

This placemat has been developed as part of the Carson City Wellhead Protection Program. One of the most valuable resources for Carson City is our groundwater. Please do all YOU can do to PROTECT it.

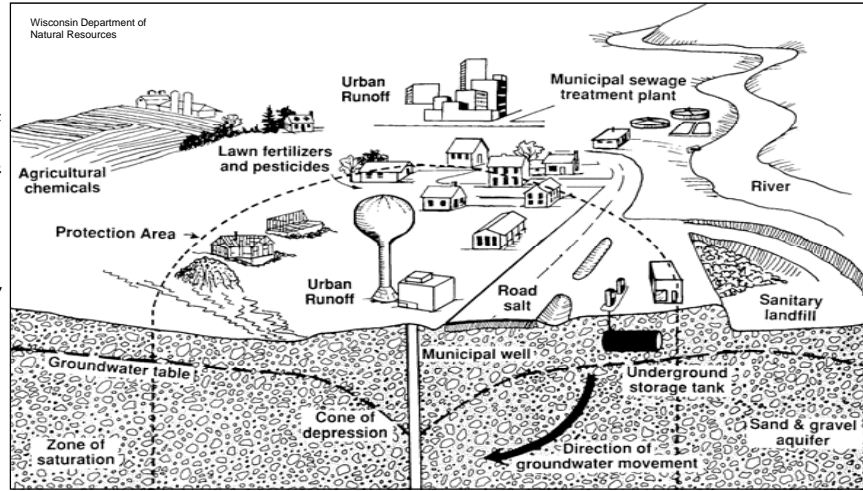
Water is the most basic resource in life. We all need a clean and reliable source of water to survive. Most people in Montcalm County rely on groundwater for their drinking water. Wellhead protection is a strategy to protect the public and private groundwater supplies from pollution that can threaten health and lives.

Carson City's drinking water is regularly tested for a variety of potential contaminants to ensure a safe supply. Carson City's Department of Public Works provides thousands of gallons of safe drinking water each day to the school, homes, churches, and businesses in Carson City. The City accomplishes this task while still maintaining very low water rates for our residents.

For more information or for answers to a question, please contact:

City of Carson City
123 E. Main St.
Carson City, MI 48811
584-3515

*The City of
Carson City*



How Do Wells Become Contaminated?

Wells become contaminated when substances that are harmful to human health get into the groundwater. Water from these wells can be dangerous to drink when the level of pollution rises above health standards. Many of our everyday activities can cause pollution. See the diagram above for examples of groundwater pollution.

** SIMPLE WAYS TO PROTECT YOUR DRINKING WATER **

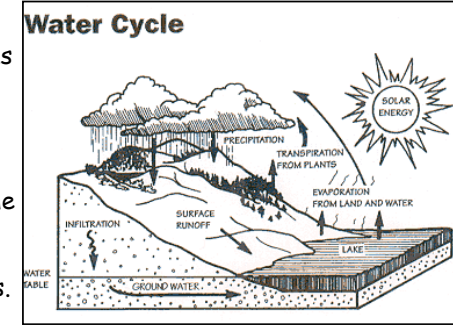
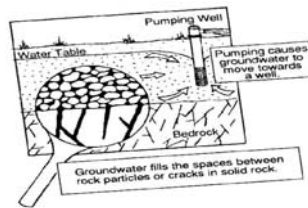
- Do not over-apply fertilizers, pesticides, or herbicides. Follow label directions or consider using less harmful alternatives.
- Have your private well tested annually.
- If you have a septic system, have it pumped every 2-3 years.
- Properly plug abandoned wells on your property.
- Never dump household hazardous chemicals directly on the ground or down the drain. Bring them to a household hazardous waste collection site for proper disposal.
- Consider alternatives to household products that contain hazardous chemicals.
- Recycle used motor oil, brake, and transmission fluid. Do not dump used oil or gasoline on the ground! Many service stations will accept used oil.
- Learn more about Carson City's Wellhead Protection Program!

Can You Find These Words? (Circle each one)

W	E	L	L	S	D	M	P	Q	S	V	F		
L	A	B	O	T	E	P	O	M	L	E	N	T	R
H	Z	T	R	E	I	C	B	C	U	E	D	I	L
C	P	A	R	R	I	F	E	N	L	K	H	I	L
O	N	A	H	Y	J	S	T	M	E	H	I	L	I
T	E	A	C	P	Z	O	C	A	L	T	C	I	L
A	F	Z	E	K	T	R	P	U	N	T	I	Z	E
M	I	S	A	R	I	X	X	N	T	W	G	S	R
N	A	B	O	P	A	I	N	T	S	L	O	P	S
A	F	U	L	D	R	I	N	K	T	E	R	S	S
E	D	S	L	M	O	H	T	J	L	A	M	E	R
P	A	T	B	A	T	O	H	E	R	I	E	L	L
G	K	U	E	F	N	A	T	U	R	E	L	L	L

- | | | |
|------------|---------------|-------------|
| nature | tap | hazardous |
| drink | protect | wells |
| toxic | recycle | leaks |
| fertilizer | water sources | pollute |
| paint | pesticide | safe |
| gasoline | oil | treatment |
| clean | batteries | contaminate |

- In Carson City, what percentage of residents depend on groundwater for their drinking water source?
 - 20%
 - 50%
 - 100%
 - None of the above
- Groundwater is stored in underground formations known as aquifers. A groundwater aquifer is most like:
 - An underground lake
 - An underground river
 - An underground sponge
 - None of the above
- Groundwater is especially susceptible to contamination because:
 - It moves slowly and once contaminants enter they may be there a long time
 - It is very cold, acting as a contaminant preserver
 - It is low in oxygen, causing slow biological and chemical activity and breakdown
 - All of the above
- Sources of groundwater contamination include:
 - Leaking Underground Storage Tank
 - Improperly installed or malfunctioning septic tanks
 - Unlined industrial waste pits, ponds or lagoons
 - All of the above
- How much water does the average household use in a month?
 - 3,000-5,000 gallons
 - 6,000-8,000 gallons
 - 9,000-11,000 gallons
 - 12,000-14,000 gallons
- How much water is used when you flush the toilet?
 - 1-3 gallons
 - 4-7 gallons
 - 8-11 gallons
 - 12-15 gallons
- Which of the following household activities uses the most water?
 - Lawn watering
 - Washing clothes
 - Bathing
 - Washing dishes



Water Wisdom Answer Key

- 1.C-100% of the Carson City residents depend solely on groundwater for their drinking water supply.
- 2.C-An aquifer is a soil formation capable of absorbing and storing water.
- 3.D-All of the reasons listed make groundwater vulnerable to contamination and extremely difficult and expensive to clean once it is polluted. It is very important to keep groundwater free from contamination.
- 4.D-All of these sources are potential contaminants. The types of contaminants from these sources will vary. Septic tanks may leach bacteria and detergent while industrial holding ponds may leach heavy metals, radioactive wastes and other industrial chemicals.
- 5.D-We sometimes drink, launder, cook, clean and shower our way through many more gallons of water than this!
- 6.A-Some toilets are made to use less water while improperly working toilets may use many more gallons of water in a day.
- 7.A-Watering lawns uses a tremendous amount of water. When drought occurs, people are restricted from watering lawns and gardens.

