



City of Sunrise
10770 W Oakland Park Blvd,
Sunrise, FL 33351-9954

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2010 Annual Drinking Water Quality Report



*Serving Customers in the Southwest
Water Treatment Plant Service Area*

June 2011



*Serving Customers in the Southwest
Water Treatment Plant Service Area*



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Water Treatment Plant Service Area*

City Commission

Mayor Michael J. Ryan
Deputy Mayor Donald K. Rosen
Asst. Deputy Mayor Joseph A. Sciotto
Commissioner Sheila D. Alu
Commissioner Lawrence A. Sofield

City Manager

Bruce Moeller

Utilities Department

Acting Utilities Director Tim Welch, P.E.

Contact Us Administrative Office:

City of Sunrise Utilities
777 Sawgrass Corporate Parkway
Sunrise, FL 33325
Phone: (954) 888-6000

Customer Service & Billing:

10770 West Oakland Park Boulevard
Sunrise, FL 33351
Phone: (954) 746-3232

After-Hours Customer Service:

Phone: (954) 846-7406
Hours: Monday through Friday,
5:00 p.m. to 11:30 p.m.

After-Hours Emergencies:

Phone: (954) 746-3600

2010 Annual Drinking Water Quality Report

The City of Sunrise Utilities Department
treats one of the most important
resources in the world: your water.

*We are pleased to present to you this year's
Annual Drinking Water Quality Report.*

*This report is designed to inform you about the
quality 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.
We want you to understand the efforts we make
to continually improve the water treatment
process and protect our water resources. We are
committed to ensuring the quality of your water.*

*This Consumer Confidence Report (CCR) has been prepared
and is mailed to our utility customers as required by EPA 40
Code of Federal Register (CFR) Part 141 requirements.*

Your Drinking Water Process

Our water source is from groundwater wells that draw from the Biscayne Aquifer. The groundwater wells are 70 to 90 feet deep and draw water from this aquifer, which is replenished by rainwater. South Florida's topography creates a very effective purification system by filtering water through many feet of soil, sand, and rock. Although the Biscayne Aquifer is prolific, it is not limitless. With the increased pressure of a growing population and a focus on restoration of the Everglades, the competition for water in South Florida is stronger than ever. It's easy to see why we should be thinking about our water supply and how we can conserve this precious resource.



Treatment of your water includes lime softening and filtration at the Southwest Water Treatment Plant. Treated water is stored to meet peak demand periods. Chlorine and ammonia are added for disinfection and fluoride is added for dental health purposes.

Did You Know...

The City of Sunrise supports the all-year, two-day-a-week landscape irrigation restrictions imposed by the South Florida Water Management District (SFWMD) and the Broward County Environmental Protection Department and Growth Management.

In order to help manage our water resources, the City is implementing a Water Conservation Program; planning for the development and funding of alternative water supply projects; and focusing on other critical renewal and replacement initiatives.

An overview of the residential restrictions is provided. For additional details, residents and business owners are invited to visit the SFWMD Web site.

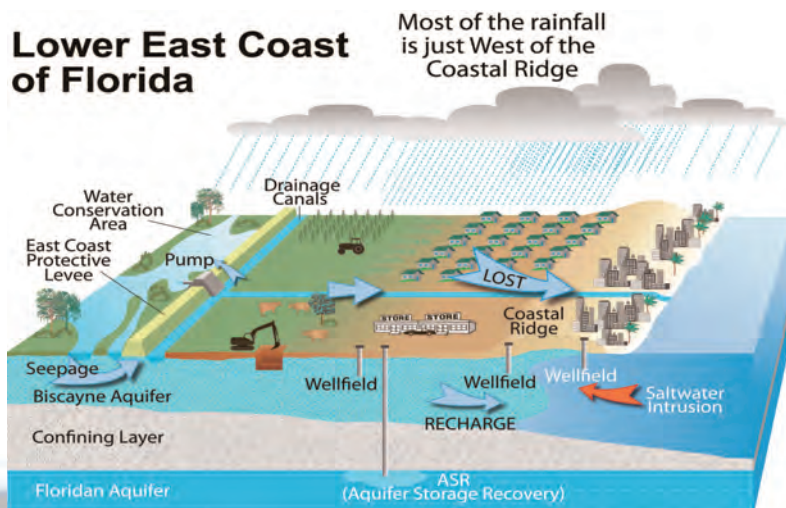
Residential Water-Use Restrictions:

For homes with addresses that end in an ODD number (1, 3, 5, 7 or 9), lawn watering is permitted on Wednesdays and Saturdays between 12:00 a.m. and 10:00 a.m., and/or between 4:00 p.m. and 11:59 p.m.

