



Speakers Task Force on Water Quality

April 3, 2019

Scott Laeser, Water Program Director, Clean Wisconsin

Thank you for the opportunity to talk about Wisconsin's water quality challenges. Clean Wisconsin is a non-profit environmental advocacy group focused on clean water, clean air, and clean energy issues. We were founded almost fifty years ago and have 20,000 members and supporters around the state. We've been working on water pollution issues in Wisconsin since our founding, and while some of the particulars have changed, with improvements to some pollution issues and new problems elsewhere, Wisconsin remains a state with abundant water resources but also abundant challenges in restoring and protecting those waters.

Clean Wisconsin employs scientists, policy experts, and legal staff to bring all the tools at our disposal to protect and improve our air and water resources. In 2014, we filed a Safe Drinking Water Act petition with the EPA when calls for action to address groundwater contamination in Kewaunee County went unanswered. We've worked closely with researchers and counties in Southwest Wisconsin to support the efforts to initiate and fund the Southwest Wisconsin Groundwater and Geology Study. And we've worked with decision makers, including many of you, for many years to support state financial and technical investments in protecting Wisconsin's air, water, and natural resources.

I am Clean Wisconsin's Water Program Director and am testifying today on behalf of Clean Wisconsin, but I am also a private well user and a farmer. My wife and I run a small vegetable farm in Argyle, WI, about an hour southwest of Madison. Our water comes from a private well in a rural, predominantly agricultural community, and with a six-week old baby girl in our household, the importance of clean drinking water could not be more top of mind. My interest in and engagement on the topic we are discussing today is both personal and professional. I work on behalf of Clean Wisconsin to advocate for and advance policies that will improve and protect our state's water resources. My wife and I strive every day to manage our farm to minimize runoff and nutrient loss and to strike a balance between our efforts to grow food and to protect our natural resources. And like any parents, we want our baby girl to have safe water, now, when she's particularly vulnerable, and every day going forward.

We're here today because the evidence, both scientific and anecdotal, of the breadth and depth of water quality challenges our state faces has become too numerous to ignore, the calls for action too deafeningly loud to dismiss. Let's be clear, though, that these pollution issues didn't emerge overnight. We've been hearing from and working with members and citizens for years who have lead in their drinking water, nitrates contaminating their wells, and fears about new pollutants like PFAS contaminating water that until recently was considered safe.

In addition to these immediate threats to safe drinking water for Wisconsin families, our state's water resources face a host of additional problems, including:

634 W. Main Street #300, Madison, WI 53703

608-251-7020 | [www.cleanwisconsin.org](http://www.cleanwisconsin.org)



- Bacteria and other pathogens in private wells in Northeast and Southwest Wisconsin
- Toxic legacy pollutants in some rivers like the Lower Fox.
- Emerging evidence about the increased cancer risk, especially for children, associated with exposure to Polycyclic Aromatic Hydrocarbons, or PAHs, which are present in certain driveway sealants.
- Radium in drinking water in Waukesha
- High levels of molybdenum in wells in Southeast Wisconsin
- Viruses in some municipal water systems
- High capacity wells in the Central Sands drawing down lakes, rivers, and streams and threatening neighboring drinking water wells.

While our water quality challenges are numerous and diverse, we wish to focus today on the immediate and emerging threats to Wisconsin citizens' drinking water from lead, nitrates, and PFAS.

As you heard from state agency staff a couple of weeks ago, we have abundant evidence regarding the scale, scope, and sources of many water pollution problems. Others, like PFAS, have arrived more recently and require a robust investment in research and monitoring. We know that citizens, and our state as a whole, have been suffering the economic consequences of water pollution for too long. Families are forced to spend money to buy bottled water, install filtration equipment, or even drill new wells so they have safe drinking water. Algae-choked lakes dissuade tourists, cutting into our outdoor recreation revenue, and studies have shown the direct link between water clarity and home values.

As we evaluate options for addressing our water pollution challenges, we believe the steps we take must support the goals of access, prevention, and provision of resources.

