

# Virgin Islands Water and Power Authority Water Quality Report 2025



St. Thomas/St. John District

PWS ID: VI0000443

January 1, 2025 through December 31, 2025



Dear Water Distributors/Water Customers:

The Virgin Islands Water and Power Authority (VIWAPA) is pleased to provide you with this annual Consumer Confidence Report (CCR) for the St. Thomas and St. John water system (PWS ID: VI0000443), covering the period of January 1 through December 31, 2025. This report is designed to keep you informed about the quality of your drinking water and the efforts undertaken to ensure it remains safe, reliable, and in compliance with all applicable federal and territorial regulations. VIWAPA currently serves approximately 38,000 residents across the St. Thomas and St. John district.

This report contains important information about the source of your drinking water, the results of our monitoring and testing program, and any regulatory compliance matters that occurred during the reporting year. VIWAPA remains committed to transparency and regulatory compliance under the Safe Drinking Water Act, and we encourage all customers to review this report carefully. Should you have any questions or require additional information, please contact VIWAPA at (340) 774-3552 or via email at [communications@viwapa.vi](mailto:communications@viwapa.vi).

VIWAPA also encourages public participation in decisions that affect your drinking water quality. Customers are invited to attend VIWAPA Board meetings, where matters related to system operations, infrastructure improvements, and water quality are discussed. Meeting schedules and participation details are available by contacting our office or visiting our website at [www.viwapa.vi](http://www.viwapa.vi). Your involvement and feedback are important as we continue to improve service delivery and maintain the highest standards of water quality.

Respectfully,

Don Gregoire

Interim Chief Operating Officer-Water Systems

This report contains very important information about your drinking water. Please translate it or speak with someone who understands it.

Ce rapport contient des informations très importantes au sujet de votre eau potable. S'il vous plaît de le traduire ou de parler avec quelqu'un qui le comprend.

Este informe contiene información muy importante sobre su agua potable. Por favor, traducirlo o hablar con alguien que lo entienda.

## **SOURCE OF YOUR DRINKING WATER**

The Virgin Islands Water and Power Authority (VIWAPA) obtains its drinking water from seawater source. The seawater is treated using a reverse osmosis (RO) desalination process provided by Seven Seas Water. This advance treatment process removes salts, minerals and contaminants to produce potable drinking water.

As water travels through the natural environment, it can dissolve naturally occurring minerals and can pick up substances resulting from human or animal activity. Contaminants that may be present in source water include:

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

## **REGULATION OF DRINKING WATER AND BOTTLE WATER QUALITY**

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 mean that the water poses a health risk.

The Virgin Islands Department of Planning and Natural Resources (VIDPNR) and the United States Environmental Protection Agency (USEPA) ensures that potable water is safe to drink. Both agencies have prescribed limits on the contaminants in water provided by public water systems. VIDPNR has established the same criteria for contaminants in bottled water.

USEPA defines a water contaminant as any physical, chemical, biological, or radiological substance or matter in water. USEPA sets legal limits on the levels of certain contaminants in drinking water. The legal limits reflect both the level that protects human health and the level that water systems can achieve using the best available technology. Besides prescribing these legal limits, USEPA rules set water testing schedules and methods that water systems must follow. The rules also list acceptable techniques for treating contaminated water.

The Safe Drinking Water Act gives individual territories the opportunity to set and enforce their own drinking water standards if the standards are at least as strong as USEPA's national standards. Most territories directly oversee the water systems within their borders.

# WATER QUALITY DATA

ENTRY POINT - DISINFECTANTS CHLORINE RESIDUAL												
Monthly Ave. (ppm)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	1.4	1.6	1.6	1.5	1.3	1.2	1.6	1.6	1.7	1.7	1.8	1.8
Quarterly Running Ave.	1.5			1.3			1.6			1.8		
Running Annual Ave. (RAA)	1.5			1.5			1.5			1.6		
MRDL	MRDLG			VIOLATION			LIKELY SOURCE					
4 as Cl2	4 as Cl2			No			Water additive used to control microbes					

**Note:** Reported RAA for quarters 1-3 are based on results from previous quarters in 2024 and are not reported on this Disinfectants-Chlorine table. Only Entry-to-System residual levels are calculated in this table.

