booklet		11/1/2003				4.1	5.1	
73	EPA Storm Water Permit for Construction Projects	Abby Swaine	EPA	Resources: Massachusetts Edition	Newsletter		2/1/2004				4.1		
74	Portadam		Portadam Inc.	The Portadam concept utilizes a steel supporting structure with a continuous reinforced vinyl liner membrane to effectively provide a means of water division, retention or impoundment.	Booklet	www.portadam.com					4.1	5.1	
75	Aqua Dam: Water-Controlling Water		Aqua Dam	Stream diversions, flood control, hazardous waste containment, dams, prevention of levee overtopping, silt barriers and temporary water storage are just a few applications of Aqua Dams, an exciting new method of controlling water with water.	Literature	www.aquadam.com	7/31/2001				4.1	5.1	
76	Hydro-Solutions: Aqua Barrier		Hydro-Solutions Inc.	Aqua-Barriers are a patented water inflated damming device.	Booklet	www.hydrologicalsolutions.com	6/24/1905				4.1	5.1	
77	Low Impact Development Design Strategies: An Integrated Design Approach	DES: Programs and Planning Division		Site Planning, Hydrology, Distributed IMP Technologies, Erosion and Sediment Control, Public Outreach	Literature		6/1/1999				4.1	5.1	
78	Polyflex: Reference Manual		Poly Flex: Polyethylene Geomembranes	An engineering approach to groundwater protection.	3 Ring Binder	www.poly-flex.com					4.1	5.1	
79	H.I.L Technology Inc.		H.I.L Technology Inc.	H.I.L Technology Inc. provides cost-effective solutions for controlling the quantity and improving the quality of water.	3 Ring Binder	hiltech@hil-tech.com	6/23/1905				4.1	5.1	

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80	Rinker Materials: Product and Technical Information for Stormceptor		Rinker Materials	The Stormceptor is a stormwater separator the efficiently removes sediment and hydrocarbons from stormwater run-off, and stores the pollutant for safe and easy removal. The versatile Stormceptor product line consists of In-Line, Inlet, Series and Submerged designs. Unit sizes range from the 450 gallon Inlet Stormceptor to the 16,000 gallon Series Stormceptor.	3 Ring Binder and CD	www.rinkerstormceptor.com	8/1/2003					5.1	
81	Product Design Manual		Stormwater Management Inc.	Stormwater Management is the leading provider of innovative, long-term, stormwater treatment products the help engineers, develops, contractors, and jurisdictional authorities keep our waterways clean.	3 Ring Binder	www.stormwaterinc.com	4/1/2002					5.1	
82	The Infiltrator Chamber Systems: Technical Manual		Infiltrator Systems Inc.	The engineer can use units combined with stone for shallow or deep systems that meet any requirement for storage and treatment, require no heavy equipment except a backhoe for installation, and are highly cost effective.	3 Ring Binder		1/1/1994					5.1	
83	HMI: Hydro-Seeding and Erosion Control Products Equipment and Accessories		HMI	See Title	Folder	www.hmi-mfg.com					4.1	5.1	
84	Sediment Control Solutions for All Stormwater Systems and Dewatering Projects		Dandy Products Inc.	The Dandy Bag, The Beaver Dam, The True Dam, The Dandy Dewatering Bag, The Dandy Pipe Sock	Folder	www.dandyproducts.com	4/9/2001				4.1	5.1	
85	Geosystems for Soil Containment	TC Mirafi		Geotubes, Geocontainers, and Geobags	Folder	www.tcmirafi.com					4.1	5.1	
86	GreenfiX America: "Doing What Comes Naturally"		GreenfiX America	Services, Products, Testing and Properties, Product Selection Guidelines, Installation Instructions	Folder	www.greenfix.com					4.1	5.1	
87	How to Create a Stormwater Utility!	City of Chicopee: Pioneer Valley Planning Commission	MASS DEP	Stormwater utilities are proven effective mechanisms for generating revenue to manage stormwater.	Folder			file 0027.0.3					
88	Storm Vault		Jensen Precast	The innovative design of the Stormvault out performs traditional stormwater treatment units which demonstrate various deficiencies in removing pollutants and slowing runoff velocities.	Folder	www.stormvault.com , www.jensenprecast.com	8/3/2003				4.1	5.1	
89	Kristar: Fossil Filter FloGard- Storm Water Filtration System		Kristar	Protects drains against storm water runoff pollution from silt, debris, oils and grease, with FloGard catch basin inserts.	Folder	www.kristar.com					4.1	5.1	6.2
90	River Morph: Stream Restoration Software		RIVERMorph LLC	The revolutionary new stream assessment and restoration software that significantly reduces your calculation time.	CD	www.rivermorph.com	8/17/2002			3.4			
91	das Curb Marker		das Manufacturing Incorporated	The das Curb Marker is used to permanently mark a variety of underground equipment locations including cable routes, valves, test stations, and road crossings.	Literature	www.dasmanufacturing.com	6/4/2004			2.3			

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92	Blue Folder: "Drop-In-Drain-Inceptor"		Robert's Design Inc.	Can be manufactured to fit any basin dimension. Curvature of the S/S frame sheds debris, which negates clogging. Suspension hardware will not impact tires or snowplows. Pillow absorption is unaffected by winter conditions.	Blue Folder	www.stormdrains.com	11/28/2000				4.1	5.1	6.2
93	Pyramat		Synthetic Industries/ Geosynthetic Products Division	High Performance Turf Reinforcement Mat	Booklet	www.fixsoil.com					4.1	5.1	
94	Environmental Data Resources, Inc.		Environmental Data Resources, Inc.	Quality environmental information, state-of-the-art technology, and world class customer service.	Folder	www.edmet.com				3.4			
95	Consultants		Various	Provides services throughout the Commonwealth related to wet land delineations.	Folder	Various	11/7/2002				4.1		
96	Total Stormwater Solutions: Committed to Clean Water- Vortechs System		Vortechs	Vortechs Systems are custom designed and sized to meet specific water quality objectives; precast models are available to treat flow rate from 1.6 cfs to 25 cfs. Larger design storms are treated using Vortechs Systems that are constructed on site using cast-in-place concrete structures.	Booklet	www.vortechs.com					4.1	5.1	
97	PetroFlag: To Quantitative Field Test Method For Total Petroleum Hydrocarbons in Soil		Dexsil Corporation	This unique method allows the user to quantify total hydrocarbons in soil from 2000 ppm to above 20,000 ppm while using a 10 gram sample. This method allows for quantification of all hydrocarbons in soil, onsite, without the use of Freon or other chlorinated solvents.	Piece of Paper	www.dexsil.com				3.4			
99	Land and Water: The Magazine of Natural Resource Management and Resoration		Land and Water	Addressing Phase II NPDES: Problems Before They Become a Headache	Magazine		May/June 2002	file 0027.0.1					
100	Wetlands Protection Act- Regulations 310 CMR 10 00		MASS DEP	Relating to the Definition of "Extended Drought" and Distinguishing "Perennial Rivers" From "Intermittent Streams"	Literature		May 12 2000			3.4			
101	Measureable Goals Guidance For Phase II Small MS4s		EPA	Background and Regulatory Context, Process for Developing Measureable Goals, Examples of BMPs and Associated Measureable Goals, Process for Developing a Storm Water Management Program, and Environmental Indicators.	Literature			file 0027.0.1					
102	Illicit Discharge Detection and Elimination Manual: A Handbook for Municipalities		New England Interstate Water Pollution Control Commission	See Title	Booklet	www.neiwpcc.org	1/1/2003			3.1			
104	NPDES Storm Water General Permit Number: MAR041065	U.S. Environmental Protection Agency		The letter summarizes the key topics we discussed and provides comments and recommendations concerning the implementation of your SWMP.	Letter	www.epa.gov/region1	9/15/2004	File 0027.0.1					
105	Global Positioning System Coordinates of Lake Quannapowitt Stormdrains, Wakefield, MA	Douglass Heath	Friends of Lake Quannapowitt	Stormdrain ID numbers correspond to those assigned by camp, Dresser McKee Inc, on a map and table published in the August 17, 1989 Wakefield Daily Item.	Piece of Paper		3/14/2001			3.5			

