Water Department

2017 was an eventful year for the water department, highlighted by a significant harmful algal bloom in Caesar Creek Lake and a change of leadership. The harmful algal bloom, while effectively treated by the water treatment plant and its staff, triggered water system upgrades that will be mandated by Ohio EPA. The improvements will ensure that any sized bloom will be effectively treated.

The first indication of the bloom came during sampling on May 23 when the algal toxin microcystin was detected at low levels in the raw water coming from Caesar Creek Lake. Test results received on June 9 showed the toxin had reached 12.8 parts per billion, though it was still not detected in the treated drinking water. As a reference, the limit in treated drinking water is 1.6 parts per billion for most people and 0.3 parts per billion for vulnerable populations.

As a precaution, Ohio EPA instructed the city switch to the Burtonville reservoirs for its source water. The reservoirs provided the city’s water through July 4, when EPA allowed a switch back to Caesar Creek Lake. In the meantime, the bloom had abated, and the city began removing water from a lower level on Caesar Creek Lake, avoiding the algae near the surface.

Only very low algal toxin detections have been found in Caesar Creek Lake water since the main bloom. Later in the summer, a different, much rarer algal toxin was found in low levels in the reservoirs. At the levels found, that toxin would also be able to be removed in the water treatment process. But the ongoing harmful algae issue illustrates why all water department facilities must be kept in top operating condition. The bloom brought multiple visits from Ohio EPA personnel, including a weeklong Comprehensive Performance Review in July that brought to the forefront many challenges throughout the water system. The findings of the review are being used to prepare a master plan than will set priorities to keep the system producing safe drinking water into the coming decades. Low-interest and no-interest financing will be sought from Ohio EPA to fund the repairs and improvements of the water system.

To help fund the repayment of the 20-year financing needed improvements, City Council is in the process of approving a rate increase that will go into effect January 1, 2018. The administration hates the idea of imposing higher rates on the city’s water customers, but is convinced additional resources are needed to ensure a continued supply of high-quality water.

Change in Leadership

After the unexpected retirement of Superintendent Jerry Rowlands, Chief Operator Adam Simpson ably served as interim superintendent from March 6 through May 21. Rick Schaffer started as permanent superintendent on May 22. Distribution Crew Leader Mike Crowe was promoted to Sanitation Superintendent on March 22, with longtime Customer Service Representative Chris Reiley being tabbed as interim crew leader. The appointment was made permanent for Reiley on June 19. Reiley earned his EPA Water Distribution Class I license on August 15.
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Other Notable Events

A break on the raw water line between Caesar Creek Lake and the city forced the use of the Burtonville Reservoir as a water source from April 28 through May 5. It was the fourth break on the line in the past several years. The breaks are a result of the line being laid in rocks during construction. The rocks appear to be rubbing holes in the iron pipe.

An outage in the equipment that allows the water plant to communicate with the pumps at Caesar Creek Lake put the City back on reservoir water May 15 through 22. The incident led to equipment being installed allowing the pumps at both location to be started manually, so that communications issues will no longer dictate the water source that can be used. Water main breaks were repaired on Truesdell Street in January, State Route 730 in February, and Osborn Road in June and December. Eight valves that allow water to enter the filter system at the plant were replaced. They had become encrusted with lime and calcium deposits.

After much study and discussion, City Council gave its final approval March 15 for the fluoridation of the water supply. The City remains committed to this improvement, but the harmful algal bloom changed the department’s priorities so the installation probably won’t be completed until 2019. In April, major repairs were completed on the equipment that feeds lime into the water. Lime softens the water and helps in the removal of contaminants.

Using a state grant for about 75% of the funding, a faulty water line was replaced on Fife Avenue and continuing southeast into the Air Park. The new line reinforces the reliability of the water supply to the industrial/commercial backbone of the City. City crews aided in the installation of new water mains at its two largest water users -- Timbertech and Alkemes -- and made taps for the Bright Farms greenhouse project. New water connections were made to the restroom at Denver Park and the new Splash Pad. In December, the stone berm around the large reservoir was repaired so that it can be returned to full capacity, and be a more reliable backup source of water.

The knowledge and dedication of the Water Department staff allowed for a continuous supply of safe drinking water throughout 2017 despite many obstacles.

The Water Plant Staff:

- Adam Simpson, Water Plant Chief Operator
- Larry Fisher, Plant Maintenance
- Zack Denely, Plant Operator
- Dale Achtermann, Plant Operator
- Josh Snell, Distribution Maintenance
- Chris Reiley, Distribution Crew Leader
- Jeff Hawk, Plant Operator
- Howard Lundsford, Plant Operator
- Aaron Collins, Plant Operator
- Mark Rohmor, Distribution Maintenance
- Josh Smith, Customer Service Representative

Submitted by:
Rick Schaffer, Superintendent
Water Department