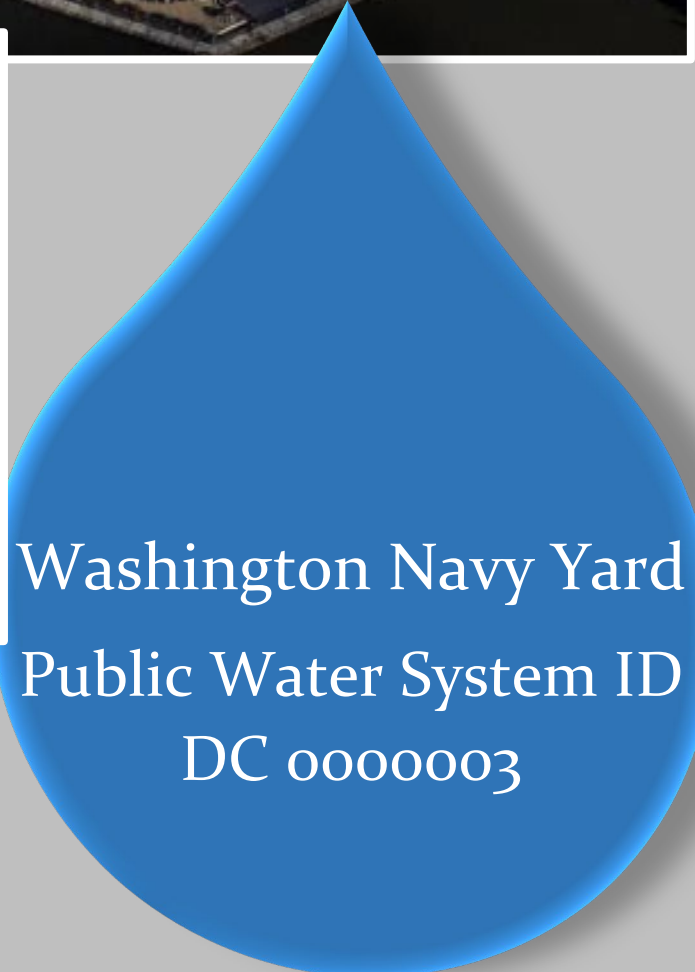
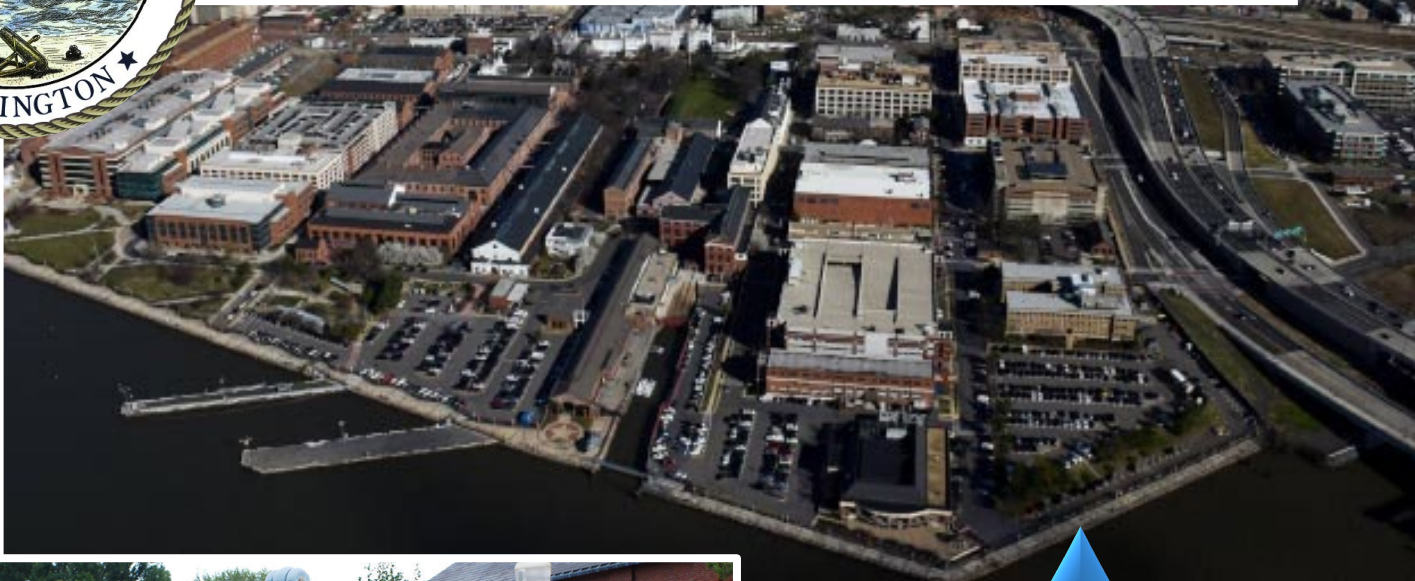




