



NEWSLETTER – SUMMER  
June 27, 2018

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## **OUR MISSION**

*"To provide water service that is dependable, economical, and meets or exceeds health standards for all cooperative members."*

## **TOPICS INSIDE**

- I. President's Corner*
- II. Water System Operation, Maintenance & Improvements*
- III. Financials & Water Rates*
- IV. Annual Water Quality & CCR Report*

## **BWC OFFICE**

**LOCATION:** 5901 Hillside Rd  
**MAIL:** P.O. Box 164  
**HOURS:** M-T 8:00 am – 4:00 pm  
F 8:00 am --2:00 pm

### **PHONE/FAX**

(410) 586-8710 (ph)  
(410) 586-1963 (fax)

**WEB PAGE:** [www.beacheswater.com](http://www.beacheswater.com)  
**EMAIL:** [beacheswater5901@gmail.com](mailto:beacheswater5901@gmail.com)  
**EMERGENCY:** (410) 846-1040  
**DROP BOX:** Outside Gate

## **Board of Directors**

Gary Clarke - President  
Fritz Riedel-Vice President  
Tom Forgette - Sec-Treas  
Dan Crain - Director  
John Collins - Director  
Frank DiGeorge - Director

## **Contract Management**

Dennis DiBello - Manager / Superintendent  
Jackie Jacob - Bookkeeper  
Cheryl Houchen - Receptionist  
Kenny Grover - Operations Tech.  
Bob Gross - Helper  
James Foote - Operations Tech.  
James Atkins - Helper  
Chuck Bearns - Operations Tech.

*Attend a monthly Board of  
Director's meeting at the office  
(5901 Hillside Road) generally on  
the second Thursday of the month.*

*Call ahead. (410) 586-8710.*

## **I. President's Corner**

The Beaches Water Cooperative has had a successful year. Fritz Riedel suggested last year that we track income monthly to assess where we stood compared to budget, which monthly billing allows us to do. It has been very helpful to have that feedback each

month since we now know where we stand financially and how much water we used. For the first full year of metered billing, we were pleasantly surprised to see that the basis for our Green Grant which allowed us to install the meters was more than justified, since it was based on water conservation. Total water withdrawal in 2015 was 47,093,420 gallons, compared to 37,048,400 gallons in 2017! A reduction of 10 million gallons can be directly attributed to changing to a meter-based system. It is doubtful that any of us really had any idea how much water we were using to run our households. The meters allow us to know what we use each month, individually and collectively, allowing us to see what we use and what it costs.

The two aquifers we draw water from, the Aquia and Nanjemoy, particularly the Aquia, have been depleted over time in Southern Maryland by increased population and too many individual wells. A reduction of 10,000,000 gallons of water used by our community over one year is a literal drop in the bucket in Southern Maryland, but it is an important reduction. Individual wells are still permitted in the Aquia, since the next lower aquifer requires a well over 1000' deep, far too expensive to make that well affordable for one household, and too expensive for our cooperative as well. Keep up the good work of reducing your water usage and your water bills. We do not plan a rate increase now and will continue to watch the budget closely. Thank you!

For the first time, for nearly a year we have had a full complement of Directors on the Board of the Cooperative. Each Director brings past-experience and concerns for their community to bear on their position on the Board. Fritz Riedel has served as Vice President of the Co-op for some years. J.R. Mathers took over from Sandy Anderson as Secretary-Treasurer. He recently retired and has recently decided to move from the community, making him ineligible for membership. His excellent work will be missed. Dan Crain is a long-time resident and has been a valuable asset, with a background in plumbing. John Collins was a career firefighter before volunteering for the Board. Frank DiGeorge joined the Board last year. Tom Forgette is a decades-long resident of Long Beach. Tom has also volunteered to take J.R. Mathers place as the new Secretary-Treasurer. My thanks to all of them for their voluntary participation in this important work. They are all active in discussions of how we are doing and how we can continue to improve our cooperative. We are now a Director short on the Board so would like to hear from anyone interested in volunteering.

