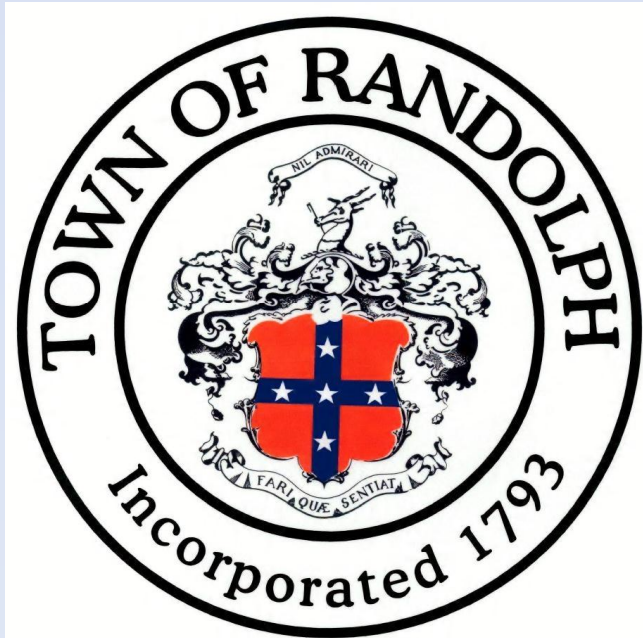
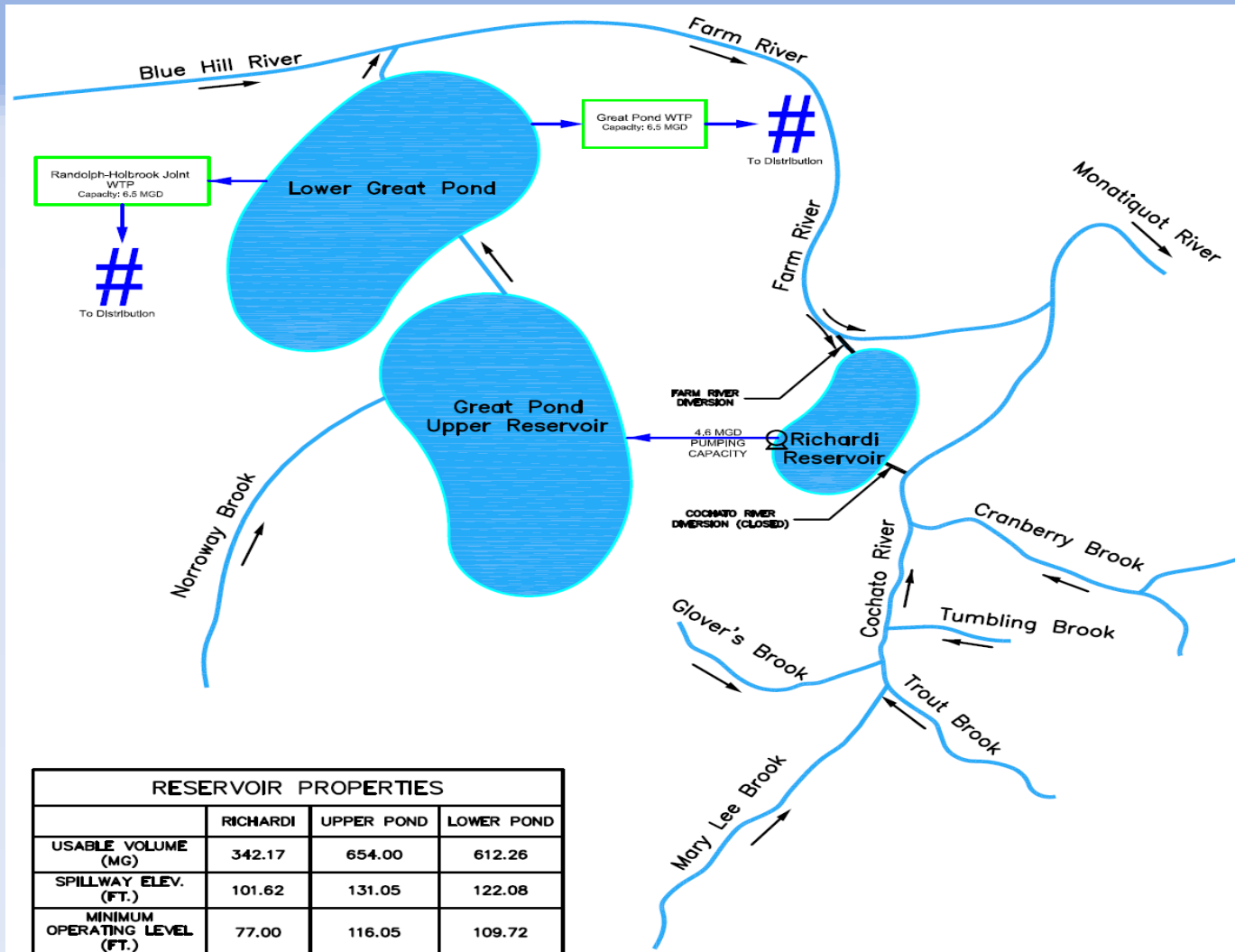


