



September 8, 2022

MS. DENICE NELSON  
JOHNSON CONTROLS, INC  
5757 N. GREEN BAY AVENUE  
MILWAUKEE, WI 53209

Via Email Only to [denice.karen.nelson@jci.com](mailto:denice.karen.nelson@jci.com)

SUBJECT: Request for Information on Deep Wells  
JCI/Tyco FTC PFAS, 2700 Industrial Parkway South, Marinette, WI  
BRRTS #02-38-580694

Dear Ms. Nelson:

The Wisconsin Department of Natural Resources (DNR) understands that Johnson Controls, Inc. and Tyco Fire Products LP (JCI/Tyco) has been conducting public outreach to notify residents in its potable well sampling area (PWSA) about potential options for long-term sources of safe drinking water. The information that the DNR received from JCI/Tyco related to this outreach is attached.

On August 19, 2022, JCI/Tyco communicated with the public in the local newspaper that the residents in the PWSA have the opportunity now, or in the future, to have JCI/Tyco install a new deep well on their property to serve as the resident's private drinking water supply.

The DNR understands that some residents identified deep wells as their preferred option. To demonstrate that residents were provided sufficient information to inform their decision, the DNR requests that JCI/Tyco provide details to the DNR to document that this information was provided or notify residents of the following information (Wisconsin Administrative [Wis Admin.] Code § NR 714.07):

- The time frame that they will receive the new deep well after they sign an agreement.
- The water quality from deep wells is not guaranteed.
- In the PWSA, deep wells may provide water that looks or tastes different from a home's existing shallow well, and the water may still require treatment to make it usable.
- In the PWSA, continued monitoring of the deep wells for per- and polyfluoroalkyl substances (PFAS) is recommended after the well is installed.

While the DNR has stated and maintains its preferred alternative for safe drinking water in the PWSA is a public water supply, we recognize the need to be responsive to residents' preferences. Deep private wells can be an acceptable interim action to provide safe drinking water, if the new wells are protective of public health, safety and welfare and the environment (Wis Admin. Code § NR 708.11(3)(a)). The DNR requests that JCI/Tyco submit details on the following items to explain how JCI/Tyco intends to design the deep wells proposed for the PWSA to be protective.

- Construction specifications for the wells to prevent cross-contamination from the upper aquifer.
- Evaluation of the potential for PFAS migration into deep aquifer from cumulative effect of the new wells.
- Short and long-term testing plan for PFAS.

- Testing plan for the presence of public health parameters such as radium, arsenic and other naturally occurring metals, as well as public welfare (aesthetic) parameters and treatment plan, if needed.
- Contingency plan if PFAS, public health and/or public welfare parameters make a well non-potable.

Please note the comments provided herein do not constitute approval of the boundaries of the area where JCI/Tyco must test and supply alternative drinking water and do not constitute approval of deep wells as a final solution for safe drinking water in the PWSA.

The DNR is committed to helping residents in the town of Peshtigo receive a long-term source of safe drinking water. With that in mind, please provide the bulleted items requested above within **30 days** of the date of this letter. If you have any questions, please contact me at (608) 622-8606 or [Alyssa.Sellwood@wisconsin.gov](mailto:Alyssa.Sellwood@wisconsin.gov).

Sincerely,



Alyssa Sellwood, PE  
Complex Sites Project Manager  
Remediation & Redevelopment Program

Attachments: March 2022 - Newspaper Advertisement and Mailers to Residents on Long-Term Water Options  
May 2022 - Summary of Feedback from Residents  
June 2022 - Summary of Feedback from Residents  
August 2022 - Newspaper Advertisement

cc: Katie McGinty, (via email: [Katie.McGinty@jci.com](mailto:Katie.McGinty@jci.com))  
Gail Good, (via email: [Gail.Good@wisconsin.gov](mailto:Gail.Good@wisconsin.gov))  
Jodie Peotter, (via email: [Jodie.Peotter@wisconsin.gov](mailto:Jodie.Peotter@wisconsin.gov))  
Christine Haag, (via email: [Christine.Haag@wisconsin.gov](mailto:Christine.Haag@wisconsin.gov))  
Kyle Burton, DNR (via email: [Kyle.Burton@wisconsin.gov](mailto:Kyle.Burton@wisconsin.gov))

**March 2022**

**Newspaper Advertisement and**

**Mailers to Residents on Long-Term Water Options**

# Multiple Options for Long-Term Clean Drinking Water

For Town of Peshtigo Residents in Tyco's Potable Well Sampling Area

In preparation for the facilitated discussions about a long-term water source, Tyco further researched all potential water options for the Town of Peshtigo residents potentially impacted by PFAS from the historic operations at Tyco's Fire Technology Center (FTC) – also known as Tyco's Potable Well Sampling Area (PWSA). Based upon further analysis, there are multiple options for a viable long-term solution.