Town of Wakefield, MA
NPDES Phase II Stormwater Permit

Reference Information Collected

File: 0027

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
106	Keeping Soil in Its Place: Article 55		Stormwater Center	Sediment Removal Efficiency of Surficial Erosion Controls	Article	www.stormwatercenter.net/Library/Practice_Articles.htm					4.1	5.1	
107	Strengthening Silt Fence: Article 56		Stormwater Center	A Summary of Recent Performance Monitoring of Silt Fences	Article	www.stormwatercenter.net/Library/Practice_Articles.htm					4.1		
108	Managing the Earth For Environmental and Financial Success		Stormwater Management	Need to have an open exchange about how we can meet environmental goals while addressing the financial and liability concerns of the construction industry.	Article		March/April 2002	File 0027.0.1					
109	Industrial Wastewater		Mass. Gov	Massachusetts Surface Water Quality Standards	Literature	www.mass.gov	7/1/2001			3.4			
110	Spill Reporting Telephone Number Change MWRA Permit # 33101397		Massachusetts Water Resources Authority	(MWRA) has changed the telephone number for contacting.	Memo		11/5/2003						6.6
112	EPA Environmental Education: Role of Plants in Water Filtration		EPA	Experiments can be done to show how a plume of dissolved materials can move through soil and enter a groundwater aquifer.	Childrens Literature			1.1					
113	Excuse Me, Is this the Way to the Drainpipe?	Ellen Frye		Explain where drinking water comes from and where wastewater goes once it leaves the homes. Explain how the water we use fits into the water cycle.	Childrens Literature			1.1					
114	Case Studies: The Residential Conservation Assistance Program (ReCAP)		Product of Canada	(ReCAP) provided a free home visit service to the residents of Oshawa, Ontario, aimed at helping householders reduce their use of energy and water and improve their 3Rs practices.	Internet Literature	www.toolsofchange.com	5/26/2004	1.1					
115	Make Less Waste: How you can help the Environment!	Tara Shade, Vanessa Hinkle	OhioEPA	Childrens Literature/Coloring Book	Childrens Literature/Coloring Book	www.epa.state.oh.us		1.1					
116	The Happy Earth Day: Coloring and Activities Book		United States Environment Protection Agency	See Title	Childrens Coloring Book		4/1/1990	1.1					
117	Canadian Pollution Prevention Information Clearinghouse-Cool Sites		Product of Canada	Listing of "cool" sites for kids.	Internet Literature	www.ec.gc.ca/cppic/youth/en/coolsite_efm	5/26/2004	1.1					
118	Community-Based Social Marketing	Doug McKenzie-Mohr Ph.D		When members of a community use resources wisely, for example by recycling or taking mass transit, a community moves toward sustainability.	Quick Reference	www.cbsm.com		1.1					
119	NPDES Stormwater Phase II Permit- Annual Report Permit Year One		Wakefield DEP	Annual Report Permit: Year One	Literature		4/27/2004	File 0027.0.2					
120	NPDES Report Generation Flowchart	Joe LoBuglio	ENQUAD	See Title	Literature		1/10/2001	File 0027.0.2					
121	Town of Wakefield- 1st Annual Forum: NPDES Stormwater Phase II Permit		Town of Wakefield	See Title	Literature		8/30/2004		2.7				
122	Stormwater Management Program Summary- Outline to DEP		Town of Wakefield	See Title	Outline		7/1/2003	File 0027.0.1					
123	Sir Speedy Bill		Sir Speedy	For Posters	Bill	paolini2@primushost.com	10/4/2004	1.1					
124	New Federal Requirements Letter		United States Environment Protection Agency	New federal requirements dealing with stormwater and construction activity.	Letter	www.epa.gov/region1	3/1/2004				4.1	5.1	
125	Outfall Reconnaissance Survey and Source Identification		United States Environment Protection Agency: NE Regional Laboratory	Slide show presentation.	Power Point Presentation					3.3			

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126	Sonar: An Effective Herbicide That Poses Negligible Risk To Human Health and the Environment		Aquatic Control Technology Inc.	Humans who are exposed to Sonar-treated water are at negligible risk.	Booklets	www.aquaticcontroltech.com	7/30/2003						6.1
127	GeoPerm instead of EcoAegis		HydroGrass Technologies Inc.	The most cost-effective erosion control protection on the market today!	E-mail/ Internet Literature	www.hydrograsstech.com	11/25/2003				4.1	5.1	
128	Putting Wetlands to Work		Environmental Protection: Aero Tec Laboratories Inc.	Natural and constructed wetlands are being used to treat successfully a broad range of industrial and municipal wastewater.	Literature	www.pillowtanks.com	4/9/2004				4.1	5.1	
129	Town of Wakefield: Household Hazardous Waste Day		Town of Wakefield	Household Hazardous Waste Day	Newsletter		3/15/2004	1.14					
130	"After The Storm" video to be shown on WCAT		Town of Wakefield: D.P.W.	"After The Storm" is a 22 minute long television program currently being shown on the Weather Channel.	Memo	www.epa.gov/weathchannel	8/30/2004	1.6					
131	Town of Wakefield Lake Quannapowitt Filter Berm- First Draft		Town of Wakefield: D.P.W.	The filter berm will be cleaned each spring prior to May 31st and each fall prior to October 31st. All weeds and debris will be removed. The top layer of sand will be scraped of debris. The structure will be repaired as needed. Sand will be added to insure the proper operation of the filter berm.	Memo		8/18/2004						6.4
132	2002-2003: The Year of Clean Water- Stormwater Month Outreach Materials and Reference Documents		U.S. Environmental Protection Agency	Stormwater Month Outreach Materials and Reference Documents	Literature	www.stormwatermonth.html	4/26/2004	1.1					
133	Community Based Approaches: Massachusetts		U.S. Environmental Protection Agency	Urban Environmental Program, Buzzards Bay, Charles River, Massachusetts Bay, Rumney Marsh, Woonasquatucket and Blackstone Rivers, Northern New England Rail Action Project.	Internet Literature		5/26/2004	0027.0.1					
134	Storm Filter		Cultec Inc.	Stormfilter is designed to be an in-line filter system that effectively removes many of the smaller particles not eliminated during the pretreatment process performed by conventional structures.	Literature	www.cultec.com	1/1/2003				4.1	5.1	
135	Sediment Control & Storm Drain Filtration: Product Catalog		Pollution Solutions, INC.	Provides economical and effective solutions to counter the negative impact on the environment that occurs thorough land development as well as unavoidable natural events.	Booklet	www.psiyes.com	Summer-Fall 2003				4.1	5.1	
136	Draft NPDES Phase II Stormwater Permit Submittal		Town of Wakefield D.P.W.	The NPDES permit submittal prepared for submittal by the end of this month.	Permit		7/17/2003	0027.0.1					
137	Haz Mat- Pollution Control Response Trailer		Town of Wakefield	It is a 14' Car Mate cargo trailer and is loaded with absorbant material. It is designed for the fire department to CONTROL a large petroleum product spill.	E-mail/Picture		8/20/2004						6.6
138	Water Detention/Recharge Systems		Contech Construction Products Inc.	Innovative civil engineering solutions	Booklet	www.contech-cpi.com	1/1/2001				4.1	5.1	
139	CDS Stops Storm Water Pollution: Before vs. After		CDS Technologies	CDS is the most effective system for the sustainable removal and retention of suspended solids and floatables from storm water.	Booklet	www.cdstech.com	4/11/2001				4.1	5.1	