For homes with addresses that end in an EVEN number (0, 2, 4, 6 or 8), lawn watering is permitted on Thursdays and Sundays between 12:00 a.m. and 10:00 a.m., and/or between 4:00 p.m. and 11:59 p.m.

No restrictions apply to other outside water uses, such as for car and boat washing, or pressure cleaning. The use of water for fire fighting, safety, sanitation, health, medical and other essential purposes is not restricted.

Lower East Coast of Florida



CONSERVATION TIP:



- When buying new appliances, consider those that offer cycle and load size adjustments. They're more water and energy efficient.

CONSERVATION TIP:



- Take short showers instead of baths.
- Never use your toilet as a wastebasket.



Precautionary Boil Water Notices

As part of ongoing efforts to protect the health of our communities, the state of Florida has developed rules that regulate how water utilities respond to water main breaks. According to the rules, if a water main breaks and its interior is exposed to groundwater, soil, or other foreign matter, a Precautionary Boil Water notice must be issued in the affected area. As the name implies, this is a precautionary measure, and more importantly, such a response is not necessary for most water leaks.

We understand that precautionary boil water notices can be a major inconvenience and we make every effort to avoid them. In the rare event that a significant break does occur, notices are distributed immediately through a high-speed telephone notification system. A notice is lifted a minimum of 24 hours after its release and only after bacteriological testing confirms the water is safe to drink. We care about your safety and encourage you to follow the precautionary notice should one be issued in your area.

If you are listed in the telephone directory, you are automatically included on our call list. However, if you have moved within the last 12 months, or if you use a cell phone as your primary telephone, please take a moment to register your contact information with us online at www.sunrisefl.gov by clicking on the "Sign Up For Information" and then following the link for "Code Red". If you do not have internet access and wish to register for Code Red call Ted Petrides at 954.888.6000.



CONSERVATION TIP:



- Raise your lawn mower cutting height. Longer grass blades reduce evaporation.
- Use an automatic shut-off nozzle on hoses. Ten gallons of water per minute can be lost through hoses.

Did You Know...

- The City of Sunrise Utilities Department provides water service to approximately 215,000 people within the cities of Sunrise, Weston, Southwest Ranches, and Davie.
- The City produces on average about 30 million gallons per day of drinking water.
- South Florida residents consume 179 gallons per person per day – the highest water usage in the state.
- Outdoor irrigation accounts for up to 50 percent of water use in Florida, and up to 50 percent of the water applied to lawns is lost to evaporation or runoff.

- Running a full load of dishes in a dishwasher saves water over washing the same dishes by hand.
- A high efficiency washing machine can save more than 50 percent in water and energy use.
- Toilet leaks can be detected by adding food coloring to the tank water. If the colored water appears in the bowl (without flushing), the toilet is leaking.

CONSERVATION TIP:



- Turn the water off while shaving or brushing your teeth.



Understanding the Water Quality Data

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. Our water system was in violation of federal and state water quality standards for alpha emitters from a sample collected in February 2010. The level of alpha emitters are shown on the Test Results Table. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increase risk of getting cancer. Quarterly samples for alpha emitters have been collected since the exceedance

was reported and the results are below the MCL. Also, prior and subsequent to the 2010 sample, our water has never exceeded the MCL for alpha emitters. We believe the 2010 exceedance could be attributed to a laboratory error in analysis. If you have any questions about this report or concerning your water utility, please contact Ted Petrides at (954) 888-6000. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled



Commission meetings. They are held every second and fourth Tuesday of the month at 6:30 p.m. in the Commission Chambers on the first floor of City Hall located at 10770 West Oakland Park Boulevard in Sunrise.

The City of Sunrise Utilities Department routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period January 1 to December 31, 2010. Data obtained before January 1, 2010 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations. In the following table you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions.

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.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that

a water system must follow.

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.

N/A means not applicable, does not apply.

ND means not detected and indicates that the substance was not found by laboratory analysis.

Parts per Billion (ppb) or Micrograms per Liter ($\mu\text{g}/\text{L}$) – one part by weight of analyte to 1 billion parts by weight of the water sample.

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.

Picocurie per Liter (pCi/L) – measure of the radioactivity in water.