## We want to hear directly from impacted property owners!

We will be reaching out to PWSA property owners to gauge the feasibility of and interest in all options. Tyco is focused on finding and funding a solution that is safe, viable, and provides property owners in the PWSA with a path forward for their long-term water source while transitioning them off bottled water/POETs provided by Tyco as soon as possible.

## OPTIONS TO BE CONSIDERED

### Individual Deep Wells

Nearby communities like City of Peshtigo use deep wells and access a deep aquifer for their community wells. So, individual wells located in the deep aquifer (500 ft.+ deep) below the Town of Peshtigo are a safe and viable solution when constructed with steel double casing of wells, as well as household water softeners as needed.

### City of Marinette Municipal Water Service

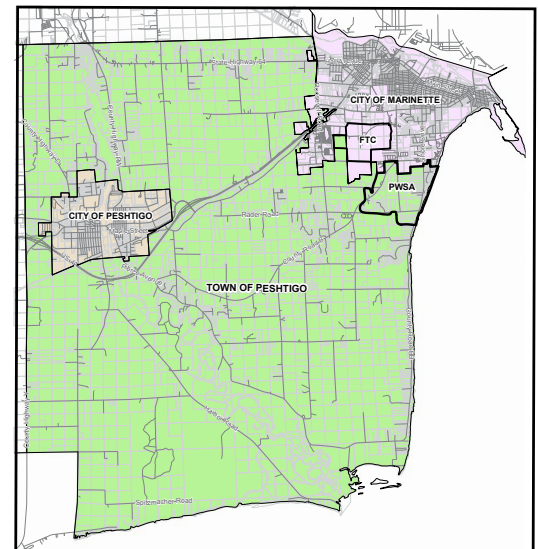
This option would require that 51% of voters and 50% of property owners in Tyco's PWSA request to be annexed through a petition. The City of Marinette cannot solicit residents to request annexation. If a valid petition is submitted, the City will vote on it. If the City Council passes the annexation ordinance, all residents in the petitioned area would be residents of the City of Marinette receiving City services and paying City property taxes.

### Hybrid

If only a portion of the property owners in Tyco's PWSA seeks and obtains annexation into the City of Marinette, the long-term water solution could be a combination of a City of Marinette waterline for some properties and individual deep wells for other properties within the PWSA but not within the annexed area.

### City of Peshtigo Municipal Water

This option has recently received a lot of attention based on a study done by Strand Associates for the Town of Peshtigo Board. This option would require construction of a 7.2-mile water pipeline from the City of Peshtigo to Town of Peshtigo residents in Tyco's PWSA. While there are benefits to this option, Tyco is concerned this option may not be feasible due to challenges including Railroad and private property approval, wetlands protection, and potential need for Town of Peshtigo to create a new Water Authority. If built, this option will take years to provide relief to those currently on bottled water and POETs.



\*Map of PWSA does not include 3 properties in Marinette with private drinking water wells.

Tyco will be reaching out to property owners in the PWSA to schedule meetings to share the options and hear input from residents. If residents in the PWSA would prefer to call and schedule a meeting, they can do so by **calling 715-582-7100 or filling out the contact form at [www.tycomarinette.com](http://www.tycomarinette.com)**.

**We look forward to discussing these options with residents and hope to start development as soon as this construction season!**



March 1, 2022

Dear Neighbor,

As promised, Tyco further researched potential water options for you and other Town of Peshtigo residents in our Private Well Sampling Area (PWSA) who were potentially impacted by PFAS from historic operations at our FTC. Based upon our analysis and engineering reports recently completed for the Town of Peshtigo and City of Peshtigo, **there are several options for a viable long-term solution.**

1. Annexation to City of Marinette to receive municipal water via a waterline
2. Individual Deep Wells 500+ ft deep designed to ensure good water quality
3. A Hybrid that combines City of Marinette municipal water and Individual Deep Wells if not everyone in the PWSA is in the area annexed
4. A waterline from the City of Peshtigo to receive municipal water

We are now in the process of calling all 169 PWSA property owners to receive feedback, field questions and understand interest in the four options. Tyco is focused on finding and funding the development, design and construction of a solution that is safe, viable, and provides property owners in the PWSA with a long-term drinking water source, rather than bottled water/POETs, as soon as possible. **Enclosed is a fact sheet on each of the four long-term water options for your review.**

**We would like to schedule meetings in person or via Zoom to discuss the options and hear your feedback.** We also have more information on the process for requesting annexation to the City of Marinette.

