The Town of Ulysses Water Source Protection Plan Committee is working with the New York Rural Water Association (NYRWA) to develop a drinking water source protection plan (DWSP2). The plan will help the Town to protect the quality and quantity of source water for residents and businesses, and to plan for future needs and funding opportunities.

A key initial step is to collect information on our water resources and how they are used. The Town has engaged with RCAP Solutions, a nonprofit community development organization, to conduct the survey at no charge to the Town. All individual responses will remain confidential. The data will be presented only in summary form.

We want to hear from all residents to ensure that a final plan best reflects the needs of our entire community.

Responses are requested by January 21st.

We sincerely appreciate your participation in this important community effort!

Click the Next button below to begin.

Please Note

Your input will help the Town, with assistance from the advisory Water Source Protection Committee, on determining how best to address water quality issues within the Town. Your answers may be used to produce reports, contribute to the Town's Comprehensive Plan update, and other Town water-related activities.

You are asked for your property location which is considered confidential information. While sanctioned by the Town of Ulysses, this survey is being conducted by a third party—the Rural Communities Assistance Partnership (RCAP Solutions) -- that is bound by contract to keep information confidential, to the extent permissible by law. Likewise, the Town and the Water Source Protection Plan Committee are committed to keeping property location information confidential. While all entities involved in this survey will make every effort to keep property location information confidential, there is always some risk of inadvertent disclosure. By taking this survey, you consent to (a) the risk your property location information may accidentally be disclosed by the Town, the Water Source Protection Committee, and/or the third party assisting with the survey, (b) your answers being subject to the disclosure requirements of the New York State Freedom of Information Law if an exception does not otherwise allow the Town to keep your answers confidential, and (c) your answers being subject to disclosure if ordered by a court of law. You further agree to hold the Town of Ulysses harmless for any disclosure of your property location information that was not caused by the Town's gross negligence.

Next

Ulysses Drinking Water Survey **Household Information** What is the street address of your property?* The physical location of your property, not a P.O. Box or mailing address. 1. Do you rent or own the property? Own Rent 2a. How many people living at the property are 18 years or more? 123 2b. How many people living at the property are under 18 years? 123 3. Is the property occupied: Year-round (6 months or more) Seasonally (5 months or less) Not occupied Back Page 2 of 8

Ulysses Drinking Water Survey **Water Source** 4. What is the source of your DRINKING water?* Where does the water that you normally drink at home come from? Select all that apply. Well Spring Rain Water Direct from Pond Stream Cayuga Lake Delivered Municipal Water **Bottled Water** Don't Know 5. What is the source of your HOUSEHOLD (e.g. bathing, cleaning) water?* This is the water you use for household needs other than drinking. Select all that apply. Well Municipal Water Spring Direct from Cayuga Lake Rain Water Pond Stream Delivered **Bottled Water** Don't Know Back Page 3 of 8

About the well If you have a well and you know the following information, please provide actuals or approximates: 6a. How many drilled wells do you have? Any wells you know of on this property, regardless of whether or not they are in use. 10 Reset 6b. How many dug wells do you have? Any wells you know of on this property, regardless of whether or not they are in use. 10 Reset 7a. What is the depth of the well casing (feet)? If unknown, enter "Unknown" 7b. What is the depth of your well (feet)? If unknown, enter "Unknown"

7c. What is the depth to the water in your well (feet)?

If unknown, enter "Unknown"

Saved	
7d. What year was the well constructed? If unknown, enter "unknown"	
8. How far is your well from the nearest septic system?	
Less than 50 feet	
50 - 99 feet	
100 - 200 feet	
Greater than 200 feet	
O Don't Know	
Back Next Page 4 of 8	

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Ulysses Drinking Water Survey **Drinking Water Quantity** Questions about the amount of drinking water available 9. Do you always have enough drinking water? Yes No 11. Has the QUANTITY of your water changed? Has remained the same Increased Decreased Don't know Back Next Page 5 of 8

