


SEMINOLE COUNTY
FLORIDA'S NATURAL CHOICE

Seminole County
**Annual Drinking Water
Quality Report 2013**



Annual Drinking Water Quality Report-2013

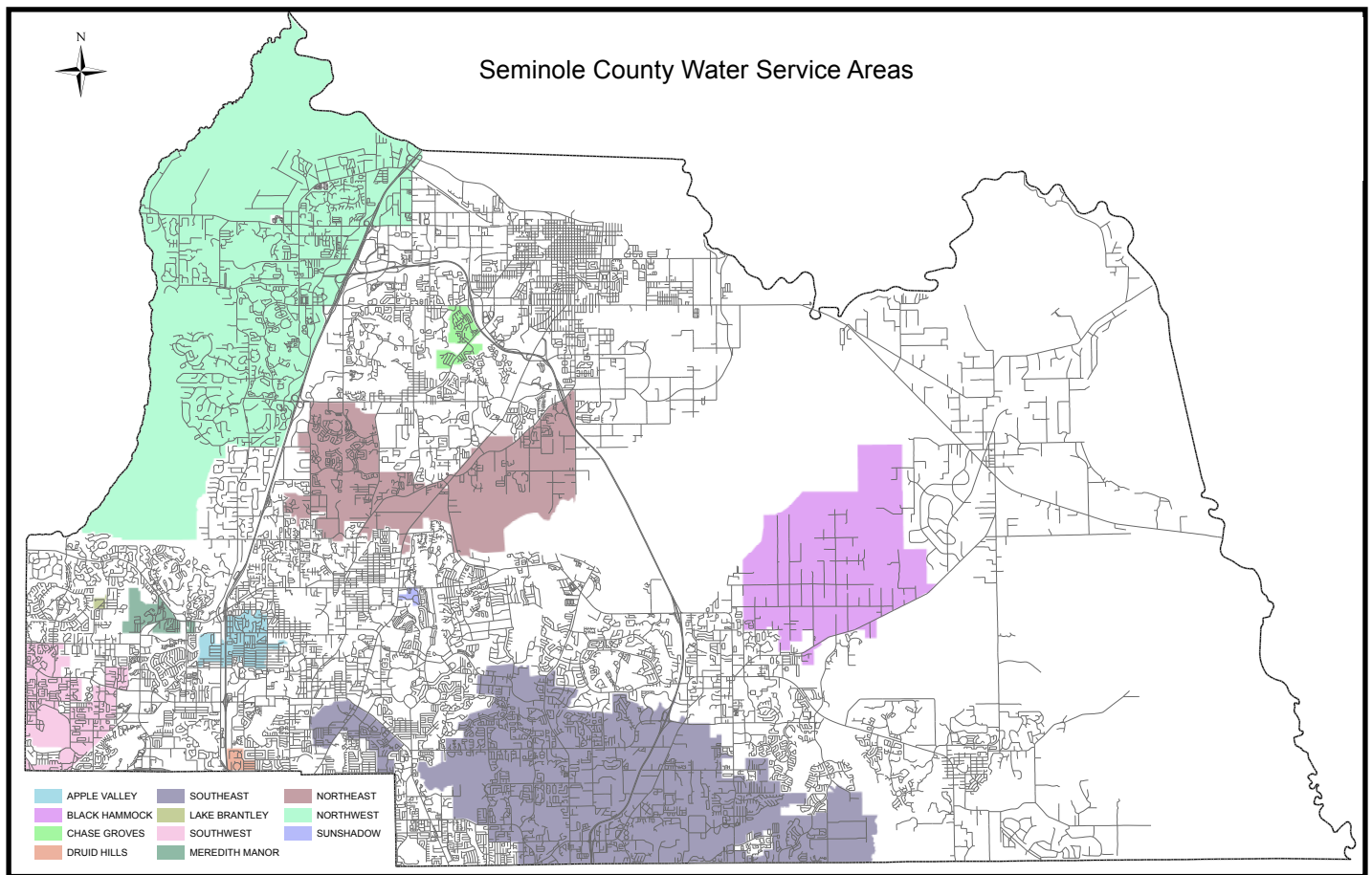
Seminole County Environmental Services is pleased to present you with the 2013 Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services that we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. I am proud to share this report which is based on water quality testing through December 2013; you will find that we supply water that meets or exceeds all federal and state water quality regulations.

