On November 12, 2012 CDM Smith of Cincinnati was contracted to design a new water treatment plant for the City of Piqua. Along with a new plant, a new river pump station, new quarry pump station, and required piping for connection to the new plant were included. In the fall of 2014, those plans were presented to and approved by the Ohio EPA.

In September of 2014, the city advertised for bids for the projects. On October 21, 2014 those bids were opened and Peterson Construction Company from Wapakoneta, Ohio was awarded the contract to construct the new plant. Along with Peterson Construction, J&J Schlaegel from Urbana, Ohio was awarded the contract for the Off-Site Pipeline portion of the project.

Construction equipment is expected to begin arriving on site sometime in February with a groundbreaking ceremony expected the first week of March. Construction is scheduled to last up to 30 months.

The Water Department is also in the process of designing and building a new water tower. The tower will be located at the end of Fox Drive in the southern part of town. Land for the new tower was graciously donated to the city by Mr. Paul Sherry.

This tower will supply the Central District of the distribution system. The tower will replace the current towers at South Main Street and Spring Street. Those two towers are in disrepair and need to be replaced. The new tower will hold one million gallons. This will give the city extra storage capacity of 500,000 gallons as the existing tanks are only 250,000 gallons each. Construction of the new tower is expected to begin in the summer of 2015.