

Resident Questions & Answers

Q: Public water has PFAS. We allow public water into Ross Twp. "Free" and people connect, then they start to water their gardens and lawns, the PFAS water then contaminates our land and will go into the ground water. We will be contaminating areas that are non detect! It will go into Gull Lake. It will destroy all our property values. Who wants to swim or buy property at Gull Lake that has PFAS in it.

A: **James Baker, City of Kalamazoo:** The City of Kalamazoo publishes and provides customers with the results of our highest PFAS test results annually. The most recent results are available via the link: <https://www.kalamazoo.org/files/assets/public/v/1/plans-and-reports/water-quality/2023-water-quality-report.pdf>

The City of Kalamazoo PFAS results are NOT high and are all below the Michigan MCL.

The City of Kalamazoo has 12 point of entry stations. The low levels of PFAS reported are currently only detected at three (3) stations, the remaining nine (9) stations have detection levels of non-detect. Treatment projects are planned to consolidate and provide treatment at all stations to ensure that all Kalamazoo water is non-detect by 2029.

Stating that Kalamazoo water has high PFAS results is false and incorrect.

Q: EGLE said 2 monitoring wells in Gull Vista exceed the acceptable levels for PFAS. Wells 21-01 and 22-01 are in Gull Vista and 18-16A is outside our neighborhood and maybe in Richland Twp. Please give us the last test results for these wells in 2024.

Q: Why did the monitoring wells mentioned above, detect for PFAS when private wells at these monitoring wells site had little to non detection of PFAS?

Q: We have many private wells non-detect, how does 1 well detect PFAS and not the neighbors?

Q: What is the source of the PFAS contamination in these individual monitoring wells and the 1 private well? Does EGLE think the source is still here?

Q: Will EGLE work on finding the source of contamination, stop it and clean up the PFAS?

Q: If public water is extended into Gull Vista neighborhood, will EGLE stop working on finding the source, stop working on stopping the source and stop clean? Do you move on since we have public water offered?

Q: Kalamazoo Water PFAS levels are very high per the Kalamazoo Water report. Does EGLE have any concerns with Kalamazoo Water bringing in water contaminated with PFAS and offered to residents with many wells non-detect of PFAS? If Kalamazoo Water is allowed to extend here and residents connect they will be contaminated with PFAS. Kalamazoo Public Water will be a new source of PFAS contamination! Why is EGLE ok with this?

Q: Exactly how many properties will the public water system pass through?

A: **James Baker, City of Kalamazoo:** The proposed expansion of the City of Kalamazoo Regional Water System (drinking water system) would be within public rights-of-ways owned by MDOT and/or RCKC. There is no proposed placement of public water system assets on private property. There are approximately 94 properties that would be adjacent to proposed public water supply.

Q: Is funding fully covered for all properties, or are there exclusions?

A: **James Baker, City of Kalamazoo:** Funding would cover the water main construction footage costs, service line installation costs, system capacity buy in fee and well abandonment costs for all properties adjacent to the proposed public water supply with an existing home or building

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with an occupancy permit issued on or before 12-31-2025 at no cost to the owner through 12-31-2030. Properties who wish to connect would need to submit a water connection application and pay a \$60 deposit, then customers would be required to pay quarterly water bills at the same rates as existing customers.

Q: How many properties currently lack access to safe drinking water?

A: **Lucus Pals, Kalamazoo County Health Department:**

- 58 homes tested
- 3 homes above current Michigan MCL's (5.2%)
- 24 homes have PFAS detections - but below current Michigan MCL's (41.3%)
- 31 homes have Non Detect for PFAS (53.4%)
- 10 homes would be above current EPA standards if adopted by Michigan (17.2%)
- 16 homes are Detect but would be below current EPA standards if adopted by Michigan (27.5%)

Q: How many wells have received county approval on properties where public water access is available?

A: **James Baker, City of Kalamazoo:** Public water supply is not currently located anywhere within Ross Township.

Q: How many properties have tested with PFAS levels exceeding the current legal limit or other contaminants above permissible thresholds?  
Have any properties tested with contamination levels that surpass legal limits for substances other than PFAS?

A: **Rachel Golota, EGLE:** Please refer to Table 1 above for PFAS residential well data. Tables and figures on the [N34th St site's MPART website](#) can be referred to for monitoring well PFAS data.  
EGLE will defer to Kalamazoo County Health Department and Community Services (KCHDCS) concerning other contaminants sampled in residential wells.

Q: If properly maintained, do carbon filters effectively reduce contaminants to keep water within permissible thresholds?

