

Whereas Tincum Township has recognized through enactment of a Groundwater Ordinance a decade ago the need to manage its limited groundwater resource, and

Whereas the township has participated in the creation of the inter-municipal Bridgeton-Nockamixon-Tincum Groundwater Management Committee recognizing that groundwater does not respect municipal boundaries , and

Whereas the general public is becoming aware of the limited availability of fresh clean water essential to the health, welfare and safety of their communities, and

Whereas the National Groundwater Association is promoting a nationwide awareness of the safe clean and available potable water,

Therefore Tincum Township designates September 14th 2010 as

Protect Your Groundwater Day¹

1 See Web Site -<http://www.ngwa.org>

Everyone can and should do something to protect groundwater. Why? We all have a stake in maintaining its quality and quantity.

- For starters, [95 percent](#) of all available freshwater comes from aquifers underground. Being a good steward of groundwater just makes sense.
- Not only that, most [surface water bodies are connected to groundwater](#) so how you impact groundwater matters.
- If you [own a well](#) to provide water for your family, farm, or business, groundwater protection is doubly important. As a well owner, you are the manager of your own water system. Protecting groundwater will help reduce risks to your water supply.

Groundwater protection

There are two fundamental categories of groundwater protection:

- Keeping it safe from [contamination](#)
- [Using it wisely](#) by not wasting it.

Before examining what you can do to protect groundwater, however, you should know that sometimes the quality and safety of groundwater is affected by substances that occur naturally in the environment.

Naturally occurring contamination

The chemistry of the groundwater flowing into a well reflects what's in the environment. If the natural quality of groundwater to be used for human consumption presents a health risk, water treatment will be necessary.

Examples of naturally occurring substances that can present health risk are:

- Microorganisms (i.e., [bacteria](#), viruses, and parasites; these tend to be more common in shallow groundwater)
- [Radionuclides](#) (i.e., radium, [radon](#), and uranium)
- Heavy metals (i.e., [arsenic](#), cadmium, chromium, lead, and selenium).

Public water systems are required to treat drinking water to [federal quality standards](#). However, it is up to [private well owners](#) to make sure their water is safe.

Contamination caused by human activities

Human activities can pollute groundwater, and this is where every person can help protect groundwater — both in terms of groundwater quality and quantity.

Some common human causes of groundwater contamination are:

- Improper storage or disposal of hazardous substances
- Improper use of fertilizers, animal manures, herbicides, insecticides, and pesticides
- Chemical spills
- Improperly built and/or maintained [septic systems](#)
- Improperly [abandoned wells](#) (these include water wells, groundwater monitoring wells, and wells used in cleaning contaminated groundwater)
- Poorly sited or constructed water wells.

An emerging concern in recent years is the occurrence of pharmaceuticals and personal care products

in water. Much research remains to be done to assess the health risks of trace amounts of these items. Nevertheless, [disposal strategies](#) for these substances are increasingly being advocated.

Water conservation

Americans are the largest water users, per capita, in the world. In terms of groundwater, Americans use [79.6 billion gallons per day](#) — the equivalent of 2,923 12-oz. cans for every man, woman, and child in the nation.

[Agricultural irrigation](#) is far and away the largest user of groundwater in America at 53.5 billion gallons a day followed by public use via public water systems or private household wells at a combined total of 18.3 billion gallons per day. More [efficient use](#) of water in either of these areas could save a huge amount.

At the household level, the greatest amount of water used inside the home occurs in the bathroom. The remainder of indoor water use is divided between clothes washing and kitchen use, including dish washing, according to the U.S. EPA.

Depending on where in the country you live, outdoor water use can vary widely.

If you want to get an ever better idea how much water you use, find out your “water footprint” by [calculating](#) the amount of water it takes to produce some of the food you consume.

ACT — acknowledge, consider, take action

On Protect Your Groundwater Day, NGWA urges you to ACT. Use this day to begin doing your part for protecting one of our most important natural resources — groundwater!

1. Acknowledge the causes of preventable groundwater contamination —

Everyone

- There are [hazardous substances](#) common to households
- Most household [water use](#) occurs in a few areas around the home.

If you own a water well

- Wellheads should be a [safe distance](#) from potential contamination
- [Septic system](#) malfunctions can pollute groundwater
- Poorly constructed or maintained wells can facilitate contamination
- Improperly [abandoned wells](#) can lead to groundwater contamination ([read related article](#)).

Everyone

- What specific [hazardous substances](#) are in and around your home?
- [Where](#) do you and your family use the most water?

If you own a water well

- Is your wellhead a [safe distance](#) from possible contamination?
- Is your [well/septic system](#) due for an inspection?
- Are there any [abandoned wells](#) on your property?

3. Take action to prevent groundwater contamination —

Everyone

When it comes to hazardous household substances:

- Store them properly in a secure place
- Use them according to the manufacturer's recommendations
- Dispose of them safely.

When it comes to water conservation:

- [Modify your water use](#) (more water saving tips)
- Install a [water-saving device](#).

If you own a water well

- [Move possible contamination sources](#) a safe distance from the wellhead
- Get current on your [septic system](#) inspection and cleaning
- Get your [annual water well system inspection](#)
- Properly [decommission any abandoned wells](#) using a professional.