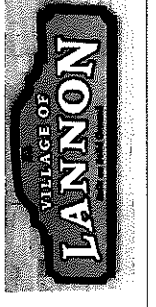


Water System Expansion – Program Update

Village Board Presentation – March 9, 2020
Lannon, WI
Ben W. Wood, P.E.



Agenda Item 13: Public Service Commission of Wisconsin Financial Outreach Letter

- PSC routinely reviews finances of all WI water utilities
- Financial Outreach Letter sent to each utility that is underperforming
- PSC Recommended a Simplified Rate Case
- Letter Received on January 9, 2020
- Village Responded on February 24, 2020

Insufficient Water Utility Revenue

- PSC Concern
 - 2017 Rate Increase was intended to balance annual spending
 - Rates are insufficient for spending since 2017
 - Deficit ~\$83,000 annual water revenue
- Village Response
 - *E.coli* issues in Fall of 2018 Prompted Additional Spending
 - Result of that spending was a December 2019 USDA Rural Development Loan Application

Plan for Revenue Growth

- PSC Concern
 - Plan Needed for revenue growth
 - Need additional ~\$83,000 in annual revenue
- Village Response
 - USDA-RD project will increase customer base from approx. 150 to 350
 - TID development (signed agreements) will add approx. 80 customers during same timeframe (2020-2021)
 - Revenue (approx.) by calendar year 2022
 - Impact Fees: \$900,000
 - Annual Water Use: \$210,000 (Increase of ~\$120,000)
 - Anticipated Revenue from Rock Pointe Village (if Approved)
 - Impact Fees: \$1,000,000
 - Annual Water Use: \$50,000

High Amount of Non-Revenue Water

- PSC Concern
 - Annual water loss is approximately 40%
 - Need to pursue controls to improve
- Village Response
 - Water loss is estimated at 6-8 gallons per minute (gpm)
 - Equivalent to 2 leaks
 - Village spent \$20,000-\$30,000 on 1 leak in 2015/2016
 - Leak investigation is a USDA-RD Contingency Project (if additional funds are available)
 - Village will pursue leaks after Water System Expansion

Schedule to Improve Utility Finances

- PSC Concern
 - Identify timeframe and action for improving finances

• Village Response

December 2019	USDA-RD Application Submitted
March 2020	USDA-RD Determination Anticipated
March 2020 to May 2020	Evaluate Anticipated Revenue
March 2020 to December 2020	Add Approximately 80 Customers from New Development
August 2020 to June 2021	Expand Municipal Water Service to 200 New Customers and One Large User
June 2021	Evaluate Revenue and the Potential Need for a Rate Increase
June 2021 to June 2025	Add Approximately 350 to 400 Customers from New Development

Conclusion – Three-Fold Solution to Improve Water Utility Finances

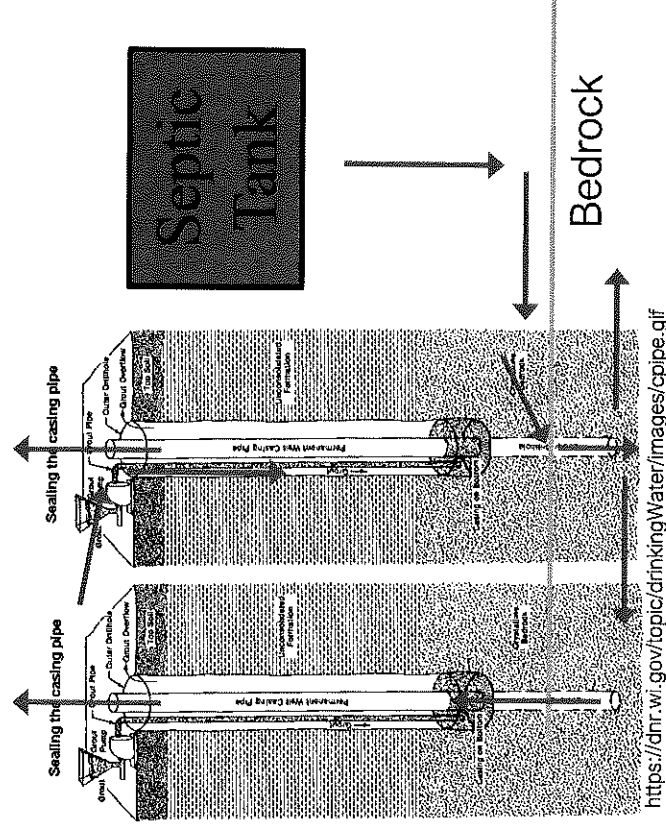
- Implement USDA-RD Water Expansion Project
- Add customers through new development
- Address leaks when revenue is available
- Assess need for rate increase pending planned growth

