



## 2015 Water Quality Report

## 2016 Flood Hazard Information

What you need to know about your water service, flood protection and the National Flood Insurance Program.

We encourage you to share this report with members of your household. Additional copies are located at the North Miami Utility Billing Office, 776 NE 125 Street, First Floor Lobby.

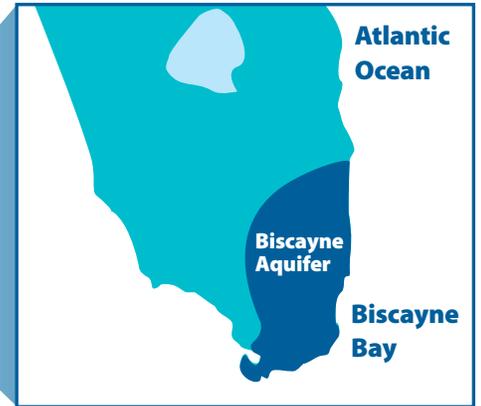


### AN KREYOL

Si ou ta vlé résévwa enfomasyon sa an kréyòl, rélé niméwo téléfon sa 305-893-6511

### En Español

Si usted quiere recibir este folleto en Español, por favor llame al teléfono 305-893-6511



## A Message from the Director

Each year, the city of North Miami presents a Consumer Confidence Report (CCR), also known as our Water Quality Report and Flood Hazard Information brochure. This document combines two required annual notices into one and provides our community with important facts about the source and quality of our drinking water, as well as important information about flood hazards. This edition of the CCR provides testing results on our water system from 2015 and demonstrates the high quality water provided to residents and business owners of North Miami.

Here in the City, we continue to provide drinking water that meets or exceeds all local, state and federal requirements. We put forth maximum effort towards meeting our goals for water supply protection, water conservation, community education, water system maintenance and water quality.

We continue to make every effort to deliver the best quality drinking water to you. I would like to thank our staff for their service and devotion provided to our community. Our staff of water plant operators, water distribution system operators, maintenance workers and engineers work non-stop to provide you with high quality and dependable water service. We are also proud that the City has upheld its Class 5 Community Rating System (CRS) ranking, one of the best ratings in the state of Florida.

Thank you for taking the time to read this edition of the CCR. Please feel free to contact us if you would like to discuss the contents of the report. We welcome this opportunity to expand communications with you and look forward to your comments.

**Wisler Pierre-Louis, P.E., LEED AP BD+C, CFM, PMP**  
**Public Works Director**

## FACTS ABOUT THE WATER WE DRINK

The city of North Miami is pleased to provide you with this year's Annual Water Quality Report. This report is designed to inform you about the quality of your drinking water and the services we deliver to you every day.

### The Source of Our Water

The goal of North Miami's Water Utility is to provide you with a safe and dependable supply of drinking water every day. Our water source is ground water from eight wells. The wells draw from the Biscayne Aquifer. In order to service our entire City and surrounding community, we also purchase water from Miami-Dade County, (which is also treated ground water from the Biscayne Aquifer).

The Biscayne Aquifer is located just below the land surface in South Florida. It consists of porous rock with tiny cracks and holes, which water flows through like an underground river. This water is often referred to as ground water or the water table, and provides virtually all of the water that is used by residents of South Florida. The water travels at a very slow rate, in an east-southeasterly direction at a rate of approximately two feet per day, which provides for a natural filtration process and results in generally clean water. Where there are very large openings or man-made canals the flow rate can increase substantially.

