

# The Campmeeting Water Supply

Current Status and Options



#### Presentation Goals

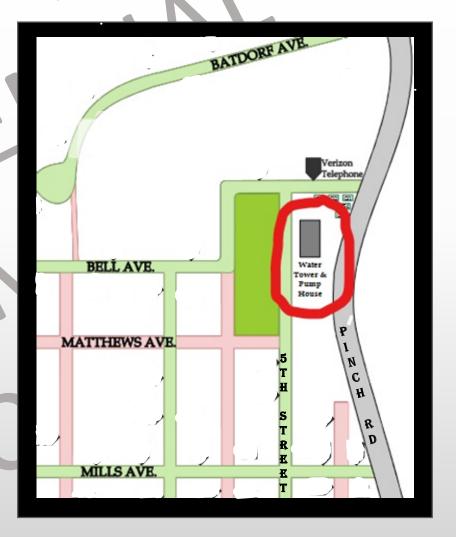
- Provide overview of existing Campmeeting water supply system and status
- Outline reliable, affordable water service options for Campmeeting
- Discuss cost estimates for each option
- Discuss other considerations for each option
- Give Members opportunity to ask questions and provide comments and suggestions to MGCA Board of Managers
  - Please take notes (ref. slide #) and save questions and comments for end



## Water System

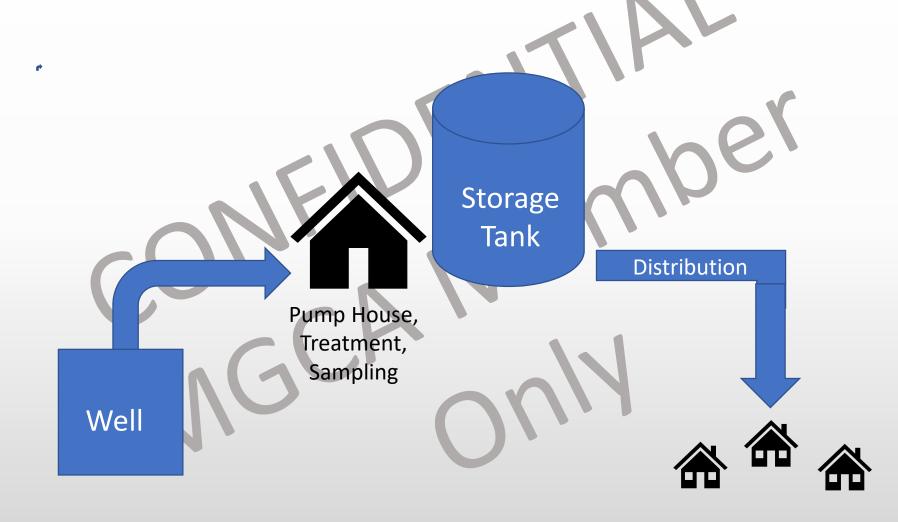
 The Campmeeting operates its own independent water system