**To contact us** about what days/times in the next 3 weeks work for a meeting and if you prefer Zoom or in-person, you can call 715-582-7100 or send us an email using the contact form at [www.tycomarinette.com](http://www.tycomarinette.com).

We look forward to hearing from you.

Sincerely,

A handwritten signature in black ink, appearing to read "Katie McGinty".

Katie McGinty, Chief Sustainability Officer

JCI/Tyco

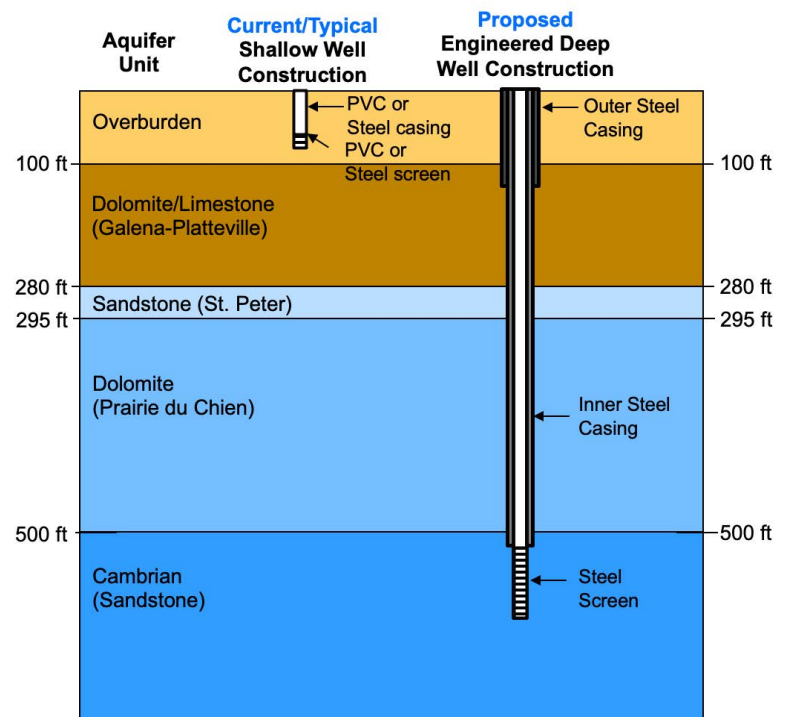


# Long-Term Water Option: Individual Deep Wells

Nearby communities like City of Peshtigo use deep wells and access a deep aquifer for their community wells. So, Individual Deep Wells located in the deep aquifer (500 ft.+ deep) below the Town of Peshtigo are a safe and viable solution when constructed with steel double casing of wells, as well as household water softeners.

## BENEFITS

- Would be constructed to be safe and ensure good water quality through the use of the following features:
  - Install wells to deeper aquifer (500+ ft.)
  - Use steel double casing to prevent shallow groundwater from moving into the deeper aquifer
  - Filter out naturally occurring materials in deep aquifer using proven equipment (i.e., water softener) as needed
- Water quality monitoring
- Can be initiated quickly
- No municipal water bills
- No annexation needed
- Does not require regular access to homes
- Property owners sign agreements directly with Tyco



## Challenges

- Requires individual property owner access agreements and development.
- Maintenance cost for in-home equipment (i.e. water softener), which many residents already have.

## Timeline

- Can be initiated this construction season – each well will take about 1 week, so all wells can be completed quickly.