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140	Diversion of Dry Weather Flows: Protects Our Beaches and Oceans From Harmful Urban Pollutants.		CDS Technologies	CDS technologies has added a unique feature to its highly successful Continuous Deflective Separation (CDS) technology that will filter and divert dry weather nuisance flows from storm drains to sanitary sewer systems.	Booklet	www.cdstech.com					4.1	5.1	
141	Fine Solids Separator		CDS Technologies	Solids Removal, Applications, Testing Results, CDS Advantages	Literature	www.cdstech.com					4.1	5.1	
142	NPDES Stormwater General Permit Number: MAR041065		U.S. Environmental Protection Agency	See Title	Letter	www.epa.gov/region1	9/15/2004	0027.0.1					
143	Catch Basin Alternative Reduces Cost of Stormwater Treatment	Janice Kaspersen		It uses the natural motion of water to screen and trap pollutants.	Newsletter	www.cdstech.com	May-June 2000				4.1	5.1	
144	NPDES Stormwater Phase II Permit- 2004 Annual Report		Town of Wakefield D.P.W.	Enclosed is the Annual Report covering the period thorough April 30, 004. The submittal is in accordance with the (EPA)'s NPDES Stormwater Phase II Regulations and the Mass DEP requirements.	Literature		4/30/2004	0027.0.2					
145	Water Trivia Facts		U.S. Environmental Protection Agency	Trivia	Literature		4/1/1995	1.1					
146	Bare Ground Solution Anti-Snow/De-Ice		Bare Ground Solution	Prevent snow and ice from adhering to the pavement for 10-14 days because of residual reactivation effect.	Literature	burnetts@technobrand.com	1/1/1998				4.1	5.1	6.5
147	Triangular Silt Dike Barrier		Triangular Silt Dike Co. Inc.	This barrier is a positive solution to many construction site drainage and erosion problems.	Literature	www.tri-silt-dike.com					4.1		
148	Permanent Turf Reinforcement Mats		Western Excelsior Corporation	Stitched Erosion Control Blankets & Turf Reinforcement Mats: Excelsior, Straw, Coconut/Straw, 100% Coconut, Geo-Composites, 100% Synthetic	Booklet	westernexcelsior@fone.net					4.1	5.1	
149	DrWater Time-Release Water: Gel Products and Hydro Mix Tackifier		DrWater	DrWater will improve the results and reduce the costs of your project.	Literature	www.drwater.com	8/3/2000				4.1	5.1	
150	GroLife: Mycorrhizal Inoculum/Soil Conditioner		GroLife	It is a natural product that contains various types of mycorrhizal fungi with an organic soil conditioner. GroLife is effective in any type of soil, helping to create a healthy beneficial environment for plants.	Booklet	www.grolife.com					4.1	5.1	
151	Curlex: Silt Trap		American Excelsior Company: Earth Science Division	Excelsior Buffer Strip to Capture Sediment Before it Washes off Job Site.	Booklet	www.curlex.com					4.1		
152	Wakefield Works: Municipal Stormwater Management Program		Wakefield D.P.W.	Lawn Care, Septic Systems, Pet Waste, Residential Landscaping, and Commercial Facilities.	Newsletter		Spring 2004	1.1					
153	EnviroBerm: Runoff Control System		Cascade Geotechnical Inc.	Replaces strawbales and rock ditch checks.	Literature	www.cascade.ab.ca					4.1	5.1	
154	Silt-Saver: A better way to a Cleaner Environment		Silt-Saver	Its fail-safe design features ease of installation and allows you to exceed existing and pending "Best Management Practices" and physically protect the job site with one revolutionary device.	Booklet	www.siltsaver.com					4.1		
155	High Performance Turf Reinforcement Mat		Pyramat: Earthstopping Solutions	Site Preparation, Seeding, Placement: Banks and Slopes, Placement: Channels, Ground Anchoring Devices, Anchor Pattern Guide, Soil Filling.	Booklet	www.fixsoil.com					4.1		

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156	Curlex I: The Industry Standard for Most Slope & Channel Protection Needs		Curlex	It is an erosion control blanket combining their unique, barbed Curlex fiber and a top layer of polypropylene netting.	Literature	www.curlex.com					4.1		
157	Introduction to Community-Based Social Marketing	Doug McKenzie-Mohr Ph.D	St. Thomas University	When members of a community adopt healthy habits the community becomes a healthier one. When members use resources wisely the community moves towards sustainability.	Internet Literature	www.toolsofchange.com	5/26/2004	1.1					
158	Drinking Water Bloopers: Embarrassing moments in the life of a water drinker.		U.S. Environmental Protection Agency	Waiting a week to fix a leak. Taking a shortcut and using the hot water tap when cooking. Slipping used motor oil into a storm sewer or burying it in the trash. Tossing toxics in the trash. Watering your lawn at high noon. Using your garbage disposal all the time.	Internet Literature	www.epa.gov/OGWDW/kids/bloopers.html	5/26/2004	1.1					6.1
159	Stormceptor: The Leader In Stormwater Quality Treatment		CSR	Research and Testing, Patented Design and Operation, Lower Life-Cycle Costs, Ease of Maintenance, Pretreatment, and Experience in Manufacturing	Folder	www.csrstormceptor.com	3/22/2001				4.1	5.1	
160	Nonpoint Source Pollution (NPS) Word Search: Kids Word Search		EPA	Childrens Word Search	Internet Word Search	www.epa.gov/owow/nps/kids/word.html	5/26/2004	1.1					
161	Engineered Products for Stormwater Treatment		Vortech	It is a highly efficient technology for removal of floating pollutants and settleable solids from surface runoff.	Booklet	www.vortech.com						5.1	
162	WrapidSeal Manhole Encapsulation System		CCI Pipeline Services	WrapidSeal's unique heat-shrinkable characteristics are based upon thirty-five years of plastics engineering, as well as sealant and coatings technology developed by Canusa-CPS for the gas and oil pipeline transmission industry.	Letter	ccpipe@earthlink.net	10/3/2003					5.1	6.1
163	Dirtbag: Pumped Sediment Removal System		SI Geosolutions	Whenever accumulated water must be pumped!	Booklet	www.sigeosolutions.com					4.1		6.2
164	Wakefield Rainfall Information for NPDES		Town of Wakefield D.P.W.	Information on rainfall: average annual rainfall, maximum annual rainfall, and minimum annual rainfall.	Letter		1/30/2004	0027.0.1					
165	Landlok Report-An Erosion Control Case Study From Synthetic Industries:Pyramat High Performance TRM Enhances Stormwater Management in Channels		Synthetic Industries/ Geosynthetic Products Division	Pyramat High Performance TRM Enhances Stormwater Management in Channels	Booklet	www.fixsoil.com							6.4
166	Continuous Deflective Separation (CDS) - Treatment of Storm Water Runoff		CDS Technologies	(CDS) technology is a non-blocking, non-mechanical screening process uniquely suited to treat storm water runoff.	Letter	www.cdstech.com	9/24/2003					5.1	
167	Straw Wattles: Erosion Control, Stormwater Runoff Control		California Straw Works	A solution to erosion and sediment control.	Literature	www.strawwattles.com					4.1		
168	Protecting Your Hardscape and Landscape Investments		Bio Barrier	Biobarrier Root Control System protects your hardscapes and landscapes from damage caused by tree and shrub root intrusion.	Booklet	www.reemay.com					4.1	5.1	6.1
169	AgroSolutions: Are you concerned about the environmental impact of your erosion control products?		Cognis	Terra-Control Soil Stabilizer: Environmentally Favorable Erosion Control with Polyvinyl Acetate	Folder						4.1	5.1	6.1