This year we have changed the format of our Water Quality Report and are offering it electronically to all of our customers. This report is divided into a service area map and 11 individual drinking water service area water quality reports. To determine your drinking water service area, please utilize the attached service area map and find the vicinity of your address; use the color-coded legend to determine your service area and go directly to that part of the report. Or, feel free to peruse the water quality data for all drinking water service areas served by Seminole County. If you would like a printed copy of this report mailed to your address, please contact Environmental Services Customer Service office at 407-665-2010, to request your copy.

Sincerely,

Laila Martin
Distribution Manager
Seminole County Environmental Services

Map of Water Service Areas



Drinking Water Quality Report-Apple Valley Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Apple Valley Service Area is obtained from ground water wells and is chlorinated for disinfection purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Source Water Assessment Plan

In 2013 the 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 two (2) potential sources of contamination identified for this system with moderate susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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) 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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).

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. Seminole County Environmental Services 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>.



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EVALUATION
TODAY**

**FIX THAT LEAKY
FAUCET OR TOILET!**

Leaks can account for, on average, 10,000 gallons of water wasted in the home every year, which is enough to fill a backyard swimming pool!

WATERING RESTRICTION SCHEDULE

**EVEN HOUSE #'S THURSDAY AND
SUNDAY ODD HOUSE #'S WEDNESDAY
AND SATURDAY NON-RESIDENTIAL-
TUESDAY AND FRIDAY RECLAIM
CUSTOMERS TWO DAYS PER WEEK**

Terms and Abbreviations for Next Page:

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

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.

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

Parts per billion (ppb) or Micrograms per liter (µg/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.

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

Apple Valley Service Area

WATER QUALITY RESULTS

Apple Valley Water System

Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226+228 (pCi/L)	06/09	N	0.3	0-0.3	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Antimony (ppb)	01/12	N	0.1	0.1	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	01/12	N	0.41	0.41	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	01/12	N	0.0079	0.0079	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	01/12	N	0.2	0.2	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
Lead (point of entry) (ppb)	01/12	N	0.36	0.36	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nickel (ppb)	01/12	N	0.61	0.61	NA	100	Pollution from mining and refining operations; Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	01/13	N	0.26	0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	01/13	N	0.32	0.32	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	01/12	N	1.10	1.1	50	50	Erosion of natural deposits; discharge from mines
Sodium (ppm)	01/12	N	14	14	N/A	160	Salt water intrusion, leaching from soil
Thallium (ppb)	01/12	N	0.031	0.031	0.5	2	Discharge from electronics, glass and drug factories
Stage 1 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	0.59 (annual average)	0.2-1.67	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	2013	N	37.967 (annual average)	36.41-39.97	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	67.59 (annual average)	62.75-70.18	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	07/12	N	0.17	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	07/12	N	0.0029	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Black Hammock Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Black Hammock Consecutive Service Area is obtained from ground water wells and is chlorinated for disinfection purposes and then fluoridated for dental health purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

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Source Water Assessment Plan

In 2013 the Department of Environmental Protection performed a Source Water Assessment on City of Oviedo, from whom we purchase your drinking water. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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.

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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).

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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>.