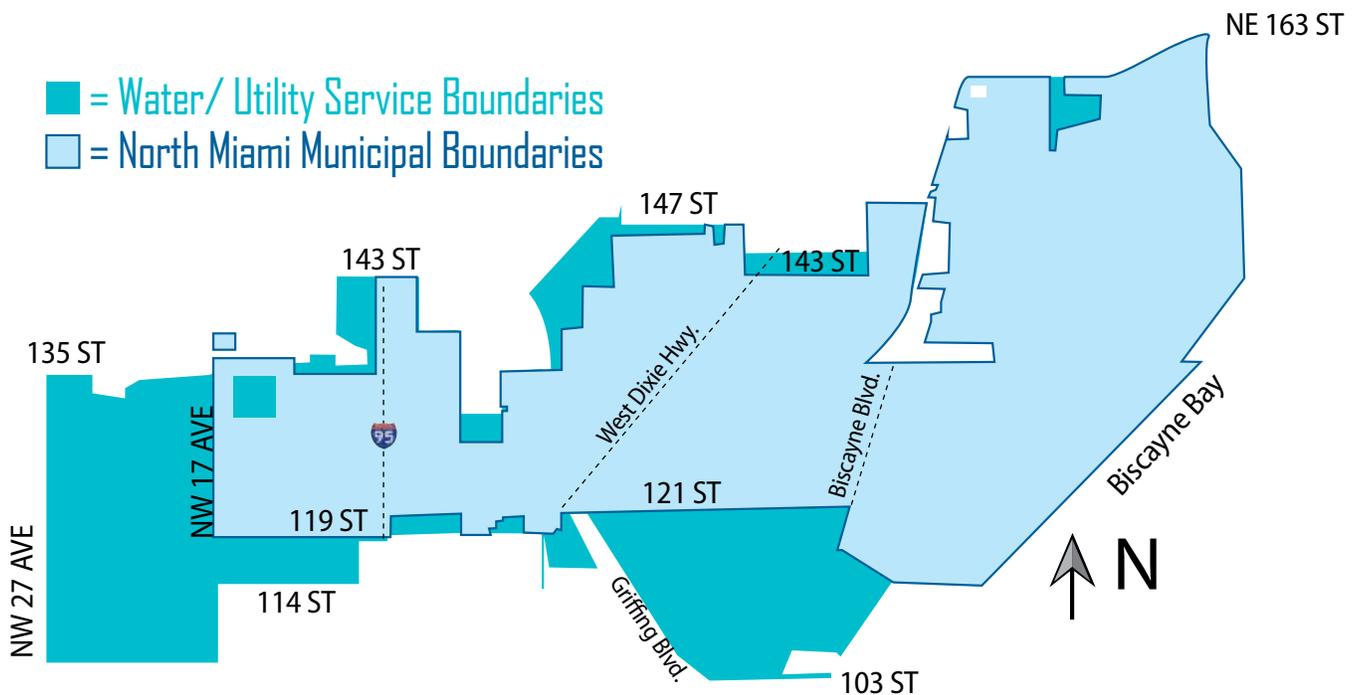
## Water Service Area

The city of North Miami Water and Sewer Utility serves a population of over 70,000 people in a 13 square-mile area. Our customers are located within the city of North Miami, as well as portions of unincorporated Miami-Dade County, Miami Shores and Biscayne Park. We also provide emergency interconnects to the municipalities of North Miami Beach and Opa-Locka. The water plant pumps and treats an average of 8.5 million gallons of water per day. We are supplemented by water purchased from Miami-Dade County's main water system through several metered interconnects throughout the distribution system.

## Treating Your Water

North Miami's Winson Water Plant at Sunkist Grove uses a lime softening process to treat water drawn from the Biscayne Aquifer (ground water) to ultimately provide quality drinking water to your home or business. The ground water contains many minerals such as calcium and magnesium. Treatment is necessary to reduce mineral levels in order to prevent build up in the pipes and discoloration of household fixtures.

The first treatment process is aeration, which removes unwanted carbon dioxide and hydrogen sulfide that can cause a bad taste and odor. Next, sodium-hypochlorite (liquid chlorine) and lime are added to the water to destroy bacteria and remove some of the minerals, such as iron. Without this process, plumbing fixtures and sinks would become stained by iron deposits. The water then flows through anthracite coal filters to remove small particles. Fluoride is added to the water, along with additional sodium-hypochlorite and ammonia, to retain adequate levels of disinfection and ensure that the drinking water remains bacteria-free as it makes its way through the distribution system. North Miami's water distribution system consists of more than 300 miles of water lines that transport treated water into your home or business. Quality Assurance testing is performed every hour by state licensed water treatment operators to ensure that the water leaving our water plant meets or exceeds all federal, state and local regulations, as well as the City's own quality standards. City of North Miami employees are committed to ensure that every drop of water delivered to our utility customers is completely safe to drink.



# WATER CONSERVATION INCENTIVE PROGRAMS

Fixtures can be exchanged at the following location:

North Miami City Hall – Utility Billing Office  
776 NE 125 Street – First floor  
Monday through Friday, 8 a.m. – 5 p.m.



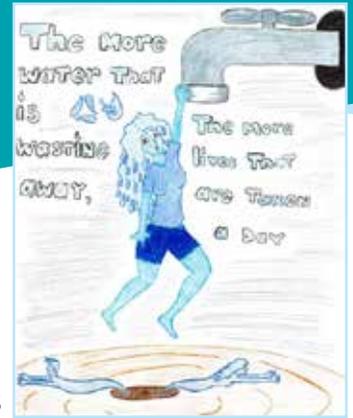
## Commercial Restaurant Spray Valve Exchange Program

Restaurants in North Miami can also reduce water consumption by exchanging existing sink spray valves with low-flow pre-rinse valves provided by the City that reduce up to 80% of water use. The new Power Rinser valve can save businesses up to \$1,300 per year. This spray valve is interchangeable with all brands and the fixture has a five year warranty. Bring us your existing valve to receive the Power Rinser Pre-Rinse Spray Valve.



## Residential Showerhead Exchange Program

Replacing your showerhead with a new high efficiency fixture can cut your water use in half. Bring us your old showerhead and we will give you a brand new, easy to install showerhead fixture.



**Nataly Morales**

8<sup>th</sup> Grade, Thomas Jefferson Middle School, Division 4

## Drop Savers Poster Contest Winner

In 2016, the city of North Miami participated in the Drop Savers Water Conservation Poster Contest, sponsored by the Florida Section of the American Water Works Association (FSAWWA). Students in grades K-12 submitted their creative artwork and slogans to the City. The following students were chosen to represent North Miami at the state competition and were also recognized by the North Miami City Council during Water Conservation Month in April 2016:

**Moses Naylor**

3<sup>rd</sup> Grade, Natural Bridge Elementary School, Division 2

**Chris Cesar**

4<sup>th</sup> Grade, Natural Bridge Elementary School, Division 3

**Nataly Morales**

8<sup>th</sup> Grade, Thomas Jefferson Middle School, Division 4

**Junette Rickman**

9<sup>th</sup> Grade, North Miami Senior High School, Division 5



## Conservation: Use Water Wisely

Water is becoming one of the world's most precious resources. Here in South Florida, as throughout the southeastern United States, water restrictions have become a way of life year-round. We encourage you to conserve water whenever possible.

For more information on water use, restrictions and conservation, visit the South Florida Water Management District's website at [sfwmd.gov](http://sfwmd.gov) or [miamidade.gov/conservation](http://miamidade.gov/conservation).

# Health and Safety Standards

We are pleased to report that our drinking water meets all federal, state and local regulations and continues to meet our quality standards.



The United States Environmental Protection Agency (EPA) and the State of Florida Department of Environmental Protection (FDEP) set both primary and secondary standards to ensure public water is safe to drink. Primary standards protect public health against substances that may be harmful to humans if consumed for long periods. Secondary standards control the aesthetic qualities of the water such as taste, odor and clarity, but do not impact public health.

North Miami routinely monitors your drinking water for contaminants according to all federal, state laws, rules and regulations. This report is based on the results of our monitoring period from January 1, 2015 to December 31, 2015. Data obtained before January 1, 2015 and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations governing water quality.

## What Should You Know About Certain Contaminants

The presence of contaminants in drinking water does not necessarily pose a health risk. Some people may be more vulnerable to effects of contaminants in drinking water than the general population. Immuno-compromised persons such as cancer patients undergoing chemotherapy, those with organ transplants, individuals with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. Anyone who falls into these categories should seek advice about drinking water from their healthcare providers.