Town of Wakefield, MA
NPDES Phase II Stormwater Permit

Reference Information Collected

File: 0027

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
170	Curlex Enforcer, RoadRunner, Silt Trap, Curlex III, Sediment Log		American Excelsior Company: Earth Science Division	Bio-Composite Soil Reinforcement For Long-Term Protection Against Erosion	Packet	www.curlex.com					4.1	5.1	
171	Meeting Regulatory Requirements for Stormwater Pollution Control		BaySaver Inc.	The BaySaver Separation System removes free oils, suspended solids and floating debris from stormwater runoff.	Packet	www.BaySaver.com	2/15/2002				4.1	5.1	
172	An Order of Environmental Publications		U.S. Environmental Protection Agency (NSCEP)	See Title	Packet	www.epa.gov/ncepihom/ordering.html	3/29/2004	1.1					
173	Control of Oil and Grease In Stormwater Runoff		CDS Technologies	Oil and Grease Capture and Removal Efficiencies of CDS Stormwater Treatment Units	Piece of Paper	www.cdstech.com					4.1	5.1	6.6
174	Geosynthetic Products		Dust Pro Inc.	Geo Textiles, Geo Grids, Geo Cells, Drainage Products, Installation, Erosion Control Blankets, Liquid Stabilizer, Plastic Barrier Fence, Geo Membranes, and Consulting	Piece of Paper	www.dustpro.com					4.1	5.1	
175	Dura-Drain Models P8 & P6: Area Drains- Flexibility of Plastic and Durability of Concrete		Kristar	The Dura-Drain Model P8 or P6 Area Drain is packed with features that make it the obvious solution to your construction project.	Booklet	www.kristar.com					4.1		
176	DPW Newsletter (Spring 2004)		Town of Wakefield D.P.W.	The project information below is the Engineering Division's listing of known NPDES Phase II Stormwater Permit work that has occurred in the last 9-months.	Letter		3/10/2004	1.1					
177	What you can do to prevent NPS pollution.		U.S. Environmental Protection Agency	Urban Stormwater Runoff, Mining, Forestry, Agriculture.	Internet Literature	www.epa.gov/owow/nps/whatudo.html	5/26/2004				4.1	5.1	
178	Quick Grass Green-Woof Excelsior Erosion Control Blanket		American Excelsior Company: Earth Science Division	Prevent erosion, assist in germination and protect seedlings with Quick Grass.	Booklet	www.curlex.com					4.1	5.1	
179	Curlex Excelsior Blankets		American Excelsior Company: Earth Science Division	Curlex blankets also have a natural "mechanical" action, by its ability to expand and contract during weather conditions.	Booklet	www.curlex.com					4.1	5.1	
180	Draft Npdes General Permit for Storm Water Discharges from regulated small Municipal Separate Storm Sewer Systems (MS4s)		U. S. Environmental Protection Agency	Fact Sheet and Supplemental Information	Booklet		9/30/2002	0027.0.1					
181	United States Court of Appeals for the Ninth Circuit Volume 1 of 2		Environmental Defense Center v. EPA	Petitioners challenge a rule issued by the United States Environmental Protection Agency pursuant to the Clean Water Act, 33 U. S. C. 1251-1387, to control pollutants introduced into the nation's water by storm sewers.	Booklet		filed january 14, 2003	0027.0.1					
182	Smart Growth for Clean Water		The Trust for Public Land	Helping communities Address the Water Quality Impacts of Sprawl	Booklet	www.tpl.org	1/1/2003			3.7			
183	Pollution Prevention at Municipal DPWs OTA Fact Sheet		Mass Office at Technical Assistance	The fact sheet highlights some of the simple pollution prevention practices specifically for DPWs to integrate into their daily routine that will improve worker safety and protect the environment.	Fact Sheet	www.mass.gov/ota							6.1
184	Storm Water Permit Basics		Abby Swaine, EPA	The Federal (EPA) Storm Water Permit for Large & Small Construction Projects	Literature	swaine.abby@epa.gov					4.1	5.1	
185	Oil Absorbent pillow		SI Geosolutions	Removes Oil & Grease from Water	Brochure	www.sigeosolutions.com					4.1	5.1	6.6
186	Gutterbuddy		SI Geosolutions	Curb Gutter Storm Drains	Brochure	www.sigeosolutions.com						5.1	