Agenda Item 14: Water System Expansion Update

- Water Quality History
- Project Overview (Area, Numbers, Schedule)
- USDA-Rural Development Application Status
- Scope of Work to Property Owners
- Available Funding
- Forthcoming Policy Decisions

History of Poor Private Well Water Quality Dates Back to 1958 and Earlier

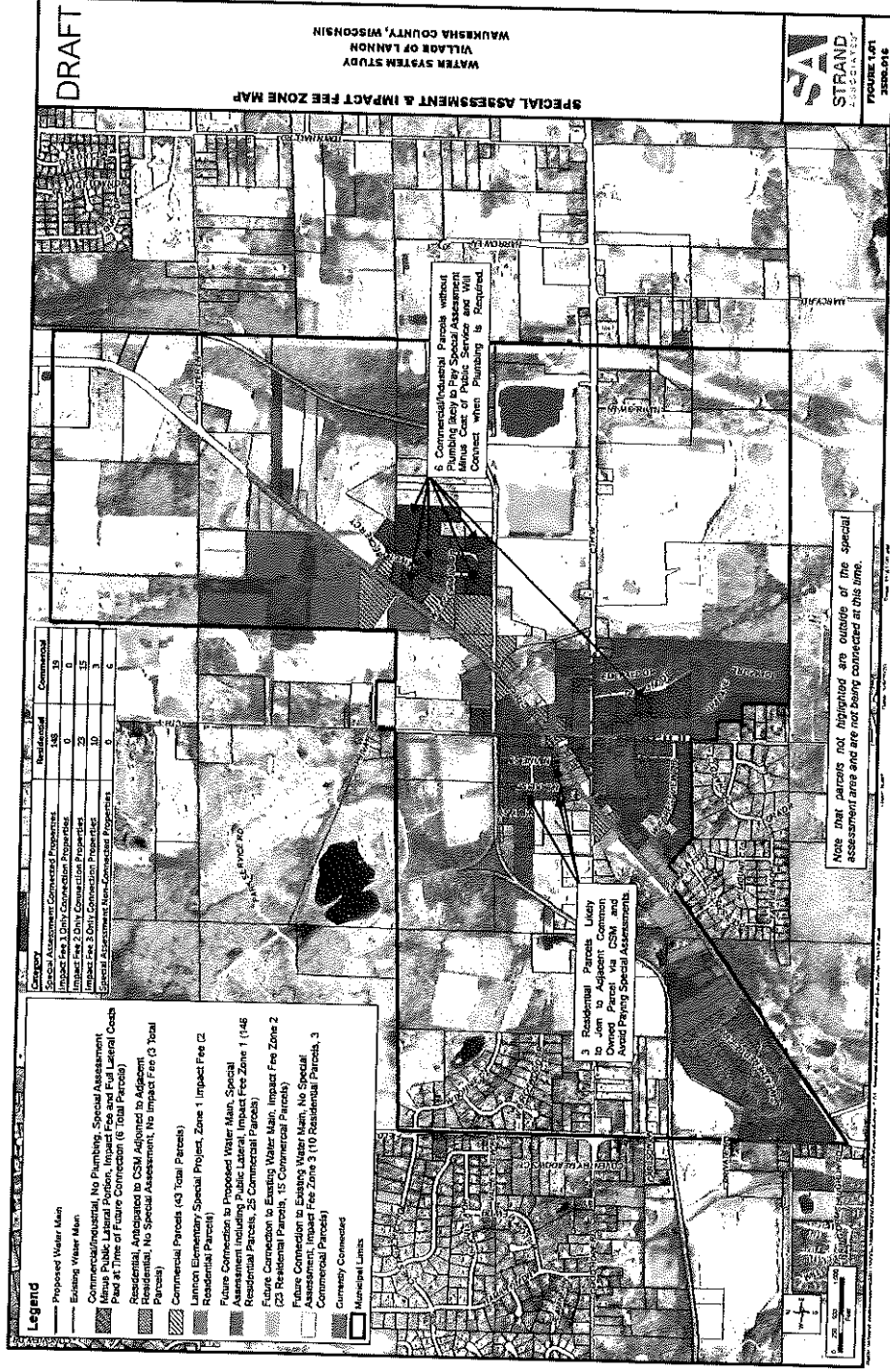
- High, shallow bedrock contributes to spread of contaminants
- DNR implemented Lannon Special Well Casing Area in Dec. 1958
 - 100-Feet of casing
- 1990's Village-wide conversion from septic to sanitary sewer
- 2018 *E.coli* (fecal bacteria) issue re-emerges (60% coliform positive; 22% *E.coli* positive)
- 2019 Lannon elementary (17-ft casing) converts to municipal water