Guidelines established by the EPA and the Centers for Disease Control (CDC) on appropriate means to lessen the risk of infection by *Cryptosporidium*<sup>1</sup> and other microbial contaminants are available from the **Safe Drinking Water Hotline at 1-800-426-4791**.

## Source Water Assessment (SWA)

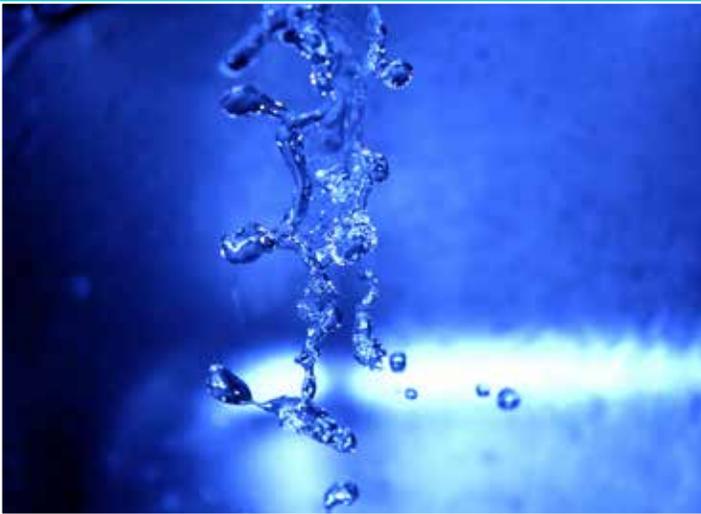
The Florida Department of Environmental Protection (DEP) conducts an ongoing assessment of public drinking water systems. North Miami's system was assessed in 2015. The Florida Department of Environmental Protection identifies and assesses any potential sources of contamination in the vicinity of our water supply. A report for our system is available at the DEP SWAPP website, [dep.state.fl.us/swapp](http://dep.state.fl.us/swapp), where you are able to search by county and by water utility.

## 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. The flowing water can also obtain 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 storm water 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 storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes, petroleum product ion and possibly from gas stations, urban storm water runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

<sup>1</sup> *Cryptosporidium* is a microscopic organism that, when ingested, can result in diarrhea and other gastrointestinal symptoms. It is associated primarily with surface water sources; however, ours is a ground water source.



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, yet does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline at 1-800-426-4791**.

## Lead Contaminants

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The city of North Miami Water Utility 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 thirty seconds to two minutes before using the water for drinking or cooking. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

You may find unfamiliar terms and abbreviations in this report. To help you better understand these terms we've provided the following definitions:

- **Action Level (AL)** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Maximum Contaminant Level Goal (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 error.
- **Maximum Contaminant Level (MCL)** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as possible using the finest available treatment technology.
- **Maximum Residual Disinfectant Level Goal (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.
- **Maximum Residual Disinfectant Level (MRDL)** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.
- **Not Detected (ND)** Indicates that the substance was not found by laboratory analysis.
- **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.
- **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.
- **Picocurie per liter (pCi/L)** Measure of the radioactivity in water.

## Unregulated Contaminants Monitoring Rule

The city of North Miami has been monitoring for unregulated contaminants (UCMR) as part of a study to help the United States Environmental Protection Agency (EPA) determine the occurrence of UCMR's in drinking water, and whether or not these contaminants need to be regulated. Currently, no health standards (such as maximum contaminant levels) have been established for the UCMR's; however, we are required to publish the analytical results of our UCMR in this report.

# The Future of Our Water and Service

The city of North Miami is committed to enhance our water service by focusing on our capacity needs for the future. One of the main projects essential to our water production is the rehabilitation of the Winson Water Plant at Sunkist Grove. Built in 1962, the rehabilitation project is necessary to make the plant more efficient and allow our water utility to continue to produce high-quality drinking water for future generations. The costs of the improvements, estimated at \$25 Million, are reflected in the current utility rates which were approved by the North Miami City Council in April 2012. The rehabilitation project includes the following upgrades:

- Lime softening process
- Accelerators
- Installation of new filtration system/pipe gallery
- Residuals handling system (sludge)
- High service pumping capacity
- Relocation/replacement of water storage tanks
- Improvements to chemical feed system
- Construction of a new operations building
- Raw water wells and transmission piping

The City acquired property necessary to relocate the water storage tanks. The City has also made improvements to the water distribution mains and replaced water meters and fire hydrants. Water service customers can also track water consumption and set up paperless statements, which helps to reduce the environmental impact of our operations. Additionally, Utility Billing customers can access account information such as payment history and account summaries online by visiting [eportal.northmiamifl.gov](http://eportal.northmiamifl.gov).

## The Mission of Our Water and Sewer Utility

The city of North Miami Water Utility is committed to providing an ample supply of high quality, safe drinking water to all North Miami customers by achieving the following objectives:

- 1) Protect public health by distributing safe, potable water to all customers.
- 2) Maintain adequate pressure and volume to meet fire protection requirements.
- 3) Keep the utility's cost as low as possible while complying with all applicable regulations.

The city of North Miami works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

## Pay Your Utility Bill Online

Visit [www.officialpayments.com](http://www.officialpayments.com) and select the LOCAL PAYMENT option.