Water "plant" is at south end of 5<sup>th</sup>
 Street at Bell Avenue



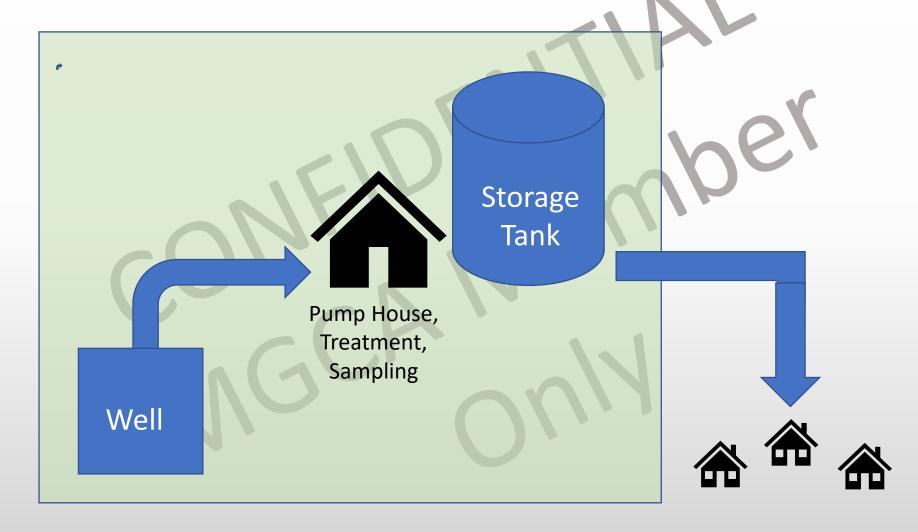


# System Components



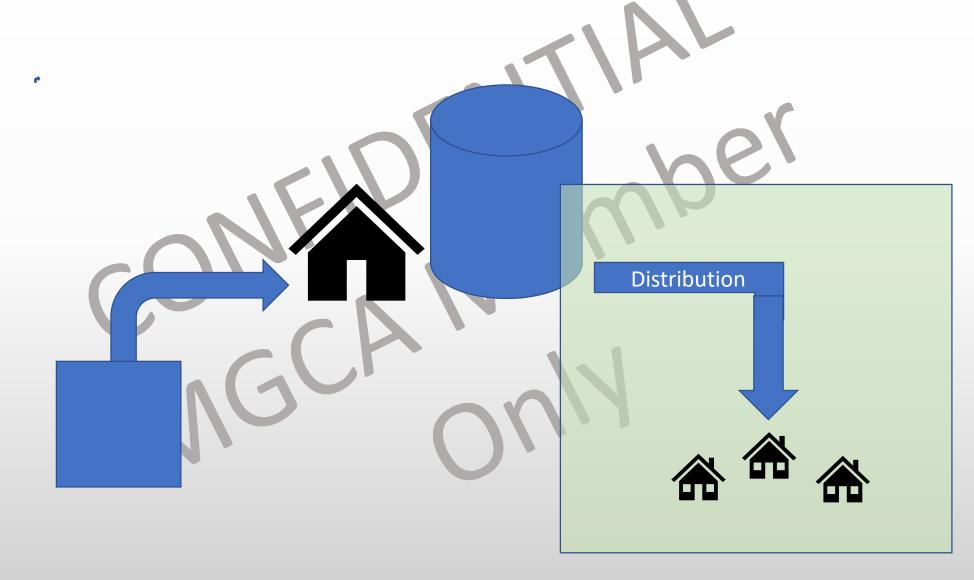


# Water Supply (Production)



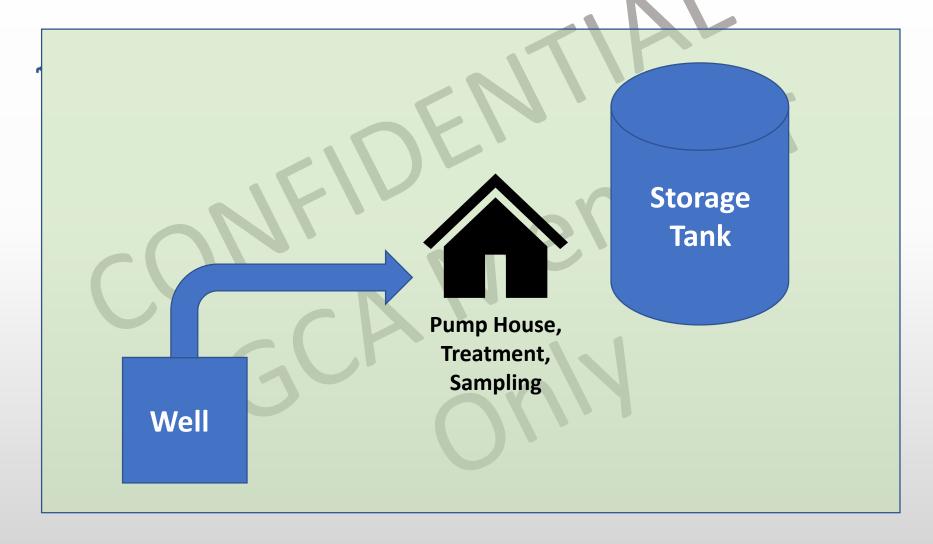


#### Water Distribution





# Focus on Water Supply





#### Water Supply System Overview

- Campmeeting is responsible for all aspects/costs of system operation
  - Permitting, water quality monitoring/testing, regulatory compliance
  - Treatment chemicals
  - System maintenance
- No individual metering; costs are shared
  - Operating costs divided equally among 242 "units" (includes UM Church)
  - Average annual cost approximately \$80 per unit
- Costs included in Annual Membership Assessment



#### The Good News...

- The Campmeeting well produces high-quality water and a large volume of water
- It is reasonable to expect that our well will continue to be productive for many years
- The cost to supply water to MGCA Members has historically been very low compared to other communities