**Health Effects:** Some people who use water containing chlorine well in excess of the Maximum Residual Disinfectant Level (MRDL) can experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

OCCURRENCE OF MICROBIOLOGICAL CONTAMINANTS (REVISED TOTAL COLIFORM RULE)		
CONTAMINANTS	HIGHEST # OF POSITIVE SAMPLES IN ANY ONE MONTH	TOTAL # OF POSITIVE SAMPLES FOR 2025
Total Coliform	1	1
<i>E. coli</i>	0	0

MICROBIOLOGICAL CONTAMINANTS (REVISED TOTAL COLIFORM RULE VIOLATIONS)				
CONTAMINANTS	MCL	NUMBER	VIOLATION	LIKELY SOURCE
<i>E. coli</i>	E. coli positive repeat following <i>E. coli</i> positive routine	0	0	Naturally present in the environment. Human and Animal waste.
	TC-positive repeat following <i>E. coli</i> positive routine	0	0	
	Failed to take required repeat samples following <i>E. coli</i> positive routine	0	0	
	Failed to test for <i>E. coli</i> when any repeat test positive for TC	0	0	

LEVEL 1 & LEVEL 2 ASSESSMENTS (REVISED TOTAL COLIFORM RULE)				
ASSESSMENT	NO. OF REQUIRED ASSESSMENTS	NO. OF COMPLETED ASSESSMENTS	NO. OF CORRECTIVE ACTIONS REQUIRED	NO. OF CORRECTIVE ACTIONS TAKEN
LEVEL 1	0	0	0	0
LEVEL 2	0	0	0	0

# WATER QUALITY DATA

## STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS RULE (DDBP)

**Trihalomethanes and Haloacetic Acids** are byproducts of disinfecting water with chlorine. Some people who drink water containing Trihalomethanes in excess of the highest allowed (MCL) over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

Total Trihalomethanes (TTHM) (ppb)		1 <sup>st</sup> Quarter (Jan 2025)	2 <sup>nd</sup> Quarter (Apr 2025)	3 <sup>rd</sup> Quarter (Jul 2025)	4 <sup>th</sup> Quarter (Oct 2025)
Four Winds		BDL	3.1	3.2	BDL
LRAA		3.5	3.2	2.9	1.6
Estate Bovoni		15.6	42.7	30.2	22.2
LRAA		38.7	43.3	39.6	28.7
Pine Peace (STJ)		7.3	13.4	5.4	9.5
LRAA		18.3	15.5	12.4	8.9
Paradise Laundry (STJ)		6.4	5.9	5.4	4.3
LRAA					
RANGE	HIGHEST LRAA	MCL	MCLG	VIOLATION	LIKELY SOURCE
BDL—42.7	43.3	80	N/A	No	Byproduct of drinking water disinfection

Haloacetic Acids (HAA5) (ppb)		1 <sup>st</sup> Quarter (Jan 2025)	2 <sup>nd</sup> Quarter (Apr 2025)	3 <sup>rd</sup> Quarter (Jul 2025)	4 <sup>th</sup> Quarter (Oct 2025)
Four Winds		BDL	0.93	1.1	BDL
LRAA		0.9	0.8	0.8	0.5
Estate Bovoni		1.7	5.1	2.9	3.0
LRAA		3.9	4.6	4.0	3.2
Pine Peace (STJ)		1.2	1.6	1.4	2.1
LRAA		2.5	2.2	1.8	1.6
Paradise Laundry (STJ)		1.0	1.1	1.2	1.3
LRAA		1.4	1.3	1.2	1.2
RANGE	HIGHEST LRAA	MCL	MCLG	VIOLATION	LIKELY SOURCE
BDL—5.1	4.6	60	N/A	No	Byproduct of drinking water disinfection

Note: Reported LRAA for quarters 1-3 are based on results from previous quarters in 2024 and are not reported on these DDBP tables. BDL means Below Detection Limit.

