

OPERATION OF WATER SYSTEM

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OPERATION OF WATER SYSTEM

WHEREAS, Brunswick Regional Water and Sewer, H2GO is a body politic and corporate of the State of North Carolina created pursuant to Article 2, Part 2 of Chapter 130A of the North Carolina General Statutes; and

WHEREAS H2GO owns and operates a Water System for the purpose of providing potable water to retail Consumers in Northern Brunswick County, North Carolina; and

WHEREAS it is H2GO's goal to establish and charge reasonable and economical Water Rates and other charges which are sufficient for H2GO to operate and maintain the Water System as a financially self-sustaining enterprise and to assure continued, uninterrupted water service to all Consumers.

NOW, THEREFORE, the following Rules and Regulations for Operation of the Water System (the Rules and Regulations, as they may be hereafter amended, shall govern the rendering of water service by Brunswick Regional Water and Sewer, H2GO.

ARTICLE I

Definitions, Applicability and Amendments

Section 1.1 Definitions.

The following words as used in these Rules and Regulations shall have the following meanings.

Annual Budget shall mean any budget or amended budget of H2GO for each Fiscal Year.

Application for Water Service shall mean the written application required by Article II of these Rules and Regulations.

Backflow shall mean the reverse flow of water or other liquid, gases, or other substances into the distribution piping of H2GO from any source or sources.

Base Fee shall mean a monthly payment charged by H2GO to each Consumer for making Water Service available which shall be payable regardless of whether the Consumer takes any water from the Water System.

Commercial Service shall mean Water Service provided to a school, multi-family dwelling, mobile home park, business, industry, public building, or public park.

Consumer shall mean a person, firm, or corporation who makes an Application for Service to H2GO and connects to the Water System, whether or not the Consumer takes water from the Water System.



Consumer Service Facilities shall mean the water service facilities owned by a Consumer and commencing at the connection on the Consumers side of H2GO's meter and servicing the facilities of such Consumer, including pipe, private cut-off valves, Backflow prevention device, pressure reducing valve and other components.

Debt Service shall mean the sum of money required to pay installments of principal and interest on bond or other obligations of H2GO in a Fiscal Year.

District Service Facilities shall mean those facilities of the Water System which have been identified by H2GO in its sole discretion as directly or indirectly benefiting only the Consumer using them and generally include the water meter, meter box, and cut-off valve related to providing water service to a Consumer.

Fiscal Year shall mean the period commencing on July 1 of any year and ending on June 30 of the following year, or such other fiscal year which H2GO may adopt.

Impact Fees shall mean a fee levied and collected to cover the cost of future capital improvements made to the Water System from time to time.

Irrigation Service shall mean service restricted only for the purpose of irrigation.

Irrigation system shall mean a device or combination of devices having a hose, pipe, or other conduit installed in the landscape which transmits H2GO water, through such device or combination of devices H2GO water or a mixture of H2GO water and chemicals is drawn and applied to residential or commercial lawns, landscapes, or green space.

Rain sensor shall mean an automatic device that will override the irrigation cycle of an irrigation system, thus turning it off, when a predetermined amount of rain has fallen. To meet the requirements of this section, a rain sensor shall be adjusted to shut off irrigation systems when up to one-fourth inch of rain has fallen.

Leak Adjustment Policy shall mean the provisions for adjustment of sewer on account of leaks set out in Section 5.6 hereof

Meter Testing Charge shall mean the charge for which a Consumer is responsible for the testing of the meter measuring service to the Consumer.

Rates and Fee Schedule shall mean the Rates and Fee Schedule adopted by H2GO from time to time.

Reconnection Charge means a fee charged by H2GO for reconnection of water or irrigation service after it has been terminated for non-payment of a water bill or disconnected by request of the customer.

Residential Service shall mean service through a one inch or smaller meter serving a single-family dwelling or church.

