



FALL 2020

# LANNON PRIVATE WELL CONTAMINATION AND MUNICIPAL WATER SERVICE UPDATE

Contaminated water supply in Village of Lannon private wells is a decades-long issue. The Village made an **EMERGENCY DECLARATION** to address the E.coli in private well supply.

## WHAT DOES THE EMERGENCY DECLARATION MEAN?

- Drinking water from contaminated sources may pose a very serious public health risk.
- Residents and businesses with private wells are required to connect to the municipal water supply
- Funds are available to reduce the overall projects costs and reduce the burden to individual Lannon property owners. (*see FUNDING UPDATE inside*)

**WHEN MUST CONNECTIONS BE COMPLETE?** Properties must connect to the public water main **within 6 months** of water main availability. (Village Ordinance Sec. 78-157)

- Properties with an existing public water main on their street that are not connected: you will receive detailed information about connecting to the system with grant funds that are available to you through the next six months, starting in October 2020.
- Properties without a water main in front of your property: you will connect after the public water main is installed between **January 2021 and December 2021**. The Village will send you a separate letter with additional information.

## TIME SENSITIVE!

**LIMITED TIME OFFER** - grant money to help cover private residential property expenses is available now and some of these funds must be used by the end of the year.

### WHO QUALIFIES:

- If you have an existing water main in front of your residence
- If your property is on a street planned for new water main installation

### WHAT IS INCLUDED:

- Private sector laterals
- Internal plumbing conversions

### HOW DO YOU APPLY FOR FUNDS:

- If your property is impacted by this project, you will receive a letter in the mail with an enclosed plumbing contract. ***You must sign and return the contract.*** The contractor will then call you to schedule the work.
- A similar program will be available to help businesses.

## CONTACTS

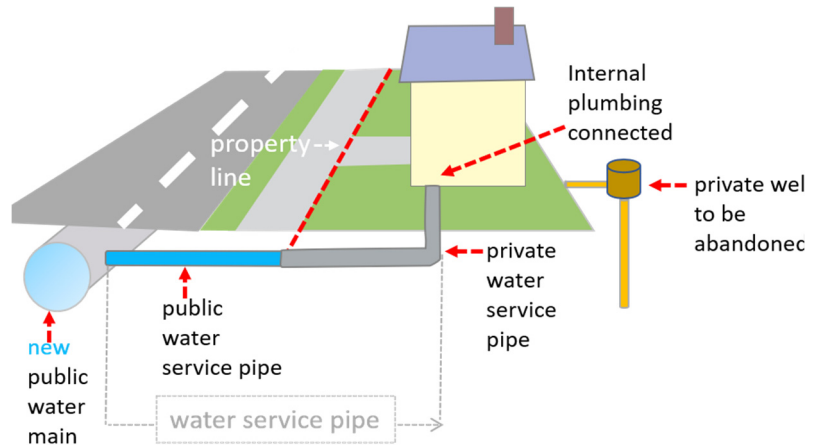
Tom Gudex (Village President) - 262-488-5813  
Ben Wood (Village Engineer) - 414-271-0771

# FUNDING UPDATE

## AFFORDABLE SOLUTIONS

Providing an affordable solution to the water quality emergency is a primary concern for Village officials. For the past two years, officials have secured funding from various public and private sources.

- The **USDA RURAL DEVELOPMENT** funds have been approved and obligated for the public water main and well. This includes \$3,493,000 of grant funds, and \$4,998,000 to be special assessed.
- The **WAUKESHA COMMUNITY FOUNDATION** will be establishing the Village of Lannon Quarry fund with \$4,560,000:
  - Aid for private property residential and business expenses not covered by other programs, including partial reductions of special assessments
  - Aid for Village of Lannon expenses not eligible for reimbursement by the USDA-RD loan, such as drainage improvements and related road restoration.
- The **WAUKESHA COUNTY COMMUNITY DEVELOPMENT BLOCK GRANT** has obligated \$847,000 and will fund private residential property expenses. This includes installation of private service laterals and internal plumbing conversions.
  - Waukesha County and the Village of Lannon jointly selected Mid City Corp. from Butler, WI to complete this work.
  - A Homeowner-Contractor-Village contract will be mailed to you in coming weeks that details the scope of work. Upon receipt of your signed contract, Mid City will contact you to schedule the work.
  - Do you have to use Mid City?**
    - Yes**, if you want the grant to cover the work.
    - No**, if you want the work done at your expense (~\$10,000).



