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

Shrewsbury Water Department

What is SWAP?

The Source Water Assessment and Protection (SWAP) program, 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	Shrewsbury Water Department
PWS Address	100 Maple Ave
City/Town	Shrewsbury
PWS ID Number	2271000
Local Contact	Robert Tozeski
Phone Number	(508) 841-8506

Introduction

We are all concerned about the quality of the water we drink. Drinking water wells 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.

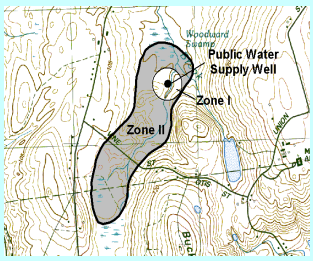
Refer to Table 3 for Recommendations to address potential sources of contamination. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

This report includes the following sections:

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

What is a 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.



Glossary

Aquifer: An underground water-bearing 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.

Section 1: Description of the Water System

Zone II #: 578 ***Susceptibility:*** High

Well Names	***Source IDs***
GP #1 South Street Well	2271000-01G

Zone II #: 577 ***Susceptibility:*** High

Well Names	***Source IDs***
GP #4 Sewell Street Well	2271000-02G
GP #3.1 Lamberts Sand Pit Well	2271000-04G
GP #3.2 Lamberts Sand Pit Well	2271000-05G
GP #5 Sewell Street Well	2271000-06G
GP #6.1 Home Farm Well	2271000-07G
GP # 6.2 Home Farm Well	2271000-08G

The wells for the Shrewsbury Water Department are located in two Zone II and an IWPA. The GP #1 South Street Well (01G) is currently inactive and located within Zone II #578 in the northwest of Shrewsbury. The Zone II (#577) for the other wells extends in to the City of Worcester and the town of Boylston, with a small section in the town of West Boylston. The system also has an emergency source, well 2271000-03G, which is not assessed in this report. Each well has a Zone I of 400 feet. The wells are located in an aquifer with a high vulnerability to contamination due to the absence of hydrogeologic barriers (i.e. clay) that can prevent contaminant migration. Please refer to the attached map to view the boundaries of the Zone I and Zone II.

The water from the active wells within Zone II #577 is treated for manganese removal chlorine is added as a disinfectant, and the water is fluoridated for dental health. For current information on monitoring results and treatment and for a copy of the most recent Consumer Confidence Report, please contact the Public Water System contact person listed above in Table 1. Drinking water monitoring reporting data are also available on the web at http://www.epa.gov/safewater/ccr1.html.

Section 2: Land Uses in the Protection Areas

The Zone II for Shrewsbury are a mixture of residential, commercial, and light industrial 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 A.

Key Land Uses and Protection Issues include:

1. Inappropriate activities in Zone I
2. Residential land uses
3. Transportation corridors
4. Hazardous materials storage and use
5. Oil or hazardous material contamination sites
6. Comprehensive wellhead protection planning

The overall ranking of susceptibility to contamination for the system 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. Inappropriate Activities in Zone Is – The Zone I for each 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 the wells are not 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 following non water supply activities occur in the Zone Is of the system wells:

Wells 02G and 06G (Sewell Street Wells) - There is a sand and gravel mining operation within the Zone I for these wells.

Wells 07G and 08G (Home Farm Wells) - There is residential and industrial land use within the Zone I.

All Wells - There are local roads or transportation corridors within the Zone I.

Zone I Recommendations:

- ✓ To the extent possible, remove all non water supply activities from the Zone Is to comply with DEP's Zone I requirements.
- ✓ Use BMPs for the storage, use, and disposal of hazardous materials such as water supply chemicals and maintenance chemicals.
- ✓ Do not use or store pesticides, fertilizers or road salt within the Zone I.
- ✓ Keep any new non water supply activities out of the Zone I.

