



Water Utility: An Informational Presentation

**High Bridge Borough Council
Town Hall Meeting - October 7, 2017**



Introduction

The water system in High Bridge is almost 100 years old. Because of its age and condition, there have been many water main breaks throughout the Borough. Repairs require shutting down sections of the system that interrupts water service to homes and businesses. Many of these breaks take Borough Department of Public Works staff away from other projects because a water main break must be repaired immediately. When DPW cannot make the repair quickly because of its magnitude, an outside contractor is hired, which can become a rather expensive cost to the utility. DPW must also then make repairs to the road surface after fixing the breaks, which can take additional time and money. A series of breaks along a single street can result in road conditions that continue to deteriorate. Since January 1, 2016, water line and road repairs have cost the Borough \$74,046.00.

In addition to water main breaks in the distribution system, the Borough will also be burdened by the need to invest in our aging water supply wells, storage tanks, hydrants, valves and meters. Many of these assets are at or very near the end of their useful lives and will need to be rehabilitated or replaced soon at a tremendous expense to the Borough.

Ultimately, the situation in Flint, Michigan has caused many municipalities around the country to focus more on the most efficient and effective way to provide the clean water that communities need to thrive. High Bridge's size and the importance of the most current expertise in water treatment and delivery caused this Borough Council to explore a sale to an experienced water system operator.

Our Water System

- Entirely funded through rates from customers
- 1472 accounts, serving about 3300 residents
- We have about 24 miles of water mains ranging in age from 1900 to current
- 3.4 miles of 4" mains must be replaced by larger lines per NJDEP regs
- Since January 2016 we have spent \$74,000 on water main breaks
- Both water tanks will require significant maintenance
- Water treatment plant will require upgrades and preventive planning per new legislation
- Our wells pumped 143 million gallons of water in 2016
- 30% non-revenue water due to leaks, old pipes, old meters
- Underground mains = "out of sight out of mind" until something breaks

Why Are We Considering Selling?

- Antiquated system will require more and more costly repairs and upgrades
- Very little capital investment in the system over the last decades
- Have had two rate hikes over two years to cover costs
- A capital spending plan from our Engineer estimates approximately \$6 million is needed to address current issues, and an additional \$3-4 million for the remaining non-critical needs
- New legislation will require upgrades and mitigation planning which could force the borough to increase rates
- The system was valued accurately by American Water –our Borough Engineer estimated the value of the system at ~\$2500 -\$3000 per customer. With 1472 customers at \$2800, that brings the value to \$4.12million. American Water bid \$4.15 million

What Happens to Our Rates if AW Buys the Water Utility?

An average customer in High Bridge using 4.5 thousand gallons (TG) per month currently pays approximately \$425 a year for water, or \$1.16 per day.

New Jersey American Water will adopt the existing High Bridge Borough rates upon acquisition of the system. If the referendum is successful in November, New Jersey American Water would acquire the system in mid-2018, adopting that same \$425 average annual bill and holding that rate until at least mid-2020. Thereafter, New Jersey American Water, via its Board of Public Utilities regulated process for changing customer rates, will put the Borough rates on a path towards equalizing with their statewide water rates, with a potential 5% increase per year.

A New Jersey American Water customer using 4.5 TG per month pays approximately \$558 annually, or \$1.53 per day.

New Jersey American Water anticipates equalizing rates over ten (10) to twelve (12) years, with the average increase for High Bridge being no greater than \$20-25 a year, or \$0.05 per day.

New Jersey American Water's ability to utilize its large, statewide customer base to spread the costs of the needed investment that will be made in High Bridge will result in lower rates for Borough residents than if the Borough were to make the same investments on their own with 1472 customers.

