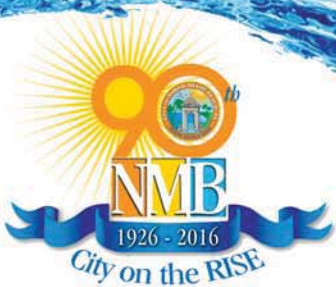




WATER QUALITY REPORT 2015



MAYOR GEORGE VALLEJO
COUNCILMAN ANTHONY F. DEFILLIPO
COUNCILWOMAN MARLEN MARTELL
COUNCILWOMAN BARBARA KRAMER
COUNCILMAN FRANTZ PIERRE
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COUNCILWOMAN BETH E. SPIEGEL

A COMPREHENSIVE REPORT ON WATER QUALITY
JANUARY 1, 2015 - DECEMBER 31, 2015

ANA M. GARCIA, CITY MANAGER
JOSE SMITH, CITY ATTORNEY
PAMELA L. LATIMORE, CITY CLERK
JEFFREY F. THOMPSON, P.E.,
DIRECTOR OF NMB WATER



I am pleased to present our 2015 Annual Water Quality Report. This report includes detailed information on the quality of water delivered to our customers between January 1, 2015 and December 31, 2015. On the following pages you will learn how our water quality met or surpassed all state and federal regulatory requirements in 2015.

NMB Water continues to upgrade its infrastructure in order to better serve its customers,

from the installation of new water service mains to the addition of advanced metering infrastructure.

We have also rebranded our name from the North Miami Beach Public Utilities Department to NMB Water, a move that reflects our identity as a regional utility provider. NMB Water professionals work around the clock to provide customers in northeastern Miami-Dade County with the best-tasting and highest-quality drinking water available.

The information shared in this report was prepared in accordance with the U.S. Environmental Protection Agency's regulations and the Safe Drinking Water Act. Reviewing this report will provide you with a better understanding of how our utility professionals continually improve the water-treatment process and protect our water sources.

Thank you for reviewing this important document. If you have any questions or concerns, please do not hesitate to contact us. Visit us online at www.NMBWater.com or call us directly; a list of contact numbers is provided in the back of this report.

Warmest Regards,

George Vallejo, Mayor
City of North Miami Beach

Water Sources

Our water begins its journey from ground water sources, specifically, the Biscayne and Floridan aquifers. Production wells pump water from these aquifers, and it is then processed through one or more of the following treatment processes: lime softening, nanofiltration, and reverse osmosis. The water is then blended, chlorinated for disinfection, fluoridated for dental-health purposes, and then distributed through our infrastructure to a water service population of approximately 170,000 people.

The Biscayne Aquifer is located approximately 10 to 200 feet below ground and is composed of porous limestone rock, which contains many tiny cracks and holes. When it rains, water percolates down through the ground and replenishes, or recharges, this aquifer. The South Florida Water Management District (SFWMD) has issued a permit that allows the City of North Miami Beach to withdraw up to 26.31 million gallons per day (MGD) from the Biscayne Aquifer. Water from the Biscayne Aquifer is treated by lime softening and/or nanofiltration processes.

Our second source of water is the Floridan Aquifer, located approximately 1,250 feet below ground. Our SFWMD permit allows us to withdraw up to 12 MGD of water from the Floridan Aquifer. This water is brackish (a combination of fresh and salt water) and is treated using reverse osmosis, a membrane treatment process that is capable of removing high concentrations of salt and other contaminants from the water.

Source Water Assessment and Protection Program (SWAPP)

In 2015 the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are five potential sources of contamination identified for this system, all with low susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at: www.dep.state.fl.us/swapp (search PWS Number: 4131618) or by contacting the Public Information Officer at (305) 957-3657.

Quality Control

NMB Water operates a laboratory that conducts a multitude of tests to ensure the production and distribution of safe drinking water. The laboratory is state certified in microbiology and ensures that the water delivered to our customers is of the highest quality possible. Water samples from 138 different locations throughout the water service area are tested monthly for bacteria, chlorine, turbidity (cloudiness), and iron.