2. Residential Land Uses – Approximately 30% of each of the Zone II consist of residential areas. Some of the areas have public sewers, and some use septic systems. If managed improperly, activities associated with residential areas can contribute to drinking water contamination. Common potential sources of contamination include:

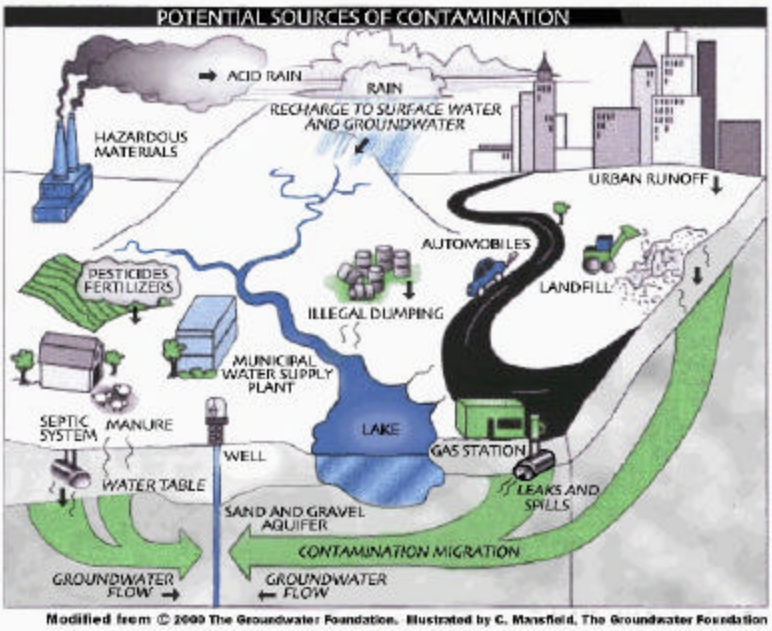
- **Septic Systems** – Improper disposal of household hazardous chemicals to septic systems is a potential source of contamination to the groundwater because septic systems lead to the ground. If septic systems fail or are not properly maintained they can be a potential source of microbial contamination.
- **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 (UST and AST) can be potential sources of contamination due to leaks or spills of the fuel oil they store.

Benefits of Source Protection

Source Protection helps protect public health and is also good for fiscal fitness:

- Protects drinking water quality at the source
- Reduces monitoring costs through the DEP Waiver Program
- Treatment can be reduced or avoided entirely, saving treatment costs
- Prevents costly contamination clean-up
- Preventing contamination saves costs on water purchases, and expensive new source development

Contact your regional DEP office for more information on Source Protection and the Waiver Program.



- **Stormwater** – 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 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 C and on www.mass.gov/dep/brp/dws/protect.htm, which provides BMPs for common residential issues.
- ✓ Work with planners to control new residential developments in the water supply protection areas.
- ✓ Promote BMPs for stormwater management and pollution controls. Visit DEP's web site for additional information and assistance at http://www.state.ma.us/dep/brp/wm/nonpoint.htm.

3. Transportation Corridors - Route 290 runs through Zone II # 577. Local roads are common throughout both of 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. De-icing salt, automotive chemicals and other debris on roads are picked up by stormwater and wash in to catchbasins.

Transportation Corridor Recommendations:

- ✓ Identify stormwater drains and the drainage system along transportation corridors. Wherever possible, ensure that drains discharge stormwater outside of the Zone II.
- ✓ Work with the Town and State to have catch basins inspected, maintained, and cleaned on a regular schedule. Street sweeping reduces the amount of potential contaminants in runoff.
- ✓ Work with local emergency response teams to ensure that any spills within the Zone II can be effectively contained.
- ✓ 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.

4. Hazardous Materials Storage and Use – Approximately 8% percent of the land area within Zone II #577 and less than 1% of Zone II #578 is commercial or industrial land uses. Many small businesses and industries use hazardous materials, produce hazardous waste products, and/or store large quantities of hazardous materials in UST/AST. If hazardous materials are improperly stored, used, or disposed, they become potential sources of contamination. Hazardous materials should never be disposed of to a septic system or floor drain leading directly to the ground.

(Continued on page 7)

What are "BMPs?"

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

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, board of health, and the town.