Security Deposit shall mean amounts required to be deposited with H2GO as security for payment of water and sewer bills.

Tap-On Fee shall mean a separate charge compensating H2GO for installation of Brunswick Regional Water and Sewer Service Facilities required for service to a Consumer.

Water Rate shall mean the water rates of H2GO established pursuant to Article IV of these Rules and Regulations.

Water System shall mean the water supply facilities owned by H2GO at any time.

Section 1.2. Amendments

H2GO may from time to time amend these Rules and Regulations. No promise, agreement or representation by any agent or employee of H2GO shall be construed as amending these Rules and Regulations or binding upon H2GO. No agreement of H2GO shall be binding unless in writing, approved by H2GO Board and signed by its Chairman.

Section 1.3. Applicability

These Rules and Regulations, as amended, shall be binding on every Consumer.

ARTICLE II

Water Service

Section 2.1 Application for Service

Any potential Consumer desiring water service must make a written Application for Water Service to H2GO upon forms to be supplied by H2GO, setting forth in detail the type of service requested, the location of the property to be served, and such other information as H2GO may require.

Section 2.2 Initial Fees

The Application for Water Service shall be accompanied by any applicable Security Deposit, Tap-On Fee, Impact Fee, Capital Recovery fee and other required fees and charges.

Section 2.3 Rejection of Application

H2GO may reject an Application for Water Service if (i) the application seeks water service not within the classifications of service offered by H2GO, (ii) the providing of water service involves excessive service costs or is otherwise not feasible, (iii) the provision of water service may adversely affect the quality and quantity of water service H2GO is able to provide to its existing Consumers, (iv) the application is from a prospective customer who intends to resell the water, (v) the applicant is delinquent in payment of bills incurred for service previously supplied at the location for which water service is sought or incurred for service previously supplied at any other location, (vi) An application for Irrigation Service may be rejected for any reason.

Section 2.4 H2GO to Produce All Potable Water

So long as H2GO is capable of delivering to a Consumer, their potable water needs, a Consumer shall not acquire or produce water from any source, including wells, for any purpose other than H2GO without the express written consent of H2GO. The Consumer shall disconnect from all other water supplies and eliminate all cross connections before connecting with the Water System.

Section 2.5 Irrigation Service

Water supplied for Irrigation Service only may not be used by a Consumer for potable or domestic use. No pipes or other Consumer Service Facilities intended for potable water service shall be connected to any meter dedicated only for Irrigation Service. If it is discovered that water supplied through a meter dedicated solely for Irrigation Service is being used for potable



or domestic water use, the Consumer shall be required to pay the applicable Base Fee and Water Rates for potable water for the 12-month period immediately preceding the date it is discovered that the Irrigation Service has been used for potable or domestic water use or such shorter period of actual service if the Irrigation Service meter has been installed for a shorter period.

- a. *New installation.* Connections to Brunswick Regional Water and Sewer water supply system shall have a separate connection for an Irrigation System consisting of an approved meter, RPZ backflow device and rain sensor.
- b. *Existing systems.* Connections to Brunswick Regional Water and Sewer water supply system shall have a separate connection for an Irrigation System consisting of an approved meter, RPZ backflow device and rain sensor.

In accordance with North Carolina General Statutes, as of July 31, 2008, all new permanent in-ground irrigation systems *shall* be individually metered which will allow H2GO to monitor water usage in compliance with water conservation policies; and allow H2GO to disconnect irrigation systems that are not in compliance with those policies.

