



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

<i>PWS Name</i>	Southwick Water Department
<i>PWS Address</i>	454 College Highway
<i>City/Town</i>	Southwick, MA 01077
<i>PWS ID Number</i>	1279000
<i>Local Contact</i>	Mr. Peter Jakobowski
<i>Phone Number</i>	(413) 569-6772

### 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.

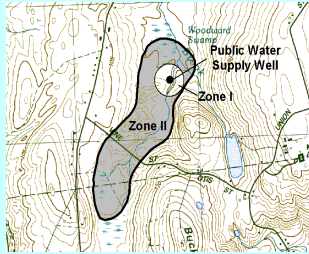
Refer to Table 3 for Recommendations to address potential sources of contamination. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

#### 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

*MA GIS Zone II #: 320*

*Susceptibility: High*

<i>Well Names</i>	<i>Source IDs</i>
Well #1 (Great Brook Well)	1279000-01G

The Town of Southwick is a growing, rural residential community in south western Massachusetts along the Connecticut border. Southwick has recreational activities in the Congamond Lake region and increased pressure in residential, light industry and commercial development. The Southwick Water Department is served by a single source, well #1 (01G). During times of peak demand, water is purchased from the Springfield Water & Sewer Commission system. A separate SWAP report has been completed for the Springfield water system and is attached to this report. The well is located in the northeastern section of Southwick near Feeding Hills Road. The Zone I for the well is a 400 foot radial area and the Zone II recharge area was delineated utilizing empirical data, analytical modeling and geologic mapping. The aquifer is an extensive, very productive, unconfined, sand and gravel, buried valley aquifer; there is no evidence of a confining clay layer in the aquifer. Groundwater flows north to the Westfield River and two other community supplies withdraw from the same aquifer. The source (01G) has an approved maximum daily withdrawal rate of 1.02 million gallons per day (mgd) and a Water Management Act Registration and Permit to withdraw an average, annual daily withdrawal of 0.69 mgd based on historic and projected demand. The well is 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 II.

The well water does not receive treatment at this time. 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.

## Section 2: Land Uses in the Protection Areas

The Zone II for Southwick is a mixture of forest, residential and agricultural 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. Nonconforming activities in Zone I
2. Residential land uses
3. Transportation corridors and right of way
4. Hazardous materials storage and use
5. Agricultural activities
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 area, as seen in Table 2.

**1. Nonconforming Activities in Zone I** – The Zone I for the well is a 400 foot radius around the wellhead. Massachusetts drinking water regulation (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 Southwick Water Department owns or controls the entire Zone I area. Presently, 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 the system's well contains an area previously used for sand and gravel mining.

**Zone I Recommendations:**

- ✓ 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.
- ✓ Control access and keep all new non water supply activities out of the Zone I.

**2. Residential Land Uses** – Approximately 13% of the Zone II contains residential areas with 8% being high density residential development around the lakes. The Town is in the process of installing municipal sewers along the west side of the Zone II area that will eventually include the lakes area. Presently the majority of the area utilizes on-site septic systems. It appears from the proposed plans that most of the Lakes area will be served by municipal sewer. However, the schools are not at this time proposed to be included. 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.
- **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:**

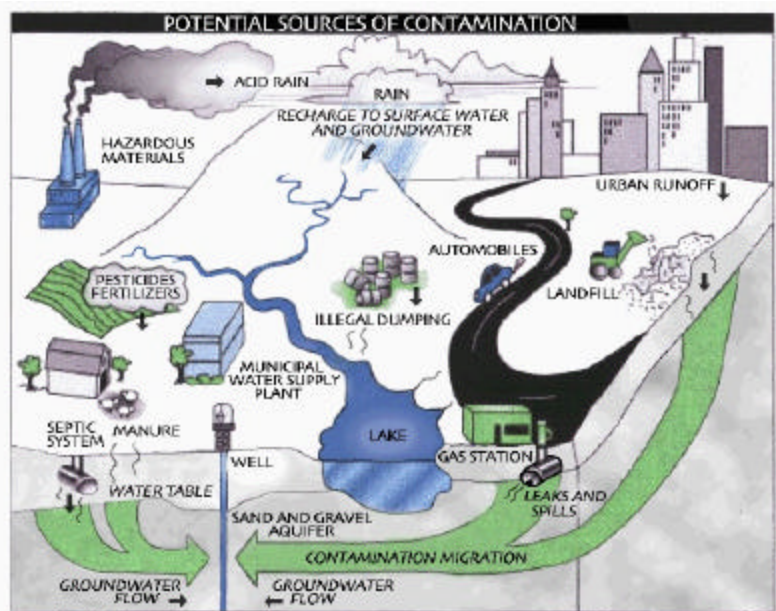
- ✓ Educate residents on best management

### 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.



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](http://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.