Microbial Transport to Private Wells Diagram

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



Anticipated Type and Number of Properties Included

- USDA Project new users – 166 immediate new users
- New connections to existing mains – 51 (33 residential)
- Total customers by project completion – 358
 - Represents approximately 80% of Lannon's Population

User Type	Existing Main and Existing Connection	New Main and New Connection	New Main and No Connection	Existing Trunk Main and New Connection	Existing Sector Main and New Connection	Total Users
Residential	1	2	3	4	5	
Commercial/Industrial	131	146	0	23	10	310
Public	7	19	6	15	3	44
Residential-Lannon Estates	3	0	0	0	0	3
Total	0	1	0	0	0	1
	141	166	6	38	13	358

Table 6.07-1 Proposed Water System Users

Schedule Update

- USDA-RD “Dockets” & Policy Decisions – March-May 2020
- Construction – Summer 2020 – Summer 2021

Lannon Water System Expansion																							
Task		1Q 2020			2Q 2020			3Q 2020			4Q 2020			1Q 2021			2Q 2021						
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J				
A	Design and Regulatory Approval																						
	1. Design Water Main																						
	2. Submit Pre-Application (PER and ER)																						
	3. USDA RD - State and National Review																						
	4. Receive Application Decision and Complete Application																						
	5. WDNR Agency Review																						
	6. USDA RD Agency Review																						
	7. Advertisement																						
	8. Bid																						
	9. Contract Execution																						
B	Construction																						
	1. Construction Mobilization																						
	2. Construction - Water Main and Public-Services																						
	3. Private-Service and Plumbing Installation																						
	4. Private Well Abandonment																						
	5. Final Completion																						
	6. Loan Closing																						

Water System Expansion Project Elements

- Total Program Cost Opinion: \$10.8M
- USDA-RD will Only Fund Public Costs: \$8.8M
- USDA-RD Will Not Fund Private Property Costs: \$2M
 - Private Service Lateral
 - Private Plumbing
 - Private Well Abandonment
 - Water Impact Fee

USDA-RD Application Status

- Letter of Determination Anticipated ~March 16, 2020
- Preliminary Underwriting
 - Total Cost of Public Project: \$ 8,916,000
 - Grant Amount: (\$ 3,494,000) (40%)
 - Village Contribution: (\$ 143,000)
 - Impact Fees: (\$ 282,000)
 - Remaining Loan Amount: \$ 4,997,000
- Interim Financing must be provided for the Remaining Loan Amount

Typical Scope and Approximate Cost of Private Property Work without Assistance

- Special Assessment: \$ 26,000
- New Service Installation: \$ 6,500
- Plumbing Conversion: \$ 2,000
- Well Abandonment: \$ 2,000
- Impact Fee: \$ 1,500
- Total without Assistance: ~\$ 38,000

- Notes:

- This amount is for a single family residence without an existing service lateral
- Approximately 63% of properties surveyed have an existing service lateral
- Plumbing conversion costs will be much higher if property owner keeps their private well
- All numbers subject to change

Typical Scope and Approximate Cost of Private Property Work with Assistance

- Special Assessment: \$~15,000 (Quarry)
 - New Service Installation: \$ 0 (CDBG)
 - Plumbing Conversion: \$ 0 (CDBG)
 - Well Abandonment: \$ 0 (DNR or Quarry)
 - Impact Fee: \$ 0 (Quarry)
 - Total with Assistance: ~\$ 12,000 to \$18,000
- Notes:
 - Grant priority has been placed on minimizing up-front costs
 - Special Assessments have payment options
 - This amount is for a single family residence
 - Plumbing conversion costs may not be covered if property owner keeps their private well
 - All numbers subject to change

Forthcoming Policy Decisions

- Blight Determination
- Lannon Estates Well Purchase Agreement
- Quarry Agreements
- Interim Financing
- Impact Fee Revision
- Special Assessment
- Water Connection Ordinance (USDA requirement)
- Private Well Monitoring Program

Agenda Item 15: Community Development Block Grant (CDBG) and Blight Determination

- Village has applied for \$850,000 in Waukesha CDBG Funds
- Waukesha CDBG Executive Committee recommended award
- Scope is to aid in:
 - Private water service lateral installation
 - Private plumbing conversion
- Waukesha County recommended Village make a Blight Determination
 - Likely no individual income verification requirement
 - Waukesha Co. hires and pays the contractor directly
 - Follow USDA-HUD Guidelines

HUD Blight Determination Guidelines

- The designated area must meet the definition of a blighted area under state or local law;
- At least 25 percent of the properties throughout the area exhibit one or more of the following:
 - **Physical deterioration of buildings/improvements;**
 - Abandonment of properties;
 - Chronic high occupancy turnover rates or chronic high vacancy rates in commercial or industrial buildings;
 - Significant declines in property values or abnormally low property values relative to other areas in the community; or
 - **Known or suspected environmental contamination.**

Wis. Stats. 66.1333 Blight Definition

- **Blighted Area:** Exhibits a predominance of buildings, which by reason of sanitation, and the existence of conditions that are conducive to ill health, and are detrimental to the public health and welfare of the community.
- **Blighted Property:** Exhibits the predominance of unsanitary or unsafe conditions, deterioration of site or other improvements (non-conforming private wells), and that the factors listed to substantially impair or arrest the sound growth of the Village and constitutes an economic or social liability and is a menace to the public health and welfare in the present condition of use of the private wells.