Section 2.6 Alternate Day Outdoor Irrigation (Effective January 1, 2022)

- a. *Definitions.* As used in this section, the following terms are defined as follows:
 - Irrigate the landscape, irrigation of the landscape, and irrigation* means the act of applying water to the outdoor landscape by any means involving sprinklers or automatic watering devices, including but not limited to the use of sprinklers attached to hoses, and installed underground sprinkler systems.
 - Landscape* means the natural or modified ground outside the border of the foundation wall of the constructed area of the property.
 - Person* means user of H2GO's potable water system.
 - Reclaimed or reused water* means the high-quality treated effluent from a wastewater treatment facility that is piped or distributed for irrigation.
- b. *Irrigation of landscape prohibited except in accordance with this section.* No person shall use potable water or reclaimed water supplied by H2GO's distribution systems to irrigate the landscape on any property except on alternate days assigned to that property for irrigating the landscape. The days of the week on which irrigation of the landscape can take place at a particular property shall be determined by that property's street address. **Even numbered property addresses shall limit irrigation to Wednesdays, Fridays, and Sundays. Odd numbered property addresses shall limit irrigation to**

- Tuesdays, Thursdays, and Saturdays.** The use of pond water, rainwater and well water is not governed by this section, nor is the watering of plant material and lawns by use of drip irrigation, watering cans, hand-held hoses, and other hand-held watering tools.
- c. Violations. Each day a violation occurs is a separate violation. Any person violating this section may be cited for each day on which a violation occurs.
- d. Penalties. Penalties for violation of this section are as set forth herein. H2GO may use anyone, or combination, of penalties and enforcement mechanisms. Imposition of one or more penalties for any violation shall not excuse any violation or permit it to continue.
1. Civil penalties. After the second written notice, a violation of this section shall subject the violator to a civil penalty of \$100. Each subsequent violation shall subject the violator to a civil penalty of \$250. Violators shall be issued a written citation that must be paid within two weeks of the service date of the citation. The citation may be served by personal delivery or by certified or registered mail, return receipt requested. The citation shall describe the violation and shall specify the amount of the civil penalty levied. The civil penalty is collectible in a civil action in the nature of debt. H2GO's attorney, or designee, is authorized to file suit on behalf of H2GO to collect any unpaid citations, and H2GO's Executive Director, Finance Director, or their designee, are authorized to verify and sign complaints on behalf of H2GO in such suits. The Utility Director, or Billing Manager, or other H2GO employee duly authorized to enforce the alternate day outdoor irrigation service may issue a citation for violations of this section.
 2. Criminal penalties. In addition to or in lieu of civil penalties, violation of this section shall constitute a misdemeanor.
- e. Emergency suspension of service. H2GO's Executive Director, or designee, may restrict or suspend water flow (water service) to any person who violates this section if the Director makes a water shortage declaration and/or that person has failed to comply on numerous occasions. The Director or designee shall make findings of fact to indicate the nature of the water emergency and the actions of that person that exacerbate the emergency situation. The Director may order:
1. That such water uses as irrigation of the landscape be suspended entirely for a specified period of time;
 2. That water flow to that person be restricted; or
 3. That water service to that person be suspended for a specified period of time.

4. Suspension of water service shall be performed in accordance with H2GO's policies, procedures, and practices. In the event that the Director orders that irrigation of the landscape be suspended for a specified period of time, the Director or designee shall have the right and privilege to access, on private property, if necessary, all necessary valves and flow restriction devices to isolate the flow of water to the irrigation system. The Director, or designee, shall also have the right and privilege of access specified above to disconnect water service at the meter, if the Director has ordered that water service be suspended for a specified period of time. The standard reconnection charge shall be paid for the reconnection of any water service terminated at the meter pursuant to the current H2GO policies and procedures.
- f. Exceptions. H2GO's Executive Director or designee may grant temporary exceptions permits to the provisions of this Section 2.6 for periods of up to 90 days for the establishment of new turf year-round or for the re-establishment of turf seasonally. Such temporary exceptions shall be granted based upon the valid application of a customer.

Section 2.7 Irrigation Controls and Rain Sensors *(Effective January 1, 2022)*

- a. Definitions. The following terms, when used in this section, shall have the meanings indicated below. Other terms used herein shall have the same definitions as provided in Section 2.6.