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187	Siltsack		SI Geosolutions	Catch Basin Sediment capture Device-Keeping catch basins free of silt	Brochure	www.sigeosolutions.com					4.1	5.1	
188	Grassy Pavers		RK Manufacturing, INC.	They harmoniously blend your architecture into the landscape in an attractive, functional and environmentally responsible way.	Brochure and Literature	www.rkmfg.com						5.1	
189	Geolink		Petrattech	premium design inhibits the transport of soil during the erosion process and helps keep our waterway free from silt and hazardous pollutants	Booklet						4.1	5.1	
190	Tri-lock Articulated Erosion Control System		American Excelsoir Company	The Tri-Lock erosion control system	Brochure	www.curlex.com					4.1	5.1	
191	Petraflex		Petrattech, Inc	Articulated Concrete Revetment System	Brochure						4.1	5.1	
192	Aqua Barrier Dimensions and Accessories		Hydro Solutions Inc	equipped with 3 in id, industrial grade, threaded fill parts,, fill parts are installed in pairs located 10 ft from each end of the barrier.	Brochure	www.hydrologicalsolutions.com					4.1	5.1	
193	Superior Dam			fast installations for flood control. Water diversion and containment, dewatering. Cofferdams. Ground water recharge, sediment traps, and many other uses	Brochure						4.1	5.1	6.6
194	The Slammer		Alpine Stormwater management company	Provides an appliance that will help make your projects NPDES permit compliant. Slammers are DOT approved alternatives in many states and are easy to specify	Brochure						4.1	5.1	
195	Airtrol			General Specifications for erosion Control	Literature						4.1	5.1	
196	Biostorm treatment systems		Bio-Microbics Inc	Bio Storm pre engineered design removes trash, sediment, oil and other pollutants from Stormwater flows. The unique off line design consists of a patented sani TEE self cleaning deflector screen and a modular separation/coalescing unit, all housed in readily available precast concrete tanks	Literature	www.biomicrobics.com					4.1	5.1	
197	Fibrelog/Plantlog, Prairielog, plant blanket, plant basket		Banksaver	Erosion/sediment control and revegetation with a masterful array of the highest quality	Brochure	www.kingfibre.com					4.1	5.1	
198	Conwed Fibers		Profile Products LLC	Accessory Products	Brochure	www.conwedfibers.com					4.1	5.1	
199	Waterlogs		Maccaferri Gabions, Inc		Literature	www.maccaferri-usa.com					4.1	5.1	
200	GeoHay Temporary Sediment-Erosion Control		Mary Ann Industries	GeoHay is completely recyclable, readily available, and will not decompose. GeoHay is strong, durable, and an excellent temporary sediment and erosion control device.	Brochure						4.1	5.1	6.6
201	Gro Power Commercial Product Line		Gro Power Inc.	The following information is provided to introduce you to the quality components that are included in all Gro-Power Products.	Booklet	www.gropower.com					4.1	5.1	
202	Agresource- The Source For Compost: The Agresource Dispatch		Agresource Inc.	Artificial Wetland is Created Using Agresoil Compost	Packet	www.agresource.com	Fall 2002				4.1	5.1	

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203	SEPA Nature's best: Erosion Control		SEPA Exports	To facilitate the removal of water from the soft subsoil region, for rapid consolidation we have designed a breakthrough system called the Vertical Fibre Drain, which is a 100% natural, biodegradable and environmentally friendly product.	Brochure	sepa@slt.net					4.1	5.1	
204	Subject: Cyber Rain Gauge and automatic stormwater samplers		Durham Geo Slope Indicator	Wireless gauge posts rainfall data to web site in near-real time. Ideal for storm water management.	Packet	www.StormwaterSamplers.com	8/4/2003			3.4			
205	Ameri-Fibers By Mat, Inc.		Mat, Inc.	Corn Fiber Mulch With Added Tackifier For Hydraulic Planting	Packet	www.soilguard.com					4.1	5.1	
206	EcoAegis Bonded Fiber Matrix: When and Where a Bonded Fiber Matrix Should Be Specified		Fiber Marketing International Inc.	A bonded fiber matrix is a versatile erosion control material that can offer a cost-effective way to keep soils on slopes in a variety of situations.	Packet	www.canforpfd.com					4.1	5.1	
207	SureTurf Seeded Mats		SureTurf	A lot of turf professionals won't be doing the same old, same old again this year.	Booklet	www.eagleonegolf.com					4.1	5.1	
208	Dust Pro Inc: Solutions for stabilizing your environment into the next Millenium.		Dust Pro Inc.	Dust Suppressants, Soil Stabilization, Erosion Control, Hydroseeding, Soil Conditioning	Packet	www.dustpro.com					4.1	5.1	
209	Excel Fibermulch II with Tackifier		American Excelsior Company: Earth Science Division	You can now be assured of a high quality mulch to provide trouble-free applications.	Sheet	www.curlex.com					4.1	5.1	
210	Geotextile: Coco Fibre Products		Islandwide Suppliers Limited	Ideal to protect embankments of waterways etc., against earth slips is most suitable for plant growth along the banks enabling long term erosion control and bank stabilization.	Booklet						4.1	5.1	
211	Contech: Erosion Control Products- Innovative Civil Engineering Solutions		Contech Construction Products Inc.	Contech offers a complete line of biodegradable erosion control fiber blankets and permanent geosynthetic turf reinforcement mats.	Booklet	www.contech-cpi.com					4.1	5.1	
212	Geocoir DeKowe: 100% Natural Erosion Control Landscape and Engineering Products		Belton Industries Inc.	Stabilization Fencing System	Booklet	www.beltonindustries.com					4.1	5.1	
213	Anti-Wash/Geojute Natural Erosion Control Fabric		Belton Industries Inc.	Anti-Wash/Geojute Is The Natural For Tough Erosion Control.	Booklet	www.beltonindustries.com					4.1	5.1	
214	Xcel CC-4 100% Coconut Mat		Western Excelsior Corporation	Stitched Erosion Control Blankets & Turf Reinforcement Mats: Excelsior, Straw, Coconut/Straw, 100% Coconut, Geo-Composites, 100% Synthetic	Booklet & Mat	www.westernexcelsior@fone.net					4.1	5.1	
215	Town of Wakefield, MA: Catch Basin Cleaning		Town of Wakefield, Engineering Division	Catch Basin Cleaning	Map		6/11/2004						6.2
216	Meeting Notes		Micheal Collins	Various Meeting Notes	Collection of Notes			0027.0.1					
217	Stormwater and the Construction Industry		EPA	Maintain Your BMPs!!!	Poster	www.epa.gov/npdes/menueofbmps		1.3					
218	StormTreat Systems: The Complete Stormwater Treatment Solution		StormTreat Systems Inc.	Complies with Water Quality Standards, Saves Space, Cost Effective, Low Maintenance	Sheet	www.eco-cycle.com	1/1/1999				4.1	5.1	
219	Keep Wakefield's Ponds, Rivers & Brooks Clean!		Town of Wakefield, Department of Public Works	Wakefield Municipal Stormwater Management Program (SWMP)	Flier		8/20/2004	1.1					
220	Airtrol: It's more than erosion control. It's "Erosion Prevention."		United States Gypsum Company	Airtrol Geobinder is a low cost, cementitious binder which, when mixed with water and mulch, sets in a controlled, predictable way to form an erosion-resistant crust.	Booklet		01/01/1997				4.1	5.1	