### **Announcing the Beaches Water Cooperative's Annual Meeting**

**Date:** September 9, 2018

**Time:** 3:00 pm

**Location:** Long Beach Civic Center  
(5845 Calvert Blvd)

**Service Advisory** -- We will be flushing community fire hydrants the week of September 17-21, 2018 starting at 9:00 a.m. This may cause the water to be discolored due to disturbing the sediment and deposits in the pipes. This sediment is naturally occurring minerals in the water. Discolored water poses no health hazard. It is free from harmful bacteria and safe for all household uses, such as showering, cooking, flushing of toilets, etc. You can drink the discolored water, but it may taste different. However, you should **NOT** wash clothes in your washing machine if the water is discolored as clothing may stain. Flush your water lines though an outside hose bib to clear up the discoloration.

**Do we add fluoride to the drinking water?** - *No we do not. Although in some areas of the country water systems add fluoride to the water, Beaches Water Co-op is only licensed by the State of Maryland to treat the drinking water for bacteriological concerns. Trace amounts of fluoride naturally occur in the aquifers, but those amounts are not significant to aid in children's dental growth and development. Many doctors/dentist prescribe fluoride supplements or children's vitamins with fluoride.*

**Chlorine smell?** - *Water is disinfected to ensure it is safe to drink. Chlorine treatment is the most common and effective disinfectant. At times the treated water may have a chlorine smell. This is the free chlorine residual that we must maintain to ensure the water at your tap is safe to drink. Letting the water stand for a few minutes dissipates the smell.*

### **I. President's Corner (cont)**

Lastly, I cannot overstate the importance of Dennis DiBello and his office team. Dennis has made so many lasting improvements to our cooperative, first as a member of the Board of Directors, and for the last 22 years, as our Business Manager, Superintendent, and Water System Operator. Dennis has been tireless in improving our water system every year, bringing long engineering experience to the care and maintenance and improvement of the BWC. He is by nature a thrifty individual who does everything to save money while constantly improving our system.

Jackie Jacob, our Bookkeeper, was previously a CPA when she joined us, and has organized and improved our financial systems over the years, as well as being the driving force of our application for the Grant which means so much to us.

Cheryl Houchen is the Secretary and receptionist who is the contact point for everyone who calls the office. She is a great organizer and knowledgeable and patient with callers who are often upset or bewildered. She calmly acts to help them get the answers they need. She is our front-line resource and yours too.

Their collective activities recently resulted in an invitation from the USDA for us to meet with them in Washington to explain what our community went through to create a successful cooperative. Our original Farmers Home Loan was through USDA and what enabled the original success of the cooperative.

Our capital budget this year will be focused on improvements to old control systems and leaks which Dennis tracks on a community map to focus on where attention is needed. He has also initiated a GIS (Geographic Information System) to map exact locations of meters, valves, pipelines, and connections in the entire community to enable ongoing maintenance. The Gerard Plant at the beachfront has been rebuilt and the obsolete tank removed. Some pipelines which have experienced chronic leaks will be replaced this coming year. Dennis and his crew make every effort to improve the system with each repair.

We continue to have as many as one-hundred members who do not pay their bills on time, which is costly for us. Calvert County may be able to help if you are having financial difficulties, but as a co-op, our bills must be paid.

Gary Clarke  
President, Beaches Water Cooperative

**Read the BWC Story on line at:**

**[www.beacheswater.com](http://www.beacheswater.com)**

### GIS Project

We have now GIS mapped out all meter pits, isolation valves, fire hydrants, blow-off, and pump houses. Our goal was to capture the “corporate memory” of our senior staff to pass that knowledge on to the “new” folks. The software mapping allowed us to generate SOPs (standard operating procedures) for leaks and repairs. We now have a notebook with printed maps and instructions for the field to determine the effects of leak repairs and maintenance. This also aids greatly in Miss Utility processing.

### Obsolete Controls

We are working on a digital control update to the analog controls that were installed in 1988. We have had many issues with them and parts, unavailable from the manufacture, are at premium on ebay. Digital controls have dropped in price to the point where instead of spending as much as \$50,000, we are doing it in-house for a few thousand.

