Potential Impacts on YOUR Source of Drinking Water

Agriculture

Agriculture practices, such as fertilizer or herbicide and pesticide storage and handling, can impact ground water sources. Additionally, livestock yards and their associated wastes and agricultural drainage wells also can contribute to ground water contamination if not properly managed.

What you can do:
For more information, call your Ohio State University County Extension Office or see its website at http://ohioline.ag.ohio-state.edu/county/index.html.

Septic Systems

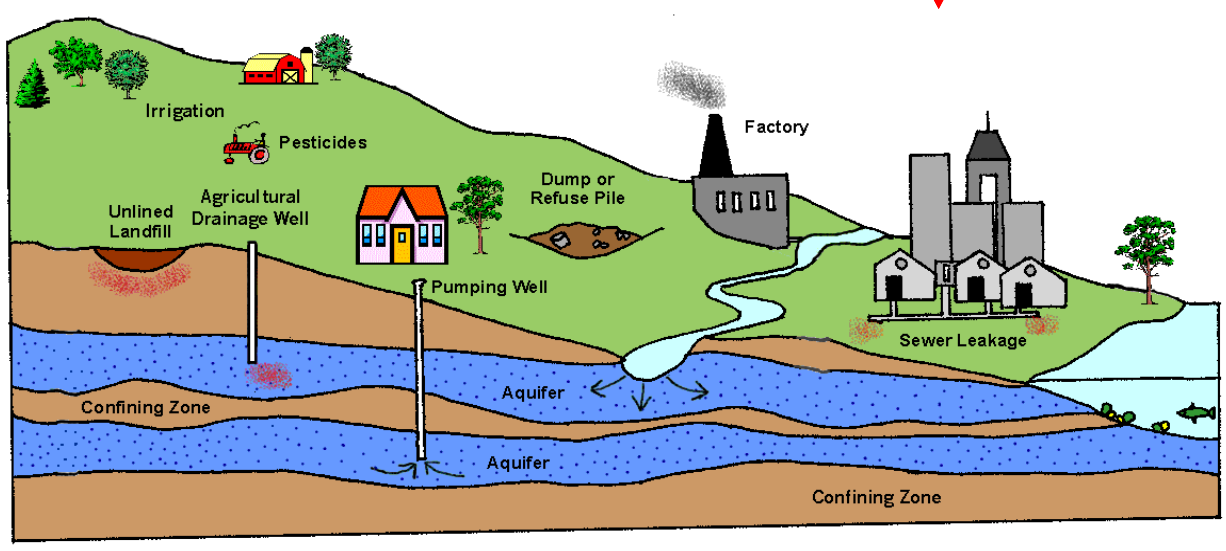
This includes septic tanks and leach fields. Ground water may become contaminated when the septic systems are poorly designed or improperly constructed, used, located, or abandoned.

What you can do:
If you own a septic system, make sure it is inspected regularly. For more information, call your local health department.

Landfills

Abandoned landfills and dumps are two of the most significant sources of ground water contamination—typically because of where they are located and because they were not lined.

What you can do:
Report illegal dumping to your local health department.



Underground Storage Tanks

Underground storage tanks are used to hold petroleum products such as gasoline, diesel fuel, and fuel oil. Because they are buried underground, leaks can go undetected for a long time.

In the United States, over 60 percent of the more than 300,000 known releases of petroleum products from underground storage tanks have affected ground water quality.

What you can do:
If you own an underground storage tank, make sure it meets all the necessary requirements. For more information, contact the Bureau of Underground Storage Tank Regulations at (614) 752-7938.

Other Potential Contaminant Sources

If not managed properly, all of the following could be considered Potential Contaminant Sources.

* Underground Injection Wells.
* Businesses and Industries using chemicals or petroleum products.
* Disposal of household, agricultural or industrial chemicals.
* Floor and storm water drains.
* Aboveground storage tanks.

For More Information about Source Water Protection, call:
The Ohio Environmental Protection Agency/Division of Drinking and Ground Waters (614) 644-2752

Where does the City of Pataskala's drinking water come from?

The City of Pataskala's drinking water is pumped out of the ground by six wells from two separate well fields. Four Wells are located at Water Treatment Plant #1, south of the City on SR 310. Two Wells are located at Water Treatment Plant #2, at the corner of Watkins and Refugee Road. The ground water from both plants are pumped to the water treatment plant where it is filtered, softened, and chlorinated. From there, it is pumped through an underground network of pipes to homes and businesses throughout the City.

Where does the ground water come from? All ground water originally comes from rain or melted snow that has seeped into the ground. Water fills spaces between sand and gravel, as well as fractures in rocks. Where underground water is abundant enough to provide an adequate source of water, the water-rich sediments or rocks are called an aquifer. Pataskala's drinking water supply is pumped from the sand and gravel deposits of the South Fork Licking River Buried Valley Aquifer. Surface drainage into the aquifer trends from northwest to southeast, approximately 7 to 10 inches of precipitation yearly infiltrates through the soil to the aquifer. This means that if pollutants are spilled on the ground near the wells, or up the aquifer valley of the wells, they may eventually enter the ground water that is used to supply Pataskala residents with drinking water. Although the water plant provides treatment, it would be very expensive to purchase treatment systems for every type of possible pollutant. To be proactive in preventing potential pollutants The City of Pataskala has developed a ***Source Water Protection Plan***.