*Typically, the cost of private water service pipes and the cost of closing the existing private wells on their property are the responsibilities of property owner.*

## INDIVIDUAL COSTS

### An example Private Property Work with Assistance

**NOTE:** Without grants, this project would cost approximately \$55,000 per property

#### Line Item

#### Cost

#### Property Owner Balance

#### Partner Entity

Special Assessment -or- Local

Water Main Impact Fee:

\$ 43,000

\$ 15,000 (USDA-RD & Quarry)

New Service Installation:

\$ 6,500

\$ 0 (CDBG)

Plumbing Conversion:

\$ 2,000

\$ 0 (CDBG)

Well Abandonment:

\$ 2,000

\$ 0-800 (DNR or Quarry)

Impact Fee:

\$ 1,500

\$ 0 (Quarry)

**Example Total:**

**\$ 55,000**

**\$ 15,000**

(Before Grants)

(After Grants)

#### Notes:

- Grant priority has been placed on minimizing up-front costs.
- Special Assessments have payment options from 0-20 years.
- This amount is for a single-family residence.
- DNR well abandonment grants are subject to income verification.

# WELL ABANDONMENTS

The Village reviewed Department of Natural Resources water quality studies dating back to 1965 which determined that high bedrock in Lannon is a contributing to the migration of bacteriological contamination including E.coli.

**DNR RECOMMENDATION:** Non-conforming wells create travel paths for contaminants to quickly migrate to conforming wells. The best option to protect water quality is to abandon your well.

## PRIVATE PROPERTY WELL ABANDONMENTS - ELIGIBLE FOR REIMBURSEMENT

- The Wisconsin Department of Natural Resources and Waukesha County have partial reimbursement programs that ***will pay up to 75% of the cost of a well abandonment*** based on individual household income.
- The Waukesha Community Foundation will ***reimburse the balance up to approximately \$800.***

**REQUIREMENT:** The Village Board determined that private wells must be abandoned once the property connects to municipal water. (Village Ordinance Sec. 78-158) **Why?** Due to serious health risks and contamination migration pathways created by private wells.

Businesses owning a well for production of products may keep their well. The Village is only aware of one qualifying well and that is the ChemRite CoPac well which has a highly sophisticated treatment system and operates at a capacity that the Village cannot support at this time.

## A TRANSPARENT PROCESS

The Village made critical decisions at public information and Village Board meetings since the emergency declaration in Oct. 2018. Topics related to expanding the water supply were on agendas at over 20 meetings.

## HOW DOES THIS AFFECT ME?

**RESIDENTIAL PROPERTY OWNER:** You must connect to the system and will be special assessed or need to pay an impact fee. Many grants have been applied that reduce your special assessment to approximately \$15,000. Your resulting quarterly water bill will be approximately \$150 per quarter for the average resident.

**BUSINESS OWNER:** You must connect to the system and will be special assessed or need to pay an impact fee. The Quarry Fund is the primary grant provider and will reduce your special assessment to approximately \$15,000. Your resulting quarterly water bill will be based on the amount of water you use.

**LANNON ESTATES RESIDENT:** Water will be sold to the entire mobile home park through one meter. Lannon Estates' will continue to meter your water use and bill you according to what you use. The special assessments and impact fees are offset by the "in-kind contribution" of the well facility, which will be transferred to the Village and upgraded. The Village's monthly bill equates to approximately \$80 per quarter for the average unit, before any additional markup by Lannon Estates' management.

**I'M NOT IN THE PROJECT AREA:** This information is being provided to everyone in the Village so that everyone is aware of the latest information. This project will not impact your property unless there are funds left over and the Village can afford to extend more water main.