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WATERING RESTRICTION SCHEDULE

EVEN HOUSE #'S THURSDAY AND SUNDAY ODD HOUSE #'S WEDNESDAY AND SATURDAY NON-RESIDENTIAL-TUESDAY AND FRIDAY RECLAIM CUSTOMERS TWO DAYS PER WEEK

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

Black Hammock Service Area

WATER QUALITY RESULTS

Black Hammock Water System							
Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium combined (pCi/L)	02/08	N	1.1	0.9 - 1.1	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	03/11	N	0.011	0.011	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	03/11	N	0.62	0.62	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth between 0.7 and 1.3 ppm
Sodium (ppm)	03/11	N	35.0	35	NA	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	2013	N	3.09 (average)	2.5-3.8	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (HAA) (ppb)	08/13	N	8.2	8.2	NA	MCL = 60	By-product of drinking water disinfection
Total trihalomethanes (TTHM) (ppb)	08/13	N	17.16	17.16	NA	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	13-Oct	N	NA	7.48-8.57	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	13-Oct	N	NA	15.19-19.62	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	08/12	N	0.3	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	08/12	N	0.0014	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Chase Groves Consecutive Service Area 2013

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We are committed to ensuring the quality of your water. The drinking water for the Chase Groves Consecutive Service Area is obtained from ground water wells and is chlorinated for disinfection purposes and then fluoridated for dental health purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

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Source Water Assessment Plan

In 2013 the Department of Environmental Protection performed a Source Water Assessment on City of Sanford, from whom we purchase your drinking water. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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.

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Picocurie per liter (pCi/L): measure of the radioactivity in water.

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

Chase Groves Service Area

WATER QUALITY RESULTS

Chase Groves Water System							
Microbiological Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Highest Monthly Percentage / Number	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria	2013	N	4.90%	0	For systems collecting at least 40 samples per month: presence of coliform bacteria in 25% of monthly	Naturally present in the environment	
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Total Number of Positive Samples for the year	MCLG	MCL	Likely Source of Contamination	
Fecal coliform and E. Coli	2013	N	5	0	A routine sample and a repeat sample are total coliform positive, and one	Human and animal fecal waste	
Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	2012	N	2.8	0-2.8	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	2012	N	0.777	0.3-0.777	0	5	Erosion of natural deposits
Uranium (pCi/L)	2012	N	0.2	0-0.2	0	30	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	2012	N	1.4	0-1.4	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	06/11	N	0.017	0.0099-0.017	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	06/11	N	0.6	0-0.6	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	06/11	N	4.8	0-4.8	200	200	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	06/11	N	0.68	0.68	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
Nitrate (as Nitrogen) (ppm)	06/13	N	0.22	0-0.22	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	06/11	N	32	23-32	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.2	0.4-2.2	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	2013	N	14.8 (annual average)	6.6-14.4	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	70.0 (annual average)	45.2-86.9	NA	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	2013	N	NA	40.62-93.48	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total	2013	N	NA	14.94-26.00	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	8/11	N	0.13	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	8/11	N	0.0021	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Druid Hills Consecutive Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Druid Hills Service Area is obtained from ground water wells and is chlorinated for disinfection purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Source Water Assessment Plan

In 2013 the Department of Environmental Protection performed a Source Water Assessment on City of Altamonte Springs, from whom we purchase your drinking water. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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)** 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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).

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. Seminole County Environmental Services 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>.



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FIX THAT LEAKY FAUCET OR TOILET!

Leaks can account for, on average, 10,000 gallons of water wasted in the home every year, which is enough to fill a backyard swimming pool!

WATERING RESTRICTION SCHEDULE

EVEN HOUSE #'S THURSDAY AND SUNDAY ODD HOUSE #'S WEDNESDAY AND SATURDAY NON-RESIDENTIAL-TUESDAY AND FRIDAY RECLAIM CUSTOMERS TWO DAYS PER WEEK

Terms and Abbreviations for Next Page:

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

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.

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

Parts per billion (ppb) or Micrograms per liter (µg/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.

