

# Water Flyer Response Related to Lannon Estates – “Information on Your Increasing Water Bills”

**Village of Lannon, Wisconsin  
August 10, 2020 Village Board Meeting**

Prepared by Ben W. Wood, P.E.

# Water Flyer Response to Private Rate Increase

**LANNON ESTATES – INFORMATION ON YOUR INCREASING WATER BILLS**

-Did you know that the Village of Lannon has never assisted with the installation nor maintenance costs of the Lannon Estates water system, and the park residents have been paying for water and solely responsible for the costs to maintain our well for the past 20 years while many of the Village of Lannon residents have not been paying anything for their water, as most of them have not bothered to hook up to their existing water system?

-Did you know that the Village of Lannon is now purchasing the Lannon Estates well, and the Village Board has voted to increase the rates for Lannon Estates residents even more so we can subsidize the installation of a new water system for the rest of the Village of Lannon? Even though the homeowners in Lannon Estates do not own their land, we are expected to help pay for improvements for the homeowners in the rest of the Village.

-Did you know that your new, increased rates will be used to subsidize the costs of the wealthiest in the community, including the Village President, Tom Gudex?

-Did you know that when asked about the increased water costs in the park, the Village President, Tom Gudex, denied that the Village had anything to do with our increased costs?

-Did you know that they are expecting our water bills to be roughly \$150 per quarter?

**YOUR PRESENCE IS NEEDED AT THE VILLAGE MEETING ON MONDAY, AUGUST 10<sup>TH</sup>, AT 7:00 PM. PLEASE BE PREPARED TO EXPRESS YOUR OBJECTIONS TO THIS SECRET ACTION THAT HAS BEEN TAKEN BY THE VILLAGE BOARD!!**

Nextdoor Neighbors Agencies Business Nonprofits Log in Sign up

David Antonian

- 1 hr ago

Village Meeting Monday, August 10th 7:00 PM Impact for Lannon Estates. Village of Lannon is now purchasing the Lannon Estates well and the Village Board has voted to increase the water rates for Lannon Estates residents even more so we can subsidize the installation of a new water system for the rest of the village. Even though Lannon Estates residents do not own their land, we are expected to help pay for improvements for homeowners in the rest of the village.

Those increased rates will be used to subsidize the costs of the wealthiest in the community including Village President, Tom Gudex.

When asked about the increased water costs in Lannon Estates, Gudex denied the Village had anything to do with the increased costs which are expected to be roughly SIX HUNDRED DOLLARS ANNUALLY! Say it out loud. \$600! For well water that is always going out, needs to be micro filtered and usually stinks!

YOU PRESENCE IS NEEDED AT THE VILLAGE MEETING MONDAY, AUGUST 10th AT 7:00 PM! BE PREPARED TO EXPRESS YOUR OBJECTIONS TO THIS SECRET ACTION THAT HAS BEEN TAKEN BY THE BOARD!

Posted in General to Lannon

Comment Comment

# Executive Summary

- Lannon Estates' Future Water Bill will be ~½ of a Typical Village of Lannon Single-Family Residence (\$80/quarter v. \$150/quarter)
- Lannon Estates' Capital Costs to Connect to Municipal Water are Essentially \$0 Because of In-Kind Contributions, Compared to ~\$15,000 Special Assessment to Single-Family Residences
- The Village Board has had Numerous Public Meetings Regarding the Municipal Water Expansion Since October 2018
- The Village of Lannon has had No Authority over Lannon Estates' Past or Current Water Rates
- Current Developers are Paying a Significant Portion of Past Water System Costs
- State Law Requires Fair Allocation of Costs and Prohibits Income-Based Allocations
- Water System Connections are Now Mandatory



**LANNON ESTATES – INFORMATION ON YOUR INCREASING WATER  
BILLS**



**YOUR PRESENCE IS NEEDED AT THE VILLAGE MEETING ON  
MONDAY, AUGUST 10<sup>TH</sup>, AT 7:00 PM. PLEASE BE PREPARED  
TO EXPRESS YOUR OBJECTIONS TO THIS SECRET ACTION THAT  
HAS BEEN TAKEN BY THE VILLAGE BOARD!!**

