

Massachusetts Department of Environmental Protection Source Water Assessment and Protection (SWAP) Report for Milford Water Company

What is SWAP?

The Source Water Assessment Program (SWAP), established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the susceptibility of drinking water sources to contamination from these land uses; and
- publicize the results to provide support for improved protection.

Susceptibility and Water Quality

Susceptibility is a measure of a water supply's potential to become contaminated due to land uses and activities within its recharge area.

A source's susceptibility to contamination does *not* imply poor water quality.

Water suppliers protect drinking water by monitoring for more than 100 chemicals, disinfecting, filtering, or treating water supplies, and using source protection measures to ensure that safe water is delivered to the tap.

Actual water quality is best reflected by the results of regular water tests. To learn more about your water quality, refer to your water supplier's annual Consumer Confidence Reports.

Table 1: Public Water System Information

PWS Name	Milford Water Company			
PWS Address	66 Dilla Street			
City/Town	Milford, Massachusetts 01757			
PWS ID Number	2185000			
Local Contact	Henry Papuga			
Phone Number	(508) 473-5110			

Introduction

We are all concerned about the quality of the water we drink. Drinking water sources may be threatened by many potential contaminant sources, including storm runoff, road salting, and improper disposal of hazardous materials. Citizens and local officials can work together to better protect these drinking water sources.

Purpose of this report:

This report is a planning tool to support local and state efforts to improve water supply protection. By identifying land uses within water supply protection areas that may be potential sources of contamination, the assessment helps focus protection efforts on appropriate best management practices (BMPs) and drinking water source protection measures.

Refer to Table 3 for Recommendations to address potential sources of contamination. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

This report includes the following sections:

- 1. Description of the Water System
- 2. Land Uses within Protection Areas
- 3. Source Water Protection
- 4. Appendices

Glossary

Aquifer: An underground waterbearing layer of permeable material that will yield water in a usable quantity to a well.

Hydrogeologic Barrier: An underground layer of impermeable material (i.e. clay) that resists penetration by water.

Recharge Area: The surface area that contributes water to a well.

Zone I: The area closest to a well; a 100 to 400 foot radius proportional to the well's pumping rate. This area should be owned or controlled by the water supplier and limited to water supply activities.

Zone II: The primary recharge area for the aquifer. This area is defined by hydrogeologic studies that must be approved by DEP. Refer to the attached map to determine the land within your Zone II.

Zone A: is the most critical for protection efforts. It is the area 400 feet from the edge of the reservoir and 200 feet from the edge of the tributaries (rivers and/or streams) draining into it.

Zone B: is the area one-half mile from the edge of the reservoir but does not go beyond the outer edge of the watershed.

Zone C: is the remaining area in the watershed not designated as Zones A or B.

The attached map shows Zone A and your watershed boundary.

Section 1: Description of the Water System

Groundwater Sources					
Zone II #: 155 Susceptibility: High					
Well Name	Source ID#				
Dilla Street Wellfield	2185000-01G				
Clark Island Wellfield	2185000-02G				
Godfrey Brook (Well #1)	2185000-03G				
Godfrey Brook (Well #2)	2185000-04G				
Godfrey Brook (Well #4)	2185000-05G				

Surface Water Sources					
Source Name Susceptibility: High					
Charles River	2185000-01S				
Echo Lake 2185000-02S					

Milford Water Company obtains its water supply from five sources and provides public water supply to the town of Milford, and wholesale water service to sections of the towns of Hopedale, Mendon, and Medway. The sources are Echo Lake, the Charles River intake, the Godfrey Brook Wells, the Clark's Island Well, and the Dilla Street Well. Of the five sources, Echo Lake and the Charles River intake are surface sources and the remainder are groundwater sources.

Echo Lake is located in the Town of Hopkinton. The Clark's Island wellfield is located on the western side of Cedar Swamp Pond which includes the Charles River watershed below the Dilla Street dam and above the Cedar Swamp dam. Clark Island wellfield consists of over sixty 2.5-inch diameter wells. The Dilla Street wellfield is located just below the Dilla Street dam. The Godfrey Brook wells are located near the southern border of the town.