# 2021

## Drinking Water Quality Report



Washington Navy Yard  
Public Water System ID  
DC 0000003

Summarizing 2021 Water  
Quality Test Results

# What is a Consumer Confidence Report?



A Consumer Confidence Report (CCR), also known as a safe drinking water or water quality report, is an annual report summarizing the drinking water quality for a community public water system. Each year, the Washington Navy Yard (WNY) must prepare and distribute a CCR to its tenants and send a copy of the CCR to the US Environmental Protection Agency, Region 3. The system must also provide a signed certification regarding the contents of the report and its distribution.

The CCR is a great opportunity for the Public Work Department (PWD) Washington to describe for its water consumers what is required to provide WNY with drinking water. Information such as water sample results, how we handled any problems that might have occurred, and future improvements or requirements associated with operating the system, is included within the CCR.

## Contact Information

### Public Works Department - Environmental

Installation Environmental Program Director	202-433-0415
Drinking Water Program Manager	202-685-8007

### Additional Contacts

DC Water – Drinking Water Division	202-612-3440
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### Información en Español

Este reporte contiene información importante sobre el agua potable que usted consume. Para obtener una traducción del reporte, por favor comuníquese con la Oficina de Asuntos Públicos al (202) 685-8007. Si necesita la asistencia de un traductor con respecto a información sobre DC Water, favor de contactar DC Water Asistencia al Cliente al (202) 354-3600 (8am a 5pm, Lunes a Viernes).





# Your Drinking Water Source

## Where does your drinking water come from?

Drinking water for the District of Columbia comes from the Potomac River, a “surface water” supply. U.S. Army Corps of Engineers, Washington Aqueduct filters and disinfects the water to meet safe drinking water standards. After treatment, the District of Columbia Water and Sewer Authority (DC Water) purchases the water from them before selling it to Public Work Department (PWD) Washington who distributes this drinking water to residential and non-residential buildings at the Washington Navy Yard. The treatment process includes sedimentation, filtration, fluoridation, pH adjustment, primary disinfection using free chlorine, secondary disinfection with chloramines through the addition of ammonia, and corrosion control with orthophosphate.

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 pick up substances resulting from the presence of animals or from human activity.

DC Water conducts water quality monitoring throughout the city ensuring that the water delivered throughout the District meets Federal drinking water quality standards. For more information on DC Water, assessment techniques and reports, susceptibility to potential sources of contamination, as well as a copy of the 2021 Consumer Confidence Report from DC Water, please visit their website at <https://www.dewater.com/waterquality>. For more information on the drinking water treatment process, visit the Aqueduct’s website at: <http://www.nab.usace.army.mil>.



# Contaminants that MAY be present in source water

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**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.

**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.



## Important Health Information

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. The EPA and Centers for Disease Control and Prevention (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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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 EPA's Safe Drinking Water Hotline (800) 426-4791



# Microbial and Inorganic Contaminants That You Should Know About

## Total Coliforms & E.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. If coliforms are found in our water distribution system, PWD Washington would need to look for potential problems in the water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

Cryptosporidium is a microbial pathogen found in most surface water in the U.S. Ingesting Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness.

## Cryptosporidium

## Lead

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 water service lines and home plumbing. WNY is responsible for providing high quality drinking water, but 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. WNY is required to test for lead every three years and the last testing period was in 2020. WNY met EPA standards for lead during that period (See Monitoring Results Table).

If you are concerned about lead in WNY water, please contact Public Works Department (PWD) Washington Drinking Water Program Manager, at (202) 685-8007. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-(800) 424-5323 or at <http://water.epa.gov/drink/info/lead/index.cfm>.