What is Drinking Water Source Protection? The Ohio EPA conducted a Susceptibility Analysis and determined our aquifer has a High Susceptibility for contamination, which does not mean the aquifer will be contaminated but conditions exist which has the possibility for contamination. In order to prevent the likelihood of aquifer contamination the City of Pataskala created a *Source Water Protection Plan*. The *Source Water Protection Plan* is a written plan of action for protecting the water you drink from contamination at the source, along with emergency action plans in the event of contamination, or major water infrastructure failure.

To assist Pataskala with its *Source Water Protection Plan* efforts, Ohio EPA provided the City with a Revised Drinking Water Source Assessment report. This report included a map of the protection area (see below) based on calculations of how far water travels through the aquifer in five years. The report also includes information on land uses and facilities that may pose a contamination risk to the drinking water source. Potential risks are based on proximity to the drinking water source and the kinds/quantities of chemicals that are typically handled by these types of facilities.

The City of Pataskala has used the assessment to develop our *Source Water Protection Plan*. The effectiveness of this plan greatly depends on public involvement and education. If you would like to be involved with the *Pataskala Source Water Protection Plan Task Force* or if you would like to see a copy of the City's *Source Water Protection Plan*, please contact the City of Pataskala's Utility Director at 740-927-4134. A copy of the *Source Water Protection Plan* can be downloaded from the City's website at www.ci.pataskala.oh.us/utilities.aspx

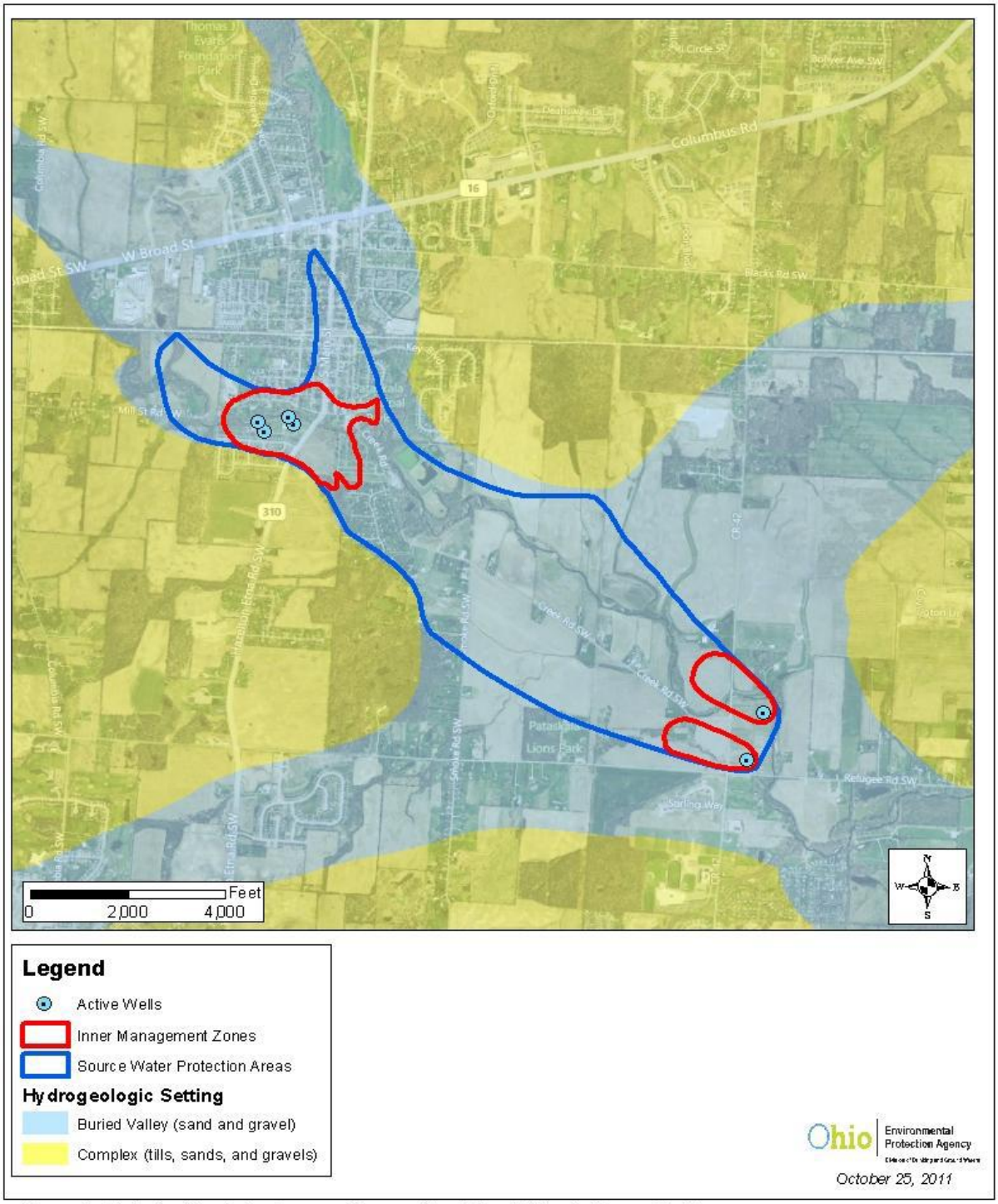


Figure 4. Extent of buried valley aquifer near the City of Pataskala's wellfields.