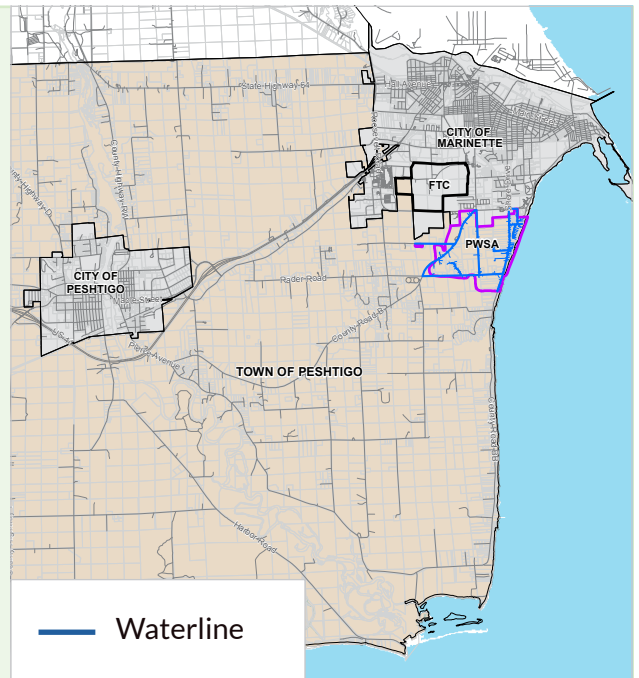


# Long-Term Water Option: City of Marinette Municipal Water Service

This option would require that 51% of voters and 50% of property owners in Tyco's Potable Well Sampling Area (PWSA) request to be annexed through a petition. The City of Marinette cannot solicit residents to request annexation. If a valid petition is submitted, the City will vote on it. If the City Council passes the annexation ordinance, all residents in the petitioned area would be residents of the City of Marinette receiving City services and paying City property taxes.

## BENEFITS

- Tie into existing municipal water supply and Water Utility, which:
  - Monitors water quality
  - Handles Operations & Maintenance
  - Provides billing & customer service
  - Has backup water supply
- City of Marinette waterline is along the City border with Town of Peshtigo so very easy to extend to homes in the PWSA



\*Map of PWSA does not include 3 properties in Marinette with private drinking water wells.

## Challenges

### Annexation Process

Annexation is commonly used in Wisconsin to allow property owners to receive the services provided by a nearby community. Property owners can request to be annexed to a nearby municipality through a petition including a legal description of the area proposed to be annexed.

#### → Property Owners Request Annexation by **Petition**:

- An ad must be placed in a newspaper notifying the public of the intent to circulate a petition, including the area proposed to be annexed.
- The Petition must be signed by: at least (a) 51% of the voters in the area requesting annexation (based on the number of votes cast in last Governor's election from that area) and (b) the owners of ½ of the land within the area, or ½ of the real property in assessed value in the area.

- ➔ **A Petition for a Referendum** can initiate a referendum process for a vote on annexation:
  - ➔ This Petition must be signed by (a) at least 20% of the voters in the area requesting annexation (based on the number of votes cast in last Governor's election from that area) and (b) the owners of ½ of the land within the area, or ½ of the real property in assessed value in the area.
  - ➔ Once this Petition is filed, a referendum of just the voters who reside in the area proposed to be annexed would be held.
- ➔ **If City of Marinette** receives a Petition for Annexation or when a Referendum for annexation passes, the City must consider and vote on an Annexation Ordinance, which requires 2/3 vote of Common Council for an area to be annexed.
- ➔ All PWSA properties in the annexed area will be served by municipal water; those in PWSA but outside annexed area may be served by individual deep well (Hybrid option) - *see Individual Deep Well & Hybrid Fact Sheets*
- ➔ **Costs/Benefits of Annexation** – *See matrix for more detail*
  - ➔ Property owners annexed to the City of Marinette will see a tax increase but that additional cost will pay for garbage removal, road snow plowing, professional fire protection, and City Police. Because a property will have professional fire protection, it is anticipated that homeowners' insurance cost would decrease. Given access to City services including municipal water, it is anticipated that property value would increase. If you have questions about your individual property taxes, consult the Officer of Assessor.

## Timeline

- ➔ Annexation process can take from 3 months to about 14 months
- ➔ 1- 2 years for Construction of waterline after permits received





# Long-Term Water Option: Hybrid of Marinette Municipal Water & Individual Deep Wells

If only a portion of the property owners in Tyco's Potable Well Sampling Area (PWSA) seeks and obtains annexation into the City of Marinette, the long-term water solution could be a combination of a City of Marinette waterline for some properties and individual deep wells for other properties within the PWSA but not within the annexed area.

## BENEFITS

- Not all properties in PWSA need to be annexed
- Provides a combination of two viable long-term water options that can be constructed in a timely manner
- Possible combination should increase feasibility

### INDIVIDUAL DEEP WELLS

- Includes features to ensure good water quality including well depth (500 ft+), steel double casing, and in-home water softeners.
- Taps same deep aquifer used by nearby cities for community wells

### MARINETTE MUNICIPAL WATER SERVICE

- Ties into existing municipal water supply and Water Utility that handles billing, customer service, maintenance and operations and ensures water quality

## Challenges

- Requires annexation for those who want Marinette Municipal Water
- Requires access agreement for those getting Individual Deep Wells
- Annexed properties will be required to pay city taxes in exchange for water, fire and garbage services.