**3. Transportation Corridors and Right of Way** - Local roads run 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. De-icing salt, automotive chemicals and other debris on roads are picked up by stormwater and washed into catch basins.

A natural gas right of way also run through the watershed. Normal maintenance of any right of way can introduce contaminants to a water supply through herbicide application for vegetation control. The over-application or improper handling of herbicides on right of ways is a potential source of contamination.

**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 properly cleaned on a regular schedule. Street sweeping reduces the amount of potential contaminants in runoff. For information on DEP's Nonpoint Competitive Grants Program Upcoming Funding Opportunity refer to: <http://www.state.ma.us/dep/brp/mf/mfpubs.htm#wpa>.
- ✓ 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.

- ✓ Notify town officials of potential USDA funding for mitigation and prevention of runoff pollution through the Environmental Quality Incentives Program (EQIP).
- ✓ Storm Drain Stenciling Program - Work with local watershed groups to institute a Storm Drain Stenciling Program. For more information on how to develop a storm drain stenciling program go to <http://www.earthwater-stencils.com>.

**Right of Way Recommendations:**

- ✓ Review the right of way Yearly Operating Plan (YOP) for utilities to ensure best management practices are implemented with regard to vegetation control and that the utility has accurate information regarding the locations of the protection zones. Review the

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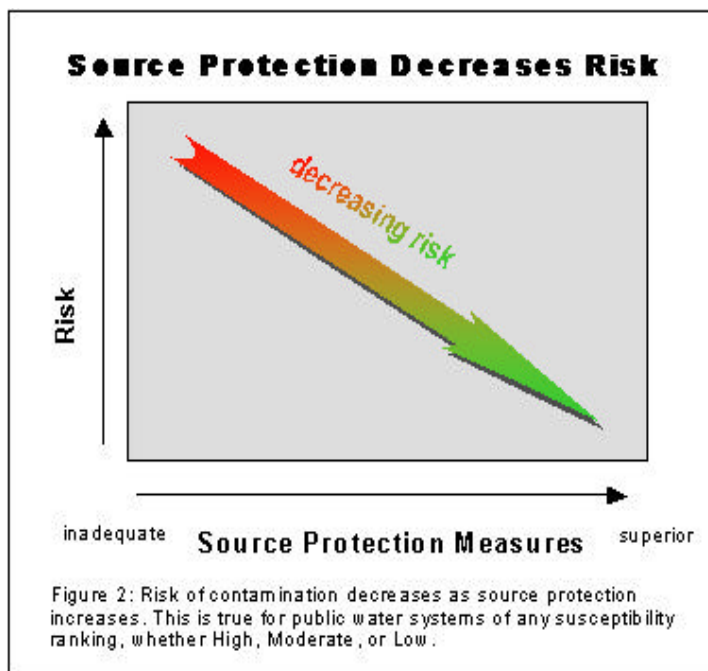
**What are "BMPs?"**

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 Catherine V. Skiba in DEP's Springfield Office at (413) 755-2119 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.





### 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 B: Regulated Facilities within the Water Supply Protection Area

Activities	Quantity	Threat*	Potential Source of Contamination
<b>Agricultural</b>			
Fertilizer Storage or Use	2	M	Fertilizers: leaks, spills, improper handling, or over-application
Livestock Operations	1	M	Manure (microbial contaminants): improper handling
Pesticide Storage or Use	2	H	Pesticides: leaks, spills, improper handling, or over-application
<b>Commercial</b>			
Bus Terminals	1	H	Fuels and maintenance chemicals: spills, leaks, or improper handling.
Sand & Gravel Operation	1	M	Fuels and maintenance chemicals: spills, leaks, or improper handling.
<b>Residential</b>			
Fuel Oil Storage (at residences)	Numerous	M	Fuel oil: spills, leaks, or improper handling
Lawn Care / Gardening	Numerous	M	Pesticides: over-application or improper storage and disposal
Septic Systems / Cesspools	Numerous	M	Hazardous chemicals: microbial contaminants, and improper disposal
<b>Miscellaneous</b>			
Schools	3	M	Laboratory, art, photographic, machine shop, cleaning and other chemicals: spills, leaks, or improper handling or storage
Hazardous Waste Generator	—	M	Note: The Schools and Bus Garage are currently registered hazardous waste generators. The Garage does have an industrial holding tank. Hazardous materials spills, discharges, leaks, or improper handling or storage.

