



keeping your well, well

Maintaining your well



For more information contact:

Thurston County Public Health Department
Environmental Health Division, (360) 867-2673
www.co.thurston.wa.us/health/ehadm
TDD Line for hearing impaired, (360) 867-2603

This worksheet will help you learn how to maintain your well and the property around it by evaluating the risks associated with your actions at home. Maintaining your well will help protect your water supply, and one of your major investments, the value of your home.

For each group check the answer, or answers, closest to your situation. Sometimes more than one answer may apply.

	Low	Risk Med	High
Well Construction and Maintenance			
Do you have a well on or near your property?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Type of water source			
Dug Well			<input type="checkbox"/>
Surface Water			<input type="checkbox"/>
Spring		<input type="checkbox"/>	
Drilled or Driven Well	<input type="checkbox"/>		
Condition of cap			
Well cap loose so small objects or animals can fall into well			<input type="checkbox"/>
Well secured so objects cannot fall or crawl into well (e.g. cap tightly secured: gasket, if present, in good condition, well vented with screened vent).	<input type="checkbox"/>		
Casing height			
Casing under water during floods			<input type="checkbox"/>
Casing extends less than 6 inches above ground surface			<input type="checkbox"/>
Casing extends at least 6 inches above ground surface AND is never under water.	<input type="checkbox"/>		

	Risk
Low	Med High

Location of well

- Water ponds around well during rain storms
- Ground slopes toward well
- Ground slopes away from well casing.

You can answer the next questions by referring to your well drilling report or well log.

Condition of casing

- Unable to determine.
- No casing, or casing appears cracked or damaged.
- No well drilling report, or casing ends above water level.
- Well drilling report indicates casing extends below water level.

Condition of seal

- No well drilling report
- Surface seal ends less than 18 feet below ground **AND** before first confining layer.
- Well drilling report indicates surface seal extends at least 18 feet **OR** beyond first confining layer.

On-Site Sewage (Septic) System

Do you have an on-site sewage (septic) system on or near your property? Yes No

Location

- Septic tank **OR** disposal system (drainfield, seepage pit, cesspool) within 100 feet of well.
- Septic tank **AND** disposal system outside of 100-foot radius.

Lawn, Pasture and Garden Products

Do you use or store insecticides, herbicides or commercial fertilizers on your property? Yes No
 If no, skip to the next question

Use

- Used within 100 feet of well **OR** in excess of label directions. (Remember to apply pesticides only according to label directions. Any other use is illegal.)
- Used no more than once per year **AND** according to label directions.

	Low	Risk Med	High
Not used on property.	<input type="checkbox"/>		
Storage			
Stored in well house			<input type="checkbox"/>
Stored away from well house.		<input type="checkbox"/>	
Small quantities stored in original containers with original labels, at least 100 feet from well house in covered area.	<input type="checkbox"/>		
Mixing			
Within 100-foot radius of well on unpaved area or bare dirt			<input type="checkbox"/>
Within 100-foot radius of well on paved area or with barrier to catch spills (such as tarp).		<input type="checkbox"/>	
More than 100 feet from well on unpaved area or bare dirt.		<input type="checkbox"/>	
More than 100 feet from well on paved area or with barrier to catch spills	<input type="checkbox"/>		
Disposal			
Poured down sink, toilet or drain into septic system.			<input type="checkbox"/>
Dumped in garbage.			<input type="checkbox"/>
Disposed of a HazoHouse		<input type="checkbox"/>	
Completely used up during single application or given to friend to use.	<input type="checkbox"/>		
Livestock or Animal Enclosure			
Are there animals in the well area? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Animals housed within 100-foot radius of well			<input type="checkbox"/>
Animals allowed to roam through well area.		<input type="checkbox"/>	
Animals fenced outside 100-foot radius	<input type="checkbox"/>		
Is there manure in the well area? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Manure piled within 100 feet of well			<input type="checkbox"/>
Manure applied within 100 feet of well		<input type="checkbox"/>	
Home Heating-Oil Tanks			
Do you have an operating, underground home heating-oil tank or farm fueling tank on your property? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Age			
More than 15 years old or unknown			<input type="checkbox"/>
Less than 15 years old.	<input type="checkbox"/>		
Location			
Within 100 feet of well.			<input type="checkbox"/>
Outside 100-foot radius of well.	<input type="checkbox"/>		