The system will give you the total amount of your payment due including the appropriate convenience fee, obtain approval of the charge, as well as issue an onscreen confirmation number and a printable digital receipt.

| PARAMETERS                            | FEDERAL MCL (a) | FEDERAL GOAL (b) | STATE MCL | NORTH MIAMI YEAR TESTED | NORTH MIAMI WATER SYSTEM                  | MIAMI-DADE YEAR TESTED | MIAMI-DADE WATER MAIN SYSTEM                | MAJOR SOURCE  |
|---------------------------------------|-----------------|------------------|-----------|-------------------------|---|------------------------|---|---|
| <b>MICROBIOLOGICAL CONTAMINANTS</b>   |                 |                  |           |                         |   |                        |   |   |
| Total Coliform Bacteria (c)           | 5%              | 0                | 5%        | 15                      | 0.0%                                      | 15                     | 0.7%  | Naturally present in the environment                                    |
| <b>STAGE 2 DISINFECTION BYPRODUCT</b> |                 |                  |           |                         |   |                        |   |   |
| Total Trihalomethanes (ppb) (d)       | 80              | N/A              | 80        | 15                      | 32 (7 - 66)                               | 15                     | 71 (5 - 79)                                 | Byproduct of drinking water chlorination                                |
| Haloacetic Acid (ppb) (d)             | 60              | N/A              | 60        | 15                      | 26 (12 - 43)                              | 15                     | 37 (15 - 51)                                | Byproduct of drinking water chlorination                                |
| <b>DISINFECTANTS</b>                  |                 |                  |           |                         |   |                        |   |   |
| Chloramines (ppm) (e)                 | MRDL= 4         | MRDL= 4          | MRDL= 4   | 15                      | 2.2 (0.9 - 2.9)                           | 15                     | 2.5 (ND - 4.6)                              | Water additive used to control microbes                                 |
| Chlorine (ppm) (e)                    | MRDL= 4         | MRDL= 4          | MRDL= 4   | 15                      | N/A                                       | 15                     | N/A   | Water additive used to control microbes                                 |
| <b>INORGANIC CONTAMINANTS</b>         |                 |                  |           |                         |   |                        |   |   |
| Arsenic (ppb)                         | 10              | N/A              | 10        | 15                      | ND  | 15                     | 1.3 (0.5 - 1.3)                             | Erosion of natural deposits   |
| Barium (ppm)                          | 2               | 2                | 2         | 15                      | 0.0046                                    | 15                     | 0.007 (0.002 - 0.007)                       | Erosion of natural deposits   |
| Chromium (ppb)                        | 100             | 100              | 100       | 15                      | ND  | 15                     | 0.001 (ND - 0.001)                          | Erosion of natural deposits   |
| Copper (ppm) (f) at tap               | AL= 1.3         | 1.3              | AL=1.3    | 14 (g)                  | 0.035, 0 out of 60 homes (0%) exceeded AL | 15                     | 0.07, 0 homes out of 116 (0.0%) exceeded AL | Corrosion of household plumbing   |
| Fluoride (ppm)                        | 4               | 4                | 4         | 15 (h)                  | 0.53 (0.20 - 0.96)                        | 15 (h)                 | 1.0 (0.4 - 1.0)                             | Erosion of natural deposits; water additive which promotes strong teeth |
| Lead (ppb) (f) at tap                 | AL= 15          | 0                | AL = 15   | 14 (g)                  | 0.001, 0 out of 60 homes (0%) exceeded AL | 15                     | 4.0, 3 out of 116 homes (3%) exceeded AL    | Corrosion of household plumbing   |
| Nitrate (as N) (ppm)                  | 10              | 10               | 10        | 15                      | 0.14                                      | 15                     | 0.11 (0.01 - 0.11)                          | Erosion of natural deposits; Runoff from fertilizer                     |
| Sodium (ppm)                          | NE              | N/A              | 160       | 15                      | 22.2                                      | 15                     | 53 (36 - 53)                                | Erosion of natural deposits and sea water                               |
| <b>RADIOACTIVE CONTAMINANTS</b>       |                 |                  |           |                         |   |                        |   |   |
| Alpha Emitter (pCi/L)                 | 15              | 0                | 15        | 15                      | 0.3 (ND - 0.3)                            | 15                     | ND  | Erosion of natural deposits   |
| Combined Radium (pCi/L)               | 5               | 0                | 5         | 15                      | 0.7 (0.11 - 0.7)                          | 15                     | 0.4 (ND - 0.4)                              | Erosion of natural deposits   |
| Uranium (ug/L)                        | 30              | 0                | 30        | 15                      | 2.1 (1.4 - 2.1)                           | 15                     | 1.3 (0.1 - 1.3)                             | Erosion of natural deposits   |

AL = Action Level

MRDL = Maximum residual disinfection level

MRDLG = Maximum residual disinfection level goal

N/A = Not Applicable

ND = None Detected

pCi/L = PicoCuries per Liter

ppb = Parts per billion or micrograms per liter (ug/L)

ppm = Parts per million or milligrams per liter (mg/L)

( ) = Ranges (low - high) are given in parentheses where applicable

The value preceding the parentheses is the highest detected level reported for the monitoring period except for disinfection by products and disinfectants, where the running annual average is reported

NE= None Established

(a) MCL = Maximum Contaminant Level

(b) Federal Goal = MCLG = Maximum Contaminant Level Goal

(c) The MCL for total Coliform Bacteria states that drinking water must not show the presence of Coliform Bacteria in  $\geq 5\%$  of monthly samples. A minimum of 80 samples for total Coliform Bacteria testing are collected each month from the distribution system, in compliance with state regulation.

(d) North Miami's total of 16 samples for Total Trihalomethane and 16 samples for Haloacetic Acid, Miami Dade's Water Main System total of 32 samples for Total Trihalomethane and 32 samples for Haloacetic Acid testing per year from the distribution system, in compliance with state regulation. Compliance is based on a running annual average. This the value that precedes the parentheses.

(e) Compliance is based on a running annual average computed quarterly from monthly samples collected during Coliform Bacteria testing. 90th percentile value reported. If the 90th percentile value does not exceed the AL (ie., less than 10% of the homes have levels above the AL) the system is in compliance and is utilizing the prescribed corrosion control measures.

(g) The 2014 data presented is from the most recent testing conducted for these parameters in accordance with regulations

(h) Fluoride testing to demonstrate compliance with State regulations is required every three years in accordance with the State's monitoring framework. However, fluoride levels are monitored daily at the treatment plants where fluoride is added to promote strong teeth.

# Flood Hazard Information



## Be Prepared ... For The Unexpected

In 1968, Congress created the National Flood Insurance Program (NFIP) to provide affordable flood insurance to people who live in areas with the greatest risk of flooding; this area is called the Special Flood Hazard Area (SFHA). The NFIP makes federally backed flood insurance available in communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. This is important since property owners must purchase flood insurance for property located within a SFHA.