# Issue #1: Village Actions Taken at Multiple Public Meetings

- October 2018
  - First public meeting in response to Lannon Elementary E.coli
  - Village Board declared public emergency and directed staff to find the most cost-effective solution
- August 2019
  - Plan is developed to extend municipal water to existing residents, including Lannon Estates
  - Information mailed to every address in the zip code
  - Public information meeting held at Lannon Elementary
- October 2018 – August 2020
  - Multiple public meetings held that discussed municipal water expansion
- Public Meeting Notices
  - All meetings are posted at Village Hall, Post Office, and online
  - Agendas and general materials available online



## LANNON ESTATES – INFORMATION ON YOUR INCREASING WATER BILLS



-Did you know that the Village of Lannon has never assisted with the installation nor maintenance costs of the Lannon Estates water system, and the park residents have been paying for water and solely responsible for the costs to maintain our well for the past 20 years while many of the Village of Lannon residents have not been paying anything for their water, as most of them have not bothered to hook up to their existing water system?

## Issue #2: Lannon Estates Ability to Care for and Provide Its Own Safe, Reliable Drinking Water

- Lannon Estates water is governed separately and directly by the Wisconsin Department of Natural Resources (WDNR)
- Historically, the current Lannon Estates well is the 2<sup>nd</sup> or 3<sup>rd</sup> well
  - Previous well(s) abandoned because of poor water quality and quantity
- Known well outages have caused boil water notices
- Lannon Estates has a private network of 2-inch and 3-inch water mains
  - Units are metered individually
  - Water mains are very leaky, estimated at 40% from usage records
- Lannon Estates well has no redundancy (backup)
- Lannon Estates Ownership (Asset Development Group, or ADG) sets water rates and is responsible for operation and maintenance
- The Lannon Estates well facility is scheduled for ~\$300,000 of upgrades when the Village takes ownership

# Issue #3: How has the Existing Municipal Water System Been Paid For?

- The existing water system is paid for in two broad categories by the users of the system
  - Impact fees
    - Paid at time of connection
    - Cover capital cost of pipes in the ground and source supply
  - Rates
    - Paid quarterly
    - Cover operation and maintenance (O&M)
    - Debt service to the sewer utility
    - Fire protection fee related to O&M of hydrants
- Historically, the Water Utility has operated at a loss due to
  - 2008 Housing Crash
  - Lower number of customers than originally planned

# Issue #3: How has the Existing Municipal Water System Been Paid For?

- How will those revenues catch up?
- Impact fees related to existing local water main
  - Developers are paying a substantial amount of impact fees
    - Whispering Ridge Estates (all Phases) ~\$900,000
    - Overstone Condominiums (Phases 1&2) ~\$580,000
    - Rock Pointe Village Apartments (Phases 1-3) ~\$1,000,000
  - Individual residents and businesses that will connect to existing water main ~\$7,000 - \$12,000 each
- Rates
  - Mandatory connections and system expansion will increase customer base from 160 to approximately 350
  - New development will add approximately 350-400 customers at build-out

# Issue #4: Are Connections to the Municipal Water System Mandatory for Everyone?

- Historically, No.
- Presently and from now on, Yes. (Requirement of USDA Funding)
- Compulsory Connection Ordinance Updated at 7/13/20 Village Board Meeting
  - Residents and businesses must connect within 6 months of water main being available
  - Expected to take effect by 9/1/20



## LANNON ESTATES – INFORMATION ON YOUR INCREASING WATER BILLS



-Did you know that the Village of Lannon is now purchasing the Lannon Estates well, and the Village Board has voted to increase the rates for Lannon Estates residents even more so we can subsidize the installation of a new water system for the rest of the Village of Lannon? Even though the homeowners in Lannon Estates do not own their land, we are expected to help pay for improvements for the homeowners in the rest of the Village.