# Routine Sampling and Monitoring



## Microbial Indicators

Substance	Units	EPA Limits		Washington Navy Yard Drinking Water			Description
		MCLG	TT	Highest	Range	Violation	
Total Coliform Bacteria	Number of Positive Samples	0	1	1	0 to 1	No	Naturally present in the environment.
E. coli Bacteria	Number of Positive Samples	0	1	0	0	No	Human and animal fecal waste.

## Disinfectants

Substance	Units	EPA Limits		Washington Navy Yard Drinking Water			Description
		MRDLG	MRDL	Highest Running Annual Average	Range of Single Site Results	Violation	
Chlorine	ppm	4	4	2.8	0.15 - 4.00	No	Water additive that protects against microbiological contamination. Chlorine is combined with ammonia to form chloramine.

## Disinfection Byproducts

Substance	Units	EPA Limits		Washington Navy Yard Drinking Water			Description
		MCLG	MCL	Highest locational running annual average	Range of single site results	Violation	
Total Trihalomethanes	ppb	N/A	80	58	17 to 76	No	Trihalomethanes are a byproduct of drinking water disinfection.
Haloacetic Acids	ppb	N/A	60	39	10 to 63	No	Haloacetic acids are a byproduct of drinking water disinfection.

## Nitrate and Nitrite

Substance	Units	EPA Limits		Washington Navy Yard Drinking Water			Description
		MCLG	MCL	Highest	Range	Violation	
Nitrate	ppm	10	10	1.9	1.8 - 1.9	No	Runoff from fertilizer use; erosion from natural deposits.
Nitrite	ppm	1	1	< 0.20	< 0.20	No	Runoff from fertilizer use; erosion from natural deposits.

## Lead and Copper (at the consumer's Tap)

Substance	Units	EPA Limits		Washington Navy Yard Drinking Water			Description
		MCLG	AL	Samples Above AL	90th Percentile	Violation	
Lead	ppb	0	15	0	< 0.5	No	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	ppm	1.3	1.3	0	0.170	No	Corrosion of household plumbing systems; erosion of natural deposits.

Lead and Copper results are from the 2020 monitoring year, which is the most recent sampling completed in accordance with Federal regulations.

## Asbestos

Substance	Units	EPA Limits		Washington Navy Yard Drinking Water			Description
		MCLG	MCL	Highest	Range	Violation	
Asbestos	MFL	7	7	Non Detected	Non Detected	No	Typically used in cement pipes.

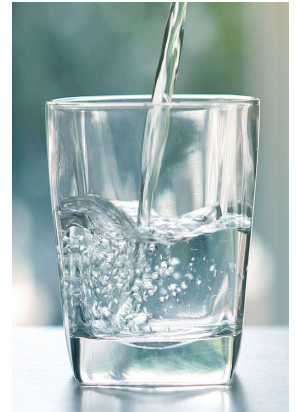
Asbestos results are from the 2020 monitoring year, which is the most recent sampling completed in accordance with Federal regulations.



# Per- and Polyfluoroalkyl (PFAS) Sampling and Monitoring

## **What are per- and polyfluoroalkyl substances and where do they come from?**

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the United States, since the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) used for fighting petroleum fires at airfields and in industrial fire suppression processes because they rapidly extinguish fires, saving lives and protecting property. PFAS chemicals are persistent in the environment and some are persistent in the human body – meaning they do not break down and they can accumulate over time.



## **Is there a regulation for PFAS in drinking water?**

There is currently no established federal water quality regulation for any PFAS compounds. In May 2016, the EPA established a health advisory (HA) level at 70 parts per trillion (ppt) for individual or combined concentrations of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). Both chemicals are types of PFAS.

Out of an abundance of caution for your safety, the Department of Defense's (DoD) PFAS testing and response actions go beyond EPA Safe Drinking Water Act requirements. In 2020 the DoD promulgated a policy to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every three years.

The EPA's health advisory states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 70 parts per trillion, water systems should quickly undertake additional sampling to assess the level, scope, and localized source of contamination to inform next steps.

## **Has Washington Navy Yard tested its water for PFAS?**

Yes, in accordance with Department of Defense (DoD) Policy on monitoring for per- and polyfluoroalkyl substances (PFAS) at installations where drinking water is provided by a non-DoD purveyor, NSA Washington conducted PFAS sampling of finished drinking water at the entry points to Washington Navy Yard, United States Naval Observatory, Marine Barrack Washington, and the Nebraska Avenue Complex drinking water distribution systems in November, 2021.

