

What is the procedure for locating an Abandoned Well on My Property?

A simple look around may identify an abandoned well. The most obvious evidence of an abandoned well is a pipe sticking out of the ground. Typically, a well casing will be a metal pipe that is 1 1/4 to 6 inches in diameter. A small concrete slab or a manhole cover may be the sign of a pit where an abandoned well is located. A ring of rocks, bricks, or concrete 12 to 36 inches or more in diameter may be a sign of a dug well. Windmills are often located over abandoned wells; an old shed may be an old well house. Also, a broken or inoperative hand pump may be connected to a well that should be plugged.

Some abandoned wells may be more difficult to identify. Many are hidden among weeds or patches of brush. A depression in the ground may occur where an old well was buried. A wet area may indicate that a flowing well was never properly plugged.

If you know or suspect you have an abandoned well please contact Steve Mince at the City of Durand at (989) 288-3113 Ext. 107

To help you determine if you have an abandoned well on your property, you may wish to consult:

- * Former property owners or neighbors, who may remember where a well was located;
- * Old photographs, which may show windmills, sheds, houses, or other locations where old wells might be found;
- * Well drillers, who may remember (or have records of) where they drilled a well that is no longer being used;
- * Fire insurance plan drawings, which may contain information about old wells;
- * Your local health department or public water utility may have records of wells located in your area or other information associated with water line extension projects.

What Should I Do If My Home Was Connected to the City of Durand Water System After the Home Was Constructed?

* Contact Steve Mince at (989) 288-3113 Ext. 107

Who Can I Contact for Additional Information on Abandoned Well Management Programs?

* Steve Mince, Director of Public Works and Utilities, City of Durand at (989) 288-3113 Ext. 107 or smince@durandmi.com

* The Shiawassee County Department of Environmental Health at (989) 743-2390

* The Michigan Department of Environmental Quality, Abandoned Well Management Program at (517) 335-9322



CITY OF DURAND



ABANDONED WELL MANAGEMENT PROGRAM IN COOPERATION WITH

 Department of
Environmental Quality



The City of Durand was awarded an Abandoned Well Management (AWM) Grant on June 23, 2005. The AWM grant provides state funds in the amount of \$45,000.00 dollars for locating and plugging abandoned water wells within the City of Durand's well fields. This grant requires the City of Durand to provide matching funds in the amount of 25% for a total project budget of \$60,000.00. Abandoned wells plugged through this program will be done so **at no cost to the property owner.**

What Is An Abandoned Well?

An abandoned well is a well that is no longer in use or that is in such disrepair that groundwater can no longer be obtained from it. Wells that are contaminated and pose a health risk also meet Michigan's legal definition of an abandoned well.

No one knows exactly how many abandoned wells there are in Michigan, but experts estimate that there may be more than one million. Each year, many wells are abandoned when they are replaced with new wells or when homes are connected to community water systems. An abandoned well that is not plugged, or that is plugged improperly, is a hazard to the health and safety of the people living around it.

What Problems Do Abandoned Wells Present?

* They are a public safety hazard. People (especially children) and small animals may be injured or killed by falling into wells that are left open.



6-year old child in 10 inch PVC pipe

* They are a health hazard because they serve as potential routes for groundwater contamination. Many of these wells are poorly constructed or badly deteriorated, and can allow runoff water (carrying bacteria, sediment, fertilizer, pesticides and other chemicals) to flow directly down into groundwater. This bypasses the natural filtering and degradation processes that can take place as these materials move through the soil.

* They may allow contaminated or poor quality water to move between aquifers. An abandoned well that connects two water-bearing geologic formations (aquifers) of different quality may allow lower-quality water to migrate into and degrade a higher-quality aquifer.

* They may lead to unnecessary waste of water (if the abandoned well is an artesian or flowing well).

Why Must Abandoned Wells Be Plugged?

Merely capping an abandoned well is not enough to prevent it from becoming a problem. In order to protect the health and safety of the people living near them, these wells must be properly plugged (or sealed) soon after abandonment.

You should realize that you are required by state law to have your unused well(s) properly plugged. Protecting the quality of our ground water by having your old well(s) properly plugged is a wise investment!

You should also be aware that you may be held potentially liable under laws guiding Michigan's cleanup program (Part 201, PA 451 of 1994) if groundwater contamination is shown to have been caused by your abandoned well.

What Types of Wells Are We Talking About?

There are three types of water wells used in Michigan, and the recommended plugging procedures differ for each type of well. Thus it is important for you to know the type of abandoned well you have prior to plugging. The three types of wells are:

Driven wells - consist of a pointed well screen attached to a 1 1/4 or 2 inch steel pipe driven into the ground, generally to a depth of 30 feet or less.

Dug wells - large diameter wells (12 inches or greater) usually excavated into shallow aquifers, with the well bore supported by stone, brick, concrete, tile or other curbing material.

Drilled wells - are generally deeper than 30 feet, cased with 2 to 6 inch steel pipe or 5-inch plastic pipe. When plugging a drilled well, it is important to know whether it is a rock well or a sand/gravel (screened) well.

Procedures Common to the Plugging of All Wells in Michigan

Though the particular method to be used for plugging a well depends upon the type of well and the existing geological conditions, several steps are common to the plugging of all abandoned wells:

- 1) All pumping equipment and pipes will be removed.
- 2) Well will be measured to determine the volume of plugging material needed
- 3) Well will be plugged using Michigan Department of Environmental Quality plugging procedures.
- 4) Area of well will be returned to its original condition.
- 5) An abandoned well plugging record will be filed with Shiawassee County and the State of Michigan.

How Much Will Plugging My Abandoned Well Cost?

Costs vary depending on the well depth, casing diameter and the amount of plugging material used. A shallow driven well may be plugged for as little as \$50. The average cost for plugging a well in Michigan is approximately \$400. Since an unplugged abandoned well can contaminate your water supply as well as the city's, **all costs will be paid by the City of Durand and the Michigan Department of Environmental Quality through the Abandoned Well Management Program.**