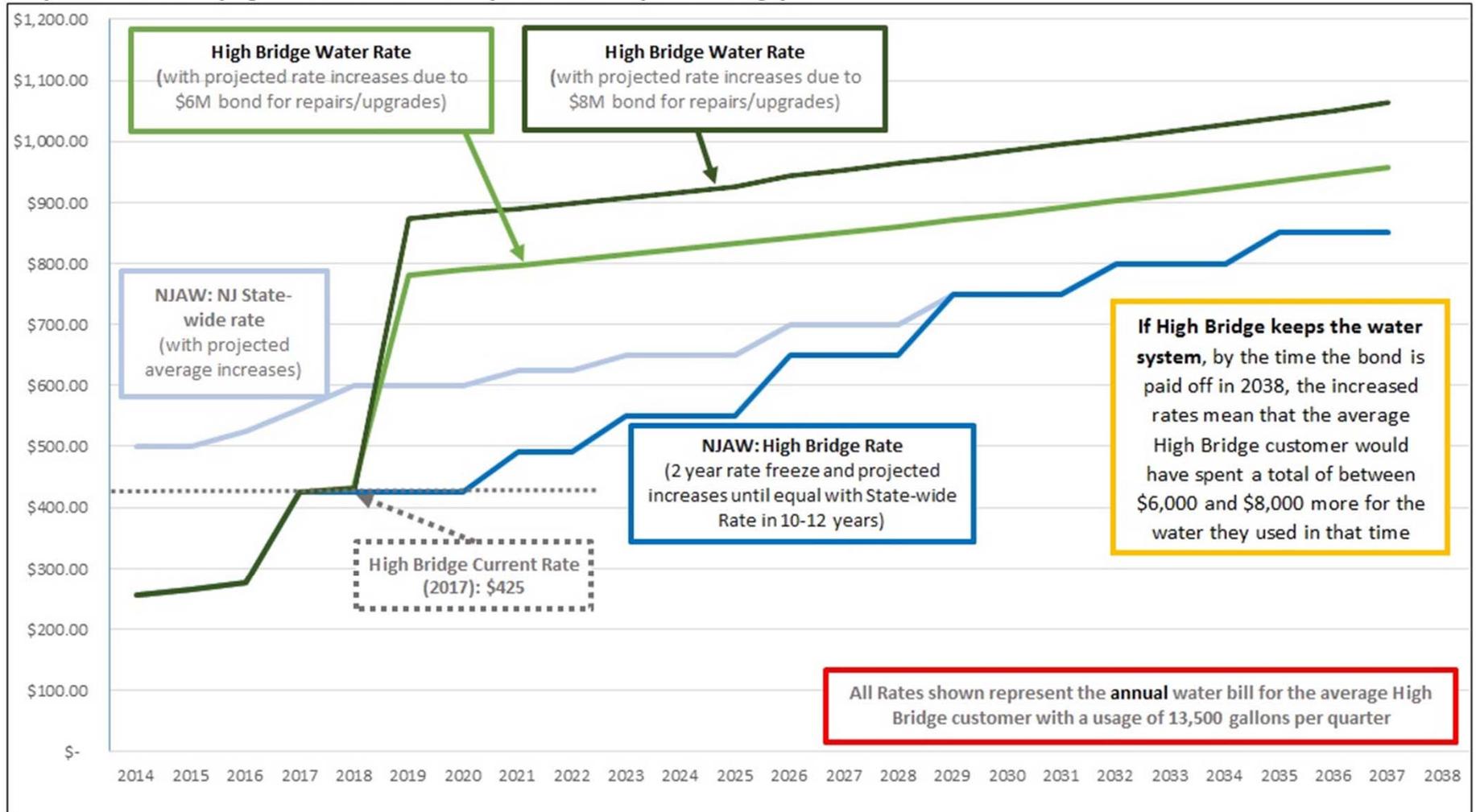
How do current HB and AW Rates Compare?