All compounds, including the combined PFOA and PFOS, were detected below the EPA HA level. The results are provided in tables below. As PFOA and PFOS were below the EPA HA, there is no immediate cause for concern, but we will continue to monitor the drinking water closely to ensure that remains the case.

**As per DoD policy, results of the sampling have been shared with the water purveyor (DC Water).**



# Per- and Polyfluoroalkyl (PFAS) Sampling and Monitoring Results

## WNY Sample Location 01

Analyte	Results ng/L
PFHxA	5.54
PFHpA	2.05
PFOA	2.64
PFNA	0.501
PFDA	1.10
PFUnA	1.10
PFDoA	1.10
PFTTrDA	1.10
PFTeDA	1.10
NMeFOSAA	1.10
NEtFOSAA	1.32
PFBS	2.07
PFHxS	1.30
PFOS	2.28
HFPO-DA	1.10
Adona	0.877
11Cl-PF3OUdS	1.10
9Cl-PF3ONS	1.10

## WNY Sample Location 02

Analyte	Results ng/L
PFHxA	3.98
PFHpA	1.52
PFOA	2.44
PFNA	0.442
PFDA	1.12
PFUnA	1.12
PFDoA	1.12
PFTTrDA	1.12
PFTeDA	1.12
NMeFOSAA	1.12
NEtFOSAA	1.34
PFBS	2.02
PFHxS	1.41
PFOS	2.19
HFPO-DA	1.12
Adona	0.893
11Cl-PF3OUdS	1.12
9Cl-PF3ONS	1.12

## WNY Sample Location 03

Analyte	Results ng/L
PFHxA	4.18
PFHpA	1.78
PFOA	2.69
PFNA	0.501
PFDA	1.11
PFUnA	1.11
PFDoA	1.11
PFTTrDA	1.11
PFTeDA	1.11
NMeFOSAA	1.11
NEtFOSAA	1.33
PFBS	2.18
PFHxS	1.33
PFOS	2.44
HFPO-DA	1.11
Adona	0.887
11Cl-PF3OUdS	1.11
9Cl-PF3ONS	1.11

## WNY Sample Location 04

Analyte	Results ng/L
PFHxA	4.45
PFHpA	1.85
PFOA	2.50
PFNA	0.416
PFDA	1.09
PFUnA	1.09
PFDoA	1.09
PFTTrDA	1.09
PFTeDA	1.09
NMeFOSAA	1.09
NEtFOSAA	1.31
PFBS	2.30
PFHxS	1.41
PFOS	2.37
HFPO-DA	1.09
Adona	0.871
11Cl-PF3OUdS	1.09
9Cl-PF3ONS	1.09

### Types of Reporting Units

milligrams per liter (mg/L)	=	parts per million (ppm)
micrograms per liter (µg/L)	=	parts per billion (ppb)
nanograms per liter (ng/L)	=	parts per trillion (ppt)
picograms per liter (pg/L)	=	parts per quadrillion (ppq)

**PFAS results are reported in PPT**





# Per- and Polyfluoroalkyl (PFAS) Sampling and Monitoring Results

## USNO Sample Location 01

Analyte	Results ng/L
PFHxA	3.80
PFHpA	1.33
PFOA	2.56
PFNA	0.497
PFDA	1.11
PFUnA	1.11
PFDoA	1.11
PFTTrDA	1.11
PFTeDA	1.11
NMeFOSAA	1.11
NEtFOSAA	1.33
PFBS	2.04
PFHxS	1.09
PFOS	2.45
HFPO-DA	1.11
Adona	0.890
11Cl-PF3OUdS	1.11
9Cl-PF3ONS	1.11

## USNO Sample Location 02

Analyte	Results ng/L
PFHxA	3.42
PFHpA	1.40
PFOA	2.52
PFNA	0.462
PFDA	1.12
PFUnA	1.12
PFDoA	1.12
PFTTrDA	1.12
PFTeDA	1.12
NMeFOSAA	1.12
NEtFOSAA	1.35
PFBS	1.97
PFHxS	1.13
PFOS	2.38
HFPO-DA	1.12
Adona	0.899
11Cl-PF3OUdS	1.12
9Cl-PF3ONS	1.12