The Community Rating System (CRS) is a program developed by the Federal Insurance Administration to provide incentives for NFIP communities that implement more stringent floodplain standards than the minimum NFIP requirements. The CRS rewards these efforts with discounts on flood insurance premiums.

**The city of North Miami currently holds a Class 5 CRS rating. This classification equates to a 25% discount on new or renewing flood insurance policies for all SFHA properties and a 10% discount on policies for non-SFHA properties.**

In North Miami, there are over 6,000 flood insurance policies in effect. Annually the City's CRS Class 5 rating generates over \$1 million in savings on flood insurance premiums. Since flooding is the most common natural disaster, it is important that you obtain the maximum protection. You can purchase flood insurance no matter where you reside (in a high, moderate or low risk area) and there is no exclusion based on the type of ownership you represent (i.e. homeowner, renter or business owner). Since protecting your property from floods is important, the following information and tips may be of interest to you. Please refer to this fact sheet in the event of an impending hurricane, tropical storm or notification of projected heavy rainfall. During extended periods of heavy rainfall, low lying areas within the City are subject to flooding. This information is offered to help protect your property and reduce potential losses due to flooding.

# Flood Hazard

Arch Creek, Little Arch Creek, Biscayne Canal and Oleta River are the four major waterways that traverse the city of North Miami. The majority of our storm sewer system empties/discharges toward one of these four waterways or Biscayne Bay, which connects directly with the Atlantic Ocean. The waterways are influenced by tides that contribute to drainage and flood problems in the City. When there is a high tide or heavy rainfall, the storm sewer system will rapidly fill up from surface run-off and tidal waters; this could cause flood conditions in our streets, swale areas and lawns.

The city of North Miami can be divided into two major drainage areas: (1) the area west of the Biscayne Canal, and (2) the area east of the Biscayne Canal. The area west of the Biscayne Canal has primarily sandy soil and a very low water table elevation. The remainder of the City, east of the Biscayne Canal, consists of muck, marl and sand and primarily has high water table levels.

Your property may be elevated high enough that you have not experienced flooding. However, this may change in the future. Hurricane Andrew (1992), South Florida's most devastating storm was not a wet hurricane as compared to Hurricane Irene (1999) which registered 13 inches of rain in Miami-Dade County in a 24-hour period. In 2000, continuous rainfall from the October 3 "No Name" storm deposited more than 19 inches of rain in a 24-hour period. This storm inundated local canals and waterways, and caused unprecedented residential property damage and destruction for what was originally forecast as a severe area thunderstorm.

## Flood Warning System

The city of North Miami and Miami-Dade County utilize the National Weather Service (NWS) for flood notification. The NWS will issue flood advisories at least six (6) hours prior to expected heavy rainfall that could cause the drainage systems to overflow and create inland ponding of flood waters and the isolation of residential/business areas. Remain tuned to your local radio stations for up-to-date forecasts. In 2001, the City developed a citywide flood warning plan to provide early warning to neighborhoods that might experience flooding. Police vehicles will drive through the neighborhoods that may be impacted and use their sirens and loud speakers to issue warnings. Evacuation routes will be US Highway 1 (Biscayne Boulevard), 125 Street, 135 Street and Interstate 95.

## Flood Safety:

If you are advised to evacuate, turn off your utilities at the main switches and/or valves. Disconnect electrical appliances, but do

«Did you know that floods are the most common natural disaster? The following pages contain a few safety tips to consider if you are ever faced with flooding.»»

not touch any electrical equipment if you are wet or standing in water. Do not walk or drive through standing or flowing water; there may be a downed power line, sinkhole or even a canal that you are unable to see. Watch your step in flooded areas as slip and fall accidents are one of the leading causes of injuries after a storm.

### Flood Insurance:

All properties located in a Special Flood Hazard Area (SFHA) and secured by a federally backed mortgage must carry flood insurance. PLEASE NOTE: When purchasing flood insurance, the policy does not go into effect until 30 days after the purchase date. Please visit [www.floodsmart.gov](http://www.floodsmart.gov) for the most current information on flood insurance premiums and to locate a flood insurance agent in your area.

**Did you know that North Miami homeowners receive a 25% discount on flood insurance?** Because of the city of North Miami's rating under the National Flood Insurance Program's (NFIP) Community Rating System, policy holders who live in a Special Flood Hazard Area have enjoyed a 25 percent discount on their flood insurance premiums. A 10 percent discount on flood insurance is also available for those who live outside of special flood hazard area, except on preferred risk policies.

### Floodplain Development Permit Requirements:

All buildings under construction require permits. These permits should be obtained prior to commencement of construction activities. Contact the Building Department before you build, alter, regrade or add fill to your property. **The Building Department is located at 12340 NE 8 Avenue.** If you see building or fill being added to a property without a City permit posted, report the work to **305-895-9820**.

### Substantial Improvement Requirements:

The city of North Miami and the National Flood Insurance Program require that if the cost of reconstruction, rehabilitation, additions or other improvements to a building equals or exceeds 50 percent of the building's market value during a five-year period, the building must meet the same construction requirements as a new building. This includes elevating the lowest floor to current standards. Substantially damaged buildings must also be brought up to the same standards.

### Drainage System Maintenance:

Rainfall drains into floodplains such as the Everglades and our many wetlands, filters through these areas, and is eventually stored underground. Underground water is the only source of drinking and domestic water supply in South Florida. It is important that we protect and maintain these drainage areas; the quality of our drinking water depends on it! Furthermore, proper drainage helps reduce the risk of flooding. It is illegal for any direct or indirect entry of any solid, liquid or gaseous matter to enter the drainage system. The City inspects the drainage system on a regular basis and removes blockages that are found or reported. If you live near areas where waters flow, you can help in this process by keeping the banks clear of brush and debris. Reports of any violations should be made to the **Public Works Department at 305-895-9870**.