**Notes:**

- 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.
- 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.
- 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.

- ✓ maps the utilities use.
- ✓ Continue current efforts toward working with local emergency response planners. Be sure that local emergency response teams are aware of the protection areas and coordinate Emergency Response Drills.

**4. Hazardous Materials Storage and Use** – The Zone II contains facilities that store or use hazardous materials. Many small businesses, schools, and industries use hazardous materials, produce hazardous waste products, and/or store large quantities of hazardous materials in UST/ASTs. 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.

The schools and bus maintenance facility are served by on-site septic system. The bus maintenance facility is presently permitted for an industrial holding tank. There is no record of the facility being registered as a hazardous waste generator. The schools all utilize on-site septic and there is no record of a separate tank for the laboratory wastewater.

**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 A and on [www.mass.gov/dep/brp/dws/protect.htm](http://www.mass.gov/dep/brp/dws/protect.htm), which provides BMP’s for common business issues.
- ✓ Work with the Board of Health, local businesses and facilities 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 floor drain requirements. See brochure “Industrial Floor Drains” for more information.
- ✓ The USDA has various funding sources for government, non-government organizations and agricultural facilities through programs such as those listed on the USDA web site <http://search.sc.egov.usda.gov/>. If it is needed, funding may be available for the school and bus terminal. Additional information is available on the web site [www.ruraldev.usda.gov](http://www.ruraldev.usda.gov) or call Paul

**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.

D. Geoffroy, Rural Development Manager at the local office in Hadley at 413-585-1000 ex.4.



**5. Agricultural Activities** – There is pastureland on the western edge of the Zone II and cropland on the eastern edge of the Zone II. Pesticides and fertilizers have the potential to contaminate a drinking water source if improperly stored, applied, or disposed. If not contained or applied properly, animal waste from barnyards, manure pits and field application are potential sources of contamination to ground and surface water.

**Agricultural Activities Recommendation:**

- ✓ 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 farm plan to protect water supplies.
- ✓ Commercial facilities may be eligible for funding BMPs through the Department of Food and Agriculture or the NRCS. Contact the NRCS about the Environmental Quality Incentives Program (EQIP).

**6. Protection Planning** – Currently, the Town does have water supply protection controls that meet DEP’s Wellhead Protection regulations 310 CMR 22.21(2). Protection planning protects drinking water by managing the land area that

*(Continued on page 7)*

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".
- ✓ 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 2 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's Zone II contains 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.

#### **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 schools and businesses to ensure the proper storage, handling, and disposal of hazardous materials.
- ✓ 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.
- ✓ Develop and implement a Wellhead Protection Plan.

#### **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](http://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

**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.

**➤ Partner with Local Businesses:**

Since many small businesses and industries use hazardous materials and produce hazardous waste products, it is essential to educate the business community about drinking water protection. Encouraging partnerships between businesses, water suppliers, and communities will enhance successful public drinking water protection practices.

**➤ Educate Residents:**

If managed improperly, household hazardous waste, septic systems, lawn care, and pet waste can all contribute to groundwater contamination. Hazardous materials include automotive wastes, paints, solvents, pesticides, fertilizers, and other substances. If a septic system fails or is not properly maintained, it could be a potential source of microbial contamination. Animal waste is also a source of microbial contamination.

**➤ Provide Outreach to the Community:**

Public education and community outreach ensure the long-term protection of drinking water supplies. Awareness often generates community cooperation and support. Residents and business owners are more likely to change their behavior if they know where the wellhead protection recharge area is located; what types of land uses and activities pose threats; and how their efforts can enhance protection.

**➤ Plan for the Future:**

One of the most effective means of protecting water supplies is local planning, include adoption of local controls to protect land use, regulations related to watersheds and ground water protection. These controls may include health ordinances/regulations, discharge prohibitions, general ordinances, and zoning bylaws that prohibit or control potential sources of contamination within the protection areas.