Drinking Water Quality Questions about the biological, chemical, aesthetic, taste and odor characteristics of your drinking water. 13. Does your untreated water have any of the following problems? Select all that apply. Salt (chloride) Discoloration Iron Sulfur Hardness Bacteria Sediment Radon Bad taste Odor Zebra mussels Nitrates Methane N/A No problems Other (feel free to add details) 14. If you have seasonal problems with water QUALITY in which season do they occur? Select all that apply. Winter Spring Summer Fall N/A No seasonal problems

	ow would you rate the QUALITY of your untreated drinking water
0	Very poor
0	Poor
0	Fair
0	Good
0	Excellent
6. Ha	as the QUALITY of your water changed? Remained the same
6. Ha	ns the QUALITY of your water changed?
6. Ha	as the QUALITY of your water changed? Remained the same
6. Ha	Remained the same Improved

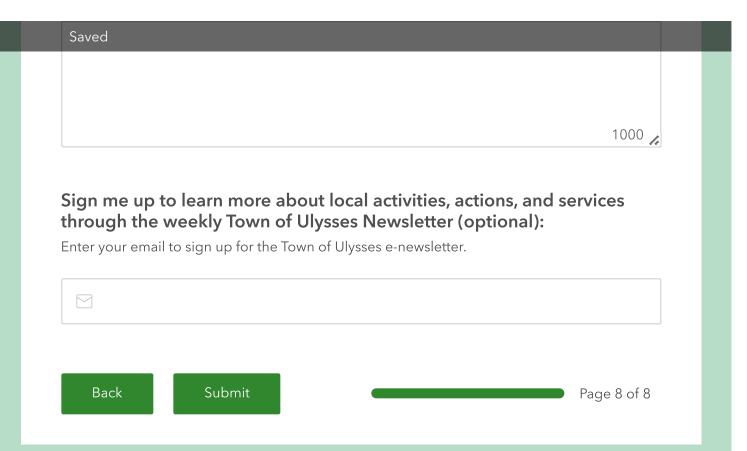
Powered by ArcGIS Survey123

Water Treatment & Expense	
Questions about in-home treatment processes and costs.	<u>▲</u>
18. Have you ever had your water tested?	
O Yes	
O No	
19. Do you treat your drinking water? If water is treated before coming to your home (i.e. municipal water, bottled water, bulk purchase) select "No"	
O Yes	
O No	
20. Do you treat your household water? This is water used for household needs aside from drinking (bathing, cooking, cleaning)	
O Yes	
O No	

Water softener	Carbon filter	Chlorine
UV disinfection	Sediment filter	Reverse osmosis
Zebra mussel protection	Not sure	No treatment system
Other, please descri	ne ne	
2. What is the approxupply?	imate annual cost of mai	
2. What is the approx upply? Vpical annual cost of treatment urchase, etc. Exact values are not required.	imate annual cost of mai	
2. What is the approx upply? vpical annual cost of treatment urchase, etc. xact values are not required.	imate annual cost of mai ent systems, chemicals, filters, reg your best estimate is OK.	gular maintenance, water
2. What is the approxupply? pical annual cost of treatment or treatment of the past 10 years?	imate annual cost of mai	gular maintenance, water

Additional Information 24. WATER USAGE - Your normal water usage includes: Select all that apply Household use Drinking Watering garden and/or lawn Pool Other outdoor Agricultural use use Commercial use Other 25. MUNICIPAL WATER - How interested are you in changing your water source to a municipal water system, if available? Very interested Somewhat interested Neutral Uninterested

28. Any additional information related to your water that you'd like to share?



Powered by ArcGIS Survey123



The Town of Ulysses Water Source Protection Plan Committee (WSPPC) is working to develop a drinking water source protection plan (DWSP2). The plan will help the Town to protect the quality and quantity of source water for residents and businesses, and to plan for future needs and funding opportunities. A key initial step is to collect information on our water resources and how they are used. We want to hear from all residents to ensure that a final plan best reflects the needs of our entire community. The Town has engaged with RCAP Solutions, a nonprofit community development organization, to conduct the survey at no charge to the Town. All individual responses will remain confidential. The data will be presented only in summary form.