# Issue #5: What are the Proposed Terms of the Well Transfer Agreement?

- The Well Transfer Agreement (WTA) is in draft form and has not been voted on by the Village Board
- WTA recognizes mutual benefits to the Village and Lannon Estates
  - Both water systems need a redundant source to deliver safe, reliable water
  - Interconnecting the systems is the fastest way for both systems to add redundant source supply
- Lannon Estates' ownership, ADG, has insisted on a “net zero transaction”
  - Capital costs are intended to be offset by the purchase price of the well
  - Additionally, the Village of Lannon will spend ~\$300,000 to upgrade the well facility
  - The Village of Lannon will also install a secondary point of connection on Diamond Drive, improving redundancy even more

## Issue #6: What Significant Action has the Village Board Taken that Impacts Lannon Estates?

- The Village Board directed staff to move forward with an equivalent meter special assessment method
  - Reduced Lannon Estates' potential assessment by ~\$2,000,000
  - Remaining special assessment and Impact Fee wrapped up in “Net Zero” transaction because of “in-kind contribution”
- New water mains are being paid for through special assessments so that each property pays a fair share
  - Equivalent Connections – would have considered each dwelling unit as 1 connection
    - Approximately 175 of 350 dwelling units are in Lannon Estates
    - Would have resulted in ~\$2,500,000 special Assessment Against Lannon Estates
  - Equivalent Meters – considers a 5/8-inch & 3/4-inch meter as 1 equivalent unit, and Lannon Estates 3-inch meter as 20 equivalent units
    - Approximately 20 of 195 equivalent meters are in Lannon Estates
    - The resulting special assessment is ~\$500,000, being compensated as an “in-kind contribution”

# Issue #7: How Will Lannon Estates' Anticipated Water Rates Compare to a Typical Village Resident?

- Municipal water rates are dictated by the Public Service Commission of Wisconsin (PSC)
- Lannon Estates will be charged for bulk water at one 3-inch meter
- Lannon Estates' private water mains and private meters will remain private
- The Village's anticipated quarterly charge to all of Lannon Estates is calculated as follows:
  - 1,934,000 gallons used by Lannon Estates' quarterly (2018)
  - x \$5.80 per 1,000 gallons used (Lannon's current rate)
  - + \$882 quarterly charge for one 3-inch meter
  - = \$12,100 per quarter total for ~175 units (\$69/unit)
- Plan on ~\$80/quarter with anticipated rate increase

# Issue #7: How Will Lannon Estates' Anticipated Water Rates Compare to a Typical Village Resident?

- The typical Village Single-Family Resident pays a quarterly meter charge and usage fee
- The total amount will average ~\$150/quarter per connection

# Issue #8: Are Lannon Estates' Residents Paying for Water Improvements Elsewhere in the Village?

- Lannon Estates will not be paying for capital costs
  - \$300,000 well facility upgrade
  - Second point of connection on Diamond Drive
  - Impact Fees and Special Assessments (essentially being offset through “in-kind” contribution)
- Lannon Estates will pay for meter and usage rates
  - Quarterly bulk water usage
  - ADG will charge individual dwelling units
  - This includes debt repayments to the sewer utility
  - This includes O&M on the well and water mains that will provide substantially improved redundancy to Lannon Estates



# LANNON ESTATES – INFORMATION ON YOUR INCREASING WATER BILLS



-Did you know that your new, increased rates will be used to subsidize the costs of the wealthiest in the community, including the Village President, Tom Gudex?

# Issue #9: Are Lannon Estates' Residents Subsidizing Costs for Other Individuals in the Village?

- State Law prohibits the allocation of municipal utility costs (special assessments, impact fees, and rates) based on income
- Tom Gudex resides on Forestview Drive, and his residence is a good example of a “Typical Home” related to the water system expansion costs

# Issue #9: Typical Single-Family Residential Capital Cost & Quarterly Water Rate

<u>Line Item</u>	<u>Subsidized Cost</u>	<u>Subsidizing Entity</u>
Special Assessment:	\$ 15,000	(USDA-RD & Quarry)
New Service Installation:	\$ 0	(CDBG)
Plumbing Conversion:	\$ 0	(CDBG)
Well Abandonment:	\$ 0 - 800	(DNR or Quarry)
Well Impact Fee:	\$ 0	(Quarry)