## USNO Sample Location 03

Analyte	Results ng/L
PFHxA	4.07
PFHpA	1.79
PFOA	2.78
PFNA	0.539
PFDA	1.10
PFUnA	1.10
PFDoA	1.10
PFTTrDA	1.10
PFTeDA	1.10
NMeFOSAA	1.10
NEtFOSAA	1.32
PFBS	2.09
PFHxS	1.13
PFOS	2.52
HFPO-DA	1.10
Adona	0.877
11Cl-PF3OUdS	1.10
9Cl-PF3ONS	1.10

## MBW Sample Location 01

Analyte	Results ng/L
PFHxA	3.94
PFHpA	1.80
PFOA	2.83
PFNA	0.574
PFDA	1.11
PFUnA	1.11
PFDoA	1.11
PFTTrDA	1.11
PFTeDA	1.11
NMeFOSAA	1.11
NEtFOSAA	1.33
PFBS	1.91
PFHxS	1.13
PFOS	2.28
HFPO-DA	1.11
Adona	0.887
11Cl-PF3OUdS	1.11
9Cl-PF3ONS	1.11

## MBW Sample Location 02

Analyte	Results ng/L
PFHxA	4.22
PFHpA	1.99
PFOA	2.65
PFNA	0.481
PFDA	1.08
PFUnA	1.08
PFDoA	1.08
PFTTrDA	1.08
PFTeDA	1.08
NMeFOSAA	1.08
NEtFOSAA	1.29
PFBS	2.19
PFHxS	1.39
PFOS	2.37
HFPO-DA	1.08
Adona	0.862
11Cl-PF3OUdS	1.08
9Cl-PF3ONS	1.08

## NAC Sample Location 01

Analyte	Results ng/L
PFHxA	4.00
PFHpA	1.48
PFOA	2.77
PFNA	0.512
PFDA	1.08
PFUnA	1.08
PFDoA	1.08
PFTTrDA	1.08
PFTeDA	1.08
NMeFOSAA	1.08
NEtFOSAA	1.29
PFBS	2.02
PFHxS	1.20
PFOS	2.44
HFPO-DA	1.08
Adona	0.862
11Cl-PF3OUdS	1.08
9Cl-PF3ONS	1.08



# Definitions

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

**MCL - Maximum Contaminant Level:** 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.

**MCLG - Maximum Contaminant Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health.

**MRDL - Maximum Residual Disinfectant Level:** The highest level of a disinfectant allowed in drinking water.

**MRDLG - Maximum Residual Disinfectant Level Goal:** The level of a drinking water disinfectant below which there is no known or expected risk to health.

**HA:** Health Advisory

**ND:** Not Detected

**ppt:** parts per trillion

**ppb:** parts per billion

**ppm:** parts per million

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



# Maintaining Water Quality



**Flush Lines After Extended Periods of Stagnation (COVID-19 Extended Telework)** Buildings might shut down over weekends, holidays and currently, for several months due to the COVID-19 Pandemic. Following extended days of water stagnation, flush a tap at the farthest end of the building from where the water originates on each floor for 15 minutes. In addition, flush each frequently used fountain/tap for 5 minutes before use.

**Maintain Water Fountains** Many fountains have filters that remove chlorine taste, reduce byproducts of chlorine, and reduce sediments and particulate metals such as lead, copper, and iron which can leach from in-house plumbing. However, without routine maintenance and changing of these filters as recommended by the manufacturer, water quality will diminish considerably. Carbon filters that are not changed will eventually accumulate enough nutrients for bacteria to grow. As bacteria activity increases, their byproducts can reduce water quality. Another common water filter is a sediment filter. If these filters are not routinely changed in accordance with the manufacturer's recommendation, they may introduce contaminants into the water.

**Keep Water Coolers Clean** Many buildings purchase bottled water coolers for drinking water purposes. Unlike tap water, the water provided in these coolers contains no disinfectant and therefore provides the potential for bacterial growth in the cooler dispenser. Coolers must be routinely cleaned as prescribed by the manufacturer.

**Clean Strainers/ Aerators** Periodically remove and clean the strainer/ aerator device on faucets in the building to remove debris.

## Public Participation

PWD Washington welcomes your feedback, questions, and comments. Please contact (202) 685-8007 or (202) 433-0415 at any time to discuss your concerns. The DC Water Board of Directors meets on the first Thursday of the month and you can watch live streaming video of the Board Meetings. Please visit [dcwater.com](http://dcwater.com) or contact the Office of the Board Secretary at (202) 787-2330 to confirm a meeting time and location.