**➤ Other Funding Sources:**

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 USDA also has various funding sources for government, non-government organizations and agricultural facilities through programs such as those listed on the USDA web site <http://search.sc.egov.usda.gov/nrcs.asp?qu=eqip&ct=NRCS>. One program in particular, the Environmental Quality Incentives Program (EQIP) may be utilized in a variety of projects from DPW stormwater management to farm nutrient management designed to protect surface and groundwater. Review the fact sheet available on line and call the local office (Amherst 413-253-4350) of the NRCS for assistance <http://www.nrcs.usda.gov/programs/farmbill/2002/pdf/EQIPFct.pdf>.

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: when funds are available, each spring DEP posts a new Request for Response for the grant program (RFR).

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. Additional Documents on Source Protection



**Table 3: Current Protection and Recommendations**

<b>Protection Measures</b>	<b>Status</b>	<b>Recommendations</b>
<b>Zone I</b>		
Does the Public Water Supplier (PWS) own or control the entire Zone I?	<b>YES</b>	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?	<b>YES</b>	Additional economical signs are available from the Northeast Rural Water Association (802) 660-4988.
Is Zone I regularly inspected?	<b>YES</b>	Continue daily inspections of drinking water protection areas.
Are water supply-related activities the only activities within the Zone I?	<b>YES</b>	Continue monitoring non-water supply activities in Zone I.
<b>Municipal Controls</b> (Zoning By -laws, Health Regulations, and General By-laws)		
Does the municipality have Wellhead Protection Controls that meet 310 CMR 22.21(2)?	<b>YES</b>	The Town "Aquifer Protection District" bylaw meets DEP's 310 CMR 22.21(2).
Do neighboring communities protect the Zone II areas extending into their communities?	<b>N/A</b>	
<b>Planning</b>		
Does the PWS have a Wellhead Protection Plan?	<b>NO</b>	Southwick does have a bylaw that complies with DEP regulation. Supplement that protection with a wellhead protection plan. Follow "Developing a Local Wellhead Protection Plan" available at: <a href="http://www.state.ma.us/dep/brp/dws/">www.state.ma.us/dep/brp/dws/</a> .
Does the PWS have a formal "Emergency Response Plan" to deal with spills or other emergencies?	<b>YES</b>	Augment plan by developing a joint emergency response plan with fire department, Board of Health, DPW, and local and state emergency officials. Continue the current coordination of emergency response drills with local teams.
Does the municipality have a wellhead protection committee?	<b>NO</b>	Establish committee; include representatives from citizen groups, planning groups, neighboring communities, and the business community.
Does the Board of Health conduct inspections of commercial and industrial activities?	<b>NO</b>	For more guidance see "Hazardous Materials Management: A Community's Guide" at <a href="http://www.state.ma.us/dep/brp/dws/files/hazmat.doc">www.state.ma.us/dep/brp/dws/files/hazmat.doc</a> . Adopt hazardous materials and UIC regulations and conduct inspections of industries in town.
Does the PWS provide wellhead protection education?	<b>YES</b>	Continue current efforts in education.

## APPENDIX B: REGULATED FACILITIES WITHIN THE WATER SUPPLY PROTECTION AREA

### DEP Permitted Facilities

DEP Facility Number	Facility Name	Street Address	Town	Permitted Activity	Activity Class	Facility Description
50494	Powder Mill Middle School	94 Powder Hill Rd	Southwick	Plant	Air Quality Permit Minor	School
211896	School Bus Maintenance Garage	Powder Mill Rd	Southwick	Industrial Wastewater	IWW Holding Tank	Maintenance Garage
378253	Southwick Tolland Regional Schools	80b Powder Mill Rd	Southwick	Handler	Small Quantity Generator Waste Oil/PCBs	Maintenance Garage

### Underground Storage Tanks

Facility Name	Address	Town	Description	Tank Type	Tank Leak Detection	Capacity (gal)	Contents
Saunder's Boat Livery Inc.	120 Congamond Rd	Southwick	Boat Livery	1 Wall	Approved In-Tank Monitor	4000	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 <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/sitellst.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)**

<b>RTN</b>	<b>Release Site Address</b>	<b>Town</b>	<b>Contaminant Type</b>
1-0014428	97 Feeding Hills Road	Southwick	Oil

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