

# The St. Joseph River Today

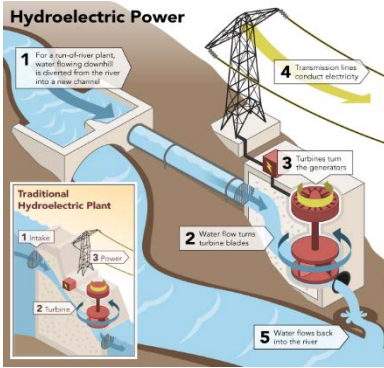
The St. Joseph River has been an important resource and transportation corridor for centuries and still plays a role in the Niles community today.

## Power and Paper on the St. Joseph River

The Niles dam, constructed in 1871, was the first of its kind in the St. Joseph River watershed. The energy generated from the dam has powered local industries for nearly 150 years and is still used by the French Paper Company. The dam benefits the surrounding community by reducing flood risk and preventing invasive species from traveling down the river.



The French Paper Company Dam today.



An illustration of hydroelectric power generation in action. Courtesy of nbpower.com

Generating hydroelectric power from the river involves kinetic energy, or energy generated by motion, that is converted into electricity. This process begins when the river water flows through a small tunnel which runs through the base of the dam. At the end of the tunnel, the water spins a turbine and flows back out into the river. The spinning turbine is connected to a generator which creates and distributes energy to electric power lines which provide electricity to the French Paper Company.



Paddlers in a competitive dragon boat race. Courtesy of Niles City Hall.

## Recreational Uses of the River

The St. Joseph River supports various recreational activities including fishing and other water sports. It is common to see people fishing for steelhead, salmon, walleye, pike, and smallmouth bass, among other species. There are many good fishing areas along the St. Joseph River such as Riverside Park on the east bank and Island Park located just north of the dam. While some people may fish to simply enjoy the scenery and engage in a relaxing activity, others can participate in fishing competitions that take place regularly. The river is also a great location for boating involving canoes, kayaks, and other watercraft. Dragon boat races occur during summer festivals. The Fort St. Joseph Archaeology Open House provides opportunities to ride in a replica of a Montreal canoe.

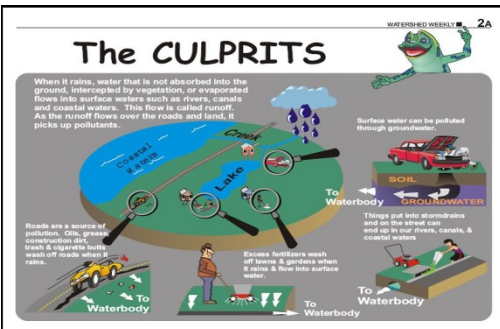


Kayaking on the St. Joseph River. Courtesy of St. Joseph County Parks (sjcparks.org)

Open house visitors enjoying a ride in a Montreal canoe. Courtesy of the Fort St. Joseph Archaeological Project. (Please crop this image)

## Is the St. Joseph River a Source of Drinking Water?

The short answer is “no.” Drinking water for the City of Niles is supplied by groundwater. Within Michigan, approximately 50% of the population relies on groundwater to supply their drinking water needs. Rain, melting snow, or surface water becomes groundwater by seeping into the ground and filling the small spaces between rock particles (sand, gravel) or cracks in solid rock. Groundwater, which supplies wells, often comes from within a short distance of the well.



Factors contributing to water quality. Courtesy of watershedsyork.org (Can you crop page no. at top?)

Community drinking water systems are at risk from many possible contamination sources and no community wants to face the loss of its drinking water. Drinking water wells can become contaminated when substances that are harmful to human health get into the groundwater. Many of our everyday activities can cause contamination. The improper use of pesticides, fertilizers, road salts, poorly maintained septic systems, pouring or disposing of pharmaceuticals, chemicals or other harmful substances down the drain or on the ground along with animal waste can all compromise water quality. Act today and remember that each individual plays a huge role in drinking water protection. It is simple—what you dump, you could eventually drink! **(increase font size for consistency)**



The Niles Water Tower. Courtesy of the City of Niles.



E. Coli bacteria at a microscopic level. Photo courtesy of cleantechnica.com