

WE HAVE SOME OF OUR NATION'S BEST SOURCE WATER

Cheryl Porter, Chief Operating Officer of the Great Lakes Water Authority (GLWA), talks about how great drinking water starts with high quality source water.

Good source water has helped GLWA contribute to a legacy of providing exceptional drinking water.

A water service provider's water treatment process begins with its source water. The source water dictates what kind of treatment techniques are necessary in a system's design to provide high quality drinking water. GLWA has three intakes located within the Great Lakes' watershed, which is 84 percent of the freshwater supply for North America. We have great quality source water that we are starting out with to generate our high quality drinking water.

The Detroit River and Lake Huron serve as GLWA's source water that is treated and used as drinking water for nearly 4 million people.

The GLWA has five water treatment plants that are supported by three water intakes. Two are in the Detroit River and one is in Lake Huron. The Detroit River, though it's not a Great Lake, is part of the Great Lakes' watershed. This freshwater supply provides GLWA's source water. Ground water is used as source water by communities that don't have access to fresh water.

The quality of source water impacts the water treatment process.

Since GLWA has a generous source water supply, we can employ conventional treatments that consist of coagulation, sedimentation, filtration and disinfection to generate high quality drinking water. If a community has finer particles in their source water, nanofiltration, membrane filtration, or a different technique can be utilized for treatment.

The GLWA has taken steps to support continued protection of its source water and intakes.

Quality is GLWA's number one priority. We are not only meeting the letter of the law; we are exceeding it by embracing the spirit of the law. Recently, GLWA received state approval for SWIPP, our Surface Water Intake Protection Program. This program involves evaluating our three intakes and assessing where GLWA stands in protecting our source water as it enters the treatment facilities. We are also part of the Lake Huron to Erie monitoring system, a warning system established to detect any chemical contaminations within the source water. The treatment plant operators who are on duty receive alerts if contaminants are identified in the system.

GLWA goes above and beyond to continuously provide safe, quality drinking water to Southeast Michigan.

We collect over 742 samples a month and are constantly monitoring the delivery process of water into the distribution system. During this process, we examine the source, and evaluate our treatment techniques and delivery systems to ensure quality throughout the entire process. We are also part of the Volunteer Program for the Partnership of Safe Drinking Water. We have received three awards through this voluntary program where we compare ourselves against the standard of other service providers. Lastly, we participate in research programs with our surrounding academic partners. We are engaged with Wayne State University to evaluate different research techniques that may be used in the future.

This podcast was created as part of a series to answer the questions commonly heard throughout our service area.