Borough Current Rate per quarter:	AW water current final Rates per quarter:
0-1,000 Gallons -\$50.00 1,000-15,000 Gallons - \$4.50 per thousand gallons 15,000-50,000 Gallons - \$7.40 per thousand gallons over 50,000 Gallons - \$10.00 per thousand gallons	Base Rate \$40.80 Water Rate \$6.65 per 1000 gallons

Just the facts

Whether or not to sell our water system is not a simple question. Many competing concerns and variables have to be considered. But at the top of many people's priority list are concerns about what will happen to our water rates. The graph below compares the likely impacts on our water rates from selling our water system to NJ American Water vs keeping ownership of the system and paying for the necessary repairs and upgrades ourselves.

The repairs and upgrades are no longer optional. Our water system, parts of which are well over 100 years old, is in serious need of major work. Nearly three decades without **any** upgrades of any sort, and the New Jersey Water Quality Accountability Act, signed into law this past July, combine to make repairs and upgrades a necessity rather than just the responsible option. To pay for this work, the borough will have to bond for at the very least \$6 million, and much more likely \$8-10 million. Paying back this borrowed money will fall directly on the rate-payers.



What Happens to Our Rates if HB Keeps the Water Utility?

- The Borough can proceed in several different ways to fund replacing/updating critical components of the water system (mains, meters, tanks).
- All the funding must come from residents in the water utility – we cannot raise taxes to pay for items covered by the water utility.
- The Borough would prioritize what must be done and come up with a strategy to fund the fixes. Although we operate without a profit, we are bound by municipal rules for some things like prevailing wage.

If High Bridge Retains the System vs Selling

High Bridge (HB)	American Water (AW)
<p>Average rate of \$4.50 per TG could increase sharply; governed by HB per resolution (For example, raising to \$10 per TG = 43% average increase)</p> <p>Would need to implement strategy to repair and/or replace prioritized items, to the overall cost of ~\$6 - \$10million</p> <p>HB bound by reporting and asset management requirements of the Water Quality Accountability Act (WQAA), which would force towns to spend on upgrading and making repairs to old systems</p> <p>Would retain control of water from our wells; selling is an irreversible decision</p> <p>1472 households would bear the costs of making repairs, upgrades and preventive maintenance</p> <p>If investments do not occur, system could become unreliable</p>	<p>Rate freeze for the first 2 years. Eventually rates would be equal to AW's state rate of \$6.65 per TG by 2030; increases are governed by the BPU</p> <p>Would require shifting items from the water utility in to the general budget (where they could result in slightly higher taxes)</p> <p>HB would pay AW for water at the golf course and for the hydrants; they would not charge us for average water usage at any other HB-owned building (if usage increases dramatically, they will charge us market rates for overage).</p> <p>AW's SCADA and security systems would immediately comply with WQAA requirements, and AW would be the responsible party for management and mitigation plans</p> <p>Costs spread over large customer base; economies of scale pricing; in-house capabilities= can do tasks much cheaper</p>

From Utility to Taxes - The Nitty Gritty if We Sell

- Water Utility includes salaries, operating expenses:
 - The 2017 water utility budget is \$466,680.00
 - Once the Utility is dissolved \$284,246 of the Salary and Wages and Operating expenses will be moved to the general budget.
 - The General budget will also be increased by adding the fire hydrant costs and water usage of the golf course.
 - This totals \$344,762 added to the general budget
- If we accept the \$4.15million, here is what will happen:
 - By law the money must be used to pay down debt in the water utility first and then the remaining money is to go toward general borough debt.
 - After paying off the debt the borough will have a \$398,885 savings in the general budget.
- Summary:
 - The borough will have a \$54,123 savings in the budget which is equal to approximately \$0.0164 on the current tax rate.