# WATER QUALITY DATA

## ENTRY POINT - TURBIDITY

Monthly Ave. (NTU)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	0.37	0.39	0.40	0.40	0.43	0.42	0.43	0.38	0.30	0.32	0.43	0.51
MCL	MCLG		VIOLATION				LIKELY SOURCE					
1.0	N/A		No				Soil runoff					

**Health Effects:** Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

## NITRATE/NITRITE

CONTAMINANT	LOCATION	UNITS	LEVEL DETECTED	MCL	MCLG	VIOLATION	LIKELY SOURCE
Nitrate	St. Thomas Entry	ppm	0.025U (BDL)	10	10	No	Runoff from fertilizer use, leaching from septic tanks, sewage, Erosion of natural deposits.
Nitrite	St. Thomas Entry	ppm	0.025U (BDL)	1	1	No	Runoff from fertilizer use, leaching from septic tanks, sewage, Erosion of natural deposits.

**Note:** "U" indicates the compound was analyzed for, but not detected. Results were Below Detection Limit (BDL).

**Health Effects:** Infants below the age of six (6) months who drink water containing nitrate/nitrite in excess of Maximum Contaminant Level (MCL) could become seriously ill and, if intreated, may die. Symptoms include shortness of breath and blue baby syndrome.

## SYNTHETIC ORGANIC CHEMICALS (SOC)

CONTAMINANT	LOCATION	UNITS	LEVEL DETECTED	MCL	MCLG	VIOLATION	LIKELY SOURCE
First Quarter	St. Thomas Entry	ppm	BDL	-	-	No	Runoff or leaching from agricultural activities (pesticides and herbicides), industrial discharges and improper disposal of chemicals; Contaminated soils that migrate into source water.
Second Quarter	St. Thomas Entry	ppm	BDL	-	-	No	

**Note:** VIWAPA-STT/STJ is required to monitor for two (2) quarters once every three (3) years.

A total of 38 chemical contaminants were tested under SOC. All results were Below Detection Limit (BDL).

**Health Effects:** Short-term exposure to elevated levels may cause nausea, dizziness or irritation of the skin and eyes. Long-term to certain SOC's has been linked to liver, kidney or nervous system damage, reproductive effects and increased risk of cancer.

# WATER QUALITY DATA

LEAD AND COPPER						
MONITORING PERIOD	CONTAMINANT	AL (ppm)	90 <sup>th</sup> PERCENTILE LEVELS	RANGE (ppm)	VIOLATION	LIKELY SOURCE
January—June 2025	Lead (Pb)	0.015	0.0006	0.00025U - 0.0061	No	Corrosion of household plumbing systems and service lines connecting buildings to water mains; Erosion of natural deposits.
	Copper (Cu)	1.3	0.009	0.00093U - 0.11	No	

CONTAMINANTS	NUMBER OF SAMPLES COLLECTED	NUMBER OF SITES EXCEEDING AL
Lead	88	0
Copper	88	0

Note: Sixty-seven (67) samples were collected on St. Thomas while twenty-one (21) samples were collected on St. John for a total of eighty-eight (88) samples. The 90th percentile levels were calculated based on this total. “U” indicates that compound was analyzed for, but not detected.