Each tubular wellfield has a Zone I that is a 250 feet radii from each wellpoint, essentially a 250 foot buffer around the perimeter of the wellfield. The remainder of the wells have a Zone I radius of 400 feet. The wells are located in aquifers

with a high vulnerability to contamination due to the absence of hydrogeologic barriers (i.e. confining clay layer) that can prevent contaminant migration. Please refer to the attached maps of the Zone II and watershed. Milford's Zone II extends into Hopedale, and the watershed extends into Hopkinton and Holliston.

The water is filtered, disinfected, treated for iron and manganese removal, and treated with potassium hydroxide and zinc orthophosphate for pH adjustment and corrosion control. For current information on monitoring results and treatment, please contact the Public Water System contact person listed above in Table 1 for a copy of the most recent Consumer Confidence Report. Drinking water monitoring reporting data is also available on the web at http://www.epa.gov/safewater/ccr1.html

What is a Wellhead Protection Area?

A well's water supply protection area is the land around the well where protection activities should be focused. Each well has a Zone I protective radius and a Zone II protection area.



Section 2: Land Uses in the Protection Areas

The Zone II and watershed for Milford are primarily a mixture of forest, light industrial, residential land uses, with a small portion consisting of recreational and commercial land uses (refer to attached map for details). Land uses and activities that are potential sources of contamination are listed in Table 2, with further detail provided in the Table of Regulated Facilities and Table of Underground Storage Tanks in Appendix B.

Key Land Uses and Protection Issues include:

- 1. Activities in Zone A and Zone I
- 2. Agricultural activities
- 3. Residential Land Uses
- 4. Transportation corridor
- 5. Oil or Hazardous Material Contamination Sites
- 6. Comprehensive Wellhead Protection Planning

The ranking of susceptibility to contamination for the Zone II and the watershed is high, based on the presence of at least one high threat land use within the water supply protection areas, as seen in Table 2.

1. Activities in Zone A - Most of the Zone A for Echo Lake (02S) is in the Town of Hopkinton. Examples of typical land use activities which may have an impact on surface water sources include: roads, and homes with on-site septic systems, above ground storage tanks; erosion; and un-permitted and unauthorized activities. Wild animals, farm animals, and domestic pets can be carriers of waterborne diseases such as Giardia, Cryptosporidium, Salmonella, etc. A highway, local roads, and homes on private septic systems occur throughout the Zone A of Echo Lake.

Zone A Recommendations:

- ✓ To the extent possible, remove prohibited activities from the Zone As to comply with DEP's Zone A requirements.
- ✓ Use BMPs for the storage, use, and disposal of hazardous materials such as water supply chemicals and maintenance chemicals.
- ✓ Storage of pesticides, fertilizers or road salt within the Zone A should be covered and contained.
- ✓ Keep any new prohibited activities out of the Zone A.

Inappropriate Activities in Zone Is – The Zone I for wells 01G and 02G is essentially a 250 foot buffer from the perimeter of the wellfields. The Zone I for the remainder of the wells is a 400 foot radius around the wellhead. Massachusetts drinking water regulations (310 CMR 22.00 Drinking Water) requires public water suppliers to own the Zone I, or control the Zone I through a conservation restriction. The Zone Is for all the wells except for Well 02G are owned or controlled by the public water system. Only water supply activities are allowed in the Zone I. However, many public water supplies were developed prior to the Department's regulations and contain non water supply activities such as homes and public roads. The Zone I for Well 03G contains a dirt road with residential property and a stream with occasional fishing.

Zone I Recommendations:

- ✓ Use BMPs for the storage, use, and disposal of hazardous materials such as water supply chemicals and maintenance chemicals.
- ✓ Keep any new non water supply activities out of the Zone I.

2. Agricultural Activites – Livestock operation occur within the watershed of Echo Lake (02S). If not contained or applied properly, animal waste from barnyards, manure pits and field application is a potential source of contamination to ground and surface water. If managed improperly,

(Continued on page 4)

What is a Watershed?

A watershed is the land area that catches and drains rainwater down-slope into a river, lake or reservoir. As water travels down from the watershed area it may carry contaminants from the watershed to the drinking water supply source. For protection purposes, watersheds are divided into protection Zones A, B and C.