**Example Approx. Total  
with Assistance**

**~\$ 15,000 to pay for Capital**

*(One-time assessment, payable over a period up to 20 years)*

**Quarterly Water Rate**

**~\$150/Quarter**

# Issue #9: Typical Lannon Estates Capital Cost and Quarterly Water Bill

<u>Line Item</u>	<u>Subsidized Cost</u>	<u>Subsidizing Entity</u>
Special Assessment:	\$ 0	(USDA-RD & Quarry)
New Service Installation:	\$ 0	(USDA-RD & Quarry)
Plumbing Conversion:	\$ NA	(NA)
Well Upgrade:	\$ 0	(USDA-RD & Impact Fees)
Well Impact Fee:	\$ 0	(USDA-RD & Quarry)

**Example Approx. Total  
with Assistance**

**~\$0 to pay for Capital**  
*(In recognition of in-kind contribution)*

**Quarterly Water Rate**

**~80/Quarter plus ADG charges  
for local water main maintenance**



## LANNON ESTATES – INFORMATION ON YOUR INCREASING WATER BILLS



-Did you know that when asked about the increased water costs in the park, the Village President, Tom Gudex, denied that the Village had anything to do with our increased costs?

# Issue #10: What Role does the Village have in Setting Lannon Estates Water Rates?

- The Village of Lannon has not ever had authority over Lannon Estates past or current water rates
- Lannon Estates Water System is, and has been, regulated directly by WDNR
- Likely reasons for past increases in Lannon Estates private water rate increases
  - Maintenance of leaky water mains
  - Installation of new private water meters
  - O&M related to the well
- Future water rates after conversion to municipal water will be dictated by the PSC
  - Water utilities are considered a monopoly and are strictly regulated by the PSC



# LANNON ESTATES – INFORMATION ON YOUR INCREASING WATER BILLS



-Did you know that they are expecting our water bills to be roughly \$150 per quarter?

# Issue #11: What Will Lannon Estates Water Rates Actually Be?

- Typical anticipated Lannon Estates water bill based on annual usage and 175 dwelling units
  - ~\$80/quarter (\$320 annually)
  - Plus additional charges by ADG for repair of leaky mains
- Typical anticipated Single-Family Residential Bill outside of Lannon Estates
  - ~\$150/quarter
- Note, the usage charge is equivalent to \$0.006 per gallon, less than 1 penny

“...Say it out loud. \$600! For well water that is always going out, needs to be micro filtered and usually stinks!”