The utility is required to monitor for numerous of possible contaminants. The results are listed on the chart found in this report. Our results are within the regulatory standards set by the United States Environmental Protection Agency (EPA), the Florida Department of Health (FDOH) and the Florida Department of Environmental Protection (FDEP).

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. NMB Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in home 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 1-800-426-4791** or at: <http://www.epa.gov/safewater/lead>.

Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) 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.

continued on last page >



NMB WATER 2015 Water Quality Report

(Finished water sampling and results from January 1, 2015 - December 31, 2015)

Water Quality Parameters

	MCL Violation	Federal MCL	Federal MCLG	State MCL	Year Tested	NMB Water Norwood Water Treatment Plant	Miami-Dade Water & Sewer Department Main System	Major Sources
Microbiological Contaminants								
Total Coliform Bacteria (e)	N	5%	0%	5%	2015	2.2%	0.7%	Naturally present in the environment
Radioactive Contaminants								
Combined Radium (pCi/L) (a)	N	5	0	5	2015	1.3 (0.3-1.3)	0.4 (ND-0.4)	Erosion of natural deposits
Uranium (ppb) (a)	N	30	0	30	2015	0.32 (0.16-0.32)	1.3 (0.1-1.3)	Erosion of natural deposits
Inorganic Contaminants								
Antimony (ppb) (a)	N	6	6	6	2015	0.09	0.1 (ND-0.1)	Discharge from fire retardants, ceramics, electronics, solder
Arsenic (ppb) (a)	N	10	0	10	2015	0.47 (0.47-0.77)	1.3 (0.5-1.3)	Erosion of natural deposits
Barium (ppm) (a)	N	2	2	2	2015	0.003	0.007 (0.002-0.007)	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb) (a)	N	100	100	100	2015	ND	0.001 (ND-0.001)	Erosion of natural deposits
Fluoride (ppm) (a)	N	4	4	4	2015	0.54 (0.52-0.54)	1.0 (0.4-1.0)	Erosion of natural deposits; discharge from fertilizer and aluminum factories Water additive which promotes strong teeth when at optimum level of 0.7 ppm
Nitrate (measured as Nitrogen ppm) (a)	N	10	10	10	2015	0.057 (0.053-0.057)	0.11 (0.01-0.11)	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (measured as Nitrogen ppm) (a)	N	1	1	1	2015	0.055 (ND-0.055)	0.01	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb) (a)	N	50	50	50	2015	ND	7.7 (ND-7.7)	Erosion of natural deposits
Sodium (ppm) (a)	N	NE	N/A	160	2015	43 (37-43)	53 (36-53)	Salt water intrusion, leaching from soil
Lead and Copper								
Copper (tap water) (ppm) (b)	N	AL = 1.3	1.3	AL=1.3	2015	0.10 (0 out of 91 homes exceeded the AL)	0.07 (0 out of 116 homes exceeded the AL)	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb) (b)	N	AL = 15	0	AL=15	2015	3.4 (3 out of 91 homes exceeded the AL)	4.0 (3 out of 116 homes exceeded the AL)	Corrosion of household plumbing systems; erosion of natural deposits
Stage 2 Disinfectants and Disinfection By-Products								
	MCL or MRDL Violation	MCL or MRDL	MCLG or MRDLG	MCL or MRDL				
Chloramines (ppm) (d)	N	4	4	4	2015	3.1 (0.6-4.1)	2.5 (ND-4.6)	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb) (c)	N	60	N/A	60	2015	20 (9-23)	37 (15-51)	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (c)	N	80	N/A	80	2015	24 (13-37)	71 (5-79)	Byproduct of drinking water disinfection

Legend

- (a) The lowest and highest values measured during the year are in parentheses. The number outside the parentheses is the highest detected level reported for the monitoring period.
- (b) 90th percentile value reported. If the 90th percentile value does not exceed the AL (less than 10% of the homes have levels above the AL), the system is in compliance and uses the prescribed corrosion control measures. Lead and copper monitoring is reduced from annually to once every three years approved by the Florida Department of Health, last available data is from year 2015.
- (c) A total of 2 samples per quarter were collected under Stage 2 D/DBP Rule for Total Trihalomethanes and Haloacetic Acids 5, the highest LRAA (locational Running Annual Average) level detected and the range of individual results were reported. The number outside the parentheses is the average of the individual results.
- (d) The lowest and highest values measured during the year are in parentheses. The number outside the parentheses is the highest running annual average (RAA).
- (e) Presence of coliform bacteria must be $\leq 5\%$ of monthly samples.