	Low	Risk Med	High
Maintenance			
Tank or piping NOT checked for leaks within last year			<input type="checkbox"/>
Tank and piping checked at least annually for leaks	<input type="checkbox"/>		
Are there abandoned home heating-oil tanks on your property or adjoining properties? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Status and Location			
Don't know.			<input type="checkbox"/>
Within 100-foot radius. Fuel in tank.			<input type="checkbox"/>
Within 100-foot radius. Fuel removed.		<input type="checkbox"/>	
In neighborhood. Fuel in tank.		<input type="checkbox"/>	
In neighborhood. Fuel removed.		<input type="checkbox"/>	
Tank removed along with any contaminated soil.	<input type="checkbox"/>		
Home, Auto and Equipment Maintenance			
Do you use paints, stains, paint thinners or other solvents, gasoline, oil or other household hazardous materials on your property? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Do you repair equipment or machinery on your property? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Location of work area			
Within 100 feet of well.			<input type="checkbox"/>
Outside 100-foot radius.		<input type="checkbox"/>	
Type of work area			
Unpaved			<input type="checkbox"/>
Paved	<input type="checkbox"/>		
Storage			
More than 5 gallons of petroleum products or other hazardous materials.			<input type="checkbox"/>
Less than 5 gallons		<input type="checkbox"/>	
No storage on site, used up or shared with someone else.	<input type="checkbox"/>		
Stored in well house.			<input type="checkbox"/>
Stored within 100 feet of well			<input type="checkbox"/>
Stored more than 100 feet from well		<input type="checkbox"/>	
Stored in open area without way to catch spills			<input type="checkbox"/>
Stored in covered area without way to catch spills.			<input type="checkbox"/>
Stored in open area with a second container to catch spills.		<input type="checkbox"/>	
Stored in covered area with a second container to catch spills.	<input type="checkbox"/>		
Disposal of materials (oil, oil filters, antifreeze, solvents, etc.)			
Stored indefinitely			<input type="checkbox"/>

	Risk		
	Low	Med	High
Don't know			<input type="checkbox"/>
Poured down sink, drain or toilet into septic system.			<input type="checkbox"/>
Dumped on ground.			<input type="checkbox"/>
Dumped in garbage.			<input type="checkbox"/>
Oil taken to used-oil collection site for recycling, and other waste taken to HazoHouse for disposal.		<input type="checkbox"/>	
Products completely used up	<input type="checkbox"/>		

Stormwater

Does water collect near your well? Yes No

Water from roof-gutters, downspouts and driveway or other rainwater directed toward well.

No standing water near well. Water from roof-gutters and downspouts drained away from 100-foot protective radius.

Soils

Water may be "cleaned" naturally as it flows through the soil and back into ground water aquifers. However, the amount of contaminants removed by this process depends on the type of soil, the type of contaminant, and the distance the water travels before reaching the water table.

Water moves quickly through coarse soils (such as sand and gravel). These soils remove few contaminants, even if the water table is quite deep. Water moves more slowly through fine-textured soils (such as clay and silt). These soils are much more effective at removing contaminants before they reach ground water.

To find out the type of surface soil and depth to the water table in your area, you may use a variety of sources including:

- Your well drilling report or well log
- Soil Survey of Thurston County, Washington
- Critical Aquifer Area Map
- Your own assessment

If you aren't sure what type of soil you have, assume you fall into the high- or moderate-risk categories.

Coarse-textured soils (sands, gravely sands), regardless of water table depth.

Water table less than 20 feet deep, regardless of soil type.

Medium- to coarse-textured soil (silt loam, loam, sandy loam) **AND** water table between 20 and 50 feet deep.