The survey is **for Ulysses residents living outside the Village of Trumansburg** and should take less than 15 minutes to complete. **Please fill out online if you can, at https://townofulyssesny.gov** or use the QR code to the right. Paper copies may be obtained from, and returned to, the Town Clerk at town hall, 10 Elm St. Trumansburg, 14886. For more information, contact <u>ulysses.clerk@gmail.com</u> or 607-387-5767 ext 221, or visit https://townofulyssesny.gov/boards/wsppc-source-water-protection-committee/

Please return by November 22, 2023

We sincerely appreciate your participation in this important community effort!

Physical address of yo	our property				
	ss (not P.O. Box) is important for determi	ning conditions, trends, and co	ncerns throughout the town.		
All individual response	es will remain confidential. The data will c	only be presented in summary f	form.		
HOUSEHOLD INFORMA	ATION	DRINKING WATER QUANT	ГІТҮ		
	the property? Rent Own	9. Do you always have e			
2. How many people liv	ving at the property are:, under 18 years		No		
3. Is the property occu		10. If not, the source runs	s dry:		
	rasonally (less than 6 mo./yr)	☐ Some years ☐ Every summer	,		
WATER COURCE		☐ Often during the	summer		
WATER SOURCE	form DDINKING and 2 (Cl. 1. II	☐ Throughout the y			
	f your DRINKING water? (Check all	<i>G</i> ,			
that apply) □ Well	☐ Direct from Cayuga Lake	11. Has the QUANTITY of			
☐ Well	☐ Delivered	Has remained the	e same		
☐ Rainwater		☐ Increased			
□ Pond	☐ Bottled Water	☐ Decreased			
☐ Stream	☐ Don't know	☐ Don't know			
5. What is the water so	ource for the rest of your	12.If the quantity has chan	nged, how many years ago?		
	R (e.g. bathing, cleaning)?				
	☐ Direct from Cayuga Lake	DRINKING WATER QUALIT	ТҮ		
□ Spring	☐ Delivered	13. Does your untreated	water have any of the following		
☐ Rainwater	Municipal water	problems? (Check all th			
☐ Pond	□ Bottled Water	□ Iron `	☐ Bad taste		
☐ Stream	☐ Don't know	☐ Salt (chloride)			
		□ Discoloration	Zebra mussels		
	s, how many of each do you have?	☐ Sulfur	☐ Nitrates		
Dug Drilled	No well	☐ Hardness	☐ Methane		
7. If you have a well an	d know the following information,	☐ Bacteria	☐ Other (feel free to add		
please provide actuals or approximates:		☐ Sediment	details)		
	th of the well (feet):	☐ Radon	□ N/A		
b) What is the dep	th to water in the well	14. If you have seasonal r	oroblems with water QUALITY, in		
(feet):		which season do they occur? (Check all that apply)			
c) Depth of well ca	sing (feet):	☐ Winter	11 //		
	vell dug/drilled in (year):	☐ Spring			
a) Trien was the t	() car).	☐ Summer			
8. How far is your we	Il from the nearest septic system?	☐ Fall			
Less than 50 ft		□ N/A			
☐ 50-99 ft	•				
□ 100 – 200 ft			the QUALITY of your untreated		
☐ Greater than 2	oo ft	water?			
☐ Don't know		□ Very poor			
		☐ Poor			
		□ Fair □ Good			
		☐ Good ☐ Excellent			
		- LYCEIIGH			