#### ...and the Not So Good News

- Our cost for water has been low because...
  - The system has been operated with minimal/volunteer staffing
  - Minimal investment was made to maintain/upgrade the water system components
  - Funds not set aside for major repair/replacement of water system components
- Engineering inspection (2019) indicated major system components deteriorated and need refurbishment or replacement
  - Immediate action necessary to prevent water supply failure
- We have been operating on borrowed time and inaction is not an option



### Water Supply System Status

#### • Our active well is excellent!

- High-quality water; high output volume
- Campmeeting owns a second well with potential to be activated if necessary

#### Pump and Pump House

- Pump house needs general repair, insulation, and installation of more efficient heating system
  - Building & Grounds Committee already addressing these issues. Heating system was included in 2021 budget
- New pump installed in 2019
- Standby generator may need to be installed (per DEP)



### Water Supply System Status

#### • Treatment/Sampling Equipment

- Functional, but old, outdated manual system
  - Requires daily, in-person visit by qualified individual to perform manual water sampling/testing
  - No automatic safeguard for chemical imbalance
- Engineer recommendations (November 2020):
  - Add automatic sampling (eliminates need for daily manual testing)
  - Add automatic shutoff in event of chemical imbalance



#### Water Supply System Status

#### Water Storage Tank

- Installed in 1947 (74 years old!)
- Last inspected in October 2019
  - Tank is substantially deteriorated
  - Does not meet OSHA standards
  - Refurbishment or replacement recommended
- The old storage tank is the major weak link in the Campmeeting water supply system



#### Not a New Issue

- This issue has been on different MGCA Boards' "radar" for many years
- Awarded (through WCT) \$70,000 DEP grant in 2018 for our water supply system
  - Contingent on connecting to the Mt. Gretna Authority (MGA) system
  - \$30,000 used for new pump
    - Would likely need to be repaid if Campmeeting decides not to connect to the MGA
- The current Board made the Campmeeting water supply its #1 priority for action



# Four Options...

- Option 1: Limited refurbishment of water tank, installation of new automatic sampling system and shutoff system
- Option 2: Extensive refurbishment of water tank, installation of new automatic sampling system and shutoff system
- Option 3: Replacement of tank and foundation, install new automatic sampling and shutoff system
- Option 4: Obtain water from outside source (Mt. Gretna Authority) and stop operating our own water supply system



# Refurbish Existing Tank

#### ■ Option 1 – Limited Refurbishment

- Estimated Project Cost: \$197,000\*
- Guaranteed for one year
- May extend service life by 7-10 years
- Time to complete work: 7 weeks
- Engineers deemed "not a good candidate for asset management"

#### Option 2 – Extensive Refurbishment

- Estimated Project Cost: \$372,000\*
- Estimated to extend service life by 20-30 years
- Time to complete work: 9 weeks



#### New Tank and Foundation

- Option 3 New Tank and Foundation
- Estimated Project Cost: \$680,000\*
  - Includes removal and replacement of existing tank and foundation
    - Existing foundation unlikely to meet current code for new tank installation
- Unlimited guarantee if properly maintained
  - Tank could remain serviceable for indefinite period
  - Interior/exterior coating required every 20-30 years
- Time to complete work: 6-8 months



#### Mt. Gretna Authority

- Option 4 Purchase Water from Mt. Gretna Authority
- Estimated Project Cost: \$166,000
  - Above amount equals total Project Cost of \$206,000 minus \$40,000 remaining credit from 2018 DEP grant
  - Includes cost to remove existing tank
- Campmeeting would grant easement to MGA to operate the Campmeeting well, pump house, and a water interconnect line
- MGA water system would draw water from Campmeeting well
- MGA would be responsible for water treatment, etc. and would supply water to Campmeeting
- Time to complete work: TBD
- Above information based on preliminary discussions with MGA



# No Interruption in Service

- Regardless of which option chosen, there will be no long-term interruption in water service to the Campmeeting
  - While work is being performed, the Campmeeting will obtain its water via an existing temporary-use connection to the Mt. Gretna Authority
  - Cost of purchasing this water has been factored into cost estimates for each option



## How Can I Compare Options?

- The cost of water for each MGCA Member is currently included in the Annual Assessment
  - Approximately \$80 per "unit" per year
- Best way to compare the four options is to estimate the annual perunit cost of water for each option
- To do this, we must consider several factors
  - Initial Project Cost (cost to refurbish/replace tank or connect to MGA)
  - Ongoing cost to produce or purchase water
  - Longer-term expenses