### Natural and Beneficial Functions:

The Oleta State Recreation Area and Mangrove Preserve, located between NE 135 Street and NE 163 Street and east of US Highway 1, has been designated as Environmentally Sensitive Land. These undisturbed natural areas of North Miami act as a natural storage area for flood waters; this helps reduce the possibility of flooding to nearby residences while helping to recharge the groundwater aquifer. Please help keep this area natural and beautiful by reporting any illegal dumping and littering violations to the **City's Code Compliance Department at 305-895-9832 or Miami-Dade County at 311**.

### Map Determinations / Elevation Certificates

The City provides Flood Insurance Rate Map (FIRM) determinations to let you know if you are in a flood hazard area and if you are required to carry flood insurance. If you would like a determination, contact the **Building Department at 305-895-9820**. You can also refer to the flood zone map on page 13 to determine if your property lies in a flood hazard area.

If you have determined that your house lies in a flood zone, a Flood Elevation Certificate can then tell you how high your house was built in relation to that flood zone.

These certificates are required for all new construction and substantial improvements to a structure. A Flood Elevation Certificate is an important document that every homeowner should have, and in case of a disaster, would demonstrate to authorities that your house is at or above the required elevation.

If the certificate shows that your house is lower, then the "50% rule" would apply to your house. What this rule simply means is, if your house is located in a flood zone and is damaged and/or improved to an amount greater than 50% of its market value, it will have to be raised to meet the current elevation requirement.

The city of North Miami collects the Federal Emergency Management Agency (FEMA) Elevation Certificate from home builders/developers as a requirement of their building permit. Elevation certificates are also required for substantially damaged structures. For more information, call the **Building Department at 305-895-9820 Monday-Friday, 7:30 a.m. - 3:00 p.m.**

### To obtain your flood elevation certificate:

If your home was built after 1995, you may be able to find your elevation certificate by visiting the North Miami Building Department. If your home was built after 1995, and you are unable to access the information, we may have the information on file but have not scanned the Certificate as of yet. For more information, call the **Building Department at 305-895-9820 Monday-Friday, 7:30 a.m. - 3:00 p.m.**

### Required disclosure in contracts for sale of real estate:

As per Sec. 8.5-45 of the city of North Miami Code of Ordinances, in any contract or any rider to the contract for the sale of improved real estate located within a Special Flood Hazard Area in the City, the seller shall include the following disclosure in not less than ten-point bold-faced type:

**THIS HOME OR STRUCTURE IS LOCATED IN A SPECIAL FLOOD HAZARD AREA. IF THIS HOME OR STRUCTURE IS BELOW THE APPLICABLE FLOOD ELEVATION LEVEL AND IS SUBSTANTIALLY DAMAGED OR SUBSTANTIALLY IMPROVED, AS DEFINED IN CHAPTER 8.5 OF THE NORTH MIAMI CODE OF ORDINANCES, IT MAY, AMONG OTHER THINGS, BE REQUIRED TO BE RAISED TO THE APPLICABLE FLOOD ELEVATION LEVEL.**

### Site Visits:

Upon request, a representative from the North Miami Public Works Department will visit your property to review flooding problems and to explain possible ways to alleviate and prevent flood damage. Also, if you have experienced flooding, drainage, sewer backup problems, or have seen illegal dumping of debris into City canals, lakes, or storm drains, please contact the **Public Works Department at 305-895-9870.**

## Flood Protection Tips

### Protecting Your Property:

If your lot is large enough, you should consider re-grading it or building a small floodwall. You can also place watertight closures over the doorways; however, these approaches only protect if flooding is not too deep. You can also consider elevating your home.

Flood-proofing, installing floodgates and making walls waterproof are among the common ways to structurally protect commercial property. Most times, residential structures are elevated higher than the anticipated floodwaters. For additional assistance on how to protect your property from flooding, you may contact the **North Miami Public Works Department at 305-895-9870**, or you may contact the **City's Building Official at 305-895-9820**. Additional information on how to perform residential retrofitting or commercial flood proofing is available at the North Miami Public Library in the City's Floodplain Management/ Community Rating System reference section.

### Minimizing Flood Damage:

Don't throw or dump anything into storm sewers or canals within the City. Even grass clippings and branches can accumulate and plug channels and drains. A plugged channel or storm drain cannot carry water when it rains. Clogged storm drains will cause water to back up into the street and may cause flooding. Every piece of trash contributes to flooding. If your property is next to a canal, help keep the banks clear of brush and debris. The City has a canal maintenance program which can help remove major blockages such as downed trees; please report any blockages to **305-895-9870**.

### Do Not Walk Through Flowing Water or Drive Through Flooded Area:

Drowning is the number one cause of flood deaths. Currents can be deceptive; six inches of moving water can knock you off your feet. If

you walk in standing water, use a pole or stick to ensure that the ground is still there. Also, do not disregard road barriers, the road or bridge may be washed out.

### **Stay Away from Power Lines and Electrical Wires:**

Electrocution is the number two flood killer. Electrical currents can travel through water. Report downed power lines to **Florida Power and Light; the number is 305-442-8770**. You can also report downed power lines to the **North Miami Police Department at 305-891-8111**.

### **Have Your Electricity Turned Off by FPL:**

Some appliances, such as television sets, hold electrical charges even after they have been unplugged. Avoid using appliances or motors which have gotten wet unless they have been taken apart, cleaned and dried.

### **Be Ready for the Unexpected:**

Place important documents inside plastic bags or other waterproof containers. Review your insurance policy to ensure it provides adequate coverage. Know what type of coverage you have. Most policies cover wind storm damage, but not flooding. Any policy change usually takes 30 days before going into effect.

### **Look Out for Animals, Especially Snakes:**

Small animals that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn things over and scare away small animals. Even domesticated animals may react differently after a disaster or storm and could bite or attack.

### **Look Before You Step:**

After a flood, the ground and floors are covered with debris, including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

### **Be Alert for Gas Leaks:**

If you use natural gas, use a flashlight to inspect for damage. Don't smoke or use candles, lanterns or open flames unless you know the gas has been turned off and the area has been ventilated.