Underground and Aboveground Storage Tanks (USTs and ASTs) can be potential sources of contamination due to leaks or spills of the fuel oil they store. Agricultural Activities Recommendations:

- ✓ Work with farmers in your protection areas to make them aware of your water supply and to encourage the use of a US Natural Resources Conservation Service (NRCS) farm plan to protect water supplies.
- ✓ Encourage farmers to incorporate an Integrated Pest Management (IPM) approach into their pest management program. IPM is an ecologically-based approach to pest control that links together several related components, including monitoring and scouting, biological controls, mechanical and/or other cultural practices, and pesticide applications. By combining a number of these different methods and practices, satisfactory pest control can be achieved with less impact on the environment.
- ✓ Promote Best Management Practices (BMPs) for fuel oil storage, hazardous material handling, storage, disposal, and emergency response planning.

What are "BMPs?"

Best Management Practices (BMPs) are measures that are used to protect and improve surface water and groundwater quality. BMPs can be <u>structural</u>, such as oil & grease trap catch basins, <u>nonstructural</u>, such as hazardous waste collection days or <u>managerial</u>, such as employee training on proper disposal procedures.

- **3. Residential Land Uses** Residential land uses are common throughout the Zone II and watershed. If managed improperly, activities associated with residential areas can contribute to drinking water contamination. Common potential sources of contamination include:
- Septic Systems Improper disposal of household hazardous chemicals to septic systems is a potential source of contamination to the groundwater because septic systems lead to the ground. If septic systems fail or are not properly maintained they can be a potential source of microbial contamination.
- Household Hazardous Materials Hazardous materials may include automotive wastes, paints, solvents, pesticides, fertilizers, and other substances. Improper use, storage, and disposal of chemical products used in homes are potential sources of contamination.
- **Heating Oil Storage** If managed improperly, Underground and Aboveground Storage Tanks (USTs and ASTs) can be potential sources of contamination due to leaks or spills of the fuel oil they store.
- Storm water Catch basins transport storm water from roadways and adjacent properties to the ground. As flowing storm water travels, it picks up debris and contaminants from streets and lawns. Common potential contaminants include lawn chemicals, pet waste, and contaminants from automotive leaks, maintenance, washing, or accidents.

Residential Land Use Recommendations:

- ✓ Educate residents on best management practices (BMPs) for protecting water supplies. Distribute the fact sheet "Residents Protect Drinking Water" available in Appendix A and on www.mass.gov/dep/brp/dws/protect.htm, which provides BMPs for common residential issues.
- \checkmark Work with planners to control new residential developments in the water supply protection areas.



✓ Promote BMPs for storm water management and pollution controls.

4. Transportation Corridors - Route 85, Route 16 and Route 140 run through the protection area for Clark Island, Godfrey Brook, and Dilla Street wells. Route 495 runs through the watershed of 01S and 02S. Local roads are present in the protection areas of both the surface sources and throughout the Zone II. Roadway construction, maintenance, and typical highway use can all be potential sources of contamination. Accidents can lead to spills of gasoline and other potentially dangerous transported chemicals. Roadways are frequent sites for illegal dumping of hazardous or other potentially harmful wastes.

Figure 1: Sample watershed with examples of potential sources of contamination

(Continued on page 7)

Potential Source of Contamination vs. Actual Contamination

The activities listed in Table 2 are those that typically use, produce, or store contaminants of concern, which, <u>if managed</u> <u>improperly</u>, are potential sources of contamination (PSC).

It is important to understand that a release may never occur from the potential source of contamination provided facilities are using best management practices (BMPs). If BMPs are in place, the actual risk may be lower than the threat ranking identified in Table 2. Many potential sources of contamination are regulated at the federal, state and/or local levels, to further reduce the risk.