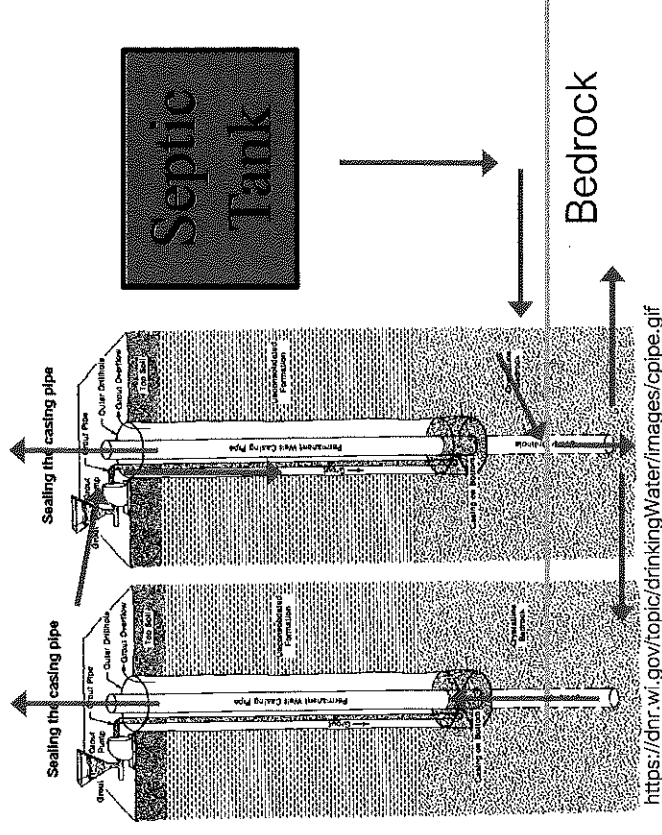
Non-conforming Private Well “Findings of Fact” from DNR Consent Letter to Hamilton School District

Findings of Fact

- 9. From September 26, 2018 to October 31, 2018, water samples from private domestic wells in the vicinity of the School were tested by Waukesha County Department of Health. Of the 56 samples collected, 33 were total coliform positive and 12 were E. coli positive.*
- 10. The School is in a known area with shallow bedrock that is susceptible to surficial contamination.*
- 11. The School is within the Special Well Casing Area “Village of Lannon - Area 59b” which requires new potable well construction to have at least 100 feet of cement grouted casing due to the potential for bacterial contamination.*
- 12. WUWN ES799 (the School’s well) has 17 feet of cement grouted casing with no description of annular seal material from 17 feet to 87 feet where the 6-inch steel well casing is set in limestone. WUWN ES799 does not conform to the Special Well Casing Area requirements.*
- 13. WUWN ES799 is located in the School’s basement and may pose a sanitary hazard to safe drinking water. The department has not allowed well terminations in basements since April 10, 1953.*

Additional Private Well Considerations

- DNR considers the mere presence of *E. coli* to be in violation of water quality standards
- High bedrock contributes to contaminant spread
- Likely significantly more than 25% of Private Wells do not conform to Special Casing Area
- Likely more than 25% of wells tested are *E. coli* positive
- Waukesha Co. has reviewed a DRAFT determination letter and concurs with this justification



Microbial Transport to Private Wells Diagram

Recommendation for Wis. Stats. Blight Determination

Based on these factors, the Village Board should make a determination for a blighted area in accordance with Wis. Stats. 66.1333. Specifically, this area has a predominance of buildings, which by reason of sanitation, and the existence of conditions that are conducive to ill health, and are detrimental to the public health and welfare of the community.

The Village Board should recognize that the area of blight shall include any property that has a private well and any property not yet been developed. Exceptions would be for properties currently zoned quarry, park, or conservation (based on the likelihood of these properties not being developed), or properties zoned agricultural that do not have habitable buildings. This determination should be made by reason of the predominance of unsanitary or unsafe conditions, deterioration of site or other improvements (specifically, non-conforming private wells), and that the factors listed to substantially impair or arrest the sound growth of the Village and constitutes an economic or social liability and is a menace to the public health and welfare in the present condition of use of the private wells.