

# Annual Drinking Water Quality Report 2017

## The Village of Palm Springs

The Village of Palm Springs is very pleased to provide you with this year's Annual Drinking Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

The Village of Palm Springs utilizes groundwater wells for our water source. The wells are drawn from the surficial aquifer in eastern Palm Beach County. This groundwater source is adequately protected by the Palm Beach County Wellfield Protection Ordinance, which the Village of Palm Springs strictly adheres to. The Village of Palm Springs Water Treatment Plant pre-treats the raw water with a magnetic ion exchange system (MIEX) for organic removal prior to lime softening to remove hardness. It is then disinfected using chloramines (chlorine and ammonia compound) and filtered prior to distribution. This report shows our water quality results and what they mean.

The Village of Palm Springs routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the following page shows the results of our monitoring for the period, of January 1st to December 31st 2017. In 2017, The Village of Palm Springs performed required triennial monitoring which included inorganic and organic chemical contaminants.

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.

Contaminants that may be present in source water include:

(A) 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 service lines and home plumbing. The Village of Palm Springs 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. 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

(B) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(C) 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.

(D) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

(E) 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.

(F) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

In 2017 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are five potential sources of contamination identified for this system with a low to moderate susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they can be obtained from (561) 965-4022.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that another potentially harmful waterborne pathogen may be present, or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. 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.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected in rate structure adjustments. We at the Village of Palm Springs work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. If you have any questions about this report or concerning your water utility, please contact Mr. Donald Ray, Water Plant Superintendent at (561) 965-4022. If you want to learn more, please attend any of our regularly scheduled Council Meetings, which are held at Village Hall. Please check our website [www.vpsfl.org](http://www.vpsfl.org) for dates and times.

The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

**TEST RESULTS TABLE**

Contaminant and Unit of Measure	Dates of Sampling (Mo./Yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
<i>Lead and Copper (Tap Water)</i>							
Copper (ppm) (Tap Water)	11/17-12/17	N	.0107	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb) (Tap Water)	11/17-12/17	N	0.728	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits.
Contaminant and Unit of Measure	Dates of Sampling (Mo./Yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<i>Inorganic Contaminants</i>							
Nitrate (as Nitrogen) (ppm)	12/17	N	0.081	0.043-0.081	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
Sodium (ppm)	12/17	N	54.8	35.0-54.8	N/A	160	Salt water intrusion, leaching from soil.
Barium (ppm)	12/17	N	0.0041	0.0033 - 0.0041	2	2	Erosion of Natural deposits; discharge of drilling wastes; discharge of metal refineries.
Fluoride (ppm)	12/17	N	.19	.18-.19	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm

**Total Coliform Bacteria:** The Highest Monthly Number is the highest monthly number of positive samples for systems collecting fewer than 40 samples per month. The Highest Monthly Percentage is the highest monthly percentage of positive samples for systems collecting at least 40 samples per month.

**Level 1 TT triggers:**

- For systems taking 40 or more samples (including routine and repeat samples) per month, the PWS exceeds 5.0 percent total coliform positive (TC+) samples for the month;

<b>Microbiological Contaminants</b>						
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation	Result	MCLG	TT	Likely Source of Contamination
1. Total Coliform Bacteria*	09/17	Y	Positive	N/A	TT	Naturally present in the environment

**Stage 2 Disinfectant and Disinfection By-Product**

For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.

One sample during 2017 (3857 42<sup>nd</sup> Ave, July) had a TTHM result of 81.2 ppb, which exceeds the MCL of 80 ppb. However, the system did not incur an MCL violation, because all annual average results at all sites were at or below the MCL. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer."

Contaminant and Unit of Measurement	Dates of sampling (Mo./ Yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
HAA5 (ppb) (Haloacetic Acids)	01/17-12/17	N	39.425	9.9-68.8	N/A	60	By-product of drinking water chlorination.
TTHM (ppb) (Total Trihalomethanes)	01/17-12/17	N	52.225	29.4-81.2	N/A	80	By-product of drinking water chlorination.

***In this table you may find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:***

**Parts per million (ppm) or Milligrams per liter (mg/l)** – one part by weight of analyte to 1 million parts by weight of the water sample.

**Parts per billion (ppb) or Micrograms per liter (ug/l)** - one part by weight of analyte to 1 billion parts by weight of the water sample.

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

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

**Maximum Contaminant Level or 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 or 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.

**Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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** - The "Goal" (MCLG) is 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 or 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 or 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.

**Initial Distribution System Evaluation (IDSE):** An important part of the Stage 2 Disinfection By-Products Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

**Locational Running Annual Average (LRAA):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.