### **If You Must Evacuate:**

If you are required to evacuate, try to move to the house of a friend or family member not affected by the impending high waters. If you live in a mobile home or are electrically dependent, plan to evacuate at the first notice of the emergency conditions. Rehearse your evacuation plan with all household members. Plan to leave early to avoid any traffic delays.

Register with the Miami-Dade County Emergency Evacuation Assistance Program at **311 or TDD at 305-468-5402** if you will need assistance to evacuate. Discuss these tips with your neighbors and friends. Try to have a prearranged plan designating how you can contact your neighbors. If you have to evacuate, inform each other of places where you will be staying and leave contact telephone numbers and addresses.

### **Securing Boats:**

If you own a boat, it's your responsibility to secure it. As a boat owner, you should make a plan in advance to move your boat or arrange for its storage. Check with a local marina for suitable alternatives. If possible, store it inside a garage or warehouse. If you must leave your boat outside, attach the trailer tongue to something firm in the ground, let the air out of the tires and make sure the boat is secure to the trailer. If possible, fill the bilge with water, which adds extra weight.

If you plan to keep your boat in the canal, be sure to double the dock lines, leaving sufficient space for the tidal range and put out extra anchors. Don't forget to remove all marine electronics or other unsecured equipment. Sail boaters should remove self-furling sails and Bimini tops. Boats on davits should be secured with extra tie lines and in such a manner to keep the boat from swinging during high winds.

### **Pet Safety Tips:**

Remember, most evacuation centers will not accept pets. So make plans in advance to board your pets in an animal kennel or with friends. If you plan to ask a friend, be sure to ask in advance. Make certain that your friend lives in an area that is not expected to be affected by the storm. Ask if their home would be open to you and/or your pet should a storm threaten.

Do not leave your pet home during a hurricane. A secure room and a few day's food and water do not necessarily mean safety for your pet. Many people returned home after Hurricane Andrew to find their pets missing. Keep a current picture of your pet to help identify it. After the storm, take caution in allowing your pet outdoors after the storm has passed. Familiar scents and landmarks will have been altered and your pet may become confused or lost. Downed power lines also present real dangers. Take precautions not to allow your pet to consume food or water which may have become contaminated.

# CITY OF NORTH MIAMI FLOOD ZONE MAP 2016



## LEGEND:

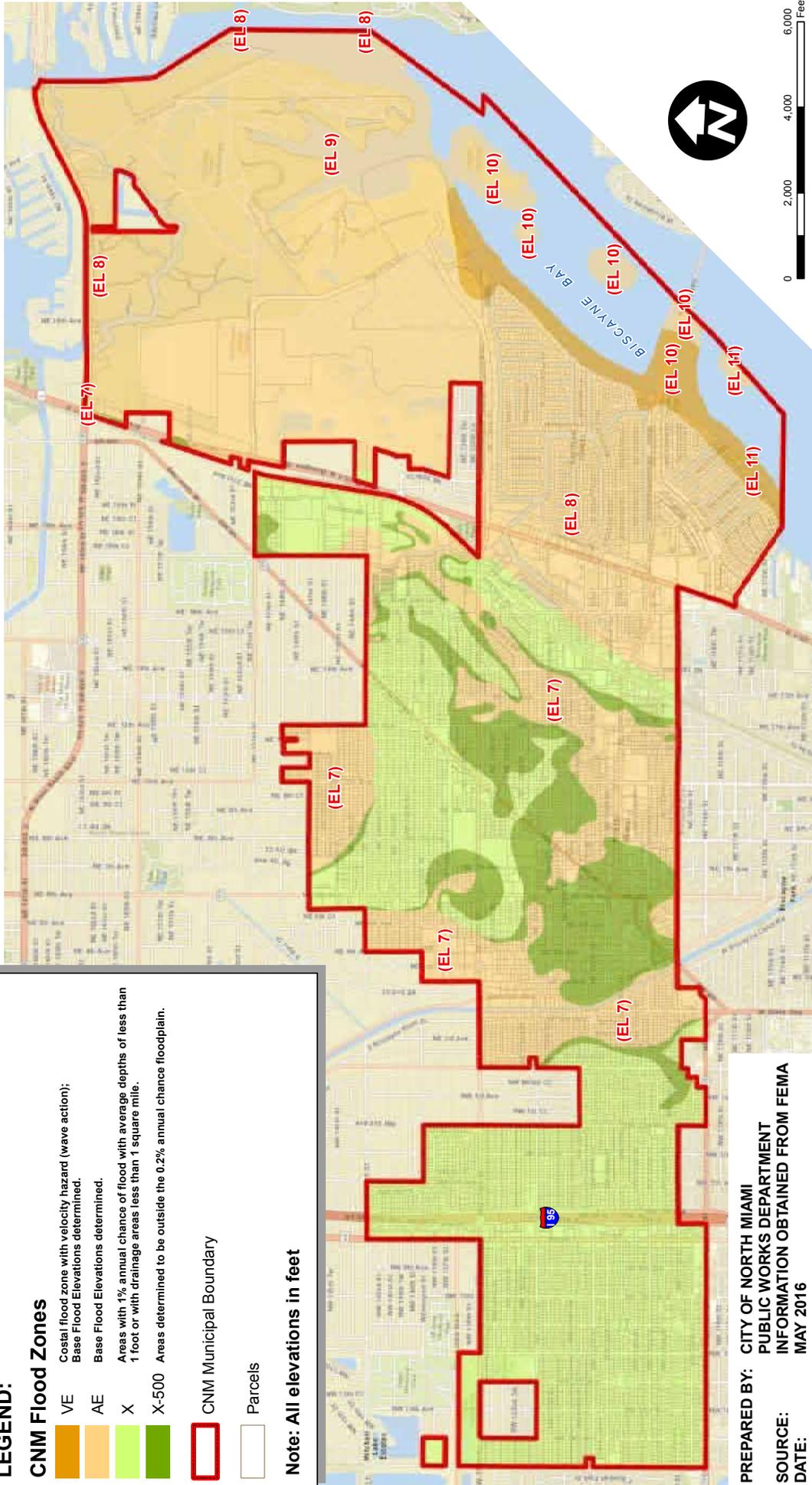
### CNM Flood Zones

-  VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
-  AE Base Flood Elevations determined.
-  X Areas with 1% annual chance of flood with average depths of less than 1 foot or with drainage areas less than 1 square mile.
-  X-500 Areas determined to be outside the 0.2% annual chance floodplain.