Irrigation system means a device or combination of devices having a hose, pipe, or other conduit installed in the landscape which transmits H2GO water, through which device or combination of devices H2GO water is drawn and applied to residential or commercial lawns, landscapes, or greenspace.

Rain sensor means an automatic device that will override the irrigation cycle of an irrigation system, thus turning it off, when a predetermined amount of rain has fallen. To meet the requirements of this section, a rain sensor shall be adjusted to shut off irrigation systems when up to one-fourth inch of rain has fallen.

- b. All new permanent in-ground irrigation systems must have:
 1. A programmable controller for adjustment of irrigation frequency and intensity.
 2. Rain sensors to automatically shut off irrigation system when up to one-fourth inch of rain has fallen.
- c. Required maintenance. All rain sensors shall be adjusted and set so that they automatically shut off the irrigation system after not more than one-fourth inch of rainfall

has occurred. All rain sensors shall be installed according to manufacturer's instructions in a location that will provide full exposure to rainfall such that accuracy of operation is assured and shall be maintained in good working condition. No person shall, with the intent of circumventing the purpose of this section, adjust either the rain sensor or irrigation system so that the rain sensor is not able to override and turn off the irrigation system after one-fourth inch of rain has fallen.

- d. Enforcement. The Executive Director or designee shall be responsible for enforcing this section. Whenever the Director determines that a violation of this section exists, the Director shall issue a written citation identifying the date, location and nature of the violation, the person cited, and specifying the penalty and the date by which the penalty must be paid.
- e. Penalties. Penalties for violation of this section are as set forth herein. H2GO may use anyone, or combination, of penalties and enforcement mechanisms. Imposition of one or more penalties for any violation shall not excuse any violation or permit it to continue.
 1. Civil penalties. After the second written notice, a violation of this section shall subject the violator to a civil penalty of \$100. Each subsequent violation shall subject the violator to a civil penalty of \$250. Violators shall be issued a written citation that must be paid within two weeks of the service date of the citation. The citation may be served by personal delivery or by certified or registered mail, return receipt requested. The citation shall describe the violation and shall specify the amount of the civil penalty levied. The civil penalty is collectible in a civil action in the nature of debt. H2GO's attorney, or designee, is authorized to file suit on behalf of H2GO to collect any unpaid citations, and H2GO's Executive Director, Finance Director, or their designee, are authorized to verify and sign complaints on behalf of H2GO in such suits. The Utility Director, or Billing Manager, or other H2GO employee duly authorized to enforce the alternate day outdoor irrigation service may issue a citation for violations of this section.
 2. Criminal penalties. In addition to or in lieu of civil penalties, violation of this section shall constitute a misdemeanor.
 3. Termination of service. Additionally, the utilities Director may restrict or terminate water service in accordance with law.

Section 2.8 Waste

A Consumer shall not willfully, or indifferently waste potable water, irrigation water, or reclaimed water delivered to it by H2GO.

ARTICLE III

Connections, Meters and Other Service Facilities

Section 3.1 Water Service Metered

Each unit shall be supplied through a separate meter or, if necessary and at the option of H2GO, through a separate battery of meters. Where a battery of meters is installed, the registrations of such meters shall be combined for billing purposes and shall be subject to a minimum charge equal to the combined minimum charge for the meters comprising the battery setting. Where, however, a Consumer is supplied through more than one service, unless otherwise agreed to by H2GO, the registration of the meter installed on each service shall be billed separately, subject to the minimum charge for each meter.

Section 3.2 H2GO to Make Connections

H2GO will designate for each Consumer the service location for all installations of the required H2GO Service Facilities (including meter) necessary for connections to H2GO's pipelines, and will specify the location, size, kind, and quality of all materials constituting the H2GO Service Facilities up to the connection on the Consumers side of H2GO's meter. Each Consumer shall provide H2GO's representatives and employees free, reasonable, and safe access to Brunswick Regional Water and Sewer Service Facilities. H2GO shall have no liability for failure to make a connection within any particular time period.