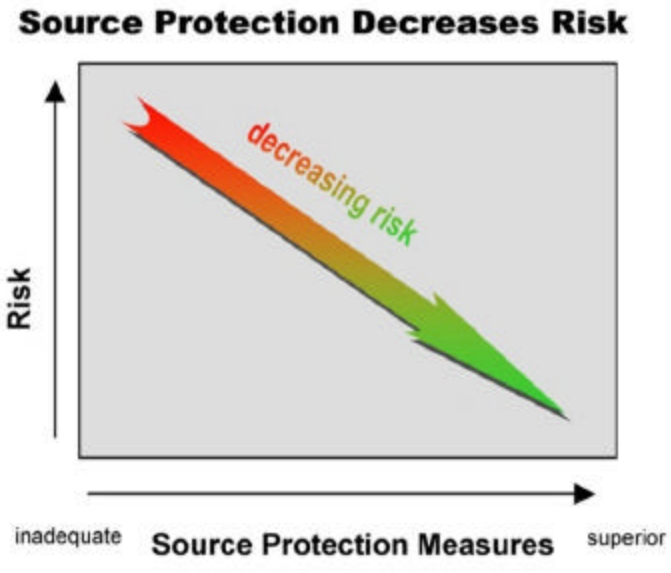


Figure 2: Risk of contamination decreases as source protection increases. This is true for public water systems of any susceptibility ranking, whether High, Moderate, or Low.

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, if managed improperly, 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 Protection Areas (Zones I and II)

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

Activities	Quantity	Threat*	Zone II #	Potential Source of Contamination
Agricultural				
Landscaping	Several	M	#577	Fertilizers and pesticides: leaks, spills, improper handling, or over-application
Commercial				
Car/Truck/Bus Washes	1	L	#577	Vehicle wash water, soaps, oils, greases, metals, and salts: improper management
Body Shops	1	H	#577	Vehicle paints, solvents, and primer products: improper management
Gas Stations	2	H	#577	Automotive fluids and fuels: spills, leaks, or improper handling or storage
Service Stations/ Auto Repair Shops	2	H	#577	Automotive fluids and solvents: spills, leaks, or improper handling
Paint Shops	1	H	#577	Paints, solvents, other chemicals: spills, leaks, or improper handling or storage
Sand And Gravel Mining/Washing	1	M	#577	Heavy equipment, fuel storage, clandestine dumping: spills or leaks
Industrial				
Electronics/Electrical Manufacturers	1	H	#577	Chemicals and process wastes: spills, leaks, or improper handling or storage
Foundries Or Metal Fabricators	1	H	#577	Solvents and other chemicals: spills, leaks, or improper handling or storage
Industry/Industrial Parks	2	H	#577, #578	Industrial chemicals and metals: spills, leaks, or improper handling or storage
Machine/ Metalworking Shops	1	H	#577	Solvents and metal tailings: spills, leaks, or improper handling

*See Table 2 notes on page 6.

Table 2: Land Use in the Protection Areas (Zones I and II) (cont'd)

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

Activities	Quantity	Threat*	Zone II #	Potential Source of Contamination
Residential				
Fuel Oil Storage (at residences)	75+	M	#577, #578	Fuel oil: spills, leaks, or improper handling
Lawn Care / Gardening	75+	M	#577, #578	Pesticides: over-application or improper storage and disposal
Septic Systems / Cesspools	30+	M	#577, #578	Hazardous chemicals: microbial contaminants, and improper disposal
Miscellaneous				
Aboveground Storage Tanks	2	M	#577	Materials stored in tanks: spills, leaks, or improper handling
Aquatic Wildlife	2	L	#577	Microbial contaminants
Fishing/Boating	2	L	#577	Fuel and other chemical spills, microbial contaminants
Small quantity hazardous waste	1	M	#577	Hazardous materials and waste: spills, leaks or improper handling or storage
Very Small Quantity Hazardous Waste	2	L	#577	Hazardous materials and waste: spills, leaks or improper handling or storage
Oil or Hazardous Material Sites	3	--	#577	Tier Classified Oil or Hazardous Materials Sites are not ranked due to th site-specific character. Individual sites are identified in Appendix B.
Pipeline (Oil or Sewer)	1	M	#577	Oil or sewage: spills or leaks
Stormwater Drains/ Retention Basins	10+	L	#577, #578	Debris, pet waste, and chemicals in stormwater from roads, parking lots, and lawns
Transmission Line Rights-of-Way -	1	L	#577	Corridor maintenance pesticides: over-application or improper handling; construction
Transportation Corridors	1	M	#577	Fuels and other hazardous materials: accidental leaks or spills; pesticides over-application or improper handling

Table 2 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.