Table 2: Land Use in the Watershed and Zone II

For more information, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area

Land Uses	Quantity	Threat	Zone II	Surface Source ID	Potential Contaminant Sources*
Agricultural					
Livestock Operations	1	Н	No	02S	Manure (microbial contaminants): improper handling
Commercial					
Auto Repair Shops/ Service Stations	5	Н	Yes	01S	Spills, leaks, or improper handling of automotive fluids, and solvents
Gas Stations	2	Н	Yes	01S	Spills, leaks, or improper handling or storage of automotive fluids and fuels
Cemeteries	3	L	Yes	Yes	Over-application of pesticides: leaks, spills, improper handling; historic embalming fluids
Sand And Gravel Mining/Washing	1	М	No	Yes	Heavy equipment, fuel storage, clandestine dumping: spills or leaks
Railroad Tracks and Yards	1	Н	Yes	No	Over-application or improper handling of herbicides, leaks or spills of transported chemicals and maintenance chemicals; fuel storage
Residential					
Fuel Oil Storage (at residences)	Many	М	Yes	02S	Spills, leaks, or improper handling of fuel oil
Lawn Care/ Gardening	Many	М	Yes	02S	Over-application or improper storage and disposal of pesticides
Septic Systems/ Cesspools	Many	М	No	02S	Microbial contaminants, and improper disposal of hazardous chemicals
Miscellaneous					
Aquatic Wildlife	3	Н	Yes	Both	Microbial contaminants
Fishing/Boating	3	М	Yes	01S	Fuel oil and other chemicals, microbial contaminants
Landfills and Dumps	2	Н	Yes	01S	Seepage of leachate

Table 2: Land Use in the Watershed and Zone II (continued)

For more information, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area

Land Uses	Quantity	Threat	Zone II	Zone C Source ID	Potential Contaminant Sources*		
Miscellaneous (Continued)							
Oil or Hazardous Material Sites	5		Yes	01S	Tier Classified Oil or Hazardous Materials Sites are not ranked due to their site-specific character. Individual sites are identified in Appendix B.		
Schools, Colleges, and Universities	1	М	Yes	No	Spills, leaks, or improper handling or storage of fuel oil, laboratory, art, photographic, machine shop, and other chemicals		
Small quantity hazardous waste generators	2	М	Yes	No	Spills, leaks, or improper handling or storage of hazardous materials and waste		
Storm water Drains/ Retention Basins	Numerous	L	Many	01S	Debris, pet waste, and chemicals in storm water from roads, parking lots, and lawns		
Transportation Corridors	3	М	Yes	01S	Accidental leaks or spills of fuels and other hazardous materials, over-application or improper handling of pesticides		
Underground Storage Tanks	9	Н	Yes	01S	Spills, leaks, or improper handling of stored materials		
Very Small Quantity Hazardous Waste Generator	3	L	Yes	01S	Spills, leaks, or improper handling or storage of hazardous materials and waste		
Wastewater Treatment Plant/ Collection Facility/ Lagoon	1	Н	Yes	01S	Treatment chemicals or equipment maintenance materials: improper handling or storage; wastewater: improper management		

Notes:

1. When specific potential contaminants are not known, typical potential contaminants or activities for that type of land use are listed. Facilities within the watershed may not contain all of these potential contaminant sources, may contain other potential contaminant sources, or may use Best Management Practices to prevent contaminants from reaching drinking water supplies.

2. For more information on regulated facilities, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area information about these potential sources of contamination.

3. For information about Oil or Hazardous Materials Sites in your protection areas, refer to Appendix C: Tier Classified Oil and/or Hazardous Material Sites.

THREAT RANKING - The rankings (high, moderate or low) represent the relative threat of each land use compared to other PSCs. The ranking of a particular PSC is based on a number of factors, including: the type and quantity of chemicals typically used or generated by the PSC; the characteristics of the contaminants (such as toxicity, environmental fate and transport); and the behavior and mobility of the pollutants in soils and groundwater.

Catch basins transport stormwater from roadways and adjacent properties to the ground. As flowing stormwater travels, it picks up debris and contaminants from streets and lawns. Common potential contaminants include contaminants from automotive leaks, maintenance, washing, or accidents.

Railroad tracks run through the Zone II. Rail corridors serving passenger or freight trains are potential sources of contamination due to chemicals released during normal use, track maintenance, and accidents. Accidents can release spills of train engine fluids and commercially transported chemicals.

Transportation Corridor Recommendations:

- ✓ Regularly inspect watersheds and Zone II for illegal dumping and spills.
- ✓ Work with local emergency response teams to ensure that any spills within the protection areas can be effectively contained.
- ✓ Work with the Town and State to have catch basins inspected, maintained, and cleaned on a regular schedule. Regular street sweeping reduces the amount of potential contaminants in runoff.
- ✓ If storm drainage maps are available, review the maps with emergency response teams. If maps aren't yet available, work with town officials to investigate mapping options such as the upcoming Phase II Stormwater Rule requiring some communities to complete stormwater mapping.
- ✓ Promote BMPs for stormwater management and pollution controls.
- ✓ Work with local officials during their review of the railroad right of way Yearly Operating Plans to ensure that water supplies are protected during vegetation control.