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221	EarthBound: Soil Stabilizer and Mulch Tackifier		Frontier Environmental Technologies, LLC	EarthBound is specifically formulated to stabilize soil structure and to hold mulch in place.	Brochure	erosion_solutions@msn.com					4.1	5.1	
222	EarthGuard Erosion Control Polymer		terra novo INC.	EarthGuard is specifically designed to dramatically reduce erosion and silt pollution caused by rain and wind.	Brochure	www.terrano.com					4.1	5.1	
223	Conwed Fibers: Creating Innovative Revegetation Solutions For Over 35 Years		Conwed Fibers: PROFILE Products LLC	Conwed Fibers products lead the industry in innovation, quality and performance. It is through our vast knowledge and product depth, that we offer unparalleled solutions to agronomic challenges in the erosion/revegetation market.	Booklet	www.conwedfibers.com					4.1	5.1	
224	To: Cities & Towns in MS4 Program		DEP	To improve these conditions, the Stormwater Phase 2 permit program has been designed to be implemented at the local level over time, using a variety of approaches to manage storm water and reduce contaminants associated with storm water.	Letter	www.state.ma.us/dep	4/12/2004	0027.0.1					
225	CDS Technologies Purple CD		CDS Technologies		Little CD	www.cdstech.com	1/1/2002				4.1	5.1	
226	Come Rain, We Shine CD		Stormwater Management Inc.		CD	www.stormwaterinc.com		1.6					
227	EC-Design 2000: Stormwater Management and Erosion Control Design Software		Synthetic Industries/ Geosynthetic Products Division	Based on FHWA's HEC 15 and USDA's RUSLE	CD	www.fixsoil.com					4.1	5.1	
228	Stormceptor: The Stormceptor System Stormwater Quality Treatment		Stormceptor: Rinker Materials		CD	www.rinkerstormceptor.com					4.1	5.1	
229	2003 Conference Workshop Proceedings CD-ROM		StormCon: The North American Surface Water Quality Conference & Exposition		CD	www.StormCon.com	July 28-31 2003	1.1					
230	EOS Webster: Customized Earth Science Data Products		EOS-WEBSTER	Mission: To make data and information products and services concerning terrestrial ecosystem processes available to the Earth System Science community.	CD	http://eos-webster.sr.unh.edu		1.1					
231	The Stormceptor System: Stormwater Quality Treatment		CSR: Stormceptor		CD	www.csrstormceptor.com					4.1	5.1	
232	Watershed Management: Integrating Environment, People, Processes, and Practices		DRCOG	International Erosion Control Association: 2001 IECA.	CD			1.1					
233	Underground Detention Systems for Storm Water Management		Contech Construction Products Inc.		CD	www.contech-cpi.com					4.1	5.1	
234	Stormwater Outreach Materials		EPA	Office of Wastewater Management Stormwater Resources 833-C-03-001	CD	www.epa.gov	2/1/2003	1.1					
235	Interpreting The Analytical Report	James Todaro	Alpha Analytical Labs		CD					3.4			
236	STABILATOR Erosion Prevention System		Water's Edge Technology, LLC	Stabilator CD v 1.03	CD	www.WatersEdgeTechnology.com	3/1/2002				4.1	5.1	
237	Stormwater Strategies: Community Responses to Runoff Pollution		NRDC	Documents the most effective strategies employed by communities around the country to control urban runoff pollution.	CD	www.nrdc.org	1/1/2001						6.1
238	Powerful Environmental Software		Envista Technologies	Developed an environmental information management system that supports the complete life cycle of your environmental program.	CD	www.envistatech.com							6.1
239	Sacramento Bag Erosion Program		Sacramento Bag Mfg. Co.	Erosion and Sediment Control: Power Point Program	CD		3/8/2002				4.1	5.1	

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240	Storm Treat: Stormwater Treatment System		Eco-Cycle Incorporated		CD						4.1	5.1	
241	Better Storm Water Management Through Vegetation		SI Geosolutions	An Assessment and Proposed Classification of Current Sediment Control and Storm Water Treatment Devices	CD	www.fixsoil.com					4.1	5.1	
242	Nutrient Separating Baffle Box, Grate Inlet Skimmer Box, Curb Inlet Basket		Suntree Technologies Inc.	Drawings CD: Version 3.3	CD	www.suntreetech.com	6/9/2003				4.1	5.1	6.6
243	E & S Inspector Trial: Measurable Goals Manager Trial	Kevin Lenahan	eFieldSystems Inc.		CD	www.efieldsystems.com	6/4/2003				4.1	5.1	
244	Technical Resources Library		Presto Products Company	Solutions for an Unstable World	CD	www.prestogeo.com	1/1/2003						6.1
245	Design Specifications		Filtrex International		CD		9/1/2003						
246	Site Solution Force		ACF Environmental	Your Source For Environmental BMP's & SWPPP CADD Files	CD	www.acfenvironmental.com	1/1/2001						6.1
247	Design Tools: Plastic Ceptic and Storm Water Chambers		Cultec Inc.		CD	www.cultec.com	1/1/2002				4.1	5.1	
248	ETV Program	Phyl Kimball	UltraTech International Inc.		CD	www.stormwaterproducts.com						5.1	6.1
249	A World In Our Backyard		New England Interstate Water Pollution Control Commission	A Wetlands Education and Stewardship Program	Video		1/1/1993	1.1					
250	Around the Cracker Barrel			Pleasure Island	Video		1/31/2003	1.1					
251	Storm Stories: "After the Storm"		Weather Channel		Video		2/4/2004	1.6					
252	Pay As You Throw		EPA	A New Trend In Sustainable Solid Waste Management	Video	www.epa.gov/payt					4.1	5.1	6.1
253	The Used Oil Management Standards		EPA	Designed primarily for generators of used oil.	Video	www.epa.gov							6.1
254	Stormwater Pollution		DWJ Television	Protecting Our Communities From Storm Water Pollution	Video		1/1/2001	1.1					
255	Private Screening: Best Management Products		American Environmental Review	Custom Demo	Video			1.1					
256	Storm Drain Markers,magnet		ACP International	The ACO Storm Drian Markers are an excellent way to comply with mandatory storm drain makrking requirements	Brochure	www.acpinternational.com			2.3				
257	BioMap and Living Waters	Natural Heritage & Endangered Species Program		This report and associated map provide information about important dirts for biodiversity conservation in your area	Brochure	www.nhesp.org		0027.0.1					
258	2005 Household Hazardous Waste Colletion Agreement	Mitchell P Garrity		Collection event at 75 New Crossing Road in Reading	Letter		1/31/2005	1.14					
259	Stormwater Pollution prevention tips: Outdoor liquid container storage, part 1		Stevens Publishing Corp	Prevention tips	Letter	www.casqa.org							6.6
260	Science beats geese at their own game	R.W. Delaney		The best way to flush unwanted Canada geese from golf courses, Corporate campuses, residential ponds, rural airfields, bike paths, and city parks	Literature								6.9
261	The Effects of Urbanization on the Biological, Physical, and Chemical Characteristics of Coastal new England Streams	James F Colesm,Thomas F Cuffney, Gerard McMahon, Karen M Beaulieu		During August 2000, responses of biological communities(invertebrates, fish, and algae), physical habitat, and water chemistry to urban	Literature								6.11
262	Uncalculated Risks in Some Pesticides		Innov-X systems	Researchers at the Univ. of Calif., Riverside have demonstrated that isomers--or the mirror-image structures-of some pesticides, although chemically identical, hve very different biological nad environmental impacts between the two sides. This may have significant implications for risk assessment and research and development directions of new products.	Literature	www.stevenpublishing.com							6.1