### Water Conservation

*To aid in water conservation for our community, BWC is offering, at wholesale cost, water saving shower heads and faucet aerators. These water saving devices use less water than the regular devices and produce similar water pressures. These water saving devices can be purchased, by our members only, at the BWC office for the following prices:*

<u>Device</u>	<u>Wholesale (your price)</u>
Shower Head	\$ 4.95
Shower Wand	\$14.25
Faucet aerator	\$ 0.50
Toilet Tank Dams	\$ 1.99

## II. Water System Operation, Maintenance & Improvements

Our design and equipment improvements are paying off with another year of high reliable operation with only a few minor disruptions in local areas.

As many of you may recall from past discussions our community’s physical elevations range from sea level to about 138 feet above sea level. This has an effect on head pressure in the system. A foot of water elevation adds 0.433 psi to the system pressure. So essentially, water at 0 psi at the office (138 ft elevation) would read 60 psi (at sea level.) Consequently we can have variations at your house from 40 psi at the highest points to 75 psi at lower points. We have a few pressure regulators to prevent excessive pressures at the lowest levels and are looking to where we may install more.

These head pressures coupled with the thermo expansion in the water heater can cause a water heater relief valve to lift. During the meter project we informed everyone that they should have an thermo expansion tank on the water heater because with the meter pit installation an individual back flow preventer was installed on each home. That back flow preventer will not allow water to flow backwards into the system and prevents cross connection contamination. For those folks who have not installed those pressure tanks, there is a chance when the water heater turns on, thermo expansion will increase pressures and can rise to the point of lifting the water heater relief valve. This is because as the water is heated it expands but can no longer flow back into the system. We highly recommend to those who have not installed this expansion tank to do so at the earliest possible opportunities to prevent a lifting of these relief valves. Water heater maintenance requires that once a relief valve lifts or after a certain age it should be replaced.

And on the subject of water heater maintenance some of you may know that the manufacturers’ recommend that water heaters be flushed out every 1-3 years. The flushing of these water heaters removes sediment that can build up in the tanks. For more information on either one of the subjects please read your owner’s manual or call me at the office

If you have any questions about the Operation or Maintenance of the system please give us a call.

V/R,

Dennis DiBello,  
Business Manager and Superintendent

**Schedule of Fees**

**Monthly Water Rates:**

<b>Consumption:</b>	<b>Rate:</b>
0-1000 gal	\$32.00
1001-2000 gal	\$3.50/thousand
2001-3000 gal	\$5.00/thousand
3001-4000 gal	\$5.75/thousand
4001-5000 gal	\$6.50/thousand
5001-10000 gal	\$7.00/thousand
Over 10000 gal	\$7.50/thousand

<b>Application/Transfer Fee</b>	\$ 40.00
<b>New Service</b>	\$5,500.00
<b>Shut-off</b>	
Non-payment	\$ 110.00
Customer Request	\$ 40.00
<b>Reconnect</b>	\$ 40.00
<b>Extended Shut-off</b>	\$ 420.00
<b>Meter Reading</b>	\$ 50.00
<b>Meter Challenge</b>	\$ 100.00
<b>Return Check</b>	\$ 25.00
<b>Late Penalty</b>	10% applied 10 days after end of month



**II. Financials & Water Rates**

How your bill is calculated. For example if you used 3011 gallons:

0-1000 gallons	\$32.00
1001-2000 gallons	\$3.50/thousand gallons
2001-3000 gallons	\$5.00/thousand gallons
3001-4000 gallons	\$5.75/thousand gallons
4001-5000 gallons	\$6.50/thousand gallons
5001-10,000 gallons	\$7.00/thousand gallons
Over 10,000 gallons	\$7.50/thousand gallons

A monthly usage of 3011 gallons would result in a water bill of \$40.56

Usage: 0-1000 + 1001-2000 + 2001-3000 + 3001-4000 (partial)

Fee: \$32.00 + \$3.50 + \$5.00 + \$0.06 = \$40.56

Similar rate scales are used by the Calvert County water systems and the Chesapeake Ranch Estates Water Co-op. These rates are based on the projected budget for next year (approximately \$459,894). Fortunately, the months included both low and high use months, so we have a good idea of the how much revenue different schemes should produce.

The “Bay Restoration Fee”, i.e. Flush Tax, of \$15 per quarter will be apportioned as \$5 monthly payments on the monthly water bill.