5. Presence of Oil or Hazardous Material Contamination Sites – The Zone II contains DEP Tier Classified Oil and/or Hazardous Material Release Sites

Top 5 Reasons to Develop a Local Wellhead and Surface Water Protection Plan

- Reduces Risk to Human Health
- Cost Effective! Reduces or Eliminates Costs Associated With:
- Increased monitoring and treatment
- Water supply clean up and remediation
- Replacing a water supply
- Purchasing water

• Supports municipal bylaws, making them less likely to be challenged

• Ensures clean drinking water supplies for future generations

• Enhances real estate values – clean drinking water is a local amenity. A community known for its great drinking water in a place people want to live and businesses want to locate.

indicated on the map as Release Tracking Numbers 2000101, 20011986, 2-00121518, 20011822, 20012596, 2-0010595 and 2-000682. Refer to the attached map and Appendix 3 for more information.

Oil or Hazardous Material Contamination Sites Recommendation:

✓ Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.

6. Protection Planning – Currently Milford has a DEP -approved Surface Water Supply Protection Plan for Echo Lake, but no wellhead protection plan. Protection planning protects drinking water by managing the land area that supplies



water to a well. Wellhead and Surface Water Protection Plans coordinate community efforts, identify protection strategies, establish a timeframe for implementation, and provide a forum for public participation. There are resources available to help communities develop a plan for protecting drinking water supply wells.

Protection Planning Recommendations:

- ✓ Establish a protection team, and refer them to http:// mass.gov/dep/brp/dws/protect.htm for a copy of DEP's guidance, "Developing a Local Wellhead Protection Plan" and "Developing a Local Surface Water Supply Protection Plan".
- ✓ Coordinate efforts with local officials to compare local wellhead and surface water protection controls with current MA Wellhead Protection Regulations 310 CMR 22.21(2) and Surface Water Supply Protection Regulations 310 CMR 22.20B and 310 CMR 22.20C. If there are no local controls or they do not meet the

current regulations, adopt controls that meet 310 CMR 22.21(2), 310 CMR 22.20B and 310 CMR 22.20C. For more information on DEP and use controls see http://mass.gov/dep/brp/dws/protect.htm.

✓ If local controls do not regulate floor drains, be sure to include floor drain controls that meet 310 CMR 22.21(2).

Other land uses and activities within the Zone II that are potential sources of contamination are included in Table 2. Refer to Appendix B for more information about these land uses. Identifying potential sources of contamination is an important initial step in protecting your drinking water sources. Further local investigation will provide more in-depth information and may identify new land uses and activities that are potential sources of contamination. Once potential sources of contamination are identified, specific recommendations like those below should be used to better protect your water supply.

Section 3: Source Water Protection Conclusions and Recommendations

Current Land Uses and Source Protection:

As with many water supply protection areas, Milford's Zone II and Zone C contain potential sources of contamination. However, source protection measures reduce the risk of actual contamination, as illustrated in Figure 2. The water supplier is commended for taking an active role in promoting source protection measures in the Water Supply Protection Areas through:

- Developing a Local Surface Water Supply Protection Plan.
- Having an active watershed land acquisition program and purchasing tracts of land in Hopkinton to increase the protective buffer around the water supply reservoir.
- A good educational program and vigorous public relations campaign through the newspapers, radio media, and water bill notices.
- The acquisition of a considerable portion of the source protection areas, and the continued pursuit of additional land for the purpose of source protection.
- Active notification program to the Water Division in the event of a hazardous material release in a Zone II, and also for the removal of underground storage tanks in a Zone II.
- Advanced water quality monitoring program including monitoring raw water to address source protection issues, including early warning monitoring.

Source Protection Recommendations:

To better protect the sources for the future:

- ✓ Inspect the Zone I and Zone A regularly, and when feasible, remove nonwater supply activities.
- ✓ Educate residents on ways they can help you to protect drinking water sources.
- ✓ Work with emergency response teams to ensure that they are aware of the storm water drainage in your Zone II and Zone C, and to cooperate on responding to spills or accidents.
- ✓ Partner with local businesses to ensure the proper storage, handling, and disposal of hazardous materials.
- ✓ Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.
- ✓ Work with farmers in your protection areas to make them aware of your water supply and to encourage the use of a NRCS farm plan to protect water supplies.