**For more information, to view presentations and get answers to frequently asked questions, visit:**  
**villageoflannon.com**

# LOCAL GEOLOGY

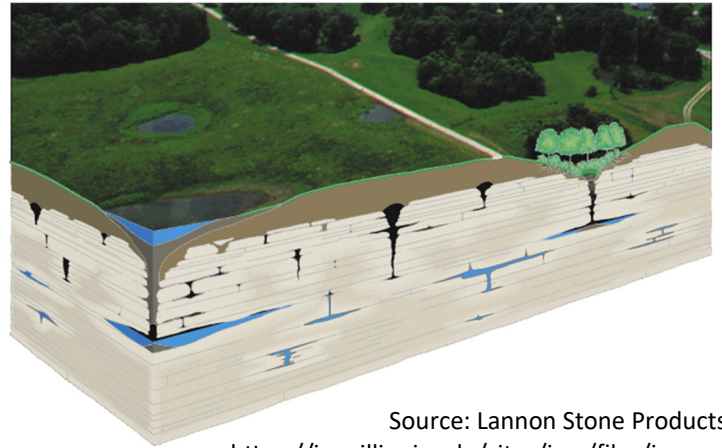
## AN *OPPORTUNITY* AND A *CHALLENGE* FOR THE VILLAGE OF LANNON

### GEOLOGIC *OPPORTUNITY*

- In 1838 Isaac Howard opened the first quarry in Lannon, starting an industry thriving today.
- Quarries employed generations of Lannon families

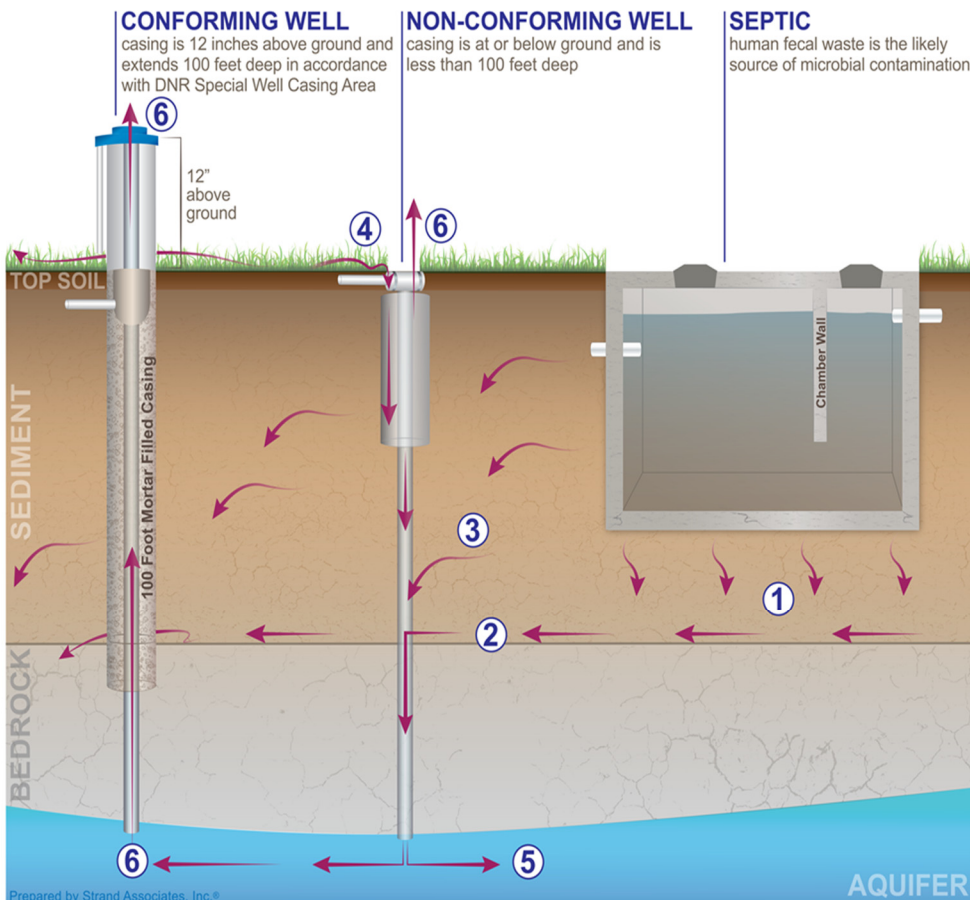
### GEOLOGIC *CHALLENGE*

- The aquifer exists within fractures in the limestone bedrock
- Contaminants can migrate quickly through the fractures
- Wells with poor casing can be an entry point for bacteria
- This has been prevalent for 75+ years, before the quarries reached significant depths. A 1990's water supply study indicated that water quality in private wells was likely to worsen if quarrying ceased.