- 1) Does an action we take help people get access to the clean drinking water they deserve?
- 2) Does an action we take help prevent, reduce or eliminate pollution from occurring?
- 3) Are we providing the scientists, governmental entities, and other stakeholders that we entrust to make sure our water is safe now and in the future with the resources they need?

Each water pollution problem we face requires a unique balance of resources and focus as we address it.

## **Lead**

With regard to lead pollution in drinking water, we have long known about the contamination and the risks it poses, especially to young children. We know lead in drinking water is a problem in dozens of communities across Wisconsin, both urban and rural. Lead exposure can cause permanent learning disabilities even in very small quantities; no amount is a safe amount of exposure. A study by the Pew Charitable Trusts estimates that every dollar spent removing lead service lines gets us a 133% return in benefits due to higher lifetime earnings and better health.

Testing of water for lead, especially in schools and day care centers but also in homes, needs to continue, but we have already identified many places around the state where we simply need to remove the pipe infrastructure that is the source of the lead. To do that, we need a significant and sustained investment in helping communities and residences replace lead service lines, which eliminates the source of lead in drinking water. The Governor's proposal to allocate \$40

634 W. Main Street #300, Madison, WI 53703  
608-251-7020 | [www.cleanwisconsin.org](http://www.cleanwisconsin.org)



million in bonding to help families and communities replace lead service lines is a great start towards eliminating lead contamination in drinking water. This Task Force can build on that action by exploring and recommending additional steps to remove and replace lead service lines as quickly and cost effectively as possible. People need access to clean water and treatment for lead exposure, Wisconsin needs to invest in removing lead service lines to eliminate lead pollution in water, and we need our state agencies like DHS and DNR to have the resources they need to protect families from lead.

## Nitrates

The evidence of nitrate pollution in both our private and municipal wells is growing. In the last year, reports of high nitrate levels in the Central Sands, the La Crosse area, and Southwest WI have added to the body of evidence already in existence. We also have a growing understanding of the health risks associated with exposure to nitrates; blue baby syndrome and central nervous system birth defects in fetuses or young children, and for adults, thyroid disease and colorectal cancer.

Research tells us that most of the nitrates contaminating our groundwater are coming from agricultural sources. In Lafayette county, where I live, we have 5,245 septic systems. Septic systems leach about 20 pounds of nitrogen per system per year. That adds up to 105,000 pounds of nitrogen that could pollute our groundwater each year. In 2017, we had 137,500 acres of corn grown in Lafayette County. A generally accepted application rate for nitrogen fertilizer on corn is about 160 lbs/year. That amounts to 22 million lbs of nitrogen spread on corn fields in Lafayette County each year. Using an estimated leaching rate of 32 lbs/acre<sup>1</sup> leaves us with 4.4 million pounds of nitrogen from corn fields that could pollute our groundwater, **about 42 times more than what comes from septic systems**. That also does not account for nitrogen from any manure or other fertilizer spread on farm fields other than corn. There are parts of the state where septic systems, especially where they occur in higher densities, pose a greater groundwater pollution risk, but overall, we know about 90% of the nitrates in our groundwater come from agricultural sources.

Over a quarter of the wells sampled in Lafayette County during the first round of sampling for the SWIGG Study had nitrate levels over 10mg/l, the health standard.

Researchers and farmers are learning about and experimenting with innovative growing practices that can help reduce nitrate pollution from farm fields. Many farmers are already employing growing practices to reduce erosion and water runoff from their fields, improve the health of their soil, and keep nutrients in their fields where they're needed instead of polluting our water. Planting grasses and other perennial plants in sensitive areas, reducing the amount of tilling that's done on fields, responsibly spreading manure in the right amounts at the right time of year, and planting cover crops, which can help improve the health of the soil and keep nutrients in the field, can all reduce the water pollution leaving farm fields.