Potential Contaminants in Source Water

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

Source Water Assessments

In 2009 the Florida Department of Environmental Protection (DEP) 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.

Potential sources of contamination are those facilities, sites, and activities that have the potential to affect the underlying ground water aquifers or nearby surface waters used for public drinking water supply. Many of these potential sources are regulated by DEP and the location and status of these sites are maintained within DEP databases. By utilizing in-house databases and a geographical information system (GIS), DEP can access and illustrate the relationships of potential contaminant sources to the approximately 12,000 public water supply intakes in Florida.

It should be noted that the potential sources of contamination identified by this assessment project are just that: potential sources. Many of these facilities are regulated and operate under stringent construction and maintenance requirements designed to protect both human health and the environment. The purpose of conducting the source water assessments is to provide information that will lead to actions to reduce current risks or avoid future problems.

There are 3 potential sources of contamination identified at a 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 or they can be obtained from Ted Petrides at (954) 888-6000.

CONSERVATION TIP:



- Water the garden during the coolest part of the day (early morning is best).
- Use mulch around shrubs and plants to reduce evaporation from the soil surface and cut down on weed growth.



Immuno-compromised Persons

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).

We at the City of Sunrise Utilities Department would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.



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)** Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B)** Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C)** Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D)** 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 stormwater runoff, and septic systems.
- (E)** Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 City of Sunrise Utilities Department 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 <http://www.epa.gov/safewater/lead>.

In order 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

CONSERVATION TIP:



- Place a plastic container filled with water in the tank of your toilet. Be sure it does not interfere with operation of the toilet's flushing apparatus.



City of Sunrise Utilities Department Water Quality Report

To determine how the quality of your drinking water compares to government standards, compare the "Level Detected" column with the maximum allowed "MCL" column.

Contaminant (Unit of Measurement)	Year Tested	MCL Violation Y/N	Level Detected / Range (Southwest WTP)		MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria (Highest Monthly No.)	Jan - Dec. 2010	N	0		0	> 1*	Naturally present in the environment
Radioactive Contaminants							
Radium 226 + 228 or combined radium (pCi/L)	Feb. 2010	N	1.8 +/- 0.53		0	5	Erosion of natural deposits
Alpha emitters (pCi/L) (Excluding Uranium)	Feb. 2010	Y	18.9		0	15	Erosion of natural deposits
Inorganic Contaminants							
Arsenic (ppm)	Feb. 2010	N	0.002		N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium (ppm)	Feb. 2010	N	0.006		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppm)	Feb. 2010	N	0.001		100	100	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride (ppm)	Feb. 2010	N	0.899		4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Nickel (ppm)	Feb. 2010	N	0.001		N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
Sodium (ppm)	Feb. 2010	N	34.2		N/A	160	Salt water intrusion, leaching from soil
Synthetic Organic Contaminants							
Atrazine (ppb)	Feb. and Aug. 2010	N	0.029 / (Range - 0.019 - 0.029)		3	3	Runoff from herbicide use on row crops
Volatile Organics							
Dichloromethane (ppb)	Feb. and Aug. 2010	N	0.89 / (Range - ND - 0.89)		0	5	Discharge from pharmaceutical and chemical factories
Disinfectants and Disinfection By-Products							
Chlorine (ppm)	Jan. - Dec. 2010	N	3.2 / (Range - 2.6 - 3.7)		MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	Aug. 2010	N	17.23 / (Range - 14.76 - 25.07)		N/A	60	By-product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb)	Aug. 2010	N	4.6 / (Range - 3.82 - 5.33)		N/A	80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Copper (tap water) (ppm)	Oct. 2008	AL Exceeded? N	90th Percentile Result = 0.0100	No. of sampling sites exceeding the AL = 0	1.3	Action Level (AL) = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Oct. 2008	AL Exceeded? N	90th Percentile Result = 1.7	No. of sampling sites exceeding the AL = 0	0	Action Level (AL) = 15	Corrosion of household plumbing systems; erosion of natural deposits
Secondary Contaminants							
Color (color units)	Feb. 2010	Y	20		N/A	15	Natural occurring organics.

* For systems collecting fewer than 40 samples per month: presence of coliform bacterial in >1% of monthly samples.

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 increase risk of getting cancer.

Due to administrative oversight during a busy part of the year, our office failed to submit a report required under the Safe Drinking Water Act. This violation has no impact on the quality of water our customers received, and it poses no risk to public health. We have established a report tracking file to ensure that all reporting requirements are met in the future.