Source: Lannon Stone Products  
<https://isgs.illinois.edu/sites/isgs/files/images/karst-slice.png>

## HOW DO WELLS GET CONTAMINATED?



### Microbial & E.Coli Transport to Private Wells

- ① Septic tank contaminant discharge soaks into ground.
- ② Shallow bedrock causes contaminants to move horizontally.
- ③ Contaminants encounter non-conforming well holes in the bedrock and quickly migrate to the bottom of the well hole and the aquifer.
- ④ Surface contaminants wash into non-conforming well caps.
- ⑤ Contaminants migrate horizontally through the groundwater, exposing neighboring wells.
- ⑥ Contaminants are drawn up into conforming and non-conforming wells.



## HISTORY AND BACKGROUND









### WATER QUALITY EVENTS IN LANNON

- **1955:** Village of Lannon issues survey inquiring about municipal water
- **1959:** WDNR institutes a “Special Lannon Well Casing Area” requirement to mitigate bacteria issues in ground water
- **1962-1965:** WDNR conducts “Investigation of the Safety of Private Water Supplies Lannon, Wisconsin”
- **1965:** WDNR conclusion: preferred action is to develop a public water supply to protect public health
- **1986:** WDNR publishes “A Report on a Groundwater Investigation in Southeastern Lisbon Township and the Village of Lannon” and recommends municipal water and sewer for both communities
- **1997:** Municipal sewer is installed throughout Lannon to mitigate bacteria sources in groundwater
- **1997:** Engineering Study again recommends a municipal water solution and indicates water quality will worsen when quarries stop pumping
- **1997:** Some municipal water pipes are installed to save costs and many property owners voluntarily paid \$100 to install a dry service lateral (a decision that saves over \$5,000 today)
- **2006-2008:** Whispering Ridge Condominiums installs and transfers a municipal well to the Village. A partial municipal water system becomes active as the Village of Lannon Municipal Water Utility.
- **2008:** Due to the controversy at the time, mandatory connections were not required.
- **2012-2018:** Village Engineer fields calls every year from a distressed homeowner whose well quality failed repeatedly, stalling home closing.
- **2018:** Lannon Elementary and several surrounding private wells test positive for E.coli bacteria.
- **2018:** The Village Board Makes an Emergency Declaration and Directs the Following:
  - Extend municipal water service to Lannon Elementary
  - Direct staff to study and find the most affordable extension of municipal water to remaining residents
- **2019:** Municipal water is successfully extended to Lannon Elementary
- **2019-2020:** Intensive study and loan and grant application is underway.
- **2020:** \$8.9M of Grant monies are obligated

## WHAT'S NEXT?

- In the coming weeks, the Village will send an individual letters to impacted property owners to further explain anticipated impacts to your specific property. This letter will have more information specific to how the funding assistance will apply to **your** property.
- Private property work will start in Fall 2020.
- Public work is projected to begin in early 2021, with water main installation mostly complete by December 2021 and roadway restoration complete by mid-2022.
- The Village will be hosting a public hearing for those property owner's impacted by Special Assessments.
- A separate special assessment letter explaining your total assessment and payment options will be sent in upcoming weeks.
- BONUS:** Roads in impacted neighborhoods will be repaved with full width pavement. The impacted travel lane on County roads will be repaved.

## ANTICIPATED SCHEDULE

Year	2020		2021				2022			
Task	Q.3	Q.4	Q.1	Q.2	Q.3	Q.4	Q.1	Q.2	Q.3	Q.4
Individual Letters to Impacted Residents										
Public Hearing Regarding Special Assessments										
Private Properties with <i>existing</i> water main – connections to public main										
New Public Water Main										
Private Property needing new water main <i>and</i> connections to public main										
Second public water supply conversion and addition										
Related Road Restoration										
Funding Deadlines Throughout ( <i>see funding section</i> )	