Managing Your Water Rates - The Nitty Gritty if We Keep

If we keep the system, here is what will happen:

- We retain control of our own water
- Borough will have to make the \$8 to \$10million investment over time
- Capital spending will be reflected in the rates, which will continue to rise significantly over the next 20 years
- Emergency repairs will continue to be unforeseen and costly – this will affect rates
- Council will have to make decisions regarding priorities in water system investments, and this will require them to raise your rates a little or a lot depending on what needs to be accomplished

NJ Water Quality Accountability Act

The Water Quality Accountability Act (S2834/A4569) unanimously passed both the Senate and House of Representatives on June 8, 2017. The Act requires both private and public water purveyors to conduct certain testing, reporting, management and infrastructure investment/planning services to be in compliance with the new State regulations.

The Law is designed to protect users of private and public utilities.

****Recent news of water utilities failing to inform users of poor water quality and failing water infrastructures was what prompted the legislators to act.****

NJ Water Quality Accountability Act

When does the Water Quality Act Take Effect?

The act was signed into law by governor Christie on July 21, 2017 and goes into effect 90 days after that date. At that point we have 18 months before mitigation plans are required.

The act pertains to any water purveyor with more than 500 water customers...

...High Bridge has 1472.

Note: As discussed at the Oct 7 Town Hall, American Water is immediately in compliance with the requirements of the Act, meaning they would begin to bring High Bridge into compliance immediately if we sell.

NJ Water Quality Accountability Act

What are some of the Requirements of the Act?

Water Valves

- Inspect main stem valves. Repair or replace any valves not operating or not fully functional.
- Conduct and document valve inspections according to the following schedule.

Valve Size	Inspection Schedule
12" or greater	Every 2 years
Less than 12"	Every 4 years
Service Connections	On Demand

- Identify water valves location using GPS technology and create a digital map using Geographical Information System (GIS) that is to be submitted to the NJDEP in a compatible GIS platform.

NJ Water Quality Accountability Act

Fire Hydrants (much of this is already done by our FD)

- Test each fire hydrant once per year record all flow information.
- Develop a plan for flushing every fire hydrant
- Maintain records for each hydrants inspection, flush and flow readings, maintain 6 years of records
- Mark each hydrant with owners emblem
- Identify each hydrants location using GPS technology and create a digital map using Geographical Information System (GIS) that is to be submitted to the NJDEP in a compatible GIS platform.

NJ Water Quality Accountability Act

Cyber Security Plan (Currently High Bridge is not internet connected, but could be required to do so in the future)

- Within 120 days of the effective date of the Act, each water purveyor that has an internet-connected control system must complete a plan for protecting their water system against any cyber attacks.
- The plan must include a risk assessment and implement appropriate controls to mitigate identified risks to the public water system, maintain situational awareness of cyber threats and exercise a Cyber Incident Response Plan.
- Within 60 days of the development of the cyber program, each water purveyor must join the New Jersey Cybersecurity and Communications Integration Cell (NJCCIC).

NJ Water Quality Accountability Act

Infrastructure Investment

- Within 18 months of the effective date of the Act, each water purveyor must prepare and implement an Asset Management Plan designed to routinely inspect, maintain, repair and renew infrastructure consistent with the industry standards of the American Water Works Association (AWWA).
- Develop a detailed engineering analysis of the asset condition and service life.
- Dedicate funds on an annual basis to address and remediate the highest priority project shown on the Asset Management Plan.
- Provide the NJDEP and New Jersey Board of Public Utilities (NJBPU), as applicable, with the Asset Management Plan, improvements made along with their costs, as well as costs of any upcoming improvements once every three (3) years.

NJ Water Quality Accountability Act

Violations-

- Three (3) Notice of Violations (NOV) for any reason or two NOV for exceeding the maximum contaminant level within a 12-month period will require the water purveyor to submit a Mitigation Plan as prepared by the Licensed Operator and Licensed Professional Engineer within 60 days of the last NOV. The mitigation plan shall specify whether the notice of violation will be addressed through operational changes or require a capital expenditure and providing a schedule for implementation of the mitigation plan.

Please be sure to visit the High Bridge Website for updated questions and information.

Thank you!

Questions?

Contact the Administrator or a
Councilperson