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

Druid Hills Service Area

WATER QUALITY RESULTS

Druid Hills Water System

Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	06/09	N	3.6	3.6	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	06/09	N	0.4	0-0.4	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	01/12	N	0.57	0.57	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	01/12	N	0.0047	0.0047	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	01/12	N	0.24	0.24	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
Nitrate (as Nitrogen) (ppm)	01/13	N	0.26	0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	01/13	N	0/32	0/32	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel (ppb)	01/12	N	0.56	0.56	N/A	100	Pollution from mining and refining operations; Natural occurrence in soil
Selenium (ppb)	01/12	N	1.30	1.3	50	50	Erosion of natural deposits; discharge from mines
Sodium (ppm)	01/12	N	15	15	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.17 (annual)	0.72-1.98	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAAs) (ppb)	2013	N	26.31 (annual average)	26.31	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	51.95 (annual average)	51.95	N/A	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	07/12	N	0.26	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	07/12	N	0.0017	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Lake Brantley Consecutive Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Lake Brantley Consecutive Service Area is obtained from ground water wells and is chlorinated for disinfection purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Source Water Assessment Plan

In 2013 the Department of Environmental Protection performed a Source Water Assessment on Sanlando Utilities, from whom we purchase your drinking water. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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)** 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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).

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. Seminole County Environmental Services 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>.



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WATERING RESTRICTION SCHEDULE

**EVEN HOUSE #'S THURSDAY AND
SUNDAY ODD HOUSE #'S WEDNESDAY
AND SATURDAY NON-RESIDENTIAL-
TUESDAY AND FRIDAY RECLAIM
CUSTOMERS TWO DAYS PER WEEK**

Terms and Abbreviations for Next Page:

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

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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.

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

Parts per billion (ppb) or Micrograms per liter ($\mu\text{g/l}$): 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.

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

Lake Brantley Service Area

WATER QUALITY RESULTS

Lake Brantley Water System

Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	4/11	N	3.5	1.6-3.5	0	15	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	4/11	N	0.041	0.009-0.041	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	4/11	N	7.8	6.8-7.8	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nickel (ppb)	4/11	N	2.8	1.5-2.8	N/A	100	Pollution from mining and refining operations; Natural occurrence in soil
Selenium (ppb)	4/11	N	3.2	2.2-3.2	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	4/11	N	13.5	5.35-13.5	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.26 (annual average)	0.2-1.74	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	8/13	N	22.1	20.1-25.9	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	8/13	N	27.4	18.6-35.9	N/A	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	11/13	N	N/A	15.5-28.5	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	11/13	N	N/A	36.3-47.6	N/A	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	9/12	N	0.033	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	9/12	N	0.0002	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Meredith Manor Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Meredith Manor Service Area is obtained from ground water wells and is chlorinated for disinfection purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.'

Source Water Assessment Plan

In 2013 the Department of Environmental Protection performed a Source Water Assessment on Sanlando Utilities, from whom we purchase your drinking water. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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)** 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.
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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. Seminole County Environmental Services 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>.



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WATERING RESTRICTION SCHEDULE

EVEN HOUSE #'S THURSDAY AND SUNDAY ODD HOUSE #'S WEDNESDAY AND SATURDAY NON-RESIDENTIAL-TUESDAY AND FRIDAY RECLAIM CUSTOMERS TWO DAYS PER WEEK

Terms and Abbreviations for Next Page:

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

Parts per billion (ppb) or Micrograms per liter (µg/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.