Q: When will the new, more stringent PFAS regulations take effect, and what will the future legal limits entail?

A: **Rachel Golota, EGLE:** EPA's PFAS NPDWR only affects public water supplies (i.e., not private drinking water wells). Please refer to [EPA's website](#) detailing rule requirements and their associated timeframes.  
Some of EPA's numbers are lower than Michigan's while others are higher than Michigan's. EGLE needs to evaluate what this means in terms of public water supply requirements, in relation to sampling, testing, and future treatment if necessary.  
While not regulated under EPA's PFAS NPDWR, similar guidance is needed for residents on private drinking water wells. MPART, EGLE, and MDHHS are working on integrating the federal standards into our existing programs and agencies.

Q: How many additional properties will fall under regulatory scrutiny once the future legal limits for PFAS are enforced?

Q: Are there any other considerations regarding safe drinking water that we need to be aware of, beyond PFAS regulatory changes? Can in-home products like carbon filters effectively resolve issues with contaminants above the current legal limit?

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Q: What chemicals/additives do you put in the water while at the treatment facilities? Who regulates what you have to put in and the percentages? How are these chemicals/additives added, manually or automated?
Q: If automated, what safe guards are in place to provide that system from being hacked?
Q: The water that will be sent to the homes of Ross residents, is to come from the Campbell Lake pumping station, is that mixed with other pumping stations water before being set to the Residents home?
Q: When was the last time the Campbell Lake pumping station tested for PFAS and what was its levels?
Q: Is the only filtration system used to filter the water a carbon filter? Does this filter out any lead that may be in the water?
Q: At the two KBS Town Halls, ELGE stated that the PFAS site in Gull Vista neighborhood was not from the PPP 34 <sup>th</sup> St site, how do you know that, is there a ‘marker’ or ‘genetic marker’ that you look for when testing, to know where the contaminate is coming from?
Q: How do you know that the PFAS is coming from the PPP 34 <sup>th</sup> St. site? Or is that an assumption?
Q: When testing water, what steps are taking to assure that you are not self-contaminating your sample?
A: <b>Rachel Golota, EGLE:</b> There are standard operating procedures (SOPs) which are followed when collecting and analyzing samples. More information about SOPs can be found on <a href="#">MPART’s</a> and <a href="#">Environmental Protection Agency’s</a> websites. Generally, all field personnel are trained to understand potential sources for cross contamination, how to properly decontaminate equipment, and the actual act of collecting the sample (e.g., using proper sample container, collecting adequate amount of sample). There are additional samples collected and analyzed called quality assurance/quality control samples (QA/QC samples). These QA/QC samples double check to make sure procedures were followed, there likely was not any cross contamination, and the accuracy and precision of the laboratory analytical instruments (the machines which calculate the amount of PFAS in a sample).
Q: If Ross brings in water, what will be ELGE’s next step at the PPP 34 <sup>th</sup> St site for monitoring and clean up?
Q: How many test wells are in Ross and where are they located?
A: <b>Rachel Golota, EGLE:</b> There are nine groundwater monitoring well locations within Ross Township. Each well has three to four depth intervals which can be sampled, totaling 31 monitoring wells. The location of these wells can be found on the figures located on the <a href="#">N34th St site’s MPART website</a> .
Q: When did you start handing out filters to the Gull Vista neighborhood how long was this done?
A: <b>Rachel Golota, EGLE:</b> EGLE and/or MDHHS reached out to residents in the Gull Vista neighborhood requesting sampling of residential wells in 2023
Q: How many studies have been done on the effects of PFAS on humans and other animals? Who have done these studies so Residents can review them online?
A: <b>James Baker, City of Kalamazoo:</b> The City of Kalamazoo is required by law to chlorinate and provide corrosion control of the public water supply. Chlorine gas and liquid blended phosphate are dosed into the water supply at source stations. The City of Kalamazoo also adds fluoride to the water for dental health benefits. The City of Kalamazoo monitors, tests and reports chemical dosage, feed rates and residuals on a daily basis. The City of Kalamazoo is regulated by EGLE and the EPA to maintain chemical dosages within an established range. This information is all

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available within the annual water quality report

<https://www.kalamazoocity.org/files/assets/public/v/1/plans-amp-reports/water-quality/2023-water-quality-report.pdf>

Chemical feed rates are controlled by closed loop systems at the treatment location with inputs from staff, upgrades are currently underway to provide automatic flow control for phosphate systems. The City of Kalamazoo is fully compliant with all Department of Homeland Security and EPA threat and vulnerability assessments, systems are supported by the IT Department and KDPS.