Randolph's Municipal Water Supply



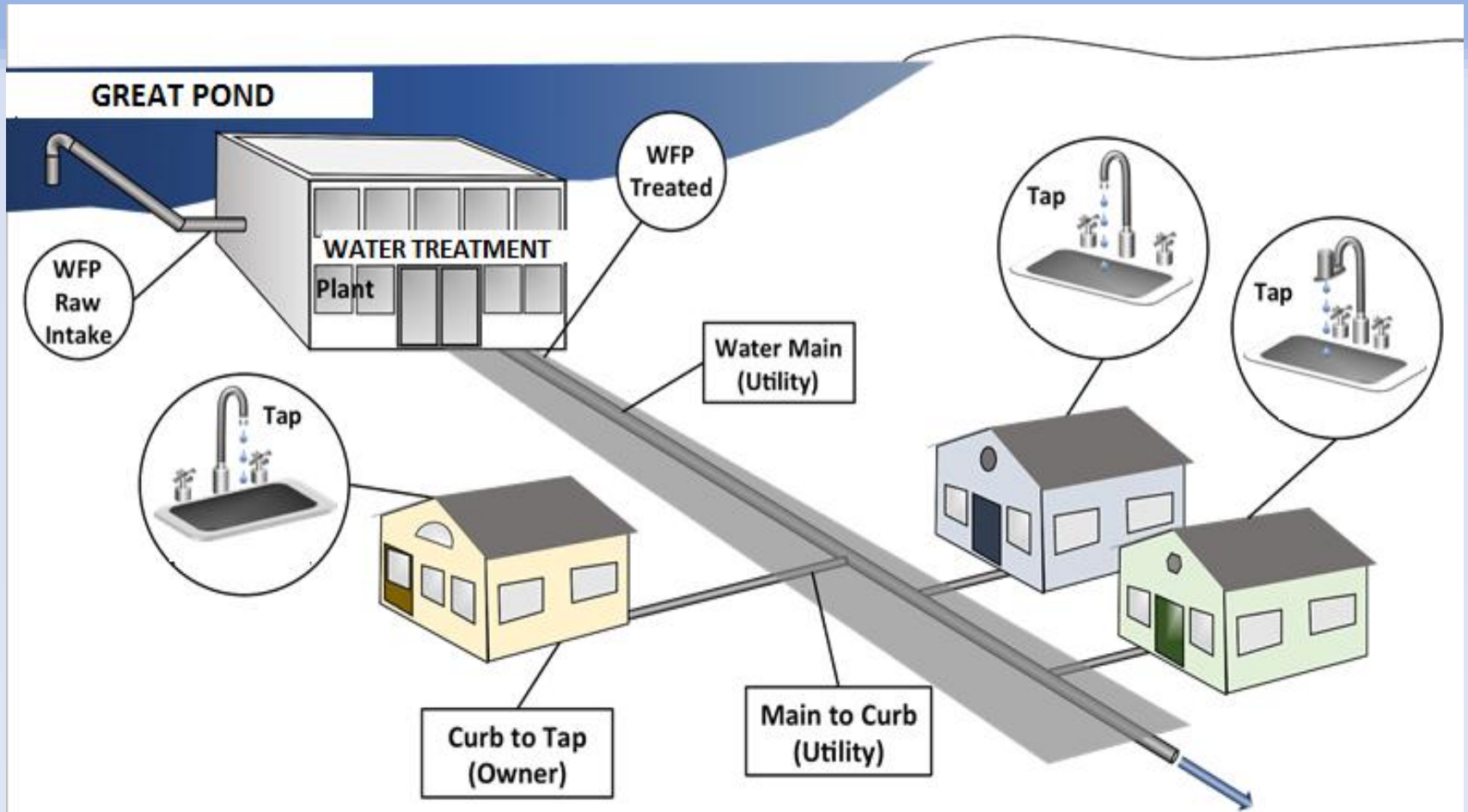
Brian Howard
Town Manager

Randolph Water Supply




RESERVOIR PROPERTIES			
	RICHARDI	UPPER POND	LOWER POND
USABLE VOLUME (MG)	342.17	654.00	612.26
SPILLWAY ELEV. (FT.)	101.62	131.05	122.08
MINIMUM OPERATING LEVEL (FT.)	77.00	116.05	109.72