 CNM Municipal Boundary

 Parcels

**Note: All elevations in feet**



PREPARED BY: CITY OF NORTH MIAMI  
PUBLIC WORKS DEPARTMENT  
SOURCE: INFORMATION OBTAINED FROM FEMA  
DATE: MAY 2016

If you have questions about the information provided in this brochure, please feel free to call any of the numbers listed below.

### CITY OF NORTH MIAMI WINSON WATER PLANT AT SUNKIST GROVE

Operates 24 hours /day. Call to report after hours, City-related emergencies (flood, burst pipes, backflow problems etc.)

**305-953-2854 or 305-953-2857 (TDD)**

#### North Miami Utility Operation Center

Monday - Friday, 7:30 a.m. - 4:00 p.m. 305-895-9838

#### North Miami Office of Utility Billing

Monday - Friday, 8:00 a.m. - 5:00 p.m. 305-895-9880

#### (Payments) Central Cashier

8:00 a.m. - 4:00 p.m.

(credit cards now accepted with proper photo ID)

#### Miami-Dade County Environment Health Office

(Local contact for FDEP)

305-623-3500

#### Miami-Dade Department of Environmental Resources Management (DERM)

305-372-6789

#### Miami-Dade Regulatory and Economic Resources (RER)

305-372-6789

#### Florida Environment Protection Agency (EPA) Water Resource Management

1-850-245-8336

#### EPA Safe Drinking Water Hotline

1-800-426-4791

| <b>City of North Miami Water and Sewer Rates</b>   |   |  |   |
|--|---|--|---|
| The following rates are currently in effect for residential water and sewer use.   |   |  |   |
| SERVICE  | MONTHLY<br>5,000 GALLONS<br>USE INSIDE CITY | QUARTERLY<br>15,000 GALLONS<br>USE INSIDE CITY | QUARTERLY<br>15,000 GALLONS<br>USE OUTSIDE CITY |
| Water Base Charge (Flat Fee) (WT)  | \$12.51                                     | \$37.53  | \$37.53   |
| Sewer Base Charge (Flat Fee) (SR)  | \$16.88                                     | \$50.64  | \$50.64   |
| This example is based on a 5,000 gallon monthly or 15,000 quarterly gallon use.<br>Rates are based on consumption, see "Residential Water Consumption Rates" Chart below.  |   |  |   |
| Water Consumption Charge (WT)  | \$9.45                                      | \$28.35  | \$28.35   |
| Sewer Consumption Charge (STR)<br>(\$4.41 per 1,000 gallons x 85%)   | \$18.74                                     | \$56.23  | \$56.23   |
| County Service Fee (CSF)<br>8% of the total WT, SR, OWSS and STR)  | \$4.61                                      | \$13.82  | \$17.28   |
| Outside City Water & Sewer Surcharge (OWSS)<br>(25% of WT, SR and STR)   | n/a   | n/a  | \$43.19   |
| <b>Sample Minimum Water &amp; Sewer Bill (One Quarter)</b>   | <b>\$62.19</b>                              | <b>\$186.57</b>                                | <b>\$233.22</b>                                 |
| <b>Rates based on a 3/4" meter, with consumption up to 15,000 gallons every 3 months.</b><br>All outside City customers may also have a utility tax imposed by their municipality, which is 10%.<br>For City customers, the above reflects only water and sewer portion of their utility bill.<br>Other services such as stormwater, and sanitation are excluded for this presentation.<br><b>Current rates were effective November 1, 2014.</b> |   |  |   |

#### Residential Water Consumption Rates (per 1,000 gallons)

| MONTHLY         |        | QUARTERLY       |        |
|-----------------|--------|-----------------|--------|
| 0 - 5,000       | \$1.81 | 0 - 15,000      | \$1.81 |
| 5,001 - 12,000  | \$2.54 | 15,001 - 36,000 | \$2.54 |
| 12,001 - 20,000 | \$3.27 | 36,001 - 60,000 | \$3.27 |
| Above 20,000    | \$3.64 | Above 60,000    | \$3.64 |

#### ADDITIONAL SERVICE FEES

|  |           |
|--|-----------|
| Turn Off Fee, Illegal Turn On,<br>or Return Check Charge | \$20 each |
| Meter Tampering  | \$100     |
| Service Reconnect  | \$10      |
| Theft/ Illegal Device Used On Premises                   | \$450     |

Activate your account online at [NorthMiamiFL.gov](http://NorthMiamiFL.gov) under E-services, Citizen E-Portal. 14



North Miami City Hall  
776 NE 125 Street  
North Miami, Florida 33161

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# 2015 Water Quality Report

# 2016 Flood Hazard Information



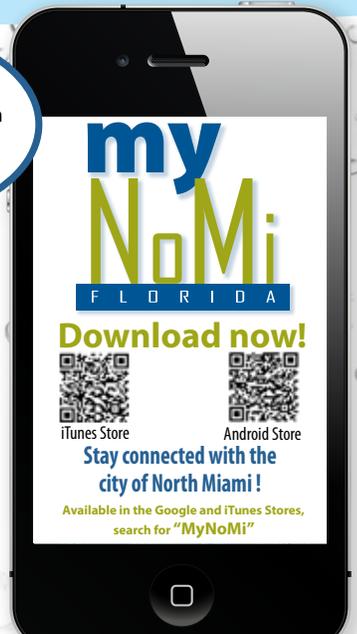
Details on your water service, flood protection and the National Flood Insurance Program.

With the MyNoMi app you can instantly report a problem to the city of North Miami directly from your mobile device or computer desktop.

Report clogged storm drain

Request fire hydrant repair

Report significant water pressure loss



To find out more visit our website at [NorthMiamiFL.gov/MyNoMi](http://NorthMiamiFL.gov/MyNoMi)