-David Antonian

# Issue #12: Why Might Municipal Water be Better for Lannon Estates?

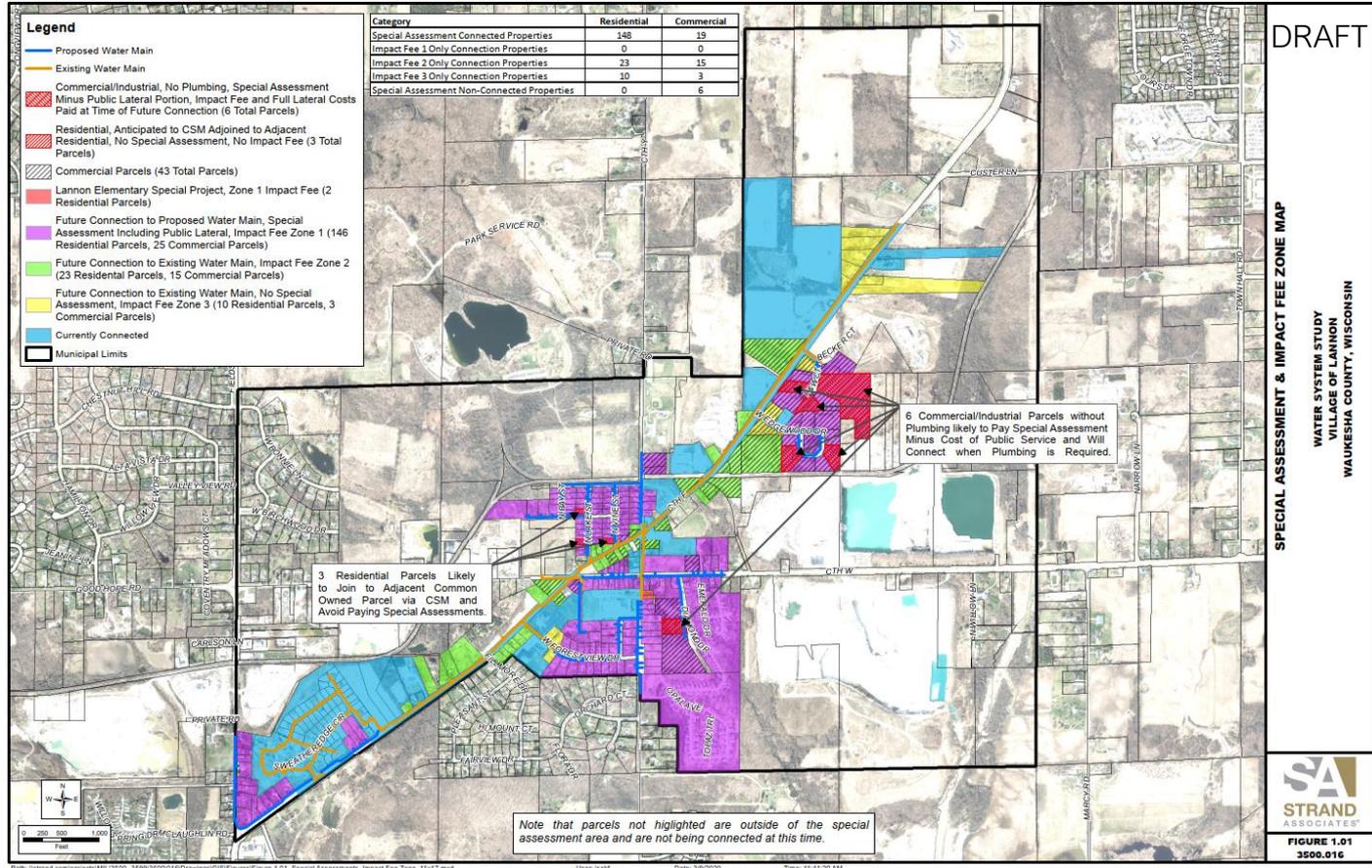
- Lannon Estates is not being “left behind”
- Improved redundancy leads to fewer outages
  - 2 sources of supply – if one well goes out, the other is live and operational
  - 2 points of connection – if a water main break happens in the private mains, the second connection brings water from another route
- Well facility upgrades
  - Chlorine injection will mitigate against bacteria contamination
  - Improved security and backflow preventers to minimize cross contamination
- Future water system improvements will benefit Lannon Estates
  - Water tower – improved reliability during emergencies
  - Additional wells – Lannon Estates will always be connected

# Executive Summary

- Lannon Estates' Future Water Bill will be ~½ of a Typical Village of Lannon Single-Family Residence (\$80/quarter v. \$150/quarter)
- Lannon Estates' Capital Costs to Connect to Municipal Water are Essentially \$0 Due to In-Kind Contributions, Compared to ~\$15,000 Special Assessment to Single-Family Residences
- The Village Board has had Numerous Public Meetings regarding the Municipal Water Expansion Since October 2018
- The Village of Lannon has had No Authority over Lannon Estates' Past or Current Water Rates
- Current Developers are Paying a Significant Portion of Past Water System Costs
- State Law Requires Fair Allocation of Costs and Prohibits Income-Based Allocations
- Water System Connections are Now Mandatory

# Project Overview Map

- USDA Rural Development Applied for 3 Miles of Water Main and a Well
- 172 Residential Properties Representing ~700 of 1,200 Residents



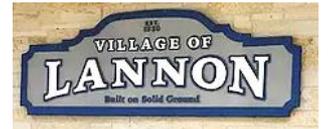
DRAFT

SPECIAL ASSESSMENT & IMPACT FEE ZONE MAP

WATER SYSTEM STUDY  
VILLAGE OF LANNON  
WAUKESHA COUNTY, WISCONSIN



FIGURE 1.01  
3500.01C



# Example Scope and Approximate Cost of Private Property Work with Assistance

## Special Assessment -or- Local

Water Main Impact Fee:	\$ 15,000	(USDA-RD & Quarry)
New Service Installation:	\$ 0	(CDBG)
Plumbing Conversion:	\$ 0	(CDBG)
Well Abandonment:	\$ 0 - 800	(DNR or Quarry)
Well Impact Fee:	<u>\$ 0</u>	(Quarry)