Water Distribution



Water Testing for Bacteria Ensures Water Quality & Safety

- ❑ Bacteria are everywhere, but we don't want to see certain types in our water supply.
- ❑ Randolph takes weekly water samples, which are analyzed in laboratories for bacteria counts.
- ❑ Coliform is a particular type of bacteria that they test for. It indicates that harmful germs may also be present.
- ❑ Randolph collaborates with several state agencies, such as the Department of Environmental Protection, to ensure the protection of area reservoirs.

 **G & L**
Laboratories

◆ Water Analysis ◆ Food/Seafood Analysis ◆ Metals/Chemical Analysis ◆ Microbiological Testing

246 Arlington Street, Quincy, MA 02170 Tel: (617) 328-3663 Fax: (617) 472-0706

REPORT

Lab. ID #: 90466 Report Date: 7/15/19
Total Pages: 2

Attn: Mr. Gerald Cody
Randolph Board of Health
Town Hall, 41 South Main St.
Randolph, MA 02368

Sample Received Date/Time: 7/11/19, 12:40 PM
Sample Received Temperature: 2.9°C
Sample Collected Date/Time: 7/11/19, 12:13 PM
Sample Collected By: G.Z. (G & L Labs)
Sample Analyzed By: M-MA-1100
Sample Identification: One (1) drinking water sample labeled:
1) Break Room, 2nd Floor


Sampling Location: Town Hall, 41 South Main St., Randolph, MA

TEST RESULTS:

Test	Unit	#1	MCL	Method Reference	Analyzed Date/Time
Total Coliform	100mL	Absent	Absent	SM 9223, 21 st Ed, 2005	7/11/19, 12:45 PM
E. coli	100mL	Absent	Absent	SM 9223, 21 st Ed, 2005	7/11/19, 12:45 PM

MCL: Maximum Contaminant Level
Mod: Modified Method
IN/C: Too Numerous To Count
* Exceed MCL
† Analyzed by Sub. Partner
‡ Not in a scope of M-MA-1100

Mass. Cert. No.: M-MA-1100

Report reviewed and approved by:  7/15
Lab. Director Signed Date

Why Is My Water Brown?

Probable causes for brown water include:

- Change in pressure at the pumping station.
- Fire in the area.
- Hydrant Flushing.
- Water Main Break



Why Is My Water Brown?

Iron and Manganese cause the water to appear rusty. Neither iron or manganese is harmful in the concentrations found in water.

- ❑ Occurs when there is a water speed increase or change in water flow direction.
- ❑ Small particles of rust are knocked off the inside of the pipes.
- ❑ Sediment that was laying on the bottom of the pipes gets back into the water.