16. Has the QUALITY of your water:☐ Remained the same	☐ Commercial use ☐ Other
☐ Improved	
□ Worsened	INTEREST IN MUNICIPAL WATER
 17. If the QUALITY has changed, approximately how many years ago? WATER TREATMENTS AND EXPENSE 18. Have you ever had your water tested? 	 25. How interested are you in changing your water source to a municipal water system if available? Very interested Somewhat interested Neutral Uninterested
☐ Yes ☐ No	26. How much would you be willing to pay for municipal
19. Do you treat your drinking water?	26. How much would you be willing to pay for municipal water service per year? ☐ <\$500 ☐ \$500-\$1000 ☐ \$1000-1500
☐ Yes ☐ No 21.Does your water system include any of the following treatments for your primary drinking water source?	□ >\$1500□ Unwilling to pay□ Unable to pay
(Check all that apply)	CONCERNS ABOUT WATER
□ Water softener □ Carbon filter □ Chlorine □ UV □ Sediment filter □ Reverse osmosis □ Zebra mussel protection □ Not sure □ No treatment system □ Other	 27. Please indicate if you are concerned with any of the following issues affecting your water supply (check all that apply): Oil or gas wells Chemicals or petroleum contamination Manure and fertilizer storage or applications Contamination from septic systems Pesticide storage or application Salt storage or application Drought and / or flood
22. What is the approximate annual cost of maintaining your water supply (treatment, maintenance, water delivery)? \$	 Lack of water supply due to pumping of adjacent wells Harmful Algal Blooms Other Issues:
23. Have you made any major investments in your water infrastructure in the past 10 years (for example, digging a well, rehabilitating a well, installing water lines, purchasing a pump)? If so, what was the approximate cost? \$	
WATER USAGE	28. OPTIONAL: Any additional information related to your water that you'd like to share?
24. Your normal water usage includes (check all that apply): □ Household use □ Drinking □ Watering garden and / or lawn □ Pool	water that you a like to share.
☐ Other outdoor uses ☐ Agricultural	THANK YOU FOR YOUR TIME!
Sign me up to learn more about local activities, actions, and service Name and Email address:	ces through the weekly Town of Ulysses Newsletter.

Please note:

Your input will help the Town, with assistance from the advisory Water Source Protection Committee, on determining how best to address water quality issues within the Town. Your answers may be used to produce reports, contribute to the Town's Comprehensive Plan update, and other Town water-related activities.

You are asked for your property location which is considered confidential information. While sanctioned by the Town of Ulysses, this survey is being conducted by a third party—the Rural Communities Assistance Partnership (RCAP Solutions) – that is bound by contract to keep information confidential, to the extent permissible by law. Likewise, the Town and the Water Source Protection Plan Committee are committed to keeping property location information confidential. While all entities involved in this survey will make every effort to keep property location information confidential, there is always some risk of inadvertent disclosure. By taking this survey, you consent to (a) the risk your property location information may accidentally be disclosed by the Town, the Water Source Protection Committee, and/or the third party assisting with the survey, (b) your answers being subject to the disclosure requirements of the New York State Freedom of Information Law if an exception does not otherwise allow the Town to keep your answers confidential, and (c) your answers being subject to disclosure if ordered by a court of law. You further agree to hold the Town of Ulysses harmless for any disclosure of your property location information that was not caused by the Town's gross negligence.



Water Source Protection Plan Committee Town of Ulysses 10 Elm St. Trumansburg, NY 14886

Ulysses Online
Ulysses Water Survey
Water Survey
Prinking Water survey
The survey
Water Survey



What is the quality and quantity of your drinking water? The Town of Ulysses Water Source Protection Plan Committee is working to develop a town-wide drinking water source protection plan. The plan will help the Town protect the quality and quantity of source water for residents and businesses, and plan for future needs and funding opportunities.

Our first step... collect information. We want to hear from YOU and all Town residents to ensure that the plan reflects the needs of our entire community.