## LEAD AND COPPER INFORMATION

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. Public utilities are responsible for providing high quality drinking water. 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 are available locally at [www.viwapa.vi](http://www.viwapa.vi) or [www.cleanwaterusvi.com](http://www.cleanwaterusvi.com) and from the National Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

## HOW TO REDUCE YOUR EXPOSURE TO LEAD AND COPPER

- Clean Faucet Aerators:** Aerators should be regularly cleaned to remove particulate matter and prevent lead-bearing particulates from leaching lead into drinking water.
- Flush Your Tap Water:** Before drinking, flush your home’s pipes by running water at the tap. Flushing involves opening taps and letting the water run to remove water that has stagnated in pipes, faucets and/or fixtures. Let cold water run from the tap for approximately 30-45 seconds or 8 oz.
- Install Lead-Free Plumbing:** Lead in drinking water may result from lead plumbing or a wide array of lead containing pipes, fittings and devices made of leaded brass/bronze alloys, like kitchen faucets or water fountains. When replacing your plumbing, ensure that the new plumbing materials comply with the current “lead free” requirements and NSF/ANSI/CAN 61 certified plumbing components.
- Use a Filter for Added Protection:** Point of use or pitcher water filters (NSF/ANSI-53 filters and NSF/ANSI-42) can be used, either alone or in combination with flushing, to reduce exposure in water used for consumption (drinking, cooking, etc.).

## PUBLIC NOTICE

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

#### Violation of Lead and Copper Rule Revisions (LCRR)

#### Failure to Develop and Make Publicly Accessible a Lead Service Line Inventory

##### What Happened?

The Virgin Islands Water and Power Authority (VIWAPA) did not meet the requirements of the Lead and Copper Rule Revisions (LCRR).

Under federal regulations (40 C.F.R. §141.84 and Appendix A to Subpart Q of Part 141), all community water systems were required to develop and make publicly accessible an inventory of service line materials by October 16, 2024.

VIWAPA did not complete and/or make publicly accessible this inventory by the required deadline for the systems listed above. As a result, both systems incurred a treatment technique violation, which requires issuance of a Tier 2 Public Notice within 30 days (by November 16, 2024). This notice fulfills that requirement.

##### What Does This Mean?

This violation is not an emergency and does not mean that your water is unsafe to drink. However, the service line inventory is a critical requirement intended to:

- Identify locations of lead service lines or lead-containing materials
- Support efforts to reduce potential exposure to lead in drinking water
- Ensure regulatory transparency and compliance

Because the inventory was not completed by the required deadline, there may be incomplete information regarding the presence of lead service lines within the distribution systems.

##### What Are the Health Effects of Lead?

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. Lead in drinking water is primarily from materials and components associated with service lines and household plumbing.

Lead exposure can result in:

- Damage to the brain and kidneys
- Reduced IQ and attention span in children
- Developmental delays

**For more information on lead and steps to reduce exposure, visit: <https://www.epa.gov/lead>**

##### What Is Being Done?

VIWAPA is actively taking corrective actions to address this violation, including:

- Completing the Lead Service Line Inventories for both districts
- Conducting records review, system mapping, and field verification of service line materials
- Coordinating with EPA and the Virgin Islands Department of Planning and Natural Resources (VIDPNR)
- Preparing the inventories for public accessibility in accordance with federal requirements
- Implementing enhanced internal compliance review procedures to ensure timely regulatory reporting and public notification

##### What Should You Do?

No immediate action is required. However, as a precaution, you may:

- Flush your tap for 30 seconds to 2 minutes before using water for drinking or cooking if water has been stagnant
- Use cold water for drinking and cooking
- Consider using a certified water filter if concerned about lead

## TERMS DEFINED

TERM	DEFINITION
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 <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system.
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as in economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.
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 are set by the US Environmental Protection Agency (USEPA).
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
90th Percentile Levels	The highest concentration of lead or copper in tap water that is exceeded by 10 percent of the sites sampled during a monitoring period. This value is compared to the lead action level (AL) to determine whether an AL has been exceeded.
Total Coliforms	A group of related 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. We found coliform indicating the need to look for potential problems in 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.
<i>E. coli</i>	Bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short term effects such as diarrhea, cramps, nausea, headaches or other symptoms.