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

Meredith Manor Service Area

WATER QUALITY RESULTS

Meredith Manor Water System

Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	4/11	N	3.50	1.6-3.5	0	15	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	01/12	N	1.2	1.2	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	01/12	N	0.0055	0.0055	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	01/12	N	0.2	0.2	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
Lead (point of entry) (ppb)	01/12	N	0.077	0.077	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nickel (ppb)	01/12	N	0.62	0.62	NA	100	Pollution from mining and refining operations; Natural occurrence in soil
Selenium (ppb)	01/12	N	1.20	1.2	50	50	Erosion of natural deposits; discharge from mines
Sodium (ppm)	01/12	N	18	18	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.72 (annual average)	0.52-3.67	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAAS) (ppb)	8/13	N	22.1	20.1-25.9	NA	MCL = 60	By-product of drinking water disinfection
THM [Total trihalomethanes] (ppb)	8/13	N	27.4	18.6-35.9	NA	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAAS) (ppb)	11/13	N	NA	15.5-28.5	NA	MCL = 60	By-product of drinking water disinfection
THM [Total trihalomethanes] (ppb)	11/13	N	NA	36.3-47.6	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	08/12	N	0.68	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	08/12	N	0.012	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Northeast Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Northeast Service Area is obtained from ground water wells and is chlorinated for disinfection purposes and then fluoridated for dental health purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Source Water Assessment Plan

In 2013 the 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 no (0) potential sources of contamination identified for this system. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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)** 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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).

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. Seminole County Environmental Services 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>.



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WATERING RESTRICTION SCHEDULE

EVEN HOUSE #'S THURSDAY AND SUNDAY ODD HOUSE #'S WEDNESDAY AND SATURDAY NON-RESIDENTIAL-TUESDAY AND FRIDAY RECLAIM CUSTOMERS TWO DAYS PER WEEK

Terms and Abbreviations for Next Page:

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

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.

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

Parts per billion (ppb) or Micrograms per liter (µg/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.

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

Northeast Service Area

WATER QUALITY RESULTS

Northeast Water System

Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	06/08	N	2.4	0-2.4	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	06/08	N	0.3	0-0.3	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	2/11	N	0.3	0.2-0.3	0	10	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	2/11	N	0.0082	0.0074-0.0082	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	2/11	N	0.71	0.71-0.71	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
Nitrate (as Nitrogen) (ppm)	1/13	N	0.26	0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	1/13	N	0.32	0.32	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	2/11	N	13.0	13-13	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Products							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.04 (annual average)	0.21-2.62	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAAS) (ppb)	2013	N	28.138 (annual average)	21.18-43.36	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	51.892 (annual average)	40.71-68.92	NA	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAAS) (ppb)	2013	N	NA	16.6-29.2	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	NA	37.2-63.2	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	8/11	N	0.47	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	8/11	N	0.0019	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Northwest Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Northwest Service Area is obtained from ground water wells and is chlorinated for disinfection purposes and then fluoridated for dental health purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Source Water Assessment Plan

In 2013 the 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 four (4) potential sources of contamination identified for this system with low or moderate susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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)** Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
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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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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).

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. Seminole County Environmental Services 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>.



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WATERING RESTRICTION SCHEDULE

EVEN HOUSE #'S THURSDAY AND SUNDAY ODD HOUSE #'S WEDNESDAY AND SATURDAY NON-RESIDENTIAL-TUESDAY AND FRIDAY RECLAIM CUSTOMERS TWO DAYS PER WEEK

Terms and Abbreviations for Next Page:

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

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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.

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

Northwest Service Area

WATER QUALITY RESULTS

Northwest Water System							
Microbiological Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Highest Monthly Percentage / Number	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria	11/13	N	1	0	For systems collecting fewer than 40 samples per month: presence of coliform bacteria in >1 sample per month	Naturally present in the environment	
Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	06/08	N	1.5	0-1.5	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	06/08	N	0.5	0-0.5	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	02/11	N	2.3	0.6-2.3	0	10	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	02/11	N	0.0084	0.0068-0.0084	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	02/11	N	0.66	0-0.66	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
Lead (point of entry) (ppb)	02/11	N	0.2	0-0.2	N/A	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nickel (ppb)	02/11	N	1.5	0.4-1.5	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	01/13	N	0.26	0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	01/13	N	0.32	0.32	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	02/11	N	3.4	1.2-3.4	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	02/11	N	28	12-28	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Products							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.165 (annual average)	0.2-2.68	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	2013	N	12.576 (annual average)	7.61-18.98	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	59.006 (annual average)	26.82-111.72	N/A	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Products							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	10/13	N	N/A	18.89-26.95	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	10/13	N	N/A	56.48-130.34	N/A	MCL = 80	By-product of drinking water disinfection