# First Factor: How to Pay Large Project Costs?

- Three ways small communities/associations pay for major expenses
  - Spend from an established capital project fund
    - Funds set aside in advance earmarked for a particular project
  - Special assessment
    - An amount paid in addition to the regular annual Member assessment
    - Used to pay for required projects for which funds are unavailable
  - Take out a loan



## First Factor: Why a Loan?

- Campmeeting capital project fund is insufficient to cover the cost of any of these projects
  - Current MGCA Members are making up for past inadequate planning
- Funding a project of this size through special assessment(s) would mean current Members fund the entire project in a short term, by making large payment(s) in addition to their regular annual assessment
- A loan spreads the cost over a long period and creates a smaller annual financial burden for each Member
  - Spreads project payback among current and future users
  - The following models assume a 4.0% annual interest rate on loans



# Second Factor: Cost to Produce/Purchase Water

#### Cost to produce or purchase water

- Future annual cost/unit for Campmeeting to produce water assumed to be
   \$91 per unit
  - Based on estimates from Becker Engineering
  - Includes all permits, operations, maintenance, inspections, etc.
- Annual cost to purchase water from MGA assumed to be \$546/unit
  - Amount MGA currently charges its customers per unit



# Third Factor: Longer-Term Expenses

- Options 1, 2, and 3 will require future expenditures for continued operation of the Campmeeting water supply system
  - Option 1 Likely to require tank replacement in 7-10 years (or sooner)
  - Option 2 Likely to require tank replacement in 20-30 years
  - Options 3 Will require tank recoating in 20-30 years
- The responsible course of action is to build a reserve fund to pay these expenses when they arise
  - The following models assume such contributions to a reserve fund, and assume 3% inflation and 4% return on investment



#### OPTION 1 - LIMITED TANK REFURBISHMENT \$197,000

7-year 4% Loan: \$134.00
Water Production Costs: \$91.00
7-year Limited Refurb; 3% Inflation; 4% ROI: \$107.00

Total/unit: \$332.00
Current Water Cost: \$-80.00
Increase to Assessment: \$252.00

#### OPTION 2 - EXTENSIVE TANK REFURBISHMENT \$372,000

25-year 4% Loan: \$134.00
Water Production Costs: \$91.00
25-year Tank Replacement; 3% Inflation; 4% ROI: \$135.00
Total/unit: \$360.00
Current Water Cost: \$-80.00
Increase to Assessment: \$280.00

#### OPTION 3 - TANK/FOUNDATION REPLACEMENT \$680,000

25-year 4% Loan: \$178.00
Water Production Costs: \$91.00
25-year Tank Recoating; 3% inflation; 4% ROI: \$26.00
Total/unit: \$295.00
Current Water Cost: \$-80.00
Increase to Assessment: \$215.00

#### OPTION 4 - MT. GRETNA AUTHORITY \$166,000

 10-year 4% Loan:
 \$ 84.00

 MGA Water Purchase Cost:
 \$546.00

 Total/unit:
 \$630.00

 Current Water Cost:
 \$-80.00

 Increase to Assessment:
 \$550.00

#### Additional Considerations

#### Options 1 & 2 – <u>Tank Refurbishment</u>

- Both options extend tank life, but tank replacement likely required at end of extended life
- Adding cost to fund a future replacement tank exceeds cost for new tank/foundation
- Campmeeting would remain responsible for all aspects of operating and maintaining water supply system
- Cost for water should be reasonably predictable going forward
- Limited Board support, but Board wanted to inform Members of all options considered



#### Additional Considerations

- Option 3 <u>Tank/Foundation Replacement</u>
  - Lowest cost option in the long term
    - Engineers indicated new tank should have unlimited lifetime with scheduled maintenance
  - Campmeeting would remain responsible for all aspects of operating and maintaining water supply system
  - Cost for water should be reasonably predictable going forward