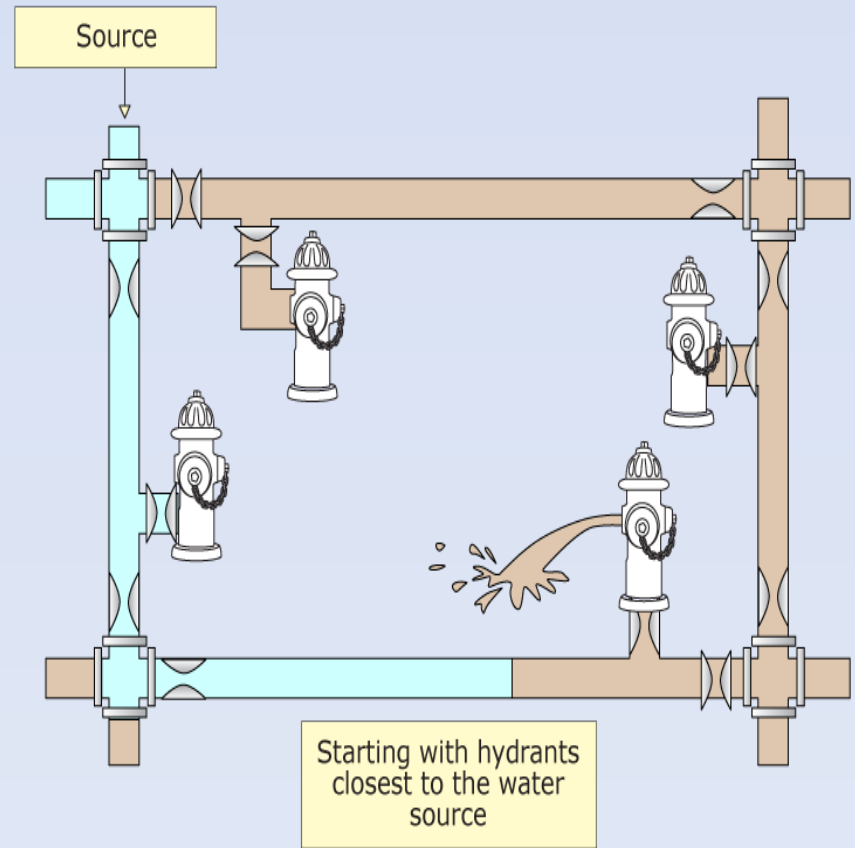


Why Is My Water Cloudy?



- Hot and cold water may appear cloudy when flows suddenly increase.
- Air gets mixed in with the water supply, causing tiny air bubbles.
- It is completely harmless.

Flushing Program



Hydrant Flushing



- ❑ Flushing removes the sediment and mineral build up, and improves the color, odor and taste of water.
- ❑ Flushing hydrants is also important for public safety. Removing the caps and exercising the fire hydrant valves helps to maintain them so they are ready for use during a fire.

Randolph/Holbrook
Joint Water Board
WTP Emergency Upgrades



Randolph/Holbrook Water Treatment Repair Schedule

Milestone/Task Item	Status	Start Date	Completion Date
Finished Water Pump No. 4 – Rebuilt Motor and Soft Starter Installed and operational	Completed		July 10, 2019
Electrical Equipment Replacement New Finished Water Pump No. 3			
Award and Notice to Award	Completed		July 5, 2019
Submittals	Completed		August 23, 2019
Equipment Lead Time:			
Electrical Equipment Fiberglass Enclosure	On Order	August 16, 2019	October 4, 2019
Finished Water Pump #3	On Order	August 16, 2019	December 19, 2019
Construction:	Underway	August 26, 2019	December 31, 2019
Electrical Equipment Installation and interior electrical connection demolition of existing FWP#3, transfer of FWP#4 to new electrical system	Ongoing	September, 3 2019	October 2019
FWP#3 Demolition, Installation and Startup		November 2019	December 31, 2019



Randolph/Holbrook Water Treatment Plant

Opinion of Probable Construction Costs Phases 1 & 2

The following summary table presents a breakdown of the opinion of probable construction costs for the electrical and pump upgrades.

	Work Item Description	Opinion of Probable Construction Cost
	Contractor's General Conditions	\$293,568
	Civil	\$113,721
	Process Mechanical	\$165,306
	Electrical	\$843,778
	Subtotal	\$1,416,374
	Contingency @ 40%	\$566,550
	Engineering Fees: Emergency support, MassDEP coordination and reporting, design, construction services, resident project representative, startup, closeout, emergency connection concept planning	\$396,585
	Emergency Expenditures (rental fees for pumping units, piping, personnel overtime etc.)	\$392,500
	TOTAL	\$2,772,500

The 40% contingency is based on the level of design completed to date. We are making every effort to reduce the costs to the extent feasible.



Randolph/Holbrook/Braintree Tri-Town Regional Water Treatment Plant



Tri-Town Regional Water Treatment Plant Opinion of Schedule

Milestone/Task Item	Status	Start Date	Completion Date
Designer Selection	Underway	July 24, 2019	September 30, 2019
Design			
Preliminary Design 30%			March 2020
60% Design		March 2020	July 2020
Permitting		March 2020	June 2021
Design			
90% Design		July 2020	November 2020
100% Design			August 2021
Bidding		September 2021	November 2021
Construction		November 2021	September 2023
Startup		September 2023	December 2023
Ribbon Cutting			January 2024



Tri-Town Regional Water Treatment Plant Opinion of Probable Construction Costs

	November 2018 EP Concept	EP Estimate November 2018
Water Treatment Plant Construction Costs		
Construction Labor, Material, Equipment		\$36,412,000
Construction Permits, Insurance, Bonds, General Field Conditions & Overhead & Profit		\$7,282,000
Construction Contingency		\$8,739,000
Escalation to Mid Point of Construction		\$5,663,000
	Total WTP Construction	\$58,096,000
Additional Project Costs		
Engineering: Design of Water Treatment Plant		\$6,391,000
Owner's Project Manager (includes Const. Serv, RPR)		\$2,905,000
	Total Project	\$67,392,000
Construction and Design of Randolph/Holbrook Transmission Main		
		\$2,864,000



How Can You Help?