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	08/11	N	0.69	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	08/11	N	0.0027	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Stage 2 Disinfectant/Disinfection By-Product Extension Notice:

In 2013 the Environmental Protection Agency (EPA) extended the compliance date for the Stage 2 Disinfectants and Disinfection Byproducts Rule (DPBR) for the Seminole County Southeast service area from October 1, 2013, to April 1, 2015, due to on-going capital improvements at the Markham Regional Water Treatment Facility. We are currently conducting quarterly monitoring at the required Stage 2 DBP locations and reporting our results as a system-wide running annual average (RAA) instead of a location specific running annual average (RAA), as required by the Stage 2 DPBR. Once the extension period is over, we will continue to conduct quarterly monitoring at the required Stage 2 DBP locations and begin reporting our results as a location specific RAA.

Drinking Water Quality Report-Southeast Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Southeast Service Area is obtained from ground water wells. The water is ozonated, filtered with granular activated carbon and chlorinated for disinfection purposes. We then fluoridate for dental health purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Source Water Assessment Plan

In 2013 the 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 no (0) potential sources of contamination identified for this system. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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.

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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>.



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Picocurie per liter (pCi/L): measure of the radioactivity in water.

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

Southeast Service Area

WATER QUALITY RESULTS

Southeast Water System							
Microbiological Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Highest Monthly Percentage / Number	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria	9/13	N	1.40%	0	For systems collecting at least 40 samples per month: presence of coliform bacteria in >5% of monthly	Naturally present in the environment	
Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	06/08	N	3.4	0-3.4	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	06/08	N	0.7	0.2-0.7	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	02/11	N	0.5	0.2-0.5	0	10	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	02/11	N	0.011	0.0064-0.011	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	02/11	N	0.69	0.58-0.69	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
Nitrate (as Nitrogen) (ppm)	01/13	N	0.26	0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	01/13	N	0.32	0.32	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	02/11	N	1.4	0-1.4	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	02/11	N	28	11-28	NA	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Products							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.49 (annual average)	0.22-2.68	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Bromate (ppb)	2013	N	1.5	1.5	MCLG = 0	MCL = 10	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	2013	N	44.528 (annual average)	24.5-56.98	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	68.528 (annual average)	47.30-87.37	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	08/11	N	0.27	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	08/11	N	0.0031	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

*We failed to complete the required sampling for Nitrate and Nitrite samples and therefore were in violation of monitoring and reporting requirements. In January 2013, the specified use of the Lake Hayes Water Treatment Facility was reduced from a full operation facility to emergency back-up only, per St. Johns River Water Management District Consumptive Use Permit. Given the restricted operation, the 2013 annual testing for Nitrite and Nitrate was not conducted. Upon realization that this sampling requirement was not met, Nitrite and Nitrate samples were collected on January 16, 2014. The sampling results were satisfactory and have been submitted to the Florida Department of Environmental Protection (FDEP) as required.