## Example Approx. Total with Assistance

**\$ 15,000**

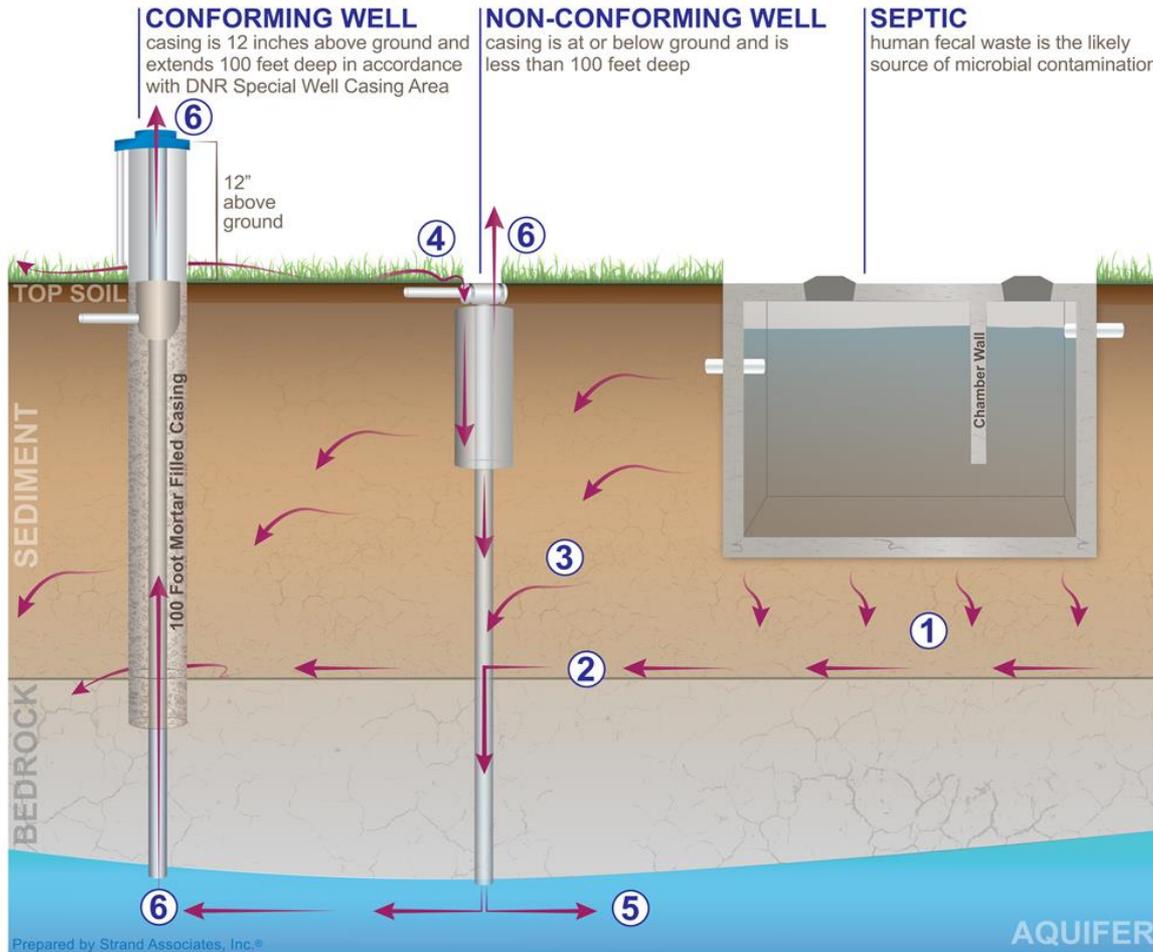
## Notes:

- 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
- Plumbing conversion costs likely not covered if property owner keeps their private well
- WDNR well abandonment grants are subject to income verification