- Pick up after your pet.
- Do not dump anything in storm drains.
- Pick up litter.
- Bring unwanted paint, old gasoline, motor oil and unwanted cleaners or pesticides to the Household Hazardous Waste Collection Day.
- Consider environmentally friendly low-flow devices to conserve water (i.e., low-flow shower heads, faucets and toilets).



Sign up for Hyper Reach

A good way to stay informed is to join **Hyper-Reach**. **Hyper-Reach** is a notification system used by the Town of Randolph to get important messages to the community.

To join Hyper-Reach, visit: <http://hyper-reach.com/marandolphsignup.html>
or call 781-815-4199.

Be sure to follow the Town of Randolph's Official Facebook Page for important news and updates!



What Does a Gallon of Randolph Water Cost?



Financial Breakdowns by Town

JOINT WATER PLANT

Randolph

50%

Holbrook

50%

TRI-TOWN WATER PLANT

Braintree

50%

Randolph

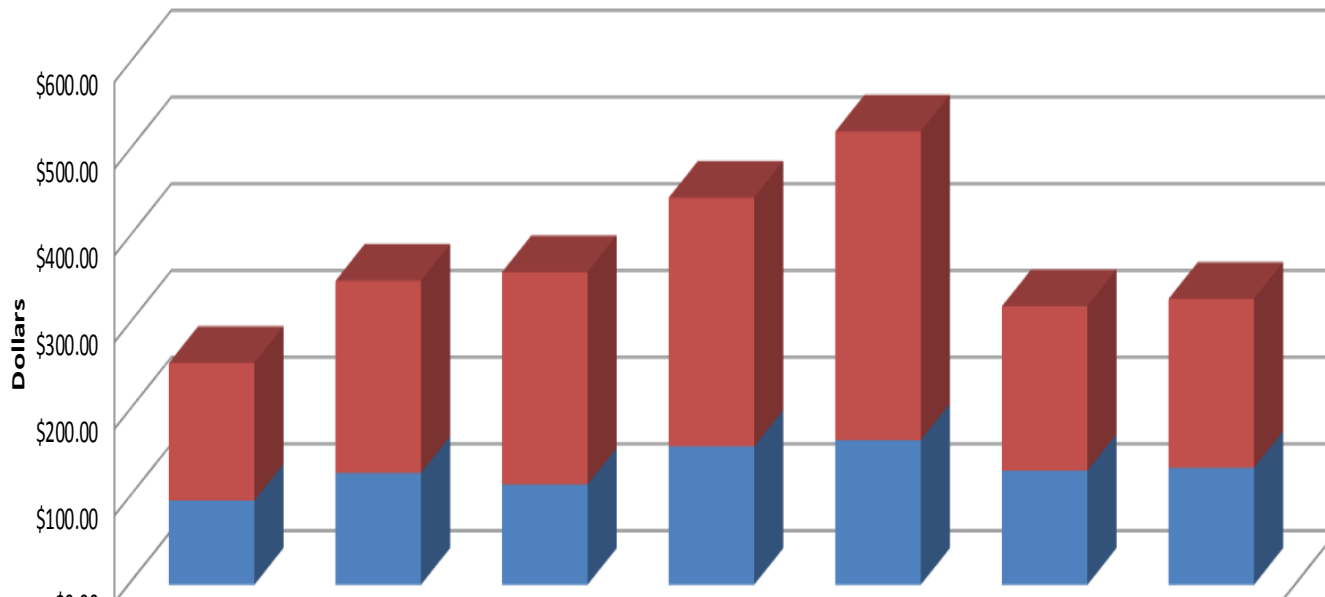
34%

Holbrook

16%

Town of Randolph Quarterly Water Billing

**Randolph Rates Compared to Surrounding Communities
2,500cf Quarterly**



	Braintree	Canton	Holbrook	Milton	Quincy	Randolph-Current FY 2019	Randolph Proposed FY 2020
■ Sewer	\$158.65	\$221.55	\$244.75	\$286.83	\$356.00	\$189.50	\$194.75
■ Water	\$97.10	\$129.10	\$115.80	\$159.60	\$166.75	\$131.75	\$135.00

Why was there a Boil Water Order?

- On July 10, 2019, a boil water order was issued due to low water pressure.
- Water Testing revealed that there was no biological contamination.
- Water pressure was restored.
- Boil Water order was lifted on July 12, 2019 at 4:15 PM.



The End

