

Doney Park Water

“A Member-Owned Cooperative”

2010 Annual Drinking Water Quality Report

Providing Water to Our Members Since 1936 ♦ Consumer Confidence Report, March 2011

Introduction

The United States Environmental Protection Agency (USEPA), as part of the Safe Drinking Water Act, requires purveyors of drinking water to annually produce a report that addresses the quality of the water they deliver to their customers. This Consumer Confidence Report provides information on the domestic drinking water delivered to you by Doney Park Water.

Doney Park Water is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water and we want you to understand the efforts we make to continually improve and protect our water resources. We are committed to ensuring the quality of your water.

Where does our water come from?

Our water source is deep groundwater drawn from within the Coconino Aquifer. The water is supplied by seven production wells that range in depth from 1581 feet to 1910 feet deep. The static water level in the various wells ranges from 1261 feet to 1504 feet. This deep groundwater provides a clean, safe water supply for all our members/customers. All of the wells are tied together and the water is distributed to our members/customers by means of a network of pipes and 19 booster stations.

This report contains important information about your water system. Please read it and call us with any questions you may have.

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo a hable con alguien que lo entienda bien.

If you have questions about this report or concerning your water utility, please contact:

- A Customer Service Representative, (928) 526-1080
- Bill Linville, General Manager, (928) 526-1080
- One of your elected board members:
Larry Davis Richard Downey Bob Lupo
Jim Timney Selden Wasson

We want our valued members/customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the last Wednesday of every month except when those weeks contain holidays which conflict with meeting dates. Please call the office to confirm meeting dates in those months in question. The Board Meetings are currently held at Doney Park Water Office, 5290 Northgate Loop, Flagstaff, Arizona, 86004, beginning at 5:00 PM.

Doney Park Water meets all Federal and State water quality standards

We are pleased to report that our drinking water is safe and meets all Federal and State water quality standards. Doney Park Water routinely monitors for constituents in your drinking water according to Federal and State laws. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. The following table shows the results of our monitoring, for which contaminants were detected. The Microbiological Contaminants section is based on our regular monthly samples taken January 1st to December 31st, 2010.

We're proud to announce that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. These detected contaminants are well below the regulatory limits for those contaminants. The EPA has determined that your water is safe at these levels.

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:

- 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 byproducts of industrial processes and petroleum production, and may 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, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Terms and Abbreviations

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

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

Maximum Contaminant Level - (mandatory language) 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 - (mandatory language) 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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	Y	0	100 ml samples	0	Our system is allowed only one positive coliform sample per month.	Naturally present in the environment
2. Fecal coliform and <i>E.coli</i>	N	0	100 ml samples	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
Radioactive Contaminants *Denotes a sample year other than 2010						
5. Alpha emitters * (sampled 2007)	N	4.4 +/- 1.4	pCi/l	0	15	Erosion of natural deposits
Inorganic Contaminants						
10. Barium *	N	1.71	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Copper *	N	0.24	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride *	N	0.16	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
19. Nitrate (as Nitrogen)	N	1.9	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Microbiological Contaminants:

(1) Total Coliform: Bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

(2) Fecal Coliform/E.Coli: 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. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Radioactive Contaminants:

(5) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Inorganic Contaminants:

(10) Barium: Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

(14) Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(16) Fluoride: Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

(17) Lead: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

(19) Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

What does this mean?

The table shows that we detected total coliform bacteria four times in 2010. We responded by flushing and chlorinating the effected areas while sampling until all samples were negative for any contamination. We are actively working on our backflow program to eliminate possible backflow hazards which may have been the cause of these detects. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliform bacteria are usually harmless, but their existence in water can be an indication of other disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by the newspaper, television or radio. If a sample is positive for bacteria, three more samples are taken at the initial sample point as well as upstream and downstream to determine if the first sample was a true detect. Negative follow-up samples would indicate that the first sample was false.

New rules and regulations are being considered now that may require disinfection for all systems, even systems with deep wells such as we have. Low pressures and positive bacti samples could lead to our system becoming a chlorinating system. Disinfection is labor intensive, expensive and can cause the water to have an objectionable taste and/or odor. Your drinking water meets or exceeds all Federal and State requirements and the EPA has determined that your water IS SAFE at these levels.

All 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Hardness

We get more questions concerning hardness than any other water issue. Our source is groundwater, and like most groundwater supplies, is fairly hard. The hardness of the water is not a health issue and may even be beneficial for its calcium content. It will cause scaling buildup on fixtures and in water heaters.

- Water is considered soft if it falls within the range of 0 –75 mg/L of hardness (0 - 4.38 gr).
- Water is considered medium hard if it falls within the range of 75 – 150 mg/L (4.38 - 8.76 gr).
- Water is considered hard if it falls within the range of 150 – 300 mg/l (8.76 – 17.52 gr).
- Water is considered very hard if it is over 300 mg/L (17.52 gr).

The hardness of our water ranges from 190 mg/L to 266 mg/L (11.10 to 15.54 gr).

Arsenic

Arsenic, fortunately, has not been a problem for us. Tests show that arsenic levels in our water ranges from less than 1ppb to 2.4 parts per billion, which is well below the new standard of 0.01 mg/L (10 PPB) that took effect January 23, 2006. Some people who drink water containing an excess of the MCL of arsenic for many years, could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

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. 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).