	Low	Risk Med	High
Medium-to-coarse textured soil (silt loam, loam, sandy loam) AND water table deeper than 50 feet deep.		<input type="checkbox"/>	
Heavy or fine-textured soils where water ponds for long periods AND water table shallower than 50 feet.		<input type="checkbox"/>	
Heavy or fine-textured soils where water ponds for long periods AND water table deeper than 50 feet.	<input type="checkbox"/>		

Sources of Help

Many local agencies and groups provide help and information on keeping your well in good condition and your drinking water safe. Here are a few places to begin:

Well Construction and Maintenance

Proper well construction and maintenance reduce the risk of pollution by sealing the well from anything that might enter it from the surface. If wells are constructed without grout or a sanitary seal, surface water carrying bacteria, pesticides, fertilizer or petroleum products can leak into your drinking water supply.

Your well drilling report and your own visual inspection can give you information about the health of your well. Check your well drilling report to be sure that the casing extends below the water level and that the surface seal extends at least 18 feet deep. Visually inspect your well to be sure that surface water does not pond around your well. Make sure that the well cap has a sanitary seal, so objects cannot fall, crawl or seep into the well.

Help: Thurston County Environmental Health, (360) 867-2673

www.co.thurston.wa.us/health/ehadm/index.html

On-Site Sewage (Septic) Systems

Current health codes require new septic systems and drainfields to be installed outside the 100-foot well protective radius. These requirements lower the risk of sewage leaking into your water supply. If your septic system or drainfield is within 100 feet of your well, test your water more frequently for coliform bacteria.

More information: *Your On-Site Sewage System*

Help: Thurston County Environmental Health Septic Information Line, (360) 867-2669

Lawn, Pasture and Garden Products

Pesticides have been found in some Thurston County wells. Illnesses such as cancer and birth defects have been traced to pesticide exposure. The best way to keep pesticides out of your water supply is not to use them. If you use them occasionally, do not use them within 100 feet of your well. Carefully follow label directions and all federal, state and local pesticide application laws.

Pesticides should be stored in their original containers and clearly labeled. Check the containers to make sure they are not leaking. To be extra safe, store in a second container or plastic leak-proof tray.

Always store pesticides in an area with a leak-proof floor. Never store them in your well house.

More information: Common Sense Gardening Guides

Help: Thurston County Environmental Health, (360) 867-2674

Animal Keeping

Animals should be fenced away from your well. No dog runs or other animal pens should be within 100 feet of your well. Manure piles should be covered and kept away from your well.

Help: Thurston Conservation District, (360) 754-3588 www.thurstoncd.com

Home Heating-Oil Tanks

If you have a home heating-oil tank on your property, you should check the tank and piping regularly for tightness and leaks. Ideally, the tank should be located at least 200 feet downslope from your well. Consider replacing tanks over 30 years old with an aboveground tank.

If you have an abandoned home heating-oil tank, any remaining fuel should be completely removed, since abandoned tanks frequently leak. Better still, the tank should be removed, along with any contaminated soil around it. Even tanks on neighboring properties may pose a threat to the water supply. Ask your neighbors if they regularly check their home heating-oil tank for leaks or have an abandoned tank on their property.

More information: *Residential Heating-Oil Tanks Fact Sheet*

Help: Thurston County Environmental Health, (360) 867-2664

Home, Auto and Equipment Maintenance

You should work on machinery at least 100 feet from your well. It is best to work on a paved surface with absorbent materials, such as kitty litter, nearby to soak up any spills. Oil, solvents or other fluids spilled on the ground can easily reach your water supply, especially if you live on coarse - to moderate - textured soils or the water table is shallow. Just one quart of motor oil can contaminate 250,000 gallons of water.

You should drain oil directly into a sealable, reusable container and take it to a used-oil collection site for recycling. Other materials—such as antifreeze, used oil filters and batteries—should be taken to HazoHouse for safe disposal. They should never be stored in your well house or within 100 feet of your well.

More information: Recycle Your Used Motor Oil

Help: Thurston County Environmental Health, (360) 867-2664