Units

pCi/l - Picocuries Per Liter: measure of the radioactivity in water.

ppm - Parts per billion: one part by weight of analyte to 1 billion parts by weight of the water sample.

ppb - Parts Per Billion: one part by weight of analyte to 1 million parts by weight of the water sample.

Abbreviations and Definitions

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

Disinfection - In treating water, it is the process by which water is exposed to a chemical for a specified time period to kill pathogenic organisms.

Disinfection By-Product - A chemical produced by the disinfection process. Disinfection by-products are regulated and are indicators of potential carcinogenic substances.

MCL - Maximum Contaminant Level - The highest level of contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal - 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.

MRDL - Maximum Residual Disinfectant Level - 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.

MRDLG - Maximum Residual Disinfectant Level Goal - 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.

NE - Not Established

N/A - Not Applicable

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

- (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**.

Important Numbers

It is important to us that you are able to access the services you need most. We have provided a list of helpful contact numbers for each of our major services. Please feel free to contact us with any questions you may have.

- After Hours/Emergency**(305) 652-6460
- NMB Water**(305) 948-2967
- Call Before You Dig** 811
- Customer Service**(305) 948-2960
- Norwood Water Treatment Plant (Office)**(305) 650-0000
- Public Information Officer**(305) 957-3657
- Water Quality Control**(305) 654-7137
- Director of NMB Water**(305) 948-2983
- Public Utilities Commission (PUC)**(305) 948-2983

The PUC has an advisory role for the City's Mayor and Council. PUC meetings are normally held the third Wednesday of each month in the North Miami Beach City Hall, second floor, Council Chambers, 17011 NE 19th Avenue, at 6 p.m. Please call to confirm.

Contact us

For technical questions about this report, call the Water Quality Manager at **(305) 650-0000**. For general questions, call the public information officer at **(305) 919-3756**. To learn more about NMB Water visit us on the web at www.NMBWater.com

Comuníquese

Esta publicación contiene información importante sobre la calidad de su agua potable. Si no lo entiende, por favor busque a alguien que se lo traduzca o le explique su contenido. Si usted tuviera alguna pregunta específicamente sobre este reporte, por favor llame al Gerente de Calidad del Agua al (305) 650-0000. Para preguntas en general, llame al Oficial de Información Pública al (305) 919-3756. Si desea más información sobre el NMB Water, le recomendamos que visite nuestra página de Internet www.NMBWater.com.

Kontaktè nou

Rapo sa-a gen enfòmasyon trè empotan so dlò potab ke ou bwè. Fè yon moun tradwi li pou ou oswa pale avek yon moun ki konprann sa-a. Pou keksyon teknik sou rapo sa-a, rele manajè pou kalite dlò lan 305-650-0000. Pou keksyon jeneral, rele Ofisye pou enfòmasyon piblik lan 305-919-3756. Pou aprann plis sou NMB Water, vizite nou lan entenet: www.NMBWater.com.

Vulnerable Populations

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 at Hotline **1-800-426-4791**.

Conservation & Education

NMB Water promotes water conservation and education through its community outreach program. Water education presentations are available, free of charge, to any school, civic, church, synagogue or neighborhood group in the NMB Water service area. To schedule a speaker or presentation at your location, please call **(305) 919-3756**.



Attention Condominium and Apartment Managers:

Please share this report with your members and tenants.

Additional Copies:

Additional copies of this report are available by calling NMB Water at **(305) 954-3657**.

This report will be mailed to customers only upon request and is also available in the North Miami Beach City Hall lobby, 17011 NE 19th Avenue, and in the lobby of NMB Water's main office, 17050 NE 19th Avenue, in North Miami Beach.



17050 NE 19th Avenue
North Miami Beach, FL 33162

(305) 948-2967

www.NMBWater.com