#### Additional Considerations

#### • Option 4 – Mt. Gretna Authority

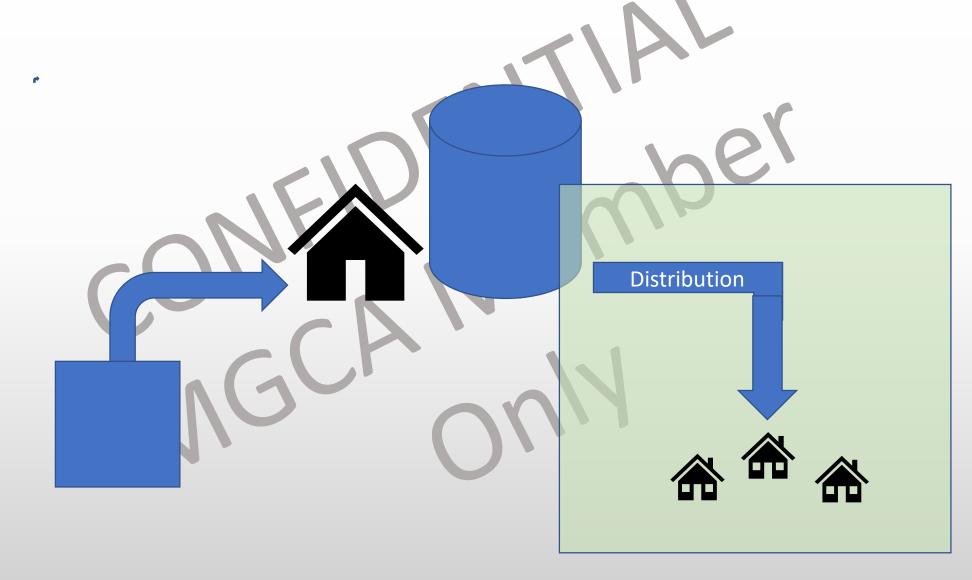
- Most costly option
- Campmeeting would relinquish its water permit
- Water from the Campmeeting well would be routed to the MGA system
  - It is unclear whether the MGA would credit Campmeeting for the value of that water
- Campmeeting would have no representative on the MGA board
- No control over future rate increases
- MGA would assume responsibility for all aspects of water supply operation:
  - Treatment, sampling, and monitoring
  - Maintenance/upkeep of all water supply system components
  - Administrative requirements
  - Responsible for all eventualities (failures, emergencies, etc.)
  - Liability for system operation



# The Other Part of Our Water System



#### Water Distribution





#### Water Distribution

- None of the previous estimates include the cost of maintenance, repair, or replacement of the Campmeeting water *distribution* system
  - Campmeeting has not regularly set funds aside in reserve to pay for future water distribution infrastructure needs
- The MGA charges customers an additional \$175/yr. per unit "infrastructure fee" to cover maintenance, repair, and replacement of water distribution system components
  - It is unknown whether the MGA would assume responsibility to maintain the Campmeeting water distribution system and what they might charge to do so
- The MGCA Board of Managers believes it would be prudent to begin regular contributions to such a reserve fund



#### Presentation Summary

- The Campmeeting water supply system is in need of costly repair or replacement and action must be taken soon
- Several options are being considered, including no longer operating the Campmeeting's own water supply and purchasing water from the Mt. Gretna Authority instead
- The Board of Managers is seeking Member feedback on this issue
  - Comments should be sent to the Campmeeting office at Office@MtGretnaCampmeeting.org by January 31
  - Presentation slides and video will be posted on the MGCA website
    - Answers to Member questions will also be posted



# Keep in mind...

- Cost estimates in the comparisons are just that *estimates!*
- They are most useful to provide a sense of scale and to compare the relative costs of each option
  - Each option contains many variables
  - Estimates are based on expert input and best assumptions regarding the scope of each project



#### **MGCA** Board Action

The Board expects to vote on a preferred course of action at its Regular Meeting on Tuesday, February 16, 2021.

We encourage you to send us your comments no later than January 31!



## Membership Vote

- If Options 2 or 3 (extensive tank furbish/new tank) are chosen Membership vote to approve funding will be required
  - MGCA By-Laws, Article VI, Section 3. Limitations on the Board of Managers
  - "The Board of Managers shall not incur indebtedness exceeding an amount equal to fifty (50) percent of the budget for the fiscal year in which such debt is incurred without first having a resolution passed at a meeting of the Association authorizing same."



#### Action Timeline

- January 9 Member comment period opens (three weeks)
- January 31 Member comment period closes
- February 6 BoM internal working session
  - Review Member comments and any additional information
  - Continue deliberative process to identify preferred course of action
- February 13 Public session (Zoom)
  - Review Member comments, questions/answers
  - Discuss status of Board deliberations



#### Action Timeline

- February 16 BoM February Regular Meeting
  - Conduct Board vote on preferred course of action
  - Make resolution to fund chosen water project
    - If required, funding resolution will be sent for Membership vote
- February 19 If required, mail ballots for Membership vote
  - Three-week voting period begins
- March 12 Deadline for receipt of ballots at Mt. Gretna P.O.
- March 13 Ballots counted and result of vote announced
- March 16 BoM March Regular Meeting
  - Discussion of next steps and, if approved, anticipated project timeline



# QUESTIONS or COMMENTS?