## Timeline

- Individual Deep Wells
  - Can start this construction season and be completed quickly
- Marinette Municipal Water
  - Annexation process can take from 3 months to about 14 months
  - 1-2 yrs. for Construction of waterline after permits received



# Long-Term Water Option: City of Peshtigo Municipal Water Service

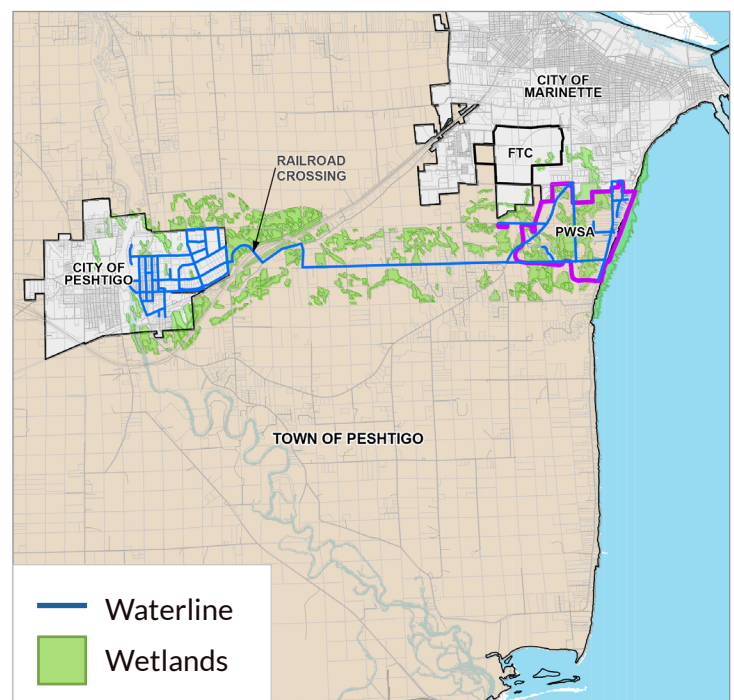
This option has recently received a lot of attention based on a study done by Strand Associates for the Town of Peshtigo Board. This option would require construction of a 7.2-mile water pipeline from the City of Peshtigo to Town of Peshtigo residents in Tyco's Potable Well Sampling Area (PWSA). While there are benefits to this option, Tyco is concerned this option may not be feasible due to the challenges detailed below. If built, this option will take years to provide relief to those currently on bottled water and POETS.

## BENEFITS

- Town of Peshtigo would buy water from City of Peshtigo (known as wholesale)
  - City of Peshtigo monitors water quality
  - City of Peshtigo has backup water source
- If the City of Peshtigo will provide water directly to PWSA residents (known as retail), the City Water Authority will also handle billing, customer service plus Operations & Maintenance (O&M)
  - If not, the Town of Peshtigo will have to create a new Town Water Authority, which has challenges, see below

## Challenges

- This will be a **challenging route** to construct a waterline, which could further delay an already long timeline.
  - 7.2 -mile pipeline requires easements/access agreements with private property owners and its length could require at least one booster pumping station to ensure water quality
  - Requires approval of Railroad authorities
  - Assessment and protection of wetlands - will require time to delineate, secure mitigation (if needed) and obtain state/federal permits



- ➔ Requires **approval** of Public Service Commission (PSC), Wisc. Dept. of Natural Resources, Town of Peshtigo, and City of Peshtigo
- ➔ Town makes request to City – Must come to **Intergovernmental Agreement**
- ➔ Number of residents connected may impact feasibility & cost for all residents
- ➔ **Tyco will pay** construction costs for a long-term water solution **for those in the PWSA only** but will not pay any costs for any areas outside of the PWSA. The Town of Peshtigo Board has recommended an option that would go beyond the PWSA
- ➔ *If* City of Peshtigo will not provide retail service, the Town of Peshtigo will have to create a new Town Water Authority and handle the additional permanent financial and administrative responsibilities of customer service, billing and O&M, which are complex and time-consuming
  - A Town Water Authority must be approved by the PSC

## Timeline

- ➔ At least 4 years per Ruckert-Mielke study provided to City of Peshtigo leadership in February 2022

**May 2022**

**Summary of Feedback from Residents**

## Update on Outreach to Residents about Long-Term Water Source

Thanks to the **75% of well owners in Tyco's Potable Well Sampling Area (PWSA)** who took the time to meet with Tyco to learn more about the 4 options for long-term water based on engineering studies and share their input. **The two-way communication will continue** as we move forward in the transition off bottled water and POETs to a long-term clean water source.