Kalamazoo drinking water does not contain lead. Homes served by lead service lines that are in contact with drinking water may leach lead into the drinking water of that home. The City of Kalamazoo stopped installing lead service lines in 1949. Proposed connections to service Ross Township customers, if approved, would use copper service lines. Homes that have lead service lines or interior lead piping can use an NSF certified filter to provide protection against lead.

The Kalamazoo drinking water system is an all groundwater system with water provided by over 90 individual wells at 12 point of entry stations. Station 11 and Central are the only current stations to have oxidation treatment and filtration. The future consolidated Station 14 and 5 will have iron, manganese and PFAS treatment. Improvements are planned to provide additional consolidation at Central with additional filtration capability to include PFAS treatment and capacity as well as reliability improvements.

There is no carbon filtration in place at Station No.25.

Only Station No.25 provides water to Richland and (potential future) Ross Townships. If an emergency were to exist water could be sent backwards up the 33<sup>rd</sup> Street Transmission main via Station No.39. Both Station No.25 and No.39 were tested for PFAS in 2024 with non-detect results.

Q: This multimillion dollar issue has obviously been in the planning stages for several years. Given the magnitude of the expense shouldn't this be a voting issue for the entire Ross Township residents?

Q: Who will be sending out the water bills and will it be a combination water/sewage quarterly bill? Will there be a quarterly bill for simply being connected and a usage charge? Will GLSWA administer the service?

Q: Please clarify the post that was issued on Friday that states that the grant is only for the Delamar, Littlefield and Merrimac neighborhoods. I may have misunderstood Mr Baker and the handouts but I understood that if we have properties where the water main will run, we have the option to connect within the scope of the grant. Is that not correct? He never specified, nor do the slides indicate that only those neighborhoods have the opportunity to connect. I am located on East D, very close to the known area of contamination. I have an RO system. but thinking of resale - I would connect. The main will go down East D. It would be a shame to deal with the construction chaos and not benefit from a connection. Please clarify that point.

A: **James Baker, City of Kalamazoo:** Should Ross Township approve the FY 2025 DWSRF Project Plan proposed water extensions as shown on the attached map, residents on E. D Ave from the Richland/Ross Township line east to N. 37<sup>th</sup> Street will have an opportunity for voluntary

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<p>no cost connection from 2025 through 12-31-2030. Please feel free to use and share the attached map to answer any questions.</p>
<p>Q: COK has a 90M low interest loan and a 20M grant are these dollars linked to specific projects or is it just in one pot for COK to decide how to split/spend?</p>
<p>Q: If the Ross water project is covered by the Grant – and if Ross rejects the plan – does the Grant go away and any future service would be borne by the Ross residents?</p>
<p>Q: Richland has two dead end water service lines – not allowed under EGLE standards – the Ross project would allow for a low cost solution to the Richland looping issue. What happens if the Ross water plan is rejected?</p>
<p>Q: We know the vast majority of the costs involved with water installation is with the excavation and restoration of the streets and right of ways. Would it be fiscally responsible and economically advisable to install sewer infrastructure at the same time as the water as most of the excavation and restoration costs would be borne by the grant?</p>
<p>Q: If the area had fire hydrants, what would the reduction in Home Owners' Insurance be? Best guess 5%</p>
<p>Q: Who would be the water management authority? COK seems to be relinquishing the control and billing to GLSWA in many locations.</p>
<p>Q: If EPA follows through on their current direction of lowering PFAS in 5 years, and even further into the future, looking at all the heat maps that are currently public record, how many of the yellow groundwater monitoring wells will turn red, and how many of the green groundwater monitoring wells will turn yellow. What will the “new” area of concern look like?</p>
<p>A: <b>Rachel Golota, EGLE:</b> PFAS National Primary Drinking Water Regulation (NPDWR) is final. EPA established enforceable maximum contaminant limits (MCLs) for six PFAS on April 10, 2024. This rule affects public water supplies. More information can be found on <a href="#">EPA's PFAS NPDWR website</a>. An additional three monitoring well locations within Ross Township would exceed the EPA's MCLs (MW-18-13, MW-20-09, and MW-20-06, please refer to the <a href="#">N34th St site's MPART website</a> for the locations of these wells.). The wells color coded “green” indicate that there were no detections of regulated PFAS. These wells would remain coded as “green.”</p>
<p>Q: If EPA remains on this current trajectory, how many MORE homes / wells would be potentially considered above criteria for safe consumption? Given this scenario, what would the potential be for number of homes impacted, again, should EPA act in 5 years to lower acceptable PFAS levels? I'm not looking for absolutes or promises. I am looking for projections by the experts given what we know today.</p>
<p>A: <b>Rachel Golota, EGLE:</b> If current residential well data is compared to EPA's PFAS criteria, an additional three residential wells would exceed, for a total of 6 residential wells.</p>
<p>A: <b>Lucus Pols, Kalamazoo County Health Department:</b> I will present on this. To give you a for instance: In Ross there are currently 2 homes that are above Michigan's Maximum Contamination Level (MCL) for at least one compound of PFAS. If EPA's levels are adopted, there will be 11 homes above EPA's levels.</p>
<p>Q: Many residents feel a personal, in home reverse osmosis system is 100% effective in protecting their families from PFAS. Is there any private use RO system that is 100% guaranteed in removing PFAS in private homes?</p>
<p>A: <b>Lucus Pols, Kalamazoo County Health Department:</b> ? I don't know if I can speak to RO systems, as each can be different, and different systems are designed to filter different</p>