Hazardous Materials Storage and Use Recommendations:

- ✓ Educate local businesses on best management practices for protecting water supplies. Distribute the fact sheet "Businesses Protect Drinking Water" available in Appendix C and on www.mass.gov/dep/brp/dws/protect.htm, which provides BMP's for common business issues.
- ✓ Work with local businesses to register those facilities that are unregistered generators of hazardous waste or waste oil. Partnerships between businesses, water suppliers, and communities enhance successful public drinking water protection practices.
- ✓ Educate local businesses on Massachusetts floordrain requirements. See brochure "Industrial Floor Drains" for more information.

5. Presence of Oil or Hazardous Material Contamination Sites – The Zone II #577 has DEP Tier Classified Oil and/or Hazardous Material Release Sites within or near the Zone II. These sites are indicated on the map as Release Tracking Numbers 2-0011456, 2-0000935, and 2-0010389. Refer to the attached map and Appendix B 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, the Town has water supply protection controls, however they have not been reviewed for compliance with DEP's Wellhead Protection regulations 310 CMR 22.21(2). Protection planning protects drinking water by managing the land area that supplies water to a well. A Wellhead Protection Plan coordinates community efforts, identifies protection strategies, establishes a timeframe for implementation, and provides a forum for public participation. There are resources available to help communities develop a plan for protecting drinking water supply wells.

Protection Planning Recommendations:

- ✓ Develop a Wellhead Protection Plan. 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".

Top 5 Reasons to Develop a Local Wellhead Protection Plan

❶ Reduces Risk to Human Health

❷ Cost Effective! Reduces or Eliminates Costs Associated With:

- Increased groundwater monitoring and treatment
- Water supply clean up and remediation
- Replacing a water supply
- Purchasing water

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

❹ Ensures clean drinking water supplies for future generations

❺ 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.

- ✓ Coordinate efforts with local officials to compare local wellhead protection controls with current MA Wellhead Protection Regulations 310 CMR 22.21(2). If they do not meet the current regulations, adopt controls that meet 310 CMR 22.21(2). For more information on DEP land use controls see http://mass.gov /dep/brp/dws/protect.htm.
- ✓ If local controls do not regulate floordrains, be sure to include floordrain controls that meet 310 CMR 22.21(2).
- ✓ Work with town boards to review and provide recommendations on proposed development within your water supply protection areas. To obtain information on build-out analyses for the town, see the Executive Office of Environmental Affairs' community preservation web site, http://commpres.env.state.ma.us/.

Other land uses and activities within the Zone II are listed in Table 2. Refer to Table 2 and Appendix A 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, the system Zone II 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

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Table 3: Current Protection and Recommendations

Protection Measures	Status	Recommendations
Zone I		
Does the Public Water Supplier (PWS) own or control the entire Zone I?	**NO**	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.
Is the Zone I posted with "Public Drinking Water Supply" Signs?	**YES**	Additional economical signs are available from the Northeast Rural Water Association (802) 660-4988.
Is Zone I regularly inspected?	**YES**	Continue daily inspections of drinking water protection areas.
Are water supply-related activities the only activities within the Zone I?	**NO**	Continue monitoring non-water supply activities in Zone Is.
Municipal Controls (Zoning Bylaws, Health Regulations, and General Bylaws)		
Does the municipality have Wellhead Protection Controls that meet 310 CMR 22.21(2)?	**NO**	The Town "Aquifer Protection District" bylaw is being updated to meet DEP's requirements for wellhead protection. Refer to www.state.ma.us/dep/brp/dws/ for model bylaws and health regulations, and current regulations.
Do neighboring communities protect the Zone II areas extending into their communities?	**NO**	Continue to work with neighboring municipalities to include Zone II areas in their wellhead protection controls.
Planning		
Does the PWS have a Wellhead Protection Plan?	**YES**	Update and implement wellhead protection plan. Follow "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 wellhead protection committee?	**NO**	Establish committee; include representatives from citizens' groups, neighboring 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 wellhead protection education?	**NO**	Aim efforts at commercial, industrial and municipal uses within the Zone II.

(Continued from page 7)

through:

- Using the Aquifer Protection Overlay District to actively protect the Zone II.
- Working with the sand and gravel mining operation to purchase Zone I land as it becomes available.

Source Protection Recommendations:
To better protect the sources for the future:

- ✓ Inspect the Zone I regularly, and when feasible, remove any non-water 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 stormwater drainage in your Zone II 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.
- ✓ Develop and implement a Wellhead Protection Plan.