### Feedback from PWSA Residents

- A slight majority of those we spoke to expressed a **preference for deep wells**.
- Some said they would prefer to **keep things the way they are or did not prefer** any long-term water option at this time.
- Less than 2 percent of those we spoke to preferred **water from the City of Peshtigo**. Most did not think it was practical or feasible.
- Many were **concerned about annexation to the City of Marinette** to get municipal water. Their primary reasons were the new costs that would be incurred for increased taxes and water bills, as well as not wanting to abide by City ordinances.
- That being said, there were others who prefer to be **annexed in order to get water from the City of Marinette**. And many of those who preferred deep wells said they were **open to annexation depending on factors** such as access to sewers, what their neighbors wanted, and Tyco covering at least some of the new tax and water costs.

### Neighbors to gauge interest in annexation

Some of the **property owners who would prefer annexation** have requested some time to speak to neighbors to find out if there is sufficient interest in pursuing annexation for a portion of the PWSA. Neighbors also said they need support in mounting an outreach effort. Tyco therefore is paying for a consultant to work with neighbors to assist them in their efforts to connect with other residents. In response to your feedback, and to aid property owners in determining whether they are interested in pursuing annexation, Tyco would like to clarify:

- **If annexation is pursued by residents and is successful**, Tyco would provide an **upfront, one-time payment** to property owners that would be calculated using the net present value (NPV) of 20 years of increased property taxes and water bills, based on current home assessment values, tax rates, and average water bills. This is in addition to paying for the construction of the waterline.
- If annexation is pursued by residents and is successful, the City of Marinette may or may not ask that annexed residents to **connect to a City sewer line**. Tyco would not cover the costs associated with constructing sewer lines or sewer bills.

### Tyco doing additional research on deep wells based on feedback

- We are looking into the possibility of **providing a maintenance contract for 20 years** to property owners receiving a well that would **cover the cost of any necessary water quality remedies**, if any, like reverse osmosis systems and/or water softeners. This maintenance contract would be in addition to Tyco paying for the construction of the deep wells and needed equipment repairs or replacements.
- Based on comments we received during this process, we are also doing additional geophysical testing **to identify the well depths and features that would provide the best water quality**, while ensuring safety.

Once this additional research is done and we know if a certain area of the PWSA is seeking annexation, **Tyco can begin the long-term water source implementation process, hopefully by late summer**. For deep wells, that would involve an agreement between each well owner and Tyco. For water from the City of Marinette, that would involve completing the annexation process between the property owners and the City, and then, if successful, working with the City to further design and construct a water line to the annexed properties. If both annexation and deep well options will be part of the long-term clean water solution, we will implement this hybrid option.

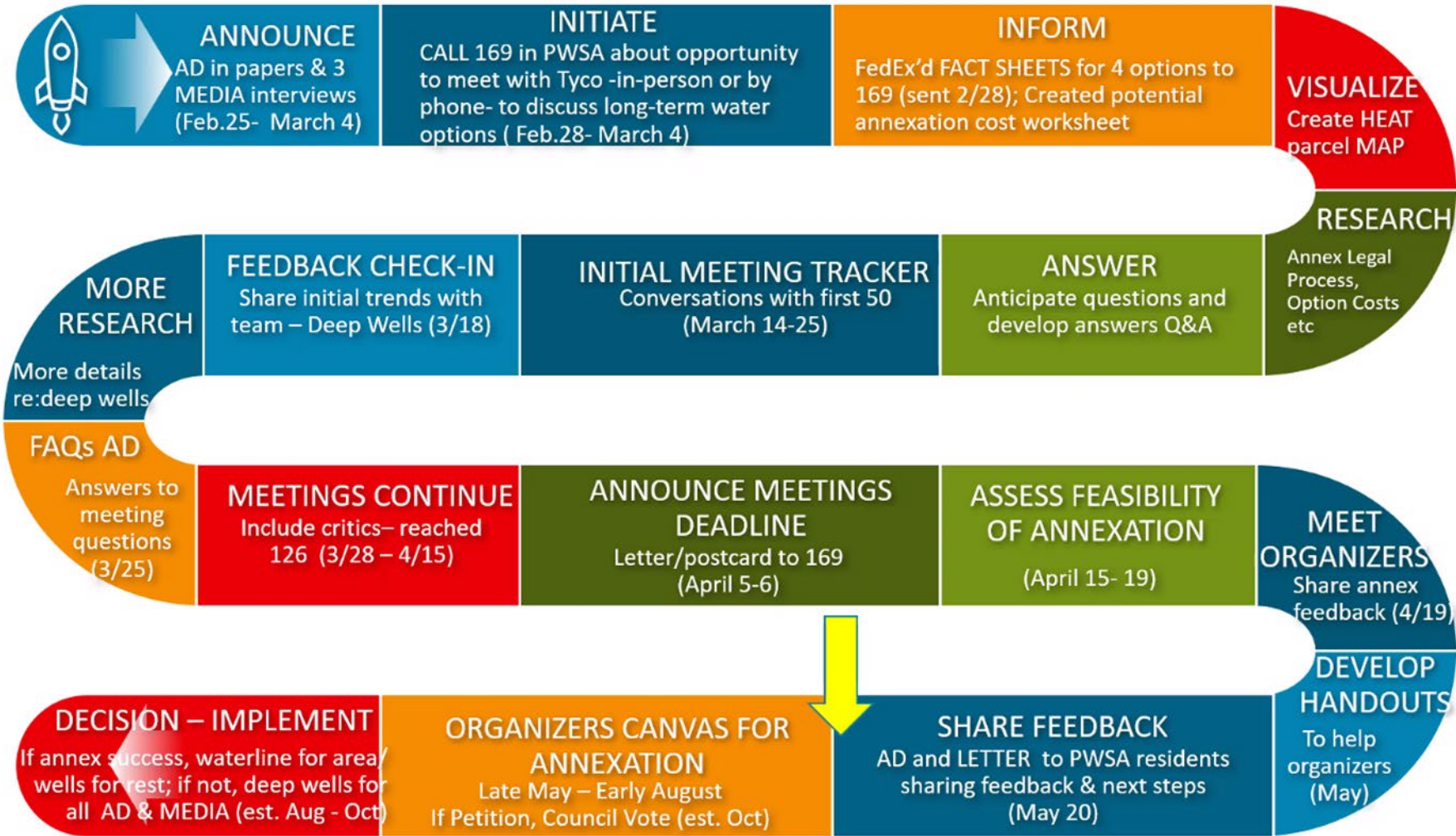
We will be sure to communicate with PWSA residents as the process moves along. As always, you can contact us at (715) 582-7100 or via the Contact Us form on [www.tycomarinettenet.com](http://www.tycomarinettenet.com)