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263	Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems, A User's Guide	Robert Pitt, Richard Field	EPA	Guide to investigating pollutants inappropriately entering drainage systems	Literature	epa.gov	1/1/1993			3.1			
264	Futerra F4netless		Profile Products LLC	New erosion control blanket - a new way to look at blankets	Brochure		2/16/2005					5.1	
265	Product Design Manual		Stormwater Management Inc.	version 3.1	Binder		2/1/2004				4.1	5.1	
266	Controlling sediment at construction sites		American Water Works Association	Eroded soil at construction sites can pollute rivers, streams and lakes via stormwater runoff. One way to help keep this pollution to a minimum is by implementing sediment control practices at these sites	Newsletter	www.stevenpublishing.com	2/24/2004					5.1	
267	Water Guide	Ben Meadows Co.	Ben Meadows Co.	Equipment for water quality testing	Brochure	benmeadows.com	4/24/2006			3.4			6.12
268	Illicit Discharge Detection and Elimination A Guidance Manual for Program Development and Technical Assessments	Center for Watershed Protection & Robert Pitt, University of Alabama	EPA	Complete guide to locating and eliminating illicit connections	Paperback manual		4/24/2006			3.1			
269	Model Stormwater By-Law	Hanover, Wendy Garpow	Hanover agent	Information on collaborative efforts by Towns on developing a stormwater by-law	printout	wendy@nsrwa.org	4/24/2006			3.8			
270	Low Impact Development Tool Kit from MAPC	MAPC	arc of innovation	toolkit for starting to develop a by-law for stormwater	paper folder	www.mapc.org/lid	2/16/2007			3.8	4.5	5.4	
271	Water Suppliers and Plumbers Backflow	Stuart Asay	AWWA	preventing pollutant backflow	paper		10/9/2007			3.1			
272	Stormtank Storage Modules	Brentwood	Internet	underground detention	paper		10/9/2007					5.2	
273	Sloptame2	Invisible Structures Inc.	Inv. Strctrs. Inc	slope stabilization	paper		10/9/2007					5.2	
274	Household Hazardous Waste Day Brochure	Wakefield DPW	DPW	day for disposal from citizens	paper		10/9/2007		2.2				
275	Stormwater Municipal Employee Training	Donald Gallucci	Weston & Sampson, Engineers	power point presentation slide handout for training	paper		4/23/2008						6.8
276	4th Annual Stormwater Forum	Michael Collins	Wakefield DPW	power point presentation slide handout for training	CD		4/23/2008		2.7				
277	Envir-Mark Storm Drain Markers	Envir-Dome Storm Drain Markers	Almetek	metal storm drain markers	paper	www.almetek.com	10/26/2007						
278	Stormwater Chambers	Cultec	Cultec, Inc.	subsurface retention/detention system design and purchasing guide	notebook	www.cultec.com	7/4/2007						
279	The Case for Environmental Regulatory Reform Cleanwater Act NPDES Permitting	MA Coalition for Water Resources Stewardship	The Case for Environmental Regulatory Reform Cleanwater Act NPDES Permitting	White paper on practical approach to stormwater management policies and programs	paper		11/14/2007	1.1					
280	Stormwater Matters	SuAsCo Watershed Council	SuAsCo Watershed Council	brochure on relevance of stormwater runoff/pollution	paper		2/3/2004	1.1					
281	Catch Basin Alternative Reduces Cost of Stormwater Treatment	Janice Kaspersen	Erosion Control	brochure on CDS Technologies	paper		11/8/2007				4.1		
282	Addressing Phase II NPDES	Land and Water	Land and Water	magazine with guidance to BMP's	paper			1.1					
283	Managing the Earth for Environmental and Financial Success	Abby Swaine and John Deering	Land and Water	pertinent educational material on Phase II program	paper			1.1					
284	Stormwater and the Construction Industry	EPA	EPA	Planning and Implementing Erosion and Sediment Control Practices	paper poster			1.3					
285	NPDES Regulations and their impact on the Mass Highway dept.	MHD	MHD	summary of Phase II program and expected impact on MHD	paper		12/11/2002	0.1					6.1
286	MA Historic Commission	Edward Bell, Sr. Archeologist	MHC	letter explaining how MHC and NPDES Phase II program should be coordinated	paper		4/18/2007	0.8					
287	Natural Heritage and Endangered Species Program	Thomas French, Asst Director	Division of Fish and Wildlife	letter explaining how F&W and NPDES Phase II program should be coordinated	paper		4/24/2007	0.7					
288	What will be accepted at the Household Hazardous Waste Collection	Wakefield DPW	DPW	brochure explaining what is and is not acceptable for delivery to the receiving facility	paper		9/22/2007	1.14	2.2				
291	Water Suppliers and Plumbers share backflow prevention responsibility	Stuart Asay	AWWA	brochure on preventing cross-contamination	paper		7/7/2008			3.1			

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292	Rare species by Town "W"	MA NHESP	MA NHESP	listing of endanferged species in Wakefield	paper		3/26/2007	0.7					
293	Construction, Demolition deris Fact Sheet: Reducing Waste for Building Owners	Environmental protection	Adventus	Information for managing demolition	paper		5/10/2006				4.1		
294	Developing Your Stormwater Pollution Prevention Plan, A Guide for Construction Sites	EPA	EPA	Guide or construction site SWPPP's	paper	www.epa.gov/npdes/stormwater/swpppp	6/19/2008				4.3		
295	Used Oil Brochure	Wakefield DPW	Wakefield DPW	Guide to disposal of used motor oil	paper		6/19/2008	1.1					
296	PCSWMM for Stormceptor	Rinker Materials	Stormceptor	Sizing Program for stormceptor	CD		6/19/2008				4.1		
297	MassHighway Storm Water Handbook	MHD	MHD	users guide	CD		5/1/2004				4.1		
298	Stromwater in your Community	Baystate Roads Program	Baystate Roads	EPA Phase II MHD & EPA upadte	paper		5/17/2007						6.8
299	Smart Ditch, HDPE ditch lining system	Penda Corp.	Penda Corp.	Smart Ditch, Technical manual	notebook	www.smartditch.com	9/22/2008					5.3	
300	Filter Technology is Looking Up	Robert Andoh	Stormwater Solutions (&10/08	Upflow filters review	paper article		10/28/2008					5.1	
301	Clean Street	Mark Carter	Stormwater Solutions (&10/08	factors behind frequency	paper article		10/28/2008						6.3
302	Placement Power	Bob Beyer John Barron	Stormwater Solutions (&10/08	auto-sampler locating	paper article		10/28/2008						6.12
303	Algae Control without Chemicals	Sonis Solutions	Stormwater Solutions (&10/08	solar powered sonic control algae	paper advrtsement		10/28/2008						6.12
304	2008 Stormwater Workshop	APWA (NE Chapter)	APWA (NE Chapter)	Various SW topics	paper and notes		12/29/2008						6.8
305	Please Help Us Make a Great Community Better	Richard Stinson	DPW	debris removal and cleaning practices	paper		2/5/2009	1.1					
306	Greenbuilding with Airfield	Airfield Systems	Airfield Systems	grass paving	paper		2/5/2009					5.1	
307	KriStar Stormwater Management Products	KriStar Enterprises	KriStar	pollutant capture devices	paper folder with information		2/6/2009					5.1	
308	Modular Wetlands	Modular Wetlands Inc.	Modular Wetlands	Modular Wetlands for urban settings for plantings	folder & disk		2/6/2009					5.1	
309	ViewPermit	ViewPoint	ViewPoint	permit management software	paper		2/6/2009	0.6					
310	Entering th Mainstream	Jay Landers	Civil Engineering	river restoration	magazine		8/1/2010					5.3	
311	EPA's Long-Awaited Construction Stormwater Rule	Doreen Zankowski, Allen Hinkley	Construction Outlook	Construction Stormwater Rule	magazine		3/10/2010					5.3	
312	Protecting Watershed Resources in a Changing Climate	Saugus River watershed Council	SRWC	Changing climate and sea level condition predictions	folder and papers		4/6/2011				4.1	5.1	
313	Small MS4 General Stormwater Permit and Low Impact Development Training Clinic	US EPA 1 & Horsley Witten Group	MWRA, Chelsea. MA	NPDES and Low Impact Development	notebook		4/27/2011					5.3	
314	Capturing dissolved phosphorus with iron-enhanced sand filtration	Andrew Erickson, PE, John Gulliver PE, Peter Weiss PS	Public Works, Aril 2011	Using mix of sand and iron (oxide producing) for phosphorus removal	magazine		5/2/2011				4.1	5.1	
315	Soleno - Mastering Storm Water	Soleno	Soleno	Product Line using HDPE systems for pipe and treatment systems	Catalog	soleno.com	12/19/2011				4.1	5.1	
316	Making rain work - don't let opportunities drain away	Kristel Riddervold, Charlottesville, VA	APWA Reporter (May 2011)	Green uses of stormwater	paper article		1/26/2012				4.1	5.1	
317	Santuit Pond Diagnostic Study, Mashpee, MA	AECOM	AECOM Environment	Study to resolve eutrophication and algae problems	paper report		11/24/2012						6.11
318	Bathymetric Contour Map of Lake Quannapowitt, Wakefield, MA	Environmental Inc.	Environmental Inc.	bottom contouring of the lake	paper map		12/12/2012			3.5			
319	MBCR 2013 Vegetative Control Program	TEC Associates	TEC Associates	plan to control vegetation along the railroad and avoid impact to sensitive receiving waters	letter		4/1/2013						6.12
320	Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards	FEMA	FEMA	methods for reducing potential impacts from natural hazards	paer report		1/1/3013		2.6	3.5			6.14
321	Stormwater BMP Workshop	University of New Hampshire	UNH Stormwater Center	evaluation of 33 approaches to watershed best management practices for water quality	paer report		4/23/2014					5.3	6.1
322	Algae Control US LLC	Algae Control US LLC	Algae Control US LLC	product literature for algae control in receiving waters	paper report		1/1/2014					5.3	6.1