*We failed to complete the required sampling for Bromate and therefore were in violation of monitoring and reporting requirements. We collected the December 2013 sample of Bromate at the Southeast Regional Water Treatment Facility and submitted to the contacted laboratory in a timely manner. The lab performed the wrong analysis on the sample. By the time we received the results and realized the error, the sample had gone out of hold time. The Laboratory reran the sample and the results were satisfactory

Southeast Service Area - Continued

Stage 2 Disinfectant/Disinfection By-Product Extension Notice:

In 2012 the Environmental Protection Agency (EPA) extended the compliance date for the Stage 2 Disinfectants and Disinfection Byproducts Rule (DPBR) for the Seminole County Southeast service area from October 1, 2012, to October 1, 2013, due to on-going capital improvements at the Southeast Regional Water Treatment Facility. We are currently conducting quarterly monitoring at the required Stage 2 DBP locations and reporting our results as a system-wide running annual average (RAA) instead of a location specific running annual average (RAA), as required by the Stage 2 DPBR. Once the extension period is over, we will continue to conduct quarterly monitoring at the required Stage 2 DBP locations and begin reporting our results as a location specific RAA.

Drinking Water Quality Report-Southwest Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Southwest Service Area is obtained from ground water wells and is chlorinated for disinfection purposes and then fluoridated for dental health purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

Seminole County Environmental Services 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 of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Source Water Assessment Plan

In 2013 the 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 no (0) potential sources of contamination identified for this system. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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)** 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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).

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. Seminole County Environmental Services 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>.




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EVALUATION
TODAY**

FIX THAT LEAKY FAUCET OR TOILET!

Leaks can account for, on average, 10,000 gallons of water wasted in the home every year, which is enough to fill a backyard swimming pool!

WATERING RESTRICTION SCHEDULE

**EVEN HOUSE #'S THURSDAY AND
SUNDAY ODD HOUSE #'S WEDNESDAY
AND SATURDAY NON-RESIDENTIAL-
TUESDAY AND FRIDAY RECLAIM
CUSTOMERS TWO DAYS PER WEEK**

Terms and Abbreviations for Next Page:

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

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.

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

Parts per billion (ppb) or Micrograms per liter (µg/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.

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

Southwest Service Area

WATER QUALITY RESULTS

Southwest Water System							
Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226 + 228 or combined radium (pCi/L)	06/08	N	0.1	0-0.1	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	2/11	N	0.3	0.3	0	10	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	2/11	N	0.0069	0.0069	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	2/11	N	0.62	0.62	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 (ppb)	2/11	N	0.5	0.5	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	01/13	N	0.26	0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	01/13	N	0.32	0.32	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	2/11	N	12	12	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Products							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.165 (annual average)	0.2-2.68	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	2013	N	26.43 (annual average)	24.28-32.14	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	41.34 (annual average)	25.63-93.45	N/A	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	2013	N	N/A	32.58-41.42	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	N	N/A	56.05-62.49	N/A	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	8/11	N	0.74	1	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)	8/11	N	0.0021	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits

Drinking Water Quality Report-Sun Shadows Consecutive Service Area 2013

We are pleased to present you this year's Annual 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. The drinking water for the Sun Shadows Consecutive Service Area is obtained from ground water wells and is chlorinated for disinfection purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2010.

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Source Water Assessment Plan

In 2013 the Department of Environmental Protection performed a Source Water Assessment on City of Casselberry, from whom we purchase your drinking water. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

EPA Would Like You to Know

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.

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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>.



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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.

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

Sunshadows Service Area

WATER QUALITY RESULTS

Sun Shadows Water System

Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	4/11	N	2.7	ND-2.7	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	4/11	N	1	0.2-1.0	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	2/11	N	0.016	0.0085-0.016	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide (ppb)	2/11	N	6.6	ND0-6.6	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	2/11	N	0.16	0.14-0.16	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 (ppb)	2/11	N	1.3	0.7-1.3	NA	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	2/11	N	0.039	0.039-0.009	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	2/11	N	12	11-12	N/A	160	Salt water intrusion, leaching from soil
Stage 2 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2013	N	1.1 (average)	0.3-2.2	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAAS) (ppb)	2013	N	59.5	27.6-77.3	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2013	Y	105.6	47.6-134.8	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	07/12	N	0.43	0	1.3	1.3	Corrosion of household plumbing systems; erosion of
Lead (tap water) (ppm)	07/12	N	0.0013	0	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits