WELLHEAD PROTECTION GUIDE FOR RESIDENTS

Plus

- Finding Lost Wells - Disclosing Wells - and Sealing Abandoned Wells
- Directory of Well Contractors that Locate and Seal Abandoned Wells In Anoka County
April 2, 2012

To Anoka County residents:

Numerous federal and state programs encourage the protection of water resources. The protection of the source of our drinking water is a community priority. The quality and safety of the water that comes from our faucet is a priority for each one of us.

This guide is for people living and working near a public water supply well and within its wellhead protection area. A wellhead protection area is established by, first, determining the "capture zone" of the public water supply well where groundwater is drawn into the well over a specific period of time (e.g. 10 years). Then, the circular capture zone is used to draw the boundaries the Drinking Water Supply Management Area (DWSMA) based on property lines, roads and other landmarks.

By establishing a wellhead protection program, your community (or public water supplier) is further committed to ensuring the safety of your drinking water and meeting the standards of the Minnesota Department of Health. Through your assistance and cooperation we will reduce pollution threats to our drinking water.

*This guide emphasizes the protection of the source of our drinking water, groundwater surrounding our wells. But, all of our water resources must be protected to preserve the quality of life for ourselves and future generations.

For more information about wellhead protection in your community contact your city water utilities director. For updated information on wellhead protection and water resources - check the Know The Flow website at www.KnowTheFlow.us.

Sincerely,

Jim Hafner, City of Blaine
Chairman
Drinking Water Supply Management Areas (DWSMA) in Anoka County

Legend
- Roads
- Source Water Assessment Area
- Drinking Water Supply Management Area
- Lakes

Shapes from MDH website: www.health.state.mn.us/divs/eh/water/swp/maps/index.htm

February 8, 2011

City of Anoka
Section 1

RESIDENT’S GUIDE TO WELLHEAD PROTECTION

This guide is for people living and working near a public water supply well and within its wellhead protection area. A wellhead protection area is the land area surrounding a well that can range a few hundred feet from the well to more than a mile. A wellhead protection area can include a few dozen to over a thousand residential and business properties.

Public water supply wells include city wells, mobile home park wells, school wells, church wells, and restaurant wells. These wells typically pump 500 to 200,000 gallons of water out of the ground each day. Groundwater pollution has been found in wells throughout Minnesota which is the reason wellhead protection is being implemented by your public water supplier.

The safety of public water supplies are monitored by the Anoka County Community Health and Environmental Services Department and the Minnesota Department of Health. Most public water supply wells produce safe drinking water. Some require treatment to remove naturally occurring contaminants (e.g. radium and arsenic) or pollutants (e.g. residential/industrial chemicals, pesticides, etc.).

A wellhead protection area is established by first determining the "capture zone" where groundwater is drawn into the well within ten (10) years. Then, the circular capture zone is used to draw the boundaries of a Drinking Water Supply Management Area (DWSMA) based on property lines, roads and other landmarks.

It’s too late to prevent pollution after it’s in the well. A public water supplier with polluted wells may have to find an alternative source of water for the community. It makes sense to protect the water that we have instead of finding unpolluted water from somewhere else. Residents living near a public water supply well (inside the wellhead protection area) have a special responsibility for the protection of their community’s drinking water supply.

DON’T WORRY, IT’S NOT THAT DIFFICULT. And you have a partner - your public water supplier - to help you and answer your questions.

Wellhead protection is as simple as good stewardship of our natural resources. Most residents are already practicing good habits that prevent land and water pollution. Residents inside a wellhead protection area have another reason. And for their efforts we owe them our gratitude.

The following pages summarize information for all residents to control pollution sources on their property and preserve our natural resources.
Household Hazardous Waste

Many household products contain the same chemicals that are strictly regulated in industrial and commercial businesses. Products that pose a significant hazard to our environment are typically flammable, corrosive, toxic, poisonous, or can cause health problems. The combined volume of these residential hazardous chemicals in a neighborhood can meet or exceed that of a business.

Household hazardous waste becomes pollution only when mishandled. When disposed in garbage, down the drain, or on the ground they can pollute soils, groundwater and nearby drinking water supply wells. Residents are encouraged to choose the least hazardous product (that gets the job done) in a quantity that will be used up. Residents that have extra, unwanted hazardous products must recycle or dispose of the excess in a safe way.

Anoka County residents may drop off their household hazardous wastes at the Household Hazardous Waste (HHW) Facility in Blaine. There is no charge to residents that use this service. Bring identification, such as a driver’s license, as proof of residency.

Businesses, schools and other organizations may NOT use the HHW facility.

Household hazardous waste does not include waste from businesses (institutions or organizations). Anoka County Environmental Services regulates hazardous waste from businesses according to Minnesota laws. For business hazardous waste management information contact the Environmental Services Section at 763-422-7093.

<table>
<thead>
<tr>
<th>Anoka County Household Hazardous Waste Facility*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3230 - 101st Ave NE</td>
</tr>
<tr>
<td>Blaine, MN 55449</td>
</tr>
<tr>
<td>763-323-5730</td>
</tr>
<tr>
<td>3230 – 101ST Ave NE Blaine, MN 55449 763-323-5730</td>
</tr>
<tr>
<td>Open Year-round  Wed. 2 pm – 8 pm  Sat. 9 am – 3 pm  Fri. 9 am – 3 pm</td>
</tr>
<tr>
<td>*Residents only; no businesses, organizations or schools.</td>
</tr>
</tbody>
</table>

What to bring to the HHW Facility:
Aerosol cans that have contents remaining, antifreeze, driveway sealer, fluorescent and HID bulbs and CFLs, gasoline and other fuels, mercury, paint (liquid only), paint stripper, paint thinner, pesticides, used motor oil, used oil filters, varnish, wood preservatives, and other household products that are corrosive, flammable, combustible or poisonous.

What NOT to bring to the HHW Facility
Ammunition, appliances, asbestos, batteries, dried paint, electronics, empty containers, explosives, garbage, radioactive wastes, or tires.

For disposal options of household wastes that are not accepted, check the Anoka County’s recycling and disposal directory, or call Anoka County Integrated Waste Management, 763-323-5730.
Residential Septic Systems

Do not put hazardous chemicals down the drain into septic systems. Septic systems don't treat hazardous chemicals. Instead, they pass through the septic tank and drainfield polluting groundwater.

Onsite septic systems use natural processes to treat typical domestic sewage (e.g. bathroom, kitchen and laundry). We need good treatment of domestic wastewater to remove pollutants before it reaches lakes, rivers and groundwater. Homes that have a septic system must be monitored and maintained to operate well.

A residential septic system typically has 1) a septic tank that collects waste oils and solids; and 2) a drainfield that distributes the liquid portion of wastewater into soils (soil treatment) where natural chemical and biologic processes remove pollutants.

Properly constructed, a septic system will treat and remove pollutants from domestic wastewater. Septic systems are expensive to design and construct but simple to maintain. Properly maintained, a septic system will operate for a long time.

Maintain Your Septic System

Tank Maintenance. The septic tank MUST be periodically cleaned (pumped) to remove sludge and floating scum buildup. A state licensed septic pumper should clean your septic tank. Septic tanks should be cleaned every two years. Never go more than 36 months between cleanings.

Water Use and Overloading. By controlling water use and making wise disposal decisions, you can avoid major problems. Use low-flow water fixtures and repair leaky faucets/toilets to keep water use volumes within your systems capacity. Keep trash (e.g. cigarette butts, personal hygiene products, medications, meat, fats, oils, coffee grounds) out of your septic system.

Feeders, Cleaners and Other Additives. Don't be misled. There is no quick fix or substitute for proper operation and regular maintenance. Do not use starters, feeders, cleaners and other additives.

Household Hazardous Waste. Septic systems are designed to treat typical kitchen and bathroom wastes. Flammable, corrosive, toxic and poisonous materials (household hazardous wastes) should NEVER enter a septic system - it will pollute groundwater. The Anoka County Household Hazardous Waste Facility accepts household hazardous waste (see the Household Hazardous Waste section).

Drainfield Maintenance. Nothing heavier than a rider lawnmower should be driven on any part of the septic system. Snow should not be compacted over the septic system because it drives frost down into the soils freezing the wastewater.

The Anoka County office of the University of Minnesota Extension Service has the Septic System Owner's Guide available and offers an annual Septic System Owner Class for residents. For more information call the Extension Service at 763-755-1280.
Lawn and Garden Chemicals
(adapted from Turf, Lawn and Garden Care: Management Ideas for Wellhead Protection, MDA, Aug. 1, 2001)

Use of lawn and garden chemicals (fertilizers and pesticides) in a wellhead protection area can be a pollution risk to the public well by exceeding recommended application rates and poor timing of application. Plus, you can actually reduce the growth and quality of grass and plants!

When caring for lawns and gardens, there is often the misconception that "if a little is good, a lot must be better." Misunderstanding turf and lawn growth cycles leads to poor timing of fertilizer and pesticide application, wastes chemicals, and pollutes water bodies.

Most lawn and garden chemicals include directions for use to efficiently and effectively apply the chemical without polluting. It's that simple.

For answers about lawn or garden care contact the Anoka County office of the University of Minnesota Extension Service (Extension Service) at 763-755-1280.
- Responsible Use of Lawn Care Pesticides,. U of M Extension, FO-5891-GO, 1995.

Home Fuel (heating) Oil Tanks and Bulk Storage of Chemicals
(adapted from Heating Oil Underground Storage Tanks, MPCA, September 2008)

Aboveground and underground residential storage tanks may be found in many wellhead protection areas. The Minnesota Pollution Control Agency estimates that there are more than 50,000 above and underground storage tanks in Minnesota. A petroleum or chemical storage tank is not a pollution hazard unless a leak or spill releases the chemical.

Commercial and industrial storage tanks are regulated. Residential storage of fuel oil (of less than 1,100 gallons) and other chemicals on residential properties is not regulated to control pollution. However, heating oil tanks contain flammable material that is regulated under the Minnesota Fire Code for fire protection and safety.

A reason homeowners are not regulated for pollution prevention is that the typical home has only small quantities of hazardous materials or wastes. However, the bulk storage of chemicals for a "home business" (e.g. manufacturing kitchen cabinets for sale) can be a hazard if commercial standards of chemical containment and spill cleanup are not employed. Operation of a home business must comply with state law and city ordinances. Contact your city building official for more information.

Home fuel oil tanks are used instead of other natural gas or electric utilities because it is unavailable or more expensive. Homeowners that switch from a fuel oil tank to liquid petroleum (LP gas) or purchase natural gas will often have some fuel oil remaining in the tank. Tanks no longer in use should have the contents emptied so that the eventual decay of a tank doesn't release pollutants into the soils and groundwater.

It's important for tank owners to prevent such tank releases because it may be determined to be a leak site regulated by the Minnesota Pollution Control Agency requiring a cleanup by a contractor. Contact your city building official for more information.
Residential Storm Water Pollution Prevention of Lakes, Rivers and Groundwater

Rain (and snow) deliver clean water to our area. It's up to us to keep it clean as it flows off of our roofs, driveways, streets and parking lots - into ponds, creeks, lakes, rivers, and groundwater.

Homes and residential property typically make up a large part of wellhead protection areas. The potential for pollution from one home cannot compare with a manufacturing plant or many other businesses. However, the combined impact of many homes may be greater.

The following are simple, low cost home practices that protect and improve the quality of water by minimizing pollutants including sediment, nutrients, metals, bacteria, trash, oil and toxins.