The survey is for **Ulysses residents living outside the Village of Trumansburg** and should take less than 10 minutes to complete. **THANK YOU!**

Use this QR code to complete your survey on your cell phone

OR access online at:

https://arcg.is/1DO1TT0



Paper copies may be obtained from, and returned to, the Town Clerk at Town Hall, 10 Elm St. Trumansburg, 14886. For more information, contact ulysses.clerk@gmail.com or 607-387-5767 ext. 221



NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

INDIVIDUAL WATER SUPPLY WELLS - FACT SHEET #7

Testing, Operation, and Maintenance of Residential Wells

Background

Over one million homes (and several million residents and visitors) throughout New York State are served by individual (residential) water supply (IWS) wells. While public water supplies are regularly tested for a variety of contaminants, inspected, and maintained, these same activities are left to the homeowner in the case of an IWS. To protect the safety and health of residents and visitors, it is *recommended* that IWS owners:

- Regularly test the well water for contaminants;
- Know how the well system operates and be familiar with the function of each system component; and
- Perform regular maintenance on the well, well system components, and the area surrounding the well.

To help ensure a potable and adequate water supply, this fact sheet and the <u>Individual Water Supply Wells – Fact Sheet #7 Checklist</u> describe when to perform recommended testing, the components of an IWS, and how an IWS should be maintained. Homeowners should keep records of all maintenance and testing performed on their wells.

This Fact Sheet focuses on testing, operation, and maintenance of a drilled well, which, when properly located and constructed, is the well type recommended for an IWS (see <u>Appendix 5-B "Standards for Water Wells"</u>). Other types of wells including well points, dug wells, springs and shore wells are more susceptible to drought and contamination from pathogens and chemical spills (see <u>Fact Sheet 5</u>). Surface water supplies (lakes, streams, etc.) should not be used for residential water use because they are more likely to be contaminated (see <u>Surface Water Fact Sheet</u>).

Well Water Testing

- Homeowners should have their water tested whenever a change in color, taste, or odor occurs. Water from a public water supply or NYS certified bottler should be used until test results are obtained.
- **Recommended testing schedule:** Test for coliform bacteria at least annually. Also test for coliform bacteria whenever a well modification or repair occurs, when any change in gastrointestinal health occurs, or when an aesthetic change in the water occurs. Test for other contaminants every three to five years (see p. 2 of the Individual Water Supply Wells Fact Sheet #7 Checklist and Fact Sheet 3 for a list of contaminants). Homeowners should contact their Local Health Department (LHD) to determine whether or not the LHD has its own required testing schedule. LHD contact information can be found at the following link: LHD contacts.
- Steps to take when contaminants are found: If test results confirm the presence of a contaminant above the applicable standard, homeowners should contact their <u>LHD</u> for further guidance. Corrective actions and/or treatment may be necessary.
- How to collect and test samples: Testing of well water should be conducted at a laboratory certified for testing potable water by the Environmental Laboratory Approval Program (ELAP). A list of labs can be found at: www.wadsworth.org/labcert/elap/comm.html or by contacting your LHD. Sample collection procedures will be outlined by the laboratory. It is recommended not to rely on in-home tests performed by water treatment vendors or test kits purchased at stores because these tests do not meet ELAP standards.

Well Operation

How a well system operates: Typical well systems consist of a well, pump, pressure tank, pressure switch, piping, and sometimes a storage tank containing a few hundred gallons of water. When a water fixture is opened, compressed air in the pressure tank forces water from the tank into the piping to the fixture. When the pressure in the tank drops due to the lowered water level, the pressure switch (located on or near the pressure tank) turns the pump on. The pump forces water from the well through the piping to the pressure tank. When the water level in the tank reaches a pre - set level, the pressure switch shuts the pump off.

Well Maintenance

Do not exceed your experience or knowledge when performing well maintenance tasks. If you are unsure about how to perform a task, contact a well driller, plumber, or electrician.

- Maintenance of well: Homeowners should inspect the well casing, well cap, and well area at least annually to make sure that the well is protected from potential sources of contamination (see Figures 1 and 2 and the Individual Water Supply Wells Fact Sheet #7 Checklist for descriptions of which items to inspect). Unacceptable well caps should be replaced with an acceptable cap (see Figure 2 below).
- Maintenance of wellhead area: Homeowners should avoid mixing, using, storing and disposing of pesticides, fertilizers, manure, herbicides, cleaners, degreasers, fuels and other pollutants near the well. These substances should be stored at least 100 feet from the well casing in original, sealed, labeled containers on an impervious surface such as concrete. Dispose of these substances properly and NEVER dispose of them down a well, or into a sink or toilet leading to the septic system.