	Title:	Author:	Published By:	Literature Description:	Document Type:	Website Link:	Date:	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5	BMP #6
323	Effect of fluid motion on colony formation in <i>Microcystis aeruginosa</i>	Lin Li, Wei Zhu, Ting-ting Wang, Yong-gang, Feng-Lan Chen, Xio Tan	Water & Science Engineering	as described in title	paper report		6/1/2013						6.11
324	Evaluation of a Floating Wetland for Improving Water Quality in an Urban Lake	Thomas DeBusk, Rick Baird, David Haselow, Tom Groffner	Southwest Florida Water Management District	as described in title	paper report		6/1/2005						6.11
325	Source Water Protection	American Water Works Association	AWWA	management approaches to watersheds to drinking water supplies	paper report		6/1/2014						6.11
326	Soil Testing for Fertilizing	Umass Amherst, MA	Umass Amherst, MA	why and how to have soils tested to evaluate what needed for vegetative growth, and if fertilizer needed and what application if so	brochure	soiltest@umass.edu	6/1/2014				4.1	5.1	
327	Phosphorous Removal, Design Manual	EPA	EPA	manual on approaches and practices to reduce and/or remove phosphorous	manual						4.1	5.1	

SECTION V

ONGOING ACTIVITIES

As there has not yet been, a permit submittal required to define the BMP work items for the future, the Town will be continuing the items listed below which we believe will provide the most benefit to the Town's stormwater management program.

- Public education (Press releases, Articles for Newsletters, Additional Fact Sheets, Public Participation at Community Events, Stormwater Forum, Lake Quannapowitt Committee, etc.)
- Cleanup activities (FOLQ Lake Quannapowitt Cleanup, DPW Stream Cleaning Program, Hazardous Waste Collection Days)
- Continuation of Sweeping, Catch basin and Stream Cleaning Programs. Also, continuation of the good housekeeping programs adopted in the first 5-year permit.
- Additional training of municipal staff
- Continuation of our stormwater drainage system investigations and mapping program and monitoring for illicit discharges

SECTION VI.

CHANGES IN IDENTIFIED BMP'S OR MEASURABLE GOALS

At the time of preparing this annual report for May 1, 2014 through April 30, 2015 we have identified that all of the pre-planned work items, including one change which is the Department of Public Works Annual Stream Cleaning Program (implemented in lieu of the Adopt-A-Stream Program), have provided implementation of the planned Best Management Practices and achieving Measurable Goals as identified in the Town's permit application submittal dated July 28, 2003.

SECTION VII

RELIANCE ON ANOTHER ENTITY FOR ACHIEVING ANY MEASURABLE GOAL.

The Town's water bodies do receive stormwater flows from the following entities, upon which the Town relies on the quality of their stormwater discharges in achieving any measurable goal:

1. Massachusetts Highway Department:

Route 95/128, which crosses, through the northern end of Town, from Stoneham to Lynnfield. Most of the drainage system for this interstate-highway as it passes through Wakefield appears to be designed to intercept stormwater runoff from the highway and ultimately discharge to the north side of the highway to the Walker's Brook in Reading, MA and downstream Reading Drainage Canal which discharges to the Saugus River near Vernon Street downstream of the outlet from Lake Quannapowitt. The only exception to this is a reach of the highway between North Avenue and Parker Road where the northbound half of the highway drainage discharges to a wetlands area upstream of Lake Quannapowitt.

2. Massachusetts Department of Conservation and Recreation:

Breakheart Reservation located along the eastern boundary of Wakefield, of which a portion drains to the Mill and Saugus Rivers in Wakefield.

3. Regional School:

Northeast Regional Vocation School (code #853) serving 12-communities, is located along the eastern boundary of Wakefield, also abutting the Breakheart Reservation, which drains to the Mill and Saugus Rivers in Wakefield.

4. Commonwealth of Massachusetts:

Camp Curtis Guild, Massachusetts Army National Guard located at the northern boundary of Wakefield, of which a small portion may drain to the Saugus River.

5. United States Government:

United States Military Reservation, Tarrant Lane military housing located in the northwest corner of Wakefield, of which the stormwater from this area drains to the Walker's Brook in Reading, MA and downstream Reading Drainage Canal which discharges to the Saugus River near Vernon Street downstream of the outlet from Lake Quannapowitt. This land is being auctioned off, last we heard, by the United States Coast Guard which has custody of the property for the government.

6. Surrounding Communities:

The Town of Wakefield has a number of abutting municipalities, which share Wakefield's municipal boundary. Along these boundaries, there are some watershed areas that may flow from one community to the other. These municipalities include: Lynnfield, Melrose, Reading, Saugus and Stoneham.