**June 2022**

**Summary of Feedback from Residents**

# Slides shared on June 2, 2022

Kathleen Cantillon, Mary Gade and Denice Nelson



### OUTREACH PROCESS/TIMELINE



# Conversations with Homeowners

## Outreach Process

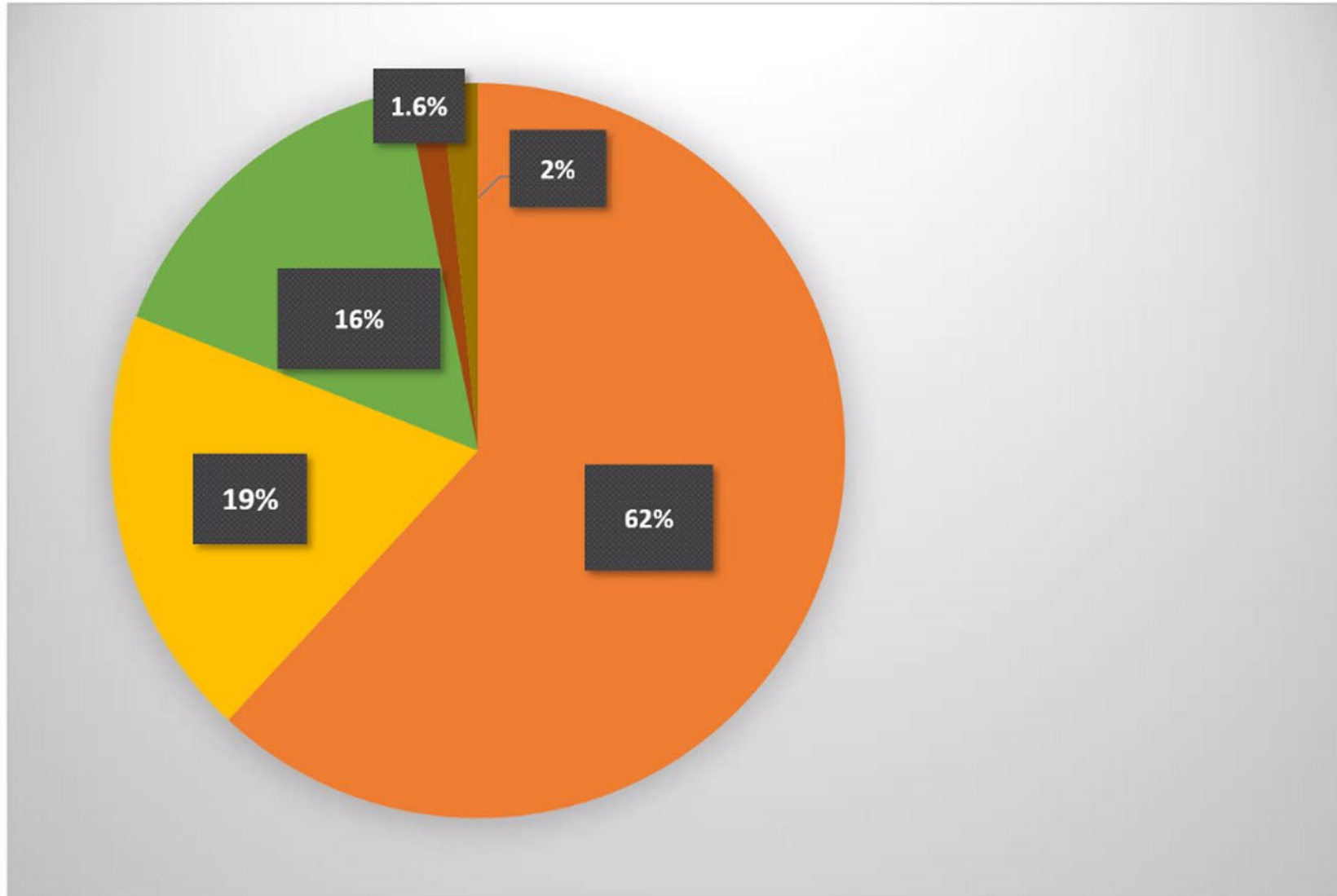
Called to set up meetings in person or by phone – *their preference*