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 C.

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

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:

1. The low permeability of underground water bearing materials in this area significantly reduces the rate of groundwater and potential contaminant flow into the Zone II.
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.

Additional Documents:

To help with source protection efforts, more information is available by request or online at mass.gov/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

APPENDIX A:
REGULATED FACILITIES WITHIN THE WATER SUPPLY PROTECTION AREA

DEP Permitted Facilities

DEP Facility Number	Facility Name	Street Address	Town	Permitted Activity	Activity Class
229288	192 MAIN ST	MULTIPLE SITES	SHREWSBURY	Generator of Hazardous Waste	Very Small Quantity Generator of Waste Oil/PCBs
229288	192 MAIN ST	MULTIPLE SITES	SHREWSBURY	Sewer Connection	Industrial Waste Water to Sewer
137551	WORCESTER SAND & GRAVEL	182 HOLDEN ST	SHREWSBURY	Generator of Hazardous Waste	Small Quantity Generator of Waste Oil/PCBs
137551	WORCESTER SAND & GRAVEL	182 HOLDEN ST	SHREWSBURY	Below Wastewater Regulated	Below Wastewater Regulated
298657	GMS AUTOMOTIVE INC	455 HARTFORD TNPK	SHREWSBURY	Generator of Hazardous Waste	Small Quantity Generator of Hazardous Waste
229288	192 MAIN ST	MULTIPLE SITES	SHREWSBURY	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
131397	WADES AUTO ENTERPRISES	6 BECKET ST	SHREWSBURY	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
137551	WORCESTER SAND & GRAVEL	182 HOLDEN ST	SHREWSBURY	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
37776	LINCOLN AUTO & TRUCK	590 LINCOLN ST	WORCESTER	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
37790	AMERICAN DISCOUNT AUTO PARTS	560 LINCOLN ST	WORCESTER	Generator of Hazardous Waste	Small Quantity Generator of Waste OIL/PCBs
38371	US NAVY MARINE CORPS RESERVE CENTER	640 PLANTATION ST	WORCESTER	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste

DEP Facility Number	Facility Name	Street Address	Town	Permitted Activity	Activity Class
51450	BODY SHOP WORLD BY WAGNER	700 PLANTATION ST	WORCESTER	Generator of Hazardous Waste	Small Quantity Generator of Hazardous Waste
177751	GARREPY PLATERS	722 PLANTATION ST	WORCESTER	Discharge to Sewer or Wastewater	Industrial Wastewater to Sewer
204573	MA NATIONAL GUARD MAINTENANCE SHOP	701 LINCOLN ST	WORCESTER	Generator of Hazardous Waste	Very Small Quantity Generator of Hazardous Waste
215793	BERLYN EXTRUDERS INC	28 BOWDITCH DR	WORCESTER	Generator of Hazardous Waste	Small Quantity Generator of Hazardous Waste
286742	NAVAL MARINE CORPS RESERVE CENTER	640 PLANTATION ST	WORCESTER	Discharge to Sewer or Groundwater	Industrial Wastewater to Sewer
337107	SAINT GOBAIN PERFORMANCE PLASTICS	640 PLANTATION ST	WORCESTER	Plant	RES Application Approved

Underground Storage Tanks

Facility Name	Address	Town	Description	Tank Type	Tank Leak Detection	Capacity (gal)	Contents
MA NATIONAL GUARD MAINTENANCE SHOP	701 LINCOLN ST.	WORCESTER	Federal/ Military	1 WALL	Approved Intertank Monitoring	5000	Diesel

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 B – 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 http://www.state.ma.us/dep/bwsc. You may obtain site -specific information two ways: by using the BWSC Searchable Sites database at http://www.state.ma.us/dep/bwsc/sitelist.htm, 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.

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)

RTN	Release Site Address	Town	Contaminant Type
2-0011456	182 HOLDEN ST	SHREWSBURY	Hazardous Material
2-0000935	601 619 LINCOLN ST	WORCESTER	Oil
2-0000594	GREAT BROOK VALLEY AVE	WORCESTER	Hazardous Material
2-0012929	45 GREAT BROOK VALLEY AVE	SHREWSBURY	Oil
2-0010389	N QUINSIGAMOND AVE	SHREWSBURY	Oil

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