What is a Zone III?

A Zone III (the secondary recharge area) is the land beyond the Zone II from which surface and ground water drain to the Zone II and is often coincident with a watershed boundary.

The Zone III is defined as a secondary recharge area for one or both of the following reasons:

- The low permeability of underground water bearing materials in this area significantly reduces the rate of groundwater and potential contaminant flow into the Zone 11.
- 2. The groundwater in this area discharges to a surface water feature such as a river, rather than discharging directly into the aquifer.

The land uses within the Zone III are assessed only for sources that are shown to be groundwater under the direct influence of surface water.

For More Information

Contact Josephine Yemoh Ndi in DEP's Worcester Office at (508) 849-4030 for more information and assistance on improving current protection measures.

Copies of this report have been provided to the public water supplier, town boards, and the local media.

Table 3: Current Protection and Recommendations

Protection Measures	Status	Recommendations
Zone A		
Does the Public Water Supplier (PWS) own or	YES (01G, 04G, 05G)	Follow Best Management Practices (BMP's) that focus on good housekeeping, spill prevention, and operational practices to reduce the use and release of hazardous materials.
control the entire Zone I?	YES (01G, 04G, 05G) NO (01G) YES YES YES NO Ilations, and Gener	To the extent possible, remove prohibited activities in Zone I to comply with DEP's Zone I requirements.
Are the Zone I and Zone A posted with "Public Drinking Water Supply" Signs?	YES	Additional economical signs are available from the Northeast Rural Water Association (802) 660-4988.
Are the Zone I and Zone A regularly inspected?	YES	Continue daily inspections of drinking water protection areas.
Are water supply-related activities the only activities within the Zone I and Zone A?	YES	Continue monitoring for non-water supply activities in Zone A.
	NO	Monitor prohibited activities in Zone 1, and investigate options for removing these activities .
Municipal Controls (Zoning Bylaws, Health Regula	ations, and Gene	ral Bylaws)
Does the municipality have Surface Water Protection Controls that meet 310 CMR 22.20C and Wellhead Protection Controls that meet 310 CMR 22.21(2)	NO	For additional source protection measures, refer to www.state.ma.us/dep/ brp/dws.
Do neighboring communities protect the water supply protection areas extending into their communities?	NO	
Planning		
Does the PWS have a local surface water and wellhead protection plan?	YES	Continue the implementation of surface water supply protection plan. Follow "Developing a Local Surface Water Supply Protection Plan" available at: www.state.ma.us/dep/brp/dws/. Develop a wellhead protection plan. Create a Wellhead Protection Plan, following "Developing a Local Wellhead Protection Plan" available at: www.state.ma.us/dep/brp/dws/.
Does the PWS have a formal "Emergency Response Plan" to deal with spills or other emergencies?	YES	Augment plan by developing a joint emergency response plan with fire department, Board of Health, DPW, and local and state emergency officials. Coordinate emergency response drills with local teams.
Does the municipality have a watershed and wellhead protection committee?	NO	Establish a committee with representatives from citizens' groups, neighbor- ing communities, and the business community.
Does the Board of Health conduct inspections of commercial and industrial activities?	YES	For more guidance see "Hazardous Materials Management: A Community's Guide" at www.state.ma.us/dep/brp/dws/files/hazmat.doc
Does the PWS provide watershed protection education?	YES	Increase residential outreach through bill stuffers, Drinking Water Week activities, and coordination with local groups. Aim additional efforts at commercial and municipal uses within the Zone IIs and Zone C.

Additional Documents:

To help with source protection efforts, more information is available by request or online at www.state.ma.us/dep/brp/dws including:

1. Water Supply Protection Guidance Materials such as model regulations, Best Management Practice information, and general water supply protection information.

2. MA DEP SWAP Strategy

3. Land Use Pollution Potential Matrix

4. Draft Land/Associated Contaminants Matrix

Conclusions:

These recommendations are only part of your ongoing local drinking water source protection. Additional source protection recommendations are listed in Table 3, the Key Issues above and Appendix A. DEP staff, informational documents, and resources are available to help you build on this SWAP report as you continue to improve drinking water protection in your community.