• Maintenance of Well Components:

- **Well pump** submersible pumps require very little maintenance. Jet pumps and suction pumps should be kept in a dry area free from flooding. They also may occasionally have to be primed.
- **Pressure tank** pressure tanks maintain pressure inside the household plumbing and prevent the well pump from running every time water is needed. This leads to prolonged pump life. Symptoms of an improperly operating pressure tank include the water pump running more frequently, surging water pressure, and taste and odor issues. If you suspect pressure tank problems contact a plumber or well driller. Keep the area around the tank clear for maintenance.
- **Pressure switch** pressure switches ensure that the pressure in the tank remains in a specified range, typically 30 50 psi or 40 60 psi. Pressure switches normally operate on higher than normal electrical voltage. Contact a well driller or electrician for switch maintenance to avoid the risk of electrical shock.
- **Pressure gauge** check to make sure the gauge is operating properly and replace if needed. Normal operating pressure should be between 30 and 60 psi.
- **Electric shutoff box** keep dry and keep the surrounding area clear for maintenance.
- Additional Treatment Devices maintenance should be performed according to the manufacturer.
- Shock chlorination of well If the well has been flooded or well maintenance has been performed, follow the instructions found at: www.health.ny.gov/environmental/water/drinking/boilwater/. Select the tab, "Disinfecting Water at Home," and then follow all instructions under "Well Contamination".





Figure 1: Photo of a properly constructed well.

Figure 2: Photos of acceptable and unacceptable well caps

Copies of this Fact Sheet, Appendix 5-B, and other Fact Sheets can be found at: http://www.health.ny.gov/environmental/water/drinking/regulations/. A list of DEC registered well drillers can be found at: http://www.dec.ny.gov/lands/33317.html. For questions contact:

or

Your Local Health Department (http://www.health.ny.gov/environmental/water/drinking/doh pub contacts map.htm)

Residential Sanitation Section Bureau of Water Supply Protection New York State Department of Health (518) 402-7650 E-mail: bpwsp@health.state.ny.us



NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

INDIVIDUAL WATER SUPPLY WELLS - FACT SHEET #7: CHECKLIST

Checklist for Testing, Operation, and Maintenance of Residential Wells

Click on the following link to open Fact Sheet 7: Fact Sheet 7

The following are *recommended* items that should be checked regularly to ensure that your private well is adequately protected against contamination and is operating properly. Completed checklists should be kept with other well maintenance and testing records. **Do not exceed your experience or knowledge when performing well maintenance tasks. If you are unsure about how to perform a task, contact a well driller, plumber, or electrician.** Please note

that the checklist is continued on the reverse side of this sheet.

Item to	Check Annually	Date	Notes
Check		Checked/By Whom	
	Test water sample for coliform bacteria; sample sent to		
Water	ELAP certified lab:		
Quality	www.wadsworth.org/labcert/elap/comm.html		
	(or contact your LHD)		
	Well casing is free of holes and cracks		
Well Casing	Well casing extends at least 12" above the surrounding		
	land surface		
	Well cap is free of holes and cracks		
	Well cap is securely attached, is bolted on top of the		
	cap, and the vent is screened (use a mirror to check for		
	screened vent under the cap)		
Well Cap	The next time the well cap is removed or replaced,		
	check to ensure the cap is sealed with an O-ring or		
	gasket. Do NOT remove the well cap unless performing		
	maintenance activities (such as shock chlorination of		
	well)		
	Pressure gauges checked to ensure they are operating		
	properly, showing pressure in the tank remains in a		
Pressure	specified range (typically between 30 – 60 psi) Pressure tank has been flushed (if necessary)		-
Tanks	· · · · · · · · · · · · · · · · · · ·		-
	Valves have been exercised to ensure they are operating properly and can be fully opened and closed		
_	Ground surrounding well casing slopes away from the		
Surrounding	casing		
Ground	Ground surrounding well casing is free of pooled water		1
Ground	and debris (leaves, branches, etc.)		
	No household hazardous materials or animal wastes		
	located/stored within 100 feet of well casing		
	Any household hazardous materials present on property		1
	are stored in original, sealed, labeled containers and on		
Property	an impervious surface (not on the lawn)		
	Aboveground oil tanks on property are in good		1
	condition and at low risk for leakage. When refilling oil		
	tanks, someone watches to ensure overflow does not		
	occur		
Septic	Septic system visually inspected to check for breakouts,		
Берис	failures, etc.		