- **Fertilizer and Pesticide** - Reduce the need for fertilizer and pesticides by practicing natural lawn care and planting native vegetation. For more information see the Lawn and Chemical section.
- **Litter and Animal Waste Control** - Properly dispose of pet waste and litter.
- **Yard Waste** - Keep yard wastes (e.g. grass, leaves, etc.) from running off into ditches, storm sewers, and ponds by composting or using curbside pickup services. Avoid accumulation of yard waste on driveway and on streets. For more options and the location of compost sites contact Anoka County Integrated Waste Management (763-323-5730).
- **Household Hazardous Wastes** - If you can't use up the flammable, corrosive, toxic, and poisonous chemicals that are collecting in your home - then clean house and drop them off at the Anoka County Household Hazardous Waste Facility (see Household Hazardous Waste section).
- **Alternative Product Use** - Consider using products that are less harmful and methods that reduce pollution of our natural resources.
- **Washing Cars and Equipment** - Use phosphorus-free detergents and non-toxic cleaning products, or use a commercial car wash. (Commercial car wash facilities must comply with operation standards for pollution prevention)
- **Driveway and Sidewalk Cleaning** - Using a hose to wash dirt, salts and oil from driveways and sidewalks into gutters and storm sewers pollutes water bodies and groundwater. Instead, sweep these potential pollutants into the trash that is a managed waste.
- **Driveway Sealcoats** - There are two varieties of driveway sealcoats: 1) asphalt-based and 2) coal tar-based. The coal tar sealant is more durable but has been identified as the source of a cancer-causing class of chemicals called polycyclic aromatic hydrocarbons (PAHs). PAHs have been found in creeks, lakes and fish. If you must seal your driveway, choose an asphalt-based sealcoat.
- **Reduce Sidewalk/Driveway Deicing Chemicals** - Manually clear your sidewalk and driveway before using a deicer. Less deicer is needed and effective in smaller amounts when snow is removed. Store deicer properly to prevent leakage.
- **Emptying Swimming Pools** - High chlorine swimming pool water should be drained across lawn before reaching gutters or storm sewers. The pool water should be held for a week or more without adding chlorine before spreading on lawn.
- **Plants Protect Water Quality** - Pollutants are typically attached to soil particles. Plants (e.g. grass, trees, brush, etc.) keep storm water from washing soil particles into storm sewers, ditches and ponds that collect (sediment) and clog these waterways. Use vegetation to cover and stabilize exposed soil to prevent sediment wash off.
- **Landscaping Options** - Native plants of the northern plains are best suited for the weather and soils found in Anoka County. An option for homeowners is to use creative landscaping that serves your needs and protects water resources. Most yards are a square plot of turf, border to border. Consider native grasses for areas not in active use or a mix of turf and natural grass with wild flowers. Or, install a rain barrel or rain garden. Contact the Anoka Conservation District (763-434-2030; www.AnokaNaturalResources.com) for more landscape and financial assistance options.
Sealing Unused (abandoned) Wells

To protect the quality of deep groundwater - Minnesota law requires all unused wells to be properly sealed by a licensed well contractor. To encourage property owners to identify and seal old unusable wells – Minnesota law requires the disclosure of all wells to the buyer of a property and the Minnesota Department of Health.

Wells become an issue when they are no longer used. All well-pipe will eventually become too decayed to be usable. Decaying wells can be a path for shallow pollution to travel rapidly into deep groundwater.

Inside of wellhead protection areas, unused (abandoned) wells are a big problem because the public well will draw shallow groundwater and pollution down through open, damaged and decayed wells into deep groundwater and the well.

All unused wells must be sealed in Minnesota to protect groundwater. Sealing unused wells near public water supply wells (inside a wellhead protection area) is a high priority for the safety of your community drinking water supply.

See the following section in this guide that addresses locating, disclosing and sealing unused (abandoned) wells.
Section 2
LOCATING ♦ DISCLOSING ♦ SEALING
UNUSED (ABANDONED) WELLS*

*This section provides Anoka County residents, businesses and property owners with information regarding unused (abandoned) wells for the protection of our drinking water resources. Minnesota Statutes (Chap. 103I) establishes the Minnesota Department of Health (MDH) as the authority regarding well construction, maintenance and sealing. For information regarding the Minnesota well management program contact the MDH Well Management Section at 651-201-4600.

It comes as a surprise to many residents and businesses that they have an old well on their property.

The homes and businesses of entire communities (e.g. East Bethel, Ham Lake, Oak Grove, etc.) get their water from a well on their property. That adds up to thousands of wells. In developed communities (e.g. Anoka, Blaine, Fridley, etc.) municipal wells and water mains have replaced thousands of home and business wells. The unused wells are simply forgotten (abandoned).

The typical municipal well withdraws large volumes of groundwater. Old abandoned wells have been identified as a pathway for pollution to reach the groundwater and nearby drinking water supply wells. Old deteriorated wells must be properly sealed to help protect groundwater and drinking water wells from being polluted.

In 1989 the Minnesota Legislature passed the Groundwater Protection Act to strengthen state and local programs that protect groundwater and our health including:
- Requiring the seller of a property to disclose to the buyer (and the MDH) the existence and "status" of all wells on their property (MN Stat., section 103I.235).
- Requiring unused (abandoned) wells be sealed by a state licensed well contractor that will prepare a Well and Boring Sealing Record for the well owner and file with the MDH (MN Stat., section 103I.301).

All abandoned wells in Minnesota are required to be sealed to protect groundwater. Abandoned wells near a public well are a hazard to the drinking water supply of a community (e.g. a city well, mobile home park well, school well, etc). Communities in Anoka County are implementing wellhead protection programs that inform and work with residents, businesses and property owners to protect our drinking water.

Locating Lost Wells on a Property

A well is a drilled, bored or dug hole into the ground to access groundwater. A well pipe (or well casing) extends to an aquifer (e.g. sand, gravel or sandstone saturated with water). A water-supply well provides drinking water or can be used for other purposes such as lawn watering, crop irrigation, livestock watering, commercial/industrial purposes, etc.

A “sand-point,” also known as a “drive-point,” is typically a well with a 1-1/4 to 2-inch diameter steel casing with a pointed well screen attached to the bottom. The well is driven into the ground by pounding down until water is encountered but usually not more than 25 to 30 feet deep. State laws and rules for drilled wells also pertain to sand-point wells. Sand-point wells are typically installed by the property owner who must record the well with the Minnesota Department of Health (MDH).
The depth of house wells in Anoka County typically range from 50 to 200 feet deep. The typical life of a house well is 30 to 50 years before it must be replaced. Properties with a long history may have more than one well. Large commercial/industrial facilities and farm properties are more likely to have multiple wells to serve multiple buildings, barns, irrigation, and other purposes.

**Well Probability Test**
To determine the probability that a well was drilled to serve a constructed building: compare the date that the building was constructed (found in city building or county property tax records) with the date that water service was made available to the property (found in city utility records). Construction of a home or other building would include drilling a well on the property if municipal water (or other public supply) was not available.

**Visual Evidence**
A well search starts with visual inspection of the property for physical evidence (listed below). Abandoned (unused) wells often appear as 1¼ inch to 6-inch diameter steel pipe in or above the ground; the floor of a basement; in a basement offset vault; or a well pit. Newer wells may be made of plastic pipe. Older wells (before 1974 well code) were not uniform construction and often buried. If a building was remodeled or expanded the building may be built over or around the well. A well buried outside the building foundation may be indicated by a water pipe that extends through a basement wall from the well. Look for:

- Well pipe visible above ground, concrete slab, or through basement floor.
- Evidence of a well, such as circular ring in cement or patch in the floor.
- Basement offset (small room off of basement, often under steps).
- Glass block or patch in step or concrete (access for well below).
- Pit in yard or basement (covered with wood, concrete, or steel; well may be at the bottom of pit or the pit may be a dug well).
- Water supply pipe or patched hole through basement floor or basement wall (typically on the same side of the building as a buried well).
- Water system components (i.e., pressure tank, pump, or evidence of former components, like “shadow” lines on floor or wall).
- Electrical components (wiring through basement floor/wall, control box).
- Low spot in yard, circular depression.
- Outbuildings (may be well house).
- Additions, false walls, paneling which may “hide” well.

**Individuals Familiar With Property**
People familiar with the property may be able to point to “lost” wells. Ask:

- Property owner and previous property owners.
- Neighbors, relatives or acquaintances who may know about wells on the property. *Neighboring wells may also give a clue as to well location, depth, and construction.
- Contractors (well drillers, pump installers, plumbers, remodelers) who have worked on property.
- Inspectors (well, plumbing, building, septic system, milk).
- Current or former employees, maintenance personnel.

**Records Search**
Since 1975, well contractors (drillers) and home owners constructing a well were required to file a well construction report with the MDH Well Management Section. Older wells may be recorded in government or other agency documents. Sources of well records include:

- Owner’s records (e.g. well repair bill) or information written on well pressure tank, control box, or well room wall.
- MDH Well Management Section records (651-201-4600; www.health.state.mn.us/divs/eh/wells)
  - County Well Index of construction records at www.health.state.mn.us/divs/eh/cwi/index.html.
- Find out if a sealing record is on file for the property.
Review Well Disclosure Certificates at [www.health.state.mn.us/divs/eh/wells/disclosures](http://www.health.state.mn.us/divs/eh/wells/disclosures).

City and township. Building and utility records may indicate the location of wells on a property. For subdivisions (neighborhood development) the developer may have used a uniform well location and construction process (builder and well contractor) for each house recorded in plat.

Sanborn Fire Insurance maps and Fire Underwriters Inspection Bureau maps (of commercial and industrial properties) available at MN History Center and the U of M Wilson Library.

Old photographs of the property.

Aerial photographs of property available at Anoka County Surveyors office.

County plat books (MN History Center and Anoka County Surveyor).

Topographic maps (shows locations of buildings and roads).

**Well Contractor (Physical) Search**

If a well cannot be located by the property owner, using the methods described above, a search by a well contractor may be necessary. Well contractors (drillers) are experienced and knowledgeable of the common methods used to locate and construct a well as construction codes, materials, equipment and methods have changed over time. The property owner that employs a well contractor to locate a lost well should also consult with the MDH Well Management Section to establish that their effort to locate the well is sufficient - if the well cannot be found. Keep all your records of your search to document costs and effort to locate lost wells.

Equipment to conduct a more detailed well search

- Metal locators and magnetometers (i.e. fluxgate magnetic pipe locator or proton magnetometer).
- Tape measure or "snake" to follow building pipes to well
- Sondes, pipe locators, and tracers.
- Ground-penetrating radar.
- Excavation equipment including shovels, hammers, chisels, and backhoe.
- Small rotary hammer or corer, bits, extensions and vacuum.

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**Well Disclosure for Property Sellers and Buyers**

(adapted from What You Should Know About Wells at Property Transfer, MDH, 10/19/2010 and Well Disclosure - Providing Important Information About Wells on Your Property, MDH, 7/1/2008)

When a real estate property (e.g. home, farm, factory, field) is sold or transferred, Minnesota Statutes section 103I.235, requires the seller to disclose the number and the status of all wells on the property including a sketch map showing the location of each well. For the disclosure, the status of a well can only be: “in use,” “not in use,” or “sealed.”

If the seller does not disclose a known well, or the seller does not properly disclose the known status of a well to the buyer, the seller may be liable to the buyer for costs related to sealing the well and reasonable attorney fees if an action against the seller is commenced within six years after the closing of the sale of the property.

If there is known to be a well on the property, but the well location is not known, a reasonable effort must be made to find the well. First, check with the MDH to see if there is a well sealing record. If the well has been properly sealed and recorded, it is not necessary to excavate and locate that well. However, if there is no documentation that the well has been properly sealed, the property owner should search for the well (see Locating Lost Well on a Property, above).

If an unused and unsealed well is found, it must be put in use or properly sealed, as described in Sealing Unused Wells (below). If search efforts are unsuccessful, contact the MDH to discuss the procedures and conditions for obtaining a variance from the well sealing requirements.
Sealing Unused Wells
(adapted from Minnesota Department of Health fact sheet, 11/20/2008)

By law, a well must be sealed if: 1) the well is not in use, and does not have an MDH maintenance permit, 2) the well is contaminated, 3) the well has been improperly sealed in the past, 4) the well threatens the quality of the groundwater, or 5) the well otherwise poses a threat to health or safety.

A well used only to water your lawn is "in use." Minnesota laws do not require a well which is in use to be sealed. Your well is considered to be “in use” if you use it on a regular (seasonal) basis. If you sell or transfer the property, the well will have to be disclosed to the buyer at that time.

**Only a licensed well contractor may seal a well.** *Don’t try to seal a well yourself.* Licensed well contractors have the necessary equipment and expertise to seal your well properly. Most important, the contractor will prepare and file the necessary records with the MDH that prove you have met your obligation to properly seal the well according to law.

Licensed well contractors are found in the Yellow Pages under *Well Drilling and Service.* The MDH has a list of licensed contractors on their web site: www.health.state.mn.us/divs/eh/wells/lwc. The Anoka County Municipal Wellhead Protection Group has developed a directory of well contractors in Anoka County and neighboring counties that perform well locating and sealing services. See the Directory of Well Contractors that locate and seal abandoned wells at the end of this section.

**How a well is sealed.** Before sealing the well, the contractor will remove any pumping equipment that may still be in place and remove any debris or other obstructions from the well. The well is then sealed by preparing and pumping an approved grout mixture from bottom to the top. The MDH Well Management Section will monitor the process with the well contractor and verify that the well is properly sealed according to the Minnesota Well Code (MN Rule 4725).

When the job is done, the contractor will submit a *Well and Boring Sealing Record* to you and the MDH. Keep it in a safe place. It provides proof that the well has been properly sealed, and no longer poses a hazard.

**The cost of sealing a well** can vary considerably. For shallow, small diameter wells -- like those found at some homes and many lake cabins -- the cost typically ranges from $400 to $900. Deeper, larger wells will cost more to seal. Access to the well, special geological conditions, debris in the well, and depth and diameter of the well will affect the cost of well sealing. Also, if a contractor is already on the site drilling a new well, the cost of sealing an old well will often be less because a special trip to the site is avoided. The same is true when people get together and arrange to have a number of old wells in a neighborhood sealed at the same time. It is always a good idea to get several estimates on costs. Financial assistance may be available to property owners to seal abandoned wells. See the list of financial services at the end of this section.

For abandoned wells within a wellhead protection area, there may be targeted financial assistance to seal the well and protect the community water system. Contact the Wellhead Protection Manager (or utilities director) in your community.