Even conservative estimates place the number of wells in Wisconsin exceeding the 10mg/l nitrate health standard at over 40,000, while other estimates are closer to 80,000 wells. Those

---

<sup>1</sup> Nitrate in Wisconsin's Groundwater. Kevin Masarik. Nitrate Task Force. March 13<sup>th</sup>, 2019.

families need access to clean drinking water now and they need to know their leaders are working to clean up the pollution contaminating their wells. The Governor's budget proposal includes increased well compensation funding to help families access clean water by drilling new wells. The budget proposal also includes money to help farmers implement some of the aforementioned conservation practices, resources for counties to assist them, and funding to support producer led watershed groups. It modestly raises permit fees for large farms and directs that money to DNR staff positions that will help oversee a permit program intended to reduce the risk of water contamination from the significant volumes of manure these farms handle. It invests in the farmers we need to use these conservation practices that have long been required of all farms but never adequately implemented or enforced. These budget measures need to be adopted if we are serious about improving water quality.

We need to do a better job using the tools we already have to protect our water from agricultural pollution sources. All Wisconsin farms should meet a minimum standard set of conservation practices on their land and we can work together to get there. Currently, only 36% of agricultural lands in the state are covered by a Nutrient Management Plan. These minimum standards have been around for a while; it's time they are fully implemented. The Farmland Preservation Tax Credit rewards farmers for implementing conservation practices; perhaps it's also time to tie use value assessment, which helps farmers manage their tax burden, to the implementation of conservation practices.

How we build and oversee septic systems should also be on the table.

And if we are truly going to address the widespread well contamination from nitrates, we'll probably have to consider additional actions, like limiting the amount of nitrogen we put on certain fields to balance the importance of the agricultural industry and its continued success to our state with our obligation to every WI citizen to provide access to clean drinking water.

## **PFAS**

An emerging threat to drinking water in certain parts of Wisconsin comes from the class of industrial chemicals known as PFAS, which you learned about in the first hearing on March 20th. These compounds are common in non-stick cookware, food wrappers, and firefighting foam, among many other uses, and their existence in groundwater in WI is strongly linked to their manufacture or use as a firefighting foam at training facilities or airports. Over 20 years of established research links PFAS to a variety of health risks. Communities are anxious about a new water contaminant showing up in their drinking water without enforceable federal or Wisconsin environmental standards.

Many other states like Michigan and Minnesota are taking significant steps to tackle the PFAS problem. While we have not been dealing with this class of chemicals for as long as lead or nitrates in Wisconsin, we know enough about PFAS that our efforts to better understand where those chemicals are contaminating drinking water in WI and what levels are unsafe for WI residents must be paired with immediate efforts to provide impacted families and communities with access to safe water. The Governor's budget includes 2 DNR science staff positions that will support and inform our state's response to PFAS contamination and allow the DNR to take steps like the development of clean-up standards. We have to start discussing and executing

634 W. Main Street #300, Madison, WI 53703  
608-251-7020 | [www.cleanwisconsin.org](http://www.cleanwisconsin.org)



cleanup efforts now to make contaminated groundwater safe to drink again. The state must work to provide access to safe drinking water to affected families, DNR and DHS must have resources to develop health-based standards for drinking water and better assess and track contamination occurrences, and ultimately, the state must make a robust commitment, in conjunction with manufacturers and users of PFAS, to clean up contaminated groundwater.

## **Costs of Inaction**

In order to confront Wisconsin's water quality challenges and protect our water in an enduring and equitable way, we need to bring to bear significant financial, technical, and educational resources. Wisconsin citizens must understand we have a variety of water quality problems, and the formation of this task force has already helped raise awareness of Wisconsin's water quality challenges. Indeed, with the second round of sampling for the Southwest Wisconsin Groundwater and Geology Study set for early April, researchers received considerably more interest from citizens in participating in the study. People are paying attention, but we must do more than simply raise awareness and talk about water pollution issues. We must start acting boldly to fix them.

You have heard, today and on March 20<sup>th</sup>, about an array of solutions to reduce water pollution and better protect our drinking water resources. You've also heard about how much they will cost. These solutions aren't cheap, they aren't easy, and they aren't going to fix things quickly. We've ignored these pollution problems for far too long for any cheap or easy solution to work.