Item to Check	Check - Every Three to Five Years	Date Checked/By Whom	Notes
Water Quality	Well water tested for lead, nitrates/nitrites, turbidity, arsenic, iron, manganese, iron plus manganese, hardness, alkalinity, pH, and sodium (see <u>Fact Sheet 3</u>)		
Septic	Septic tank pumped out/inspected every 2-3 years by a NYSDEC permitted Waste Transporter to avoid failure of septic system and potential contamination of well		
Item to Check	Check - As Specified for Your Equipment	Date Checked/By Whom	Notes
Water Softener	If water softener present, exhausted resin has been replaced or regenerated (if needed)		
Filter	Cartridge filter (if present) checked and replaced if necessary		
Tank	Aeration system storage tank (if present) has been flushed and cleaned		
UV	Lamp in the UV disinfection system (if present) has been replaced (if needed)		
	Housing and lamp in the UV disinfection system (if present) have been cleaned		
Other	Other treatment units maintained on schedule		



NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

INDIVIDUAL WATER SUPPLY WELLS - FACT SHEET #5 SUSCEPTIBLE WATER SOURCES

(Well Points, Dug Wells, Springs and Shore Wells)

Individual (residential) water supplies (IWS) need to provide adequate quantities of water fit for consumption and intended uses. A drilled well, located and constructed in accordance with 10NYCRR Appendix 5-B "Standards for Water Wells", should routinely be the water supply option selected. Well points, dug wells, springs and shore wells are susceptible to contamination from pathogens, spills, etc. and the effects from drought. These water sources may be considered only as a last resort with proper protective measures and, in most cases, will require approval by County or State health department officials through issuance of a specific waiver pursuant to Part 75 of the State Health Department's Administrative Rules and Regulations or via a county sanitary code waiver provision.

SPECIFIC INFORMATION FOR SUSCEPTIBLE WATER SOURCE TYPES

The following types of water sources typically utilize surface water bodies or shallow groundwater sources. Surface waters can contain bacteria, parasites, viruses and possibly other contaminants and shallow groundwater sources are also at significant risk of contamination. These water sources typically have distinguishing construction characteristics which do not comply with Appendix 5-B requirements and would therefore require a specific waiver or other county approval if utilized.

Well Points

A well point (or "driven point") is a special type of well installed using a drive point with a built-in screen fastened to the end of a small diameter pipe (usually 1-1/4 to 2 inches) and without a protective outer casing. Well points are installed by pounding, driving or excavating down to the water table. These wells are usually constructed in shallow aquifers with sandy soils, within 10 to 30 feet of the ground surface and use a suction pump to draw water. Single pipe driven point wells under suction are not in compliance with Appendix 5-B and should be avoided.

Dug Wells

A dug well is constructed by making a large diameter excavation into a shallow aquifer, by hand digging or backhoe and shoring the excavation with large diameter concrete rings. (Shoring constructed with stone or brick are not in compliance with Appendix 5-B and should be avoided.) Dug wells are typically less than 15 feet deep and usually use a suction pump to draw water.

Springs

Springs occur where an aquifer discharges naturally at or near the ground surface, and are broadly classified as either rock or earth springs. It is often difficult to determine the true source of a spring (that is, whether it truly has the natural protection against contamination that a groundwater aquifer typically has.) Even if the source is a good aquifer, it is difficult to develop a collection device (e.g., "spring box") that reliably protects against entry of contaminants under all weather conditions. (The term "spring box" varies, and, depending on its construction, would be equivalent to, and treated the same, as either a spring, well point or shore well.) Increased yield and turbidity during rain events are indications of the source being under the direct influence of surface water.