The above map identifies the Source Water Protection in Pataskala for the protection of the ground water (blue outline) the inner management zones are outlined in red, special precaution is vital in these areas to eliminate the possibility of ground water contamination.

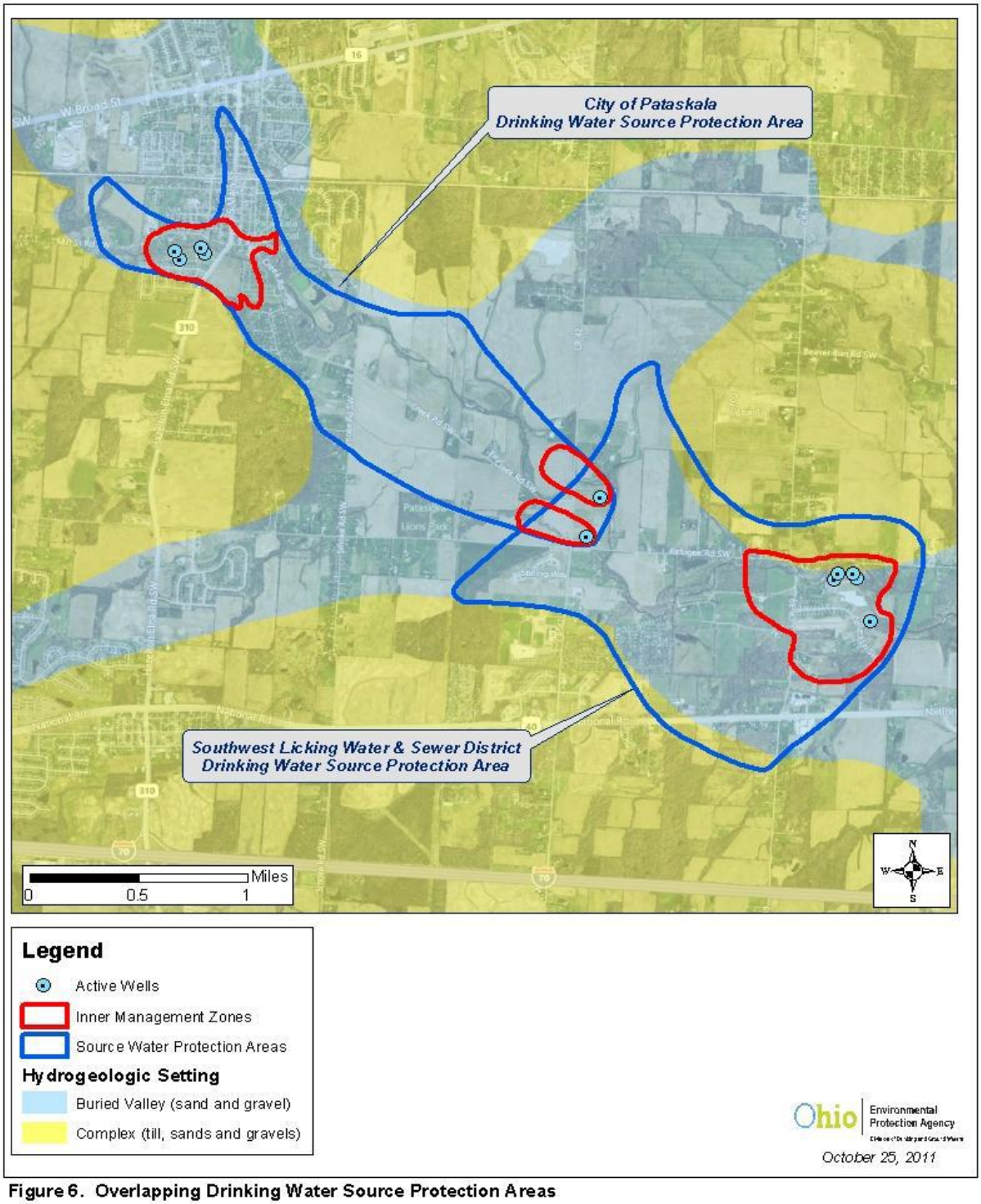


Figure 6. Overlapping Drinking Water Source Protection Areas

The above map indicates the Source Water Protection Area for both Pataskala and Southwest Licking Water and Sewer District. As you can see our protection areas overlap.