# Funding Update

- Total Program Budget: \$10.9M of Public and Private Costs
- Total Grant Funds **Obligated**: \$8.9M
- Community Development Block Grant (CDBG)
  - \$847,868 Obligated for Private Resident Work
- USDA Rural Development Loan and Grant
  - \$3,493,000 Grant toward Public Water Mains
  - Requires Mandatory Connections to Water System
- The Quarry Fund
  - Waukesha County Community Foundation
  - \$4,560,000 Obligated
    - Private Property Assistance
    - Public Costs not USDA Eligible

# Water Quality History has Driven the Need for Municipal Water



## 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.

**SA STRAND ASSOCIATES®**

# History of 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 the ground water
- 1962-1965: WDNR conducts “Investigation of the Safety of Private Water Supplies Lannon, Wisconsin”
- 1965: WDNR concludes that the 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 the groundwater

# History of Water Quality Events in Lannon – Cont'd

- 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 \$100.00 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 approximately 1 call per year from a distressed homeowner whose well quality failed repeatedly, stalling home closing

# History of Water Quality Events in Lannon – Cont'd

- 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
- 2020, 4<sup>th</sup> Quarter: Private property work scheduled to begin
- 2020 – 2021: Public water main and second source installation

# The Quarries Have Changed, However the Water Quality Remains the Same

1963: Active DNR Investigation

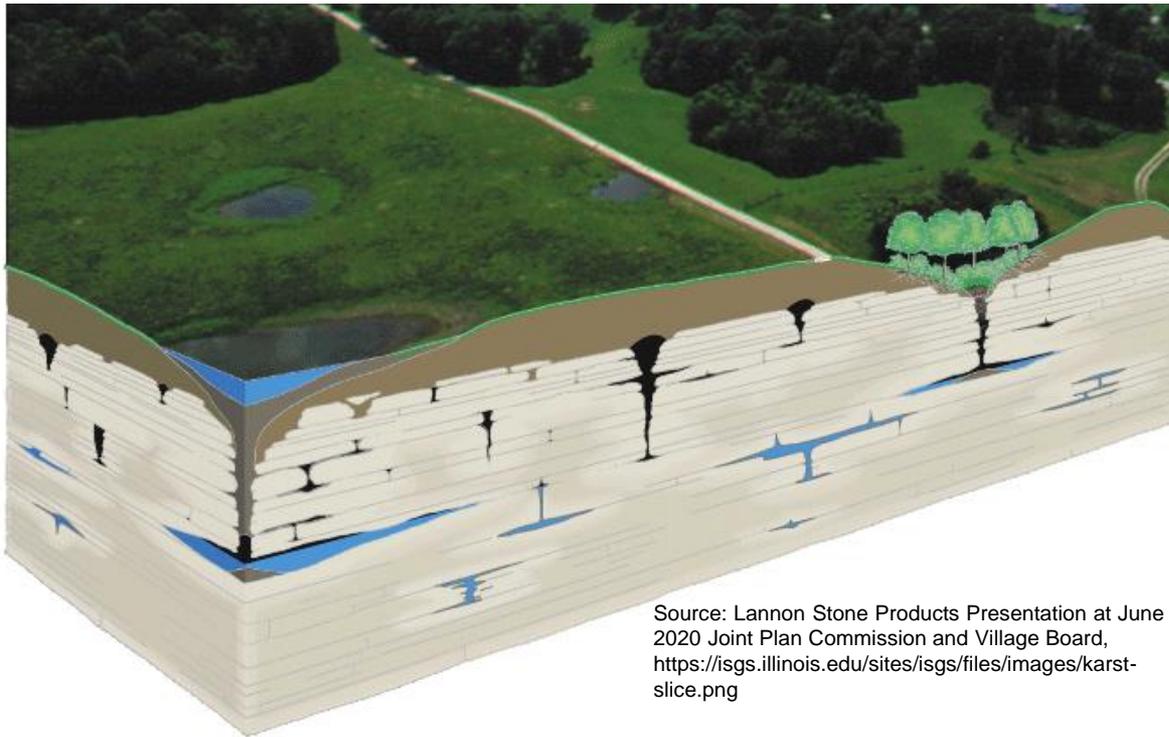


2015: Water Quality Persists



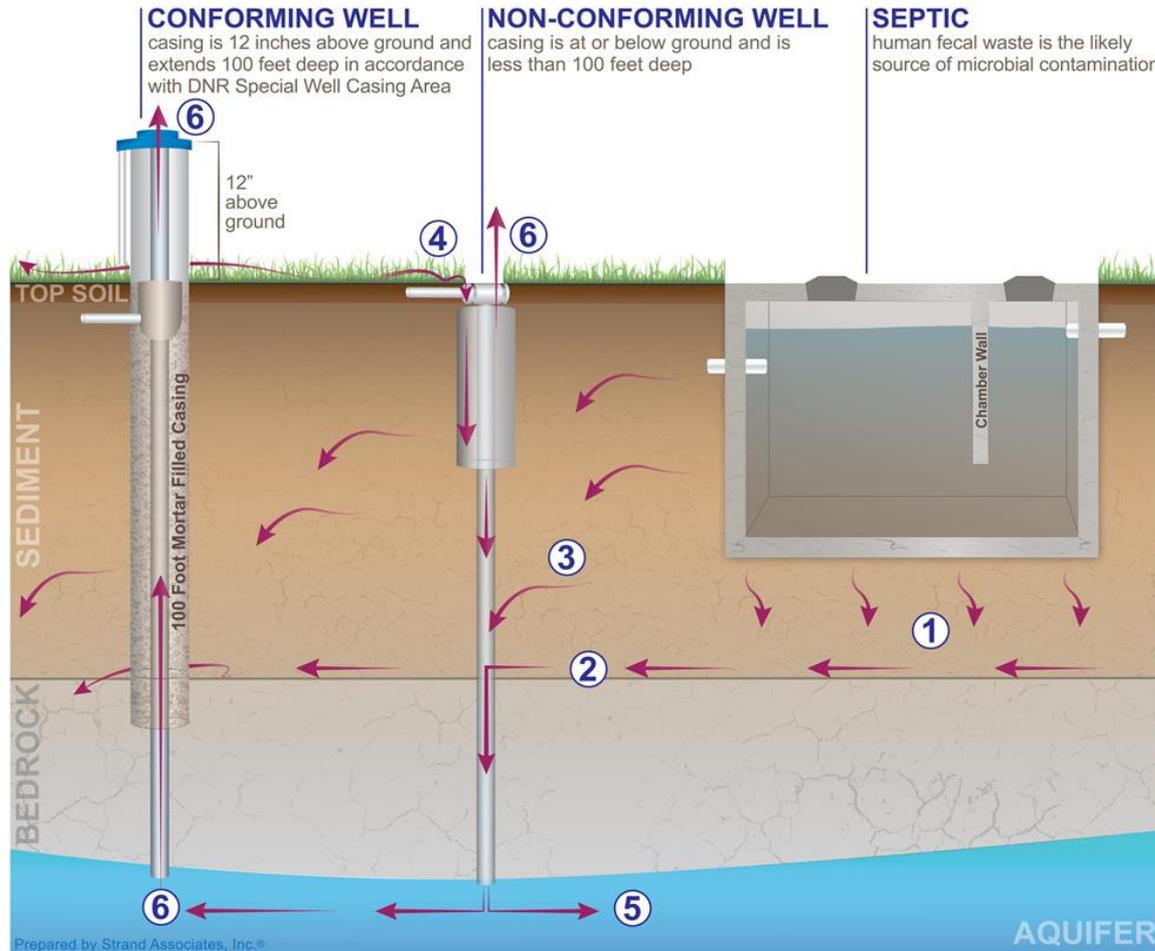
# Local Geology has Historically Been an Opportunity and a Challenge for the Village of Lannon

- 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



Source: Lannon Stone Products Presentation at June 25, 2020 Joint Plan Commission and Village Board, <https://isgs.illinois.edu/sites/isgs/files/images/karst-slice.png>

# Geology and Failing Septic Systems are a Significant Source of Bacteria



## 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.

**SA STRAND ASSOCIATES®**