**If you have any questions,** please contact the well specialist at the metro office of the MDH Well Management Section (651-201-4600) or speak to a licensed well contractor.
Directory of Area Water Well Contractors*
(that provides water well locating and sealing services in Anoka County)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Phone</th>
<th>Contact</th>
<th>City</th>
<th>Services</th>
<th>Locates Lost Wells</th>
<th>Seals Wells</th>
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<tbody>
<tr>
<td>Art Torgerson and Son Well Co</td>
<td>763-434-6180</td>
<td>Gene Torgerson</td>
<td>East Bethel</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<tr>
<td>Barott Drilling Services, Inc.</td>
<td>651-484-0198</td>
<td>Bradley Barott</td>
<td>Lino Lakes</td>
<td>Y</td>
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<td>Y</td>
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<tr>
<td>Bastian Well Services Inc.</td>
<td>612-282-7067</td>
<td>William Bastian</td>
<td>Andover</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Malenke Water Services</td>
<td>763-493-3650</td>
<td>Myron Malenke</td>
<td>Blaine</td>
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<td>Y</td>
<td>Y</td>
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<td>Mork Well Co., Inc.</td>
<td>763-753-2530</td>
<td>Jacque Danielson</td>
<td>Anoka</td>
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<td>Y</td>
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<td>George Johnson Well Drilling</td>
<td>651-257-2510</td>
<td>George W. Johnson</td>
<td>Chicago City</td>
<td>Y</td>
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<td>Y</td>
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<td>Husnik Well Drilling</td>
<td>651-462-1957</td>
<td>Mike Husnik</td>
<td>Stacy</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<td>Zuercher Well Drilling, Inc.</td>
<td>651-674-5939</td>
<td>Andy Zuercher</td>
<td>North Branch</td>
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<td>Associated Well Drillers Inc.</td>
<td>952-941-1530</td>
<td>M. Cody Schultz</td>
<td>Eden Prairie</td>
<td>Y</td>
<td>Y</td>
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</tr>
<tr>
<td>Bergerson Caswell Inc.</td>
<td>763-479-3121</td>
<td>Mark Klein</td>
<td>Maple Plain</td>
<td>Y</td>
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<tr>
<td>Don Stodola Well Drilling, Inc.</td>
<td>952-446-9355</td>
<td>Mark Stodola</td>
<td>St. Bonifacius</td>
<td>Y</td>
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<tr>
<td>Ingleside Engineering and Const.</td>
<td>763-479-1869</td>
<td>Brian Van Beusekom</td>
<td>Loretto</td>
<td>Y</td>
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<tr>
<td>McAlpine Well Drilling of Dayton</td>
<td>763-428-2252</td>
<td>Tim McAlpine</td>
<td>Dayton</td>
<td>Y</td>
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<tr>
<td>TL Stevens Well Co., Inc.</td>
<td>763-479-2272</td>
<td>Joe Stevens</td>
<td>Maple Plain</td>
<td>Y</td>
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<tr>
<td>Ace Pump &amp; Well</td>
<td>763-689-3040</td>
<td>Gary Edblad</td>
<td>Stanchfield</td>
<td>Y</td>
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<tr>
<td>Johnson Bros. Well Drilling Co.</td>
<td>651-484-2859</td>
<td>John Johnson</td>
<td>St. Paul</td>
<td>Y</td>
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<tr>
<td>Keys Well Drilling Co.</td>
<td>651-646-7871</td>
<td>Doug Keys</td>
<td>St. Paul</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<tr>
<td>Able Well Drilling</td>
<td>763-274-2604</td>
<td>Scott Thompson</td>
<td>Elk River</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Aqua Plus Inc.</td>
<td>612-240-3900</td>
<td>Bill Canty</td>
<td>Elk River</td>
<td>Y</td>
<td>Y</td>
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<td>Bjorklund Co., Inc.</td>
<td>763-360-1221</td>
<td>Steven Bjorklund</td>
<td>Becker</td>
<td>Y</td>
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<td>EH Renner and Sons, Inc.</td>
<td>763-427-6100</td>
<td>Roger Renner</td>
<td>Elk River</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>JA McAlpine Well Drilling, Inc.</td>
<td>763-370-3547</td>
<td>John McAlpine</td>
<td>Princeton</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Macs Well and Pump Service</td>
<td>763-441-2862</td>
<td>Dennis McAlpine</td>
<td>Elk River</td>
<td>Y</td>
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<tr>
<td>McCullough and Sons, Inc.</td>
<td>651-464-3939</td>
<td>David McCullough</td>
<td>Forest Lake</td>
<td>Y</td>
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<td>Salverda Well Co.</td>
<td>651-464-2876</td>
<td>William Salverda</td>
<td>Forest Lake</td>
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<tr>
<td>Sampson Brothers Well Co.</td>
<td>651-430-0193</td>
<td>Thomas Gallagher</td>
<td>Hugo</td>
<td>Y</td>
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</table>
Directory of Water Well Contractors* (continued)
(that provides water well locating and sealing services in Anoka County)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Phone</th>
<th>Contact</th>
<th>City</th>
<th>Services Anoka Co.</th>
<th>Locates Lost Wells</th>
<th>Seals Wells</th>
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<tr>
<td>Alberg Water Services, Inc.</td>
<td>763-263-1800</td>
<td>Steve Alberg</td>
<td>Annandale</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>M Praught Drilling, Inc.</td>
<td>763-682-3092</td>
<td>Michael Praught</td>
<td>Buffalo</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Mattson Well Co.</td>
<td>320-543-2441</td>
<td>Kent Mattson</td>
<td>Howard Lake</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>MJR Well and Pump, Inc.</td>
<td>320-274-2838</td>
<td>Mike Rivers</td>
<td>Annandale</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Motzko Well Drilling</td>
<td>952-955-2543</td>
<td>Ron Motzko</td>
<td>Delano</td>
<td>Y</td>
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</tbody>
</table>

*The listed well contractors are located in Anoka County and adjacent counties (Chisago, Hennepin, Isanti, Ramsey, Sherburne, Washington and Wright). The result of a survey of well contractors that locate and seal wells is indicated in the last columns of the table.

For more information on well contractors licensed in Minnesota contact the MDH Well Management Section at 651-201-4600 or visit the MDH website at: [http://www.health.state.mn.us/divs/eh/wells/index.html](http://www.health.state.mn.us/divs/eh/wells/index.html)

Jan. 31, 2012