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things. What I can say is that filters are only as good as they are maintained and monitored. City water has standards in place to monitor and maintain their water supply. If a home doesn't maintain their filter system they could be unknowingly drinking contaminated water. Additional information on filters can be found on [MPART's website for Home Filters](#) or [EPA's website for reducing PFAS in drinking water with treatment technologies](#).

Q: Why in 2023 did the Ross Township 10/3/2023 presentation indicate filters are "not a long-term" solution?

Q: What is the alternative plan, as the recent reports of Kalamazoo city water has rising PFAS, when the city does not get those levels reduced and the township has obtained loans and tax payer dollars to fund this project?

Q: Is PFAS present in wells tested in Ross Township, and if so, how many and at what levels? One resident claims only one well of 67 tested has PFAS, and that the levels on that well are decreasing.

A: **Rachel Golota, EGLE:** Yes, per- and polyfluoroalkyl substances (PFAS) are present in residential drinking water wells. A total of 58 residential wells in Ross Township have been sampled by Michigan Department of Health and Human Services (MDHHS) and/or Michigan Department of Environment Great Lakes and Energy (EGLE). Total PFAS for these wells range from non-detect to 2,599 part per trillion (ppt).

Sampling results will not be identical from one sampling event to another sampling event. Aquifers are dynamic systems. Results from this year are within range of what is expected for normal fluctuations. The data does not indicate concentrations are trending downward.

Q: Can township officials get a list of addresses that have "testing data exceedances.", or at least a generic list with just a street?

A: **Rachel Golota, EGLE:** MDHHS retains the records for residential well sampling data, EGLE defers to their agency for sharing individual results.

Q: Is there any plan to increase well monitoring in Ross Township?

A: **Rachel Golota, EGLE:** There is no plan at this time to extend the investigation area further east into Ross Township.

Q: Will EGLE work on finding the source of contamination, stop it and clean up the PFAS?

A: **Rachel Golota, EGLE:** The main source of the contamination is Production Plated Plastics' (PPP) facility. Anticipated next steps include evaluating several treatment technologies to address PFAS contamination at the PPP site to prevent additional migration of contamination offsite.

Q: If public water is extended into Gull Vista neighborhood, will EGLE stop working on finding the source, stop working on stopping the source and stop clean? Do you move on since we have public water offered?

A: **Rachel Golota, EGLE:** There is no current plans to stop work at this site.

Q: If Ross brings in water, what will be ELGE's next step at the PPP 34<sup>th</sup> St site for monitoring and clean up?

A: **Rachel Golota, EGLE:** EGLE will continue to monitor groundwater contamination by sampling groundwater monitoring wells twice a year. Laboratory experiments will be conducted to evaluate several technologies' ability to treat nickel, chromium, and PFAS in soil.

Q: Do we know if the plume is moving, and if so, which direction and how fast?

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<p>A: <b>Rachel Golota, EGLE:</b> Data indicates that the footprint of the plume in Ross Township is stable.</p>
<p>Q: Where is the plume?</p>
<p>A: <b>Rachel Golota, EGLE:</b> Wells which exceed Part 201 Criteria in Ross Township include MW-18-16, MW-21-01, MW-22-01. Please refer to the <a href="#">figures on the N 34<sup>th</sup> St site’s Michigan PFAS Action Response Team (MPART) Website</a></p>
<p>Q: EGLE said 2 monitoring wells in Gull Vista exceed the acceptable levels for PFAS. Wells 21-01 and 22-01 are in Gull Vista and 18-16A is outside our neighborhood and maybe in Richland Twp. Please give us the last test results for these wells in 2024.</p>
<p>A: <b>Rachel Golota, EGLE:</b> Analytical data for these wells can be found on the <a href="#">N34th St site’s MPART website</a>. MW-18-16A is within Ross Township.</p>
<p>Q: Why did the monitoring wells mentioned above, detect for PFAS when private wells at these monitoring wells site had little to non detection of PFAS?</p>
<p>A: <b>Rachel Golota, EGLE:</b> 20 residential wells in the Gull Vista area had detections or exceedances for PFAS. (For clarity, the Gull Vista area is being defined as N 36th street, Delmar, Littlefield, Merrimac, &amp; Sherbrook) Differences in results between individual residential wells and/or groundwater monitoring wells can be attributed to many factors including but not limited to construction of the well (e.g., depth or well, length of screen), subsurface geology, and aquifer dynamics.</p>
<p>Q: What is the source of the PFAS contamination in these individual monitoring wells and the 1 private well? Does EGLE think the source is still here?</p>
<p>A: <b>Rachel Golota, EGLE:</b> It is unclear at this moment what caused the PFAS exceedances in the Gull Vista area and if a source remains. While the PFAS exceedances in the Gull Vista area appear as a spot of contamination outside the main body of the PPP PFAS plume, EGLE’s actions to mitigate unacceptable human exposure remain unchanged.</p>
<p>Q: At the two KBS Town Halls, ELGE stated that the PFAS site in Gull Vista neighborhood was not from the PPP 34<sup>th</sup> St site, how do you know that, is there a ‘marker’ or ‘genetic marker’ that you look for when testing, to know where the contaminate is coming from?</p>
<p>A: <b>Rachel Golota, EGLE:</b> There are laboratory methods and data evaluations which can be done to help “fingerprint” a PFAS plume’s source. However in this case, that is not needed. There are wells with lower PFAS concentrations between Gull Vista area wells and the wells located at and near the PPP site. This data shows that Gull Vista area as a “hot spot” separate from the main part of the PPP PFAS plume.</p>
<p>Q: How do you know that the PFAS is coming from the PPP 34<sup>th</sup> St. site? Or is that an assumption?</p>
<p>A: <b>Rachel Golota, EGLE:</b> The locations of the groundwater monitoring wells and their PFAS concentrations allow EGLE to deduce the contamination originated from the former PPP site.</p>
<p>Q: If the water lines south of CD Avenue and east of the Ross Township border are necessary to significantly reduce the risk of PFAS exposure:</p>
<p>A: <b>James Baker, City of Kalamazoo:</b> The slides will address this question and if it is not clear, I will be happy to explain/elaborate further.</p> <p>There are real world challenges with placing new water main to service customers impacted by variable concentrations of pollution across a broad area, that is to say that the entire area isn’t seeing the same concentration of PFAS with homes at both ND and above MI MCLs.</p>

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Water Main Design Constraints

- Must be placed within a public ROW
- Must be looped
- Must serve all customers by full direct frontage where customers are intended to be served
- Ross Township loops help to close Richland Township loops
- 100-year design life
- Water quality benefits to the system

The proposed water mains on E D Ave, M89, E DE Ave, and 37<sup>th</sup> Street are primarily intended to connect and “bring home” existing Richland Township dead end mains.

An isolated main to the Delmar neighborhood would not be a design consideration given the outstanding dead ends in Richland and would not meet current EGLE reliability standards nor Kalamazoo redundancy standards.

**Additional Resources provided by EGLE:**

**United States Environmental Protection Agency (USEPA) website “PFAS Analytical Methods Development and Sampling Research**

<https://www.epa.gov/water-research/pfas-analytical-methods-development-and-sampling-research>

**USEPA’s Final PFAS National Primary Drinking Water Regulation**

<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

**EPA’s Reducing PFAS in Drinking Water with Treatment Technologies**

<https://www.epa.gov/sciencematters/reducing-pfas-drinking-water-treatment-technologies>

**Michigan’s PFAS Action Response Team (MPART) website for PFAS sampling guidance**

<https://www.michigan.gov/pfasresponse/investigations/sampling-guidance>

**MPART website for North 34<sup>th</sup> Street**

<https://www.michigan.gov/pfasresponse/investigations/sites-aoi/kalamazoo-county/north-34th-street>

- **For figures and data table for groundwater monitoring results, scroll down to the 2024 dropdown selection.**

**MPART Home Filters**

<https://www.michigan.gov/pfasresponse/drinking-water/filters>