PolicyPennings by Daryll E. Ray & Harwood D. Schaffer

Toledo Mayor to residents: "Don't drink the water"

On Saturday, August 2, 2014, a toxin, microcystin, was found at the municipal water treatment plant in Toledo, Ohio. That discovery plunged a city of 500,000 people into a tap water ban that lasted several days and had people combing stores for bottled water while the Ohio National Guard was called upon to deliver untainted water to the city's residents.

The microcystin was produced by a particular type of cyanobacteria found in the water of Lake Erie where Toledo gets its water. Ingestion of microcystin can result in the death of dogs and other small animals. In a large enough concentration, it can result in liver damage and even death in humans, thus the concern of the Toledo Mayor and Ohio Governor as they announced the tap water ban.

Unlike many other water contaminants, boiling the water does not destroy the threat, but instead serves to increase the concentration of the toxin in the water and thus its lethality.

We would not be writing about this event—though it is certainly newsworthy—but for its connection to agriculture. It seems that the growth of cyanobacteria is fed, in part, by phosphorus that is contained in runoff from agricultural land. In the presence of key nutrients like phosphorus, the rapid growth of cyanobacteria results in algae blooms that can cover vast areas of Lake Erie. In this case one of those areas this year was right over the inlet pipe for the Toledo municipal water system.

But runoff from cropland into the Maumee River is not the only source of nutrients like phosphorus. Other sources of contamination include the fertilization of urban yards, livestock facilities, and municipal waste treatment plants that release their treated effluent into Lake Erie.

With the support of the Ohio Farm Bureau Federation, the state passed a law that requires crop farmers to take a one-day class in order to receive a license to spread fertilizer on their land. It is expected that the classes will provide farmers with information they need to reduce the amount of fertilizer they use while maintaining yields. Animal agriculture is not affected by this legislation.

Will this be sufficient? Probably not, though it will help. But it is going to take more than legislation; it is going to take a change in the mindset of urban residents and urban officials who operate wastewater treatment facilities as well as crop and livestock farmers.

For too long, all of us have been willing to look the other way as our activities have resulted in problems for others. We have known that runoff results in a dead zone in the Gulf of Mexico larger than the state of Connecticut. And yet the response to date has been minimal. On the other hand, no municipality has a water inlet under the dead zone, thus the lack of urgency.

Talk about the water pollution problems in the Chesapeake Bay and you will observe people acting like those in the political cartoon by Thomas Nast where Boss Tweed and others are pictured standing in a circle with each person pointing his finger at the person to the right.

It is our observation that the longer we deny an obvious problem, the more likely we are going to be faced both with increasingly serious problems and inflexible regulations.

The event in Toledo can be seen as a threat to business as usual as we whistle in the dark hoping that nothing else is going to happen. Or we can begin to work to find sensible solutions to problems that if ignored can only get worse. The Ohio Farm Bureau acting on behalf of its crop farmers has made a reasonable start. Will they be joined by others whose actions have also contributed to the problem that resulted in the two day tap water ban in Toledo?

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