What we too often fail to talk about are the costs of inaction, the costs of the status quo, of kicking the can down the road once again. Municipalities, farms groups, businesses, and state agencies have all spent money providing drinking water to citizens who couldn't get clean water from their taps. Tyco Fire Protection Products is paying for new water systems to help deal with PFAS contamination. Farm groups in central Wisconsin and Northeast Wisconsin are footing the bill for bottled water and water filtration systems to help citizens who have wells contaminated with high nitrates or pathogens. The City of Milwaukee, in conjunction with health partners, is buying water filters to help low income families with lead pollution. These stopgap measures are important, but they must be paired with robust efforts to clean up the pollution that precipitated the need for these actions in the first place.

Each day that passes, thousands of families around this state can't drink their own water. They buy bottled water, they invest in filtration systems, and they spend thousands of dollars drilling new wells. Many families are exposed to health risks or suffer from the health effects of contaminated water because they don't know their drinking water is contaminated, or they hear folks question the science, claiming we don't know enough yet to worry. The costs of water pollution to Wisconsin families in the form of medical expenses, missed work or school days from illness, and the stress of dealing with contaminated water are difficult to quantify, but they are real.

You've heard a lot about the potential health impacts from various water pollutants; learning disabilities in children from lead exposure, increased cancer risk from PFAS compounds, and central nervous system birth defects from exposure to high levels of nitrates. Last year, a woman

634 W. Main Street #300, Madison, WI 53703  
608-251-7020 | [www.cleanwisconsin.org](http://www.cleanwisconsin.org)



from central Wisconsin wrote about her heart wrenching experience with the manifestation of central nervous system defects during her pregnancy. Her baby was growing inside of her with a badly misshapen head. Her baby was missing part of its skull and the part of its brain that would allow it to breathe on its own outside the womb. Doctors described her case as the worst encephalocele, which is an opening in the skull where the brain protrudes out, they had ever seen.

The water that woman consumed before and during her pregnancy was found shortly after to contain 43mg/l of nitrates. Can we say unequivocally that the tragedy this Wisconsin family had to bear was caused by those astronomical nitrate levels? We cannot. But neither can we, in good conscience, allow Wisconsin families to bear the risk that it was, and the risk that more tragedies like this could happen in the future when the evidence makes that risk clear.

There is no zero-cost option to the problem we confront today; the question is simply who bears the cost; taxpayers and businesses in a sustained, informed, and organized effort to protect our water resources, or Wisconsin families each day when they wake up and can't drink their water or risk the health consequences of doing so.

### **Imperative for Action**

Every Wisconsin family deserves the right to clean drinking water, and with the formation of this task force, people expect decisive action and measurable results. Citizens want to know what's in their water and how it might impact their health, they want help getting access to clean drinking water if they don't have it, and they want Wisconsin's water pollution cleaned up. We stand ready to work with you to do so. We have to start investing in access to clean drinking water for all Wisconsin families, prevention of the pollution rendering our water undrinkable, and prioritizing research and providing resources for local and state governments to fix these problems.

**Adopting proposals like those included in the Governor's budget should be the beginning of serious bipartisan policy efforts to tackle Wisconsin's numerous water quality challenges.** Every tool in the tool box needs to be used, everyone needs to be prepared to make changes, and we need to tackle this challenge together. We need a continued, robust, and honest dialogue about how we're going to fix these problems. We need to help farms and businesses reduce pollution, not just expect them to bear the entire burden themselves. We've been asking farmers to grow us cheap food for decades; testimony you've heard today demonstrates that that quest has given us a fragile farm economy and polluted water. We've got to work together to turn both of those around.

Let's dispense with the tired argument that the success of our businesses and farms and clean drinking water for all Wisconsin citizens are mutually exclusive. Let's start making the changes and investments that are necessary to support successful enterprises and safe drinking water. Today, we can move beyond talking about how we all want clean water and start acting like it.

Thank you.

634 W. Main Street #300, Madison, WI 53703  
608-251-7020 | [www.cleanwisconsin.org](http://www.cleanwisconsin.org)