- If in person, usually at person's home

Conversation:

- Asked if they had any questions about the options after reading the fact sheets
  - Answered any questions/concerns they had
- At this point, which option sounds most desirable to you? And why?
- What is your biggest concern about the options?
- If concerns addressed, would you be open to annexation or another option?

# PWSA Outreach Feedback



REACHED	126
DIDN'T REACH	43
TOTAL WELLS	169

**August 2022**  
**Newspaper Advertisement**

# Progress Continues on Implementing Long-Term Water Solution

Express Interest in Annexation by September 1  
Deep Well Agreements Coming in September

## More Neighbors Are Weighing In

Thanks to the well owners in the Potable Well Sampling Area (PWSA) who have communicated with Tyco about our offer to pay the new costs associated with a long-term water solution: a deep well with a 20-year contract for water quality services or a municipal waterline with a lump sum payment of the NPV of 20 years of tax increases and water bills if they are annexed.\*

Jennifer Friday, the resident who has been posting on Facebook and meeting with neighbors to discuss all available options, reports there may be sufficient interest in part of the PWSA to be annexed so they can receive municipal water from the City of Marinette.

With all of this extensive outreach, PWSA property owners have now received detailed information on the 2 available options (deep wells or annexation to City of Marinette to receive municipal water), had their questions answered, and understand the costs and payments Tyco is taking responsibility for. We can now move forward as a community and begin to deliver those permanent clean water solutions.

## Preparation of Deep Well Agreements

Tyco has been doing the preparation work necessary to start installing wells as soon as possible: title searches, additional water quality tests, and soliciting bids from well drillers.

**We plan to mail deep well agreements to those residents who are not in an area of possible annexation by the end of September.**

## Resident Deadline to Communicate Interest in Annexation: September 1

Jennifer Friday has publicly indicated that she needs to hear from any PWSA residents interested in annexation by September 1.

**You can reach Jennifer via the Facebook group: Town of Peshtigo PFAS Impacted Residents, by calling or texting her at 715-316-1698, or emailing her at [jssb31@yahoo.com](mailto:jssb31@yahoo.com).**

If there is sufficient interest, the area for potential annexation will be defined publicly, and Jennifer will start to circulate a petition for residents in that area to sign.

## Deep Well Installation Scheduled to Start This Fall

So, by this fall, property owners in the PWSA should know if they are being offered a deep well from Tyco or if they live in the area of possible annexation to get water from the City of Marinette.

Once a Deep Well Agreement is signed, installation can begin. If there is not sufficient interest in annexation or the petition is not approved by the Marinette Common Council, all owners will have the opportunity to get a deep well from Tyco.

**Thanks for your patience as this process has unfolded.**

We are grateful for your engagement and are very encouraged that the time when all PWSA neighbors will have a permanent clean water solution is now in sight.

**As always, you can contact us at (715) 582-7100 or via the Contact Us form on [www.tycomarinette.com](http://www.tycomarinette.com).**

\*Tyco would provide an upfront, one-time payment to property owners that would be calculated using the net present value (NPV) of 20 years of increased property taxes and water bills, based on current home assessment values, tax rates and average water bills, if they are annexed.