Shore Wells

"Shore wells" (also known as "infiltration galleries" or "cassion wells") are shallow wells influenced by surface water and are installed near a waterbody in a shallow aquifer that is directly connected to surface water. Shore wells can also be shallow subsurface devices adjacent to a water body, installed to collect water through a covered stone-filled trench or similar arrangement that drains surface water to a "storage" well or tank. Soils surrounding shore wells provide minimal filtration. The risk of contamination of these water sources can be similar to those of surface water sources.

ADDITIONAL CONSIDERATIONS AND RECOMMENDATIONS

The use of susceptible sources as described above is discouraged. A properly installed drilled well should be considered first before considering the use of a susceptible source. As a last resort, when the use of a susceptible source is considered, the following is recommended:

Well Points, Dug Wells and Springs

Where shallow ground water aquifers exist, well points, dug wells and springs can be allowed if they are installed by a certified New York State Department of Environmental Conservation (NYS DEC) registered water well contractor and, in most cases, require issuance of a specific waiver by the LHD or county sanitary code approval as needed. For these sources, installation of appropriate treatment should be considered (e.g., continuous disinfection). For springs, an engineering report, which may include a hydrogeologic study, should also be provided to assure that the water source is satisfactory.

Shore Wells

In cases where satisfactory groundwater cannot be developed according to Appendix 5-B standards, a specific waiver or approvals via county sanitary code can be requested for development of a shore well. All such requests should demonstrate unsatisfactory availability of groundwater via an engineering report or other evidence (such as a hydrogeologic study) deemed acceptable by the approval authority. Since shore wells provide minimal natural filtration of surface water, all requests should include proposed design, treatment (including filtration and continuous disinfection) and an operation, maintenance and monitoring plan developed by a professional engineer. After health department approval, the shore well needs to be installed by a certified NYS DEC registered water well contractor. Inclusion of a deed amendment as a condition on the specific waiver approval should also be considered. A professional engineer should certify that the construction and installation of treatment has been provided according to plans.

WATER QUALITY TESTING

Water quality testing is important for all drinking water wells to identify water characteristics and determine treatment needs. See NYS DOH Fact Sheet #3, "Recommended Residential Water Quality Testing" for a recommended minimum list of parameters to test for. It is recommended to test for coliform bacteria every year and to periodically re-test water quality; this is particularly important for water supplies susceptible to contamination.

COUNTY OR STATE HEALTH DEPARTMENT APPROVAL PROCESS REQUIRING A SPECIFIC WAIVER FROM PART 75 OR A COUNTY SANITARY CODE PROVISION

The local health official (see below) for the geographic area where the property that will utilize the water source is located should be contacted for information about how to apply for a specific waiver or other county sanitary code approval. It is recommended that, before an application for a waiver or other approval is submitted, the local health official be contacted regarding conceptual acceptability of the proposal. A specific waiver or other approval <u>IS NOT</u> intended as a device for routinely approving individual water sources that do not meet state standards. It is intended to provide administrative flexibility to address rare cases when hardships exist and/or other circumstances that make it impractical to meet Appendix 5-B standards.

ADDITIONAL INFORMATION:

Appendix 5-B can be found at:

http://www.health.state.ny.us/environmental/water/drinking/part5/appendix5b.htm

NYSDEC registered well drillers can be found at: http://www.dec.ny.gov/cfmx/extapps/WaterWell/index.cfm

For a copy of Appendix 5-B or other Fact Sheets or questions concerning this Fact Sheet:

Contact Your Local Health Department:
https://www.health.ny.gov/environment-al/water/drinking/doh_pub_contacts_map.htm

or

Residential Sanitation Section Bureau of Water Supply Protection New York State Department of Health (518) 402-7650 or FAX (518) 402-7599 E-mail: bpwsp@health.ny.gov