



# ANNUAL WATER QUALITY REPORT

WATER TESTING  
PERFORMED IN 2016



Presented By the  
Town of Florence



We are pleased to present the Town of Florence Annual Consumer Confidence Report. You are receiving this report as one of the lucky people who call Florence home. Through decades of planning, strategic action and sustainable practices, the Town of Florence is positioned our access of water supplies for many years to come. The Town of Florence has inspectors, technicians, engineers and water treatment specialists that work diligently to keep our water system performing properly ensuring the safety of your drinking water.

We are confident that the information in this report will shed some light not only on the quality of your drinking water, but the value of water and how much effort and dedication goes into providing you this precious resource.

### What is a water quality report?

The environmental Protection Agency (EPA) created the Safe Drinking Water Act (SDWA) in 1974 as a set of regulations to ensure water quality across the country. The SDWA requires that an annual water quality report, or Consumer Confidence Report, be created and distributed to all water customers to provide them with details about where their water comes from, and what it contains, and how it compares to the nation-wide standards created by regulatory agencies. This report acts as a snapshot for water quality in the Town of Florence from January through December 2016



### Where does my water come from?

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells, depending on the location. 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.

The source of drinking water for Florence is groundwater. This water is pumped from the Town's four drinking water wells (No. 1, No. 3, No. 4 and No. 5) directly into the distribution system and provides a consecutive connection source of water.

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



## Why are there contaminants in my drinking water?

Contamination can come from many sources.

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

**Pesticides and herbicides** that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.

**Inorganic contaminants**, such as salts and metals, can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil / gas production, mining or farming.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, are byproducts of industrial processes and petroleum production and may come from gas stations, urban stormwater runoff and/or septic systems.

**Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.

## Are some people more vulnerable to water quality contamination?

Some people may be more vulnerable to contaminants in drinking water than the general population. 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. 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants, call the *EPA Safe Drinking Water Hotline* at 1-800-426-4791.



## Information about Arsenic

If arsenic is less than or equal to the Maximum Contaminant Level (MCL), your drinking water meets EPA's standards. 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.



## Information about Nitrate

Nitrate in drinking water at levels above 10 parts per million (ppm) is a health risk for infants of less than six months of age. "High nitrate levels in drinking water can cause blue baby syndrome." Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant and detected nitrate levels above 5 ppm, you should ask advice from your health care provider.

## Information about 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. Florence Water Company 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 the 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/sfewater/lead](http://www.epa.gov/sfewater/lead).



We want our valued customers to be informed about their water quality. If you want to learn more about public participation or to attend any of our regularly scheduled meetings, please contact Timm Wainscott, Water Superintendent at 520-868-7619 for additional opportunity and meeting dates and time.

## DEFINITIONS

AL = Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

MCL = Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water.

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

MFL = Million Fibers per Liter

MRDL = Maximum Residual Disinfectant Level. The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG = Maximum Residual Disinfectant Level Goal. The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur.

MREM = Millirems per year – a measure of radiation absorbed by the body.

NA = Not Applicable, sampling was not completed by regulation or was not required.

NTU = Nephelometric Turbidity Units, a measure of water clarity.

PCi/L = Picocuries per Liter – a measure of the radioactivity in water.

PPM = Parts per Million or Milligrams per liter (mg/L).

PPB = Parts per Billion or Micrograms per liter (pg/L).

PPT = Parts per Trillion or Nanograms per liter.

PPQ = Parts per Quadrillion or Picograms per liter.

TT = Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.





**WATER QUALITY DATA:**

Disinfectants	Violation Y or N	Running Annual Average (RAA)	Range of All Samples (L- H)	MRDL G	MCLG	Sample Month & Year	Likely Source of Contamination
Chlorine (ppm)	N	1.0	1.0 – 1.0	MRDL G=4	MRDLG=4	2016	Water additive used to control microbes
Disinfection By-Products	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L- H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (ppb) (HAA5)	N	2.00 ppb	0.0 – 2.1	60	No goal for the total.	2016	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (TTHM)	N	12.0 ppb	11.0 – 12.4	80	No goal for the total.	2016	Byproduct of drinking water disinfection
Lead & Copper	Violation Y or N	90 <sup>th</sup> Percentile <u>AND</u> Number of Samples Over the AL	Range of All Samples (L- H)	AL	MCLG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	90 <sup>th</sup> Percentile = 0.159 ppm # Samples over AL = 0	0.009 – 0.159	1.3	1.3	July 2015	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	90 <sup>th</sup> Percentile = 11 # Samples over AL = 3	0.90 – 11.0	15	0	July 2015	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L- H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha emitters (pCi/L)	N	2.5 pCi/L	1.8 – 2.5	15	0	March 2015	Erosion of natural deposits
Inorganic Chemicals (IOC)	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Arsenic (ppb)	N	3.6 ppb	2.2 – 3.6	10	0	February 2012	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.0048 ppm	0.0026 – 0.0048	2	2	February 2012	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	N	3.6 ppb	1.5 – 3.6	100	100	February 2012	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	N	1.0 ppm	0.67 – 1.0	4	4	February 2012	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	N	9	2.2 – 9.2	10	10	2016	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Further source water assessment documentation can be obtained by contacting ADEQ, 602-771-4641.



# Water Conservation Guide

## WATER WISDOM

MATCH THE WATER-SAVING TIP TO THE AMOUNT OF WATER SAVED



1. Use a hose nozzle and turn off the water while you wash your car or bike and save this much water.



2. You'll save this much water if you time your shower to keep it under 5 minutes.



3. If you turn off the shower while you shampoo, how many gallons will you save?



4. Turn off the water while you brush your teeth and you'll keep this much water from going down the drain.



5. Use a broom instead of a hose to wash off driveways and sidewalks and save this much water.

A. MORE THAN 50 GALLONS A WEEK.

B. UP TO 80 GALLONS EVERY TIME.

C. 4 GALLONS EVERY MINUTE.

D. MORE THAN 100 GALLONS.

E. UP TO 1000 GALLONS A MONTH.

Answers 1)D 2)E 3)A 4)C 5)B

## FIND ALL THESE EASY WAYS TO SAVE WATER

S	R	E	L	K	N	I	R	P	C	T	S	U	J	D	A
T	U	Q	A	Z	B	Y	R	F	O	N	K	I	O	L	M
N	I	S	H	O	R	T	S	H	L	W	E	R	S	N	P
A	B	X	E	T	G	C	E	A	L	Z	L	I	J	M	K
L	Q	Z	U	M	B	A	O	V	E	P	Z	Y	I	V	S
P	X	Z	J	I	U	M	Y	U	C	Q	Z	E	S	K	K
E	U	B	V	M	X	L	J	M	T	C	O	V	X	E	A
V	Z	O	K	O	A	U	C	R	R	W	N	P	L	M	E
I	U	N	R	O	E	X	W	H	A	L	E	P	J	C	L
T	I	M	E	R	S	W	E	P	I	C	S	I	R	E	X
A	A	B	C	B	Z	T	E	P	N	C	O	I	R	E	I
N	V	E	P	I	U	H	V	J	N	L	H	O	X	E	F
X	M	W	A	T	E	R	D	E	E	P	L	Y	R	I	S

HOSE NOZZLE

SHORT SHOWERS

BROOM

FIX LEAKS

NATIVE PLANTS

COLLECT RAIN

TIMER

WATER DEEPLY

ADJUST SPRINKLERS

USE MULCH

XERISCAPE