The Department's Wellhead Protection Grant Program and Source Protection Grant Program provide funds to assist public water suppliers in addressing water supply source protection through local projects. Protection recommendations discussed in this document may be eligible for funding under the Grant Program. Please note: each spring DEP posts a new Request for Response for the grant program (RFR).

Other grants and loans are available through the Drinking Water State Revolving Loan Fund, the Clean Water State Revolving Fund, and other sources. For more information on grants and loans, visit the Bureau of Resource Protection's Municipal Services web site at: http://mass.gov/dep/brp/mf/mfpubs.htm.

The assessment and protection recommendations in this SWAP report are provided as a tool to encourage community discussion, support ongoing source protection efforts, and help set local drinking water protection priorities. Citizens and community officials should use this SWAP report to spur discussion of local drinking water protection measures. The water supplier should supplement this SWAP report with local information on potential sources of contamination and land uses. Local information should be maintained and updated periodically to reflect land use changes in the Zone II. Use this information to set priorities, target inspections, focus education efforts, and to develop a long-term drinking water source protection plan.

Section 4: Appendices

- A. Protection Recommendations
- B. Regulated Facilities within the Water Supply Protection Area
- C. Table of Tier Classified Oil and/or Hazardous Material Sites within the Water Supply Protection Areas
- D. Additional Documents on Source Protection

APPENDIX B: REGULATED FACILITIES WITHIN THE WATER SUPPLY PROTECTION AREA FOR MILFORD WATER DEPARTMENT

DEP Permitted Facilities

DEP Facility Number	Facility Name	Street Address	Town	Permitted Activity	Activity Class
337006	ANP-OPERATIONS CO - MILFORD POWER	108 NATIONAL STREET	MILFORD	Large Quantity Toxic User	Toxic Use Reduction Filer
131065	ARCHER RUBBER COMPANY	213 CENTRAL ST	MILFORD	Generator of Hazardous Waste	Small Quantity Generator of Hazardous Waste
131065	ARCHER RUBBER COMPANY	213 CENTRAL ST	MILFORD	Plant	Air Quality Permit
131065	ARCHER RUBBER COMPANY	213 CENTRAL ST	MILFORD	Industrial Sewer Waste Water	Industrial Waste Water to Sewer
131065	ARCHER RUBBER COMPANY	213 CENTRAL ST	MILFORD	Large Quantity Toxic User	Toxic Use Reduction Filer
230648	ASTINS AUTO SERVICE	20 HAMILTON ST	MILFORD	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
2756	BALL FOSTER GLASS CONTAINER CO	ONE NATIONAL AVE	MILFORD	Plant	Air Quality Permit
2756	BALL FOSTER GLASS CONTAINER CO	ONE NATIONAL AVE	MILFORD	Industrial Sewer Waste Water	Industrial Waste Water to Sewer
2756	BALL FOSTER GLASS CONTAINER CO	ONE NATIONAL AVE	MILFORD	Generator of Hazardous Waste	Large Quantity Generator of Hazardous Waste
2756	BALL FOSTER GLASS CONTAINER CO	ONE NATIONAL AVE	MILFORD	Generator of Hazardous Waste	Large Quantity Generator of Waste Oil/PCBs

2756	BALL FOSTER GLASS CONTAINER CO	ONE NATIONAL AVE	MILFORD	Large Quantity Toxic User	Toxic Use Reduction Filer
131067	BENJAMIN MOORE & CO	49 SUMMER ST	MILFORD	Plant	Air Quality Permit
131067	BENJAMIN MOORE & CO	49 SUMMER ST	MILFORD	Large Quantity Toxic User	Toxic Use Reduction Filer
131067	BENJAMIN MOORE & CO	49 SUMMER ST	MILFORD	Industrial Sewer Waste Water	Industrial Waste Water to Sewer
316276	JIFFY LUBE	58-60 E MAIN ST	MILFORD	Generator of Hazardous Waste	Large Quantity Generator of Waste Oil/PCBs
262866	MILFORD COLLISION	36 MAIN ST	MILFORD	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
262866	MILFORD COLLISION	36 MAIN ST	MILFORD	Generator of Hazardous Waste	Very Small Quantity Generator of Waste Oil/PCBs
39510	MILFORD LANDFILL	CEDAR ST	MILFORD	Closed Landfill	Closed Landfill
39511	MILFORD SLUDGE LANDFILL	SOUTH MAIN ST./RTE 140	MILFORD	Landfill	Landfill
291955	MOBICO AUTO SERVICE INC	129 SOUTH MAIN ST	MILFORD	Fuel Dispenser	Fuel Dispenser
302036	MOBICO AUTO SERVICE INC	129 SOUTH MAIN ST	MILFORD	Generator of Hazardous Waste	Small Quantity Generator of waste Oil/PCBs
131067	MOORE BENJAMIN & CO	49 SUMNER ST	MILFORD	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous waste
2756	SAINT GOBAIN CONTAINERS, LLC	1 NATIONAL ST	MILFORD	Surface Water Facility	Surface Water Facility