Fiscal year 7/1/18– 6/30/19

<b>BWC FY 2018/19 BUDGET</b>	<b>INCOME</b>
Water service	411,714
Office Rent	1,200
Advertising-Quarterly	1,500
Application & Transfer Fees	5,000
Cash Reserves	40,480
<b>Total Income</b>	<b>\$459,894</b>
<b>BWC FY 2018/19 BUDGET</b>	<b>EXPENSES</b>
Auditing	9,800
Bad Debt	1,030
Bank Service Charges	5,000
Depreciation Expense	68,184
Professional Memberships	800
Engineering	1,500
Insurance	12,000
Loan Interest	250
Mortgage Pay Down	22,274
Mortgage Interest	16,112
Legal	5,000
Licenses and Permits	600
Office - Other	12,000
Operating Supplies	18,450
Repairs & Maintenance	23,575
Routine Service	228,269
Solid Waste Fee & BRF	50
Utilities	30,000
Water Testing	5,000
<b>Total Expense</b>	<b>\$459,894</b>



#### IV. 2017 - Annual Drinking Water Quality Consumer Confidence Report

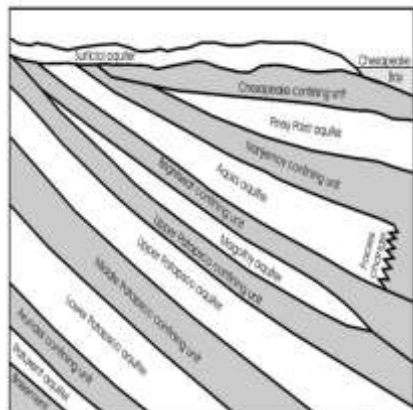
Our drinking water is safe and meets all federal and state requirements for community drinking water. In 2017, there were no water quality violations.

BEACHES WATER CO-OPERATIVE  
MD0040009

Annual Water Quality Report for the period of January 1 to December 31, 2017

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by BEACHES WATER CO-OPERATIVE is Ground Water: Nanjemoy and Aquia confined aquifers.



For more information regarding this report contact:  
Name: Dennis DiBello  
Phone: 410-586-8710

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

##### Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Name		Type of Water	Report Status	Location
Gerard (bayfront/bayview) CA029966	CA029966	GW	Y	Long Beach approx. 200 ft W of Main St
Jorgensen 1 (locust 1) CA054043	CA054043	GW	Y	Long Beach approx. .5 mi e of Rt 2
Jorgensen 2 (locust 2) CA811941	CA811941	GW	Y	Near 1.3 mi se of St Leonard approx. 300 ft W of Beach Rd
Rausch (balsam) CA054331	CA054331	GW	Y	Long Beach approx. .5 mi e of Rt 2
Slater 1 (new well) CA920901	CA920901	GW	Y	Near 4 SE of St Leonard approx. 50 ft W of Long Beach Dr & Hill Rd
Slater 2 CA811940	CA811940	GW	Y	Near 1.3 mi SE of St Leonard approx. 200 ft w of Long Beach Rd
Slater 3 CA882256	CA882256	GW	Y	Near 5 mi SE of St Leonard approx. 50 ft S of Long Beach Rd

### Lead and Copper

Definitions:

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level	90th Percentile	# Sites Over	Units	Violation	Likely Source of Contamination
Copper	7/13/2016	1.3	1.3	0.32	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	7/13/2016	0	15	6.6	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits.

### Water Quality Test Results

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum residual disinfectant level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum residual disinfectant level goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**mrem:** millirems per year (a measure of radiation absorbed by the body)

**na:** not applicable.

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2017	0.8	0.7-0.8	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.

Total Trihalomethanes (TTHM) *	2017	4	3.57 – 3.57	No goal for the total	80	ppb	N	By-product of drinking water disinfection
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\*Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

<b>Inorganic Contaminants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.	2017	10	4.5 – 12.3	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Fluoride	2017	0.3	0.3 - 0.3	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.2	0 - 0.2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Radioactive Contaminants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Beta/photon emitters	12/19/2012	13.1	13.1 - 13.1	0	4	mrem/yr	N	Decay of natural and man-made deposits.

**Summer 2018 Newsletter  
&  
2017 Consumer Confidence Report (CCR)**