## TERMS DEFINED

TERM	DEFINITION
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Non-applicable (N/A)	Not applicable.
Non-detected (N/D)	Not detected.
BDL	Below detection limit.
Parts per billion (ppb)	One part per billion or microgram per liter ( $\mu\text{g/L}$ ) corresponds to one minute in 2,000 years, or one penny in \$10 million.
Parts per million (ppm)	One part per million or milligrams per liter ( $\text{mg/L}$ ) corresponds to one minute in two years, or a single penny in \$10,000.
Curie	the curie (symbol Ci) is a non SI unit of radioactivity, defined as $1 \text{ Ci} = 3.7 \times 10^{10}$ decays per second.
PicoCurie – (pCi/l)	Picocuries per liter or 0.000,000,000,001 (one trillionth) of a Curie, an international measurement unit of radioactivity.
Turbidity	Measured in Nephelometric Turbidity Units (NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance.



## SPECIAL PRECAUTIONS

Some people are 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 for infections.

These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available for EPA's Safe Drinking Water Hotline (1-800-426-4791) or EPA's website at [www.epa.gov/safewater](http://www.epa.gov/safewater). More information about contaminants and potential health effects can also be obtained from the hotline or EPA's website.

## VIWAPA –STT/STJ WATER FACTS

1. Roughly about 46.8 miles of distribution mains and 16.9 miles of transmission lines throughout.
2. There are about 416 valves, 198 hydrants, 21 fixed Automatic Flushing Devices (AFD) and 10 mobile AFD on both islands.
3. Thirteen (13) pump stations to assist with delivering water.
4. Serves a combined population of about 42,000 people.
5. Consist of 88 sample stations for water quality testing.
6. Daily monitoring of all water quality parameters like chlorine residual, pH, conductivity, turbidity, temperature and orthophosphate residual.
7. Approximately 200 bacteriological test performed every month.



Photo above depicts one of VIWAPA's STT/STJ water sampling stations.

## WATER FUN FACTS

1. Roughly 70% of the human body is made up of water.
2. Water makes up 83% of our blood, 70% of our brain, and 90% of our lungs.
3. Drinking too much water too quickly can lead to water intoxication. Water intoxication occurs when water dilutes the sodium level in the bloodstream and causes an imbalance of water in the brain.
4. By the time a person is feeling thirsty, his or her body has already lost over 1% of its total water amount.
5. The weight a person loses directly after intense physical activity is weight from water, not fat.
6. Pure water (solely hydrogen and oxygen atoms) has a neutral pH of 7, which is neither acidic nor basic.
7. Flushing toilets represent the largest portion of indoor water use.
8. Water dissolves more substances than any other liquid. Wherever it travels it carries chemicals, minerals and nutrients with it.



**KID'S CORNER**  
**COLORING AND ACTIVITY PAGES**  
**Water Words Scramble**



1. KDNIR    \_ \_ \_ \_ \_

2. SGA    \_ \_ \_

3. APT    \_ \_ \_

4. VSAE    \_ \_ \_ \_

5. CONEA    \_ \_ \_ \_ \_

6. IPEP    \_ \_ \_ \_

7. DEI    \_ \_ \_

8. E. LIOC    \_ \_ \_ \_ \_

9. BHAT    \_ \_ \_ \_

10. QUILID    \_ \_ \_ \_ \_

ANSWERS: 1. DRINK 2. GAS 3. TAP 4. SAVE 5. OCEAN 6. PIPE 7. IDE  
 8. E. COLI 9. BATH 10. LIQUID

**VI Water and Power Authority**

**P.O. Box 1450**

**St. Thomas, VI 00804**

**[www.viwapa.vi](http://www.viwapa.vi)**

**Please contact VIWAPA's Communications Division at  
(340)774-3552 or [communications@viwapa.vi](mailto:communications@viwapa.vi) if you  
have any questions about this Potable Water Quality  
Report for VI0000443 (St. Thomas/St. John)**