Underground Storage Tanks

Facility Name	Address	Town	Description	Tank Type	Tank Leak Detection	Capacity (gal)	Contents
MOBICO AUTO SERVICE INC.	129 SOUTH MAIN ST.	MILFORD	Gas Station	2 Wall	Approved Interstitial Space Monitor	12000	Gasoline
MOBIL GAS STATION	CEDAR ST.	MILFORD	Gas Station	1 Wall	Inventory Record Keeping	10000	Gasoline

For more information on underground storage tanks, visit the Massachusetts Department of Fire Services web site: http://www.state.ma.us/dfs/ust/ustHome.htm

Note: This appendix includes only those facilities within the water supply protection area(s) that meet state reporting requirements and report to the appropriate agencies. Additional facilities may be located within the water supply protection area(s) that should be considered in local drinking water source protection planning.

APPENDIX C – Table of Tier Classified Oil and/or Hazardous Material Sites within the Water Supply Protection Areas

DEP's datalayer depicting oil and/or hazardous material (OHM) sites is a statewide point data set that contains the approximate location of known sources of contamination that have been both reported and classified under Chapter 21E of the Massachusetts General Laws. Location types presented in the layer include the approximate center of the site, the center of the building on the property where the release occurred, the source of contamination, or the location of an on-site monitoring well. Although this assessment identifies OHM sites near the source of your drinking water, the risks to the source posed by each site may be different. The kind of contaminant and the local geology may have an effect on whether the site poses an actual or potential threat to the source.

The DEP's Chapter 21E program relies on licensed site professionals (LSPs) to oversee cleanups at most sites, while the DEP's Bureau of Waste Site Cleanup (BWSC) program retains oversight at the most serious sites. This privatized program obliges potentially responsible parties and LSPs to comply with DEP regulations (the Massachusetts Contingency Plan – MCP), which require that sites within drinking water source protection areas be cleaned up to drinking water standards.

For more information about the state's OHM site cleanup process to which these sites are subject and how this complements the drinking water protection program, please visit the BWSC web page at <u>http://www.state.ma.us/dep/bwsc</u>. You may obtain site -specific information two ways: by using the BWSC Searchable Sites database at <u>http://www.state.ma.us/dep/bwsc/sitelist.htm</u>, or you may visit the DEP regional office and review the site file. These files contain more detailed information, including cleanup status, site history, contamination levels, maps, correspondence and investigation reports, however you must call the regional office in order to schedule an appointment to view the file.

The table below contains the list of Tier Classified oil and/or Hazardous Material Release Sites that are located within your drinking water source protection area.

(empter 212 Sites) Zisted of Refease Tracking (empter (Ref))								
RTN	Release Site Address	Town	Contaminant Type					
2-0010595	62 N. BOW ST.	MILFORD	Oil/Hazardous Material					
2-0011986	11 BEACH ST.	MILFORD	Oil/Hazardous Material					
2-0011822	31 MAIN ST.	MILFORD	Oil					
2-0000682	162 CEDAR ST	MILFORD	Oil					
2-0000101	80 PROSPECT ST.	MILFORD	Oil					
2-0012596	74 SUMNER ST.	MILFORD	Oil					
2-0012518	129 S. MAIN ST.	MILFORD	Oil					

Table 1: Bureau of Waste Site Cleanup Tier Classified Oil and/or Hazardous Material

 Release Sites (Chapter 21E Sites) - Listed by Release Tracking Number (RTN)

For more location information, please see the attached map. The map lists the release sites by RTN.