Section 3.3 Control and Maintenance of H2GO Equipment

- a. H2GO Service Facilities and all supply lines, and other equipment of H2GO shall be under its exclusive control, and no persons, other than authorized employees, agents, or contractors of H2GO, shall repair, change, tamper or interfere with them in any way. IT IS UNLAWFUL FOR ANY PERSON TO TAMPER WITH OR BYPASS A WATER METER.
- b. Meters and other H2GO Service Facilities will be maintained by H2GO at its expense insofar as ordinary wear is concerned, but damage to any meter or other H2GO Service Facilities due to hot water, freezing, vehicular traffic, or other external causes arising

out of or caused by the Consumers Service Facilities, operations, negligence, or carelessness shall be paid by the Consumer. The amount of such damage or the cost of repairs shall be added to the first water bill of the Consumer rendered after the amount of the damage or the cost of the repairs are ascertained by H2GO. Payment of such amount may be enforced in the same manner as payment of Water Rates.

- c. Connections, meters remain property of H2GO. All meters, meter boxes, pipes and other equipment furnished and used by Brunswick Regional Water and Sewer or other agency in installing any water or sewer connection shall be and remain the property of Brunswick Regional Water and Sewer.
- d. It shall be unlawful to plant, place or allow to become established, vegetation, other than low-growing grass, over or within three feet of any water meter box owned by H2GO. It shall also be unlawful to block or cover remote-read metering antennas with any type of landscaping ground cover including soil, grass, mulch, stone, or brick pavers. Metering antennas must remain exposed. H2GO will not be responsible for repair or replacement of any vegetation or ground cover removed to expose metering antennas. It will be H2GO's standard procedure to remove obstructions that interfere with remote-read metering functions. Violations of this Section shall be subject to a \$50 civil penalty after an initial written notice, and a \$100 civil penalty for each occurrence thereafter.

Section 3.4 Consumers Service Facilities

The Consumers Service Facilities shall be installed and maintained by the Consumer at its sole cost and expense but shall be subject to inspection and approval by H2GO before service is connected. The Consumers Service Facilities shall be installed in accordance with H2GO's specifications. H2GO does not assume responsibility for inspecting the Consumers Service Facilities or for any defects therein.

Section 3.5 Backflow

Consumers Service Facilities connected with Brunswick Regional Water and Sewer Service Facilities shall not be connected with pipes or fixtures supplied with water from any other source. Illegal or unapproved connections will be fined in accordance with the current fee schedule plus any State imposed fines. Each Consumer shall prevent the Backflow of water from his premises into the Water System. The Backflow prevention devices to be used shall comply with applicable State building codes and shall be approved by H2GO. Expense for all Backflow prevention equipment, installation, maintenance, and tests shall be the sole responsibility of each Consumer. There shall be no cross-connections between the Consumer

Service Facilities and any other sources of water. Upon the discovery of a cross-connection or the absence of a proper Backflow prevention device, water service shall be terminated until the violation is remedied. Each backflow device will be tested annually by a North Carolina certified backflow tester and results forwarded to Brunswick Regional Water and Sewer. Failure to have a backflow device tested will be fined in accordance with the current fee schedule.

Section 3.6 Tests

H2GO may at any time remove any meter for routine tests, repairs, or replacement. H2GO shall upon request of a Consumer, test the accuracy of the meter in use, provided the meter has not been tested by H2GO within a period of three (3) months previous of such request, and that the Consumer will agree to abide by the results of such test in the adjustment of disputed charges. If the meter is shown to have an error as described in Section 3.7 hereof, H2GO will replace or correct the meter at no charge to the Consumer. If the meter has no such error, the Consumer will pay a Meter Testing Charge in accordance with the Rates and Fee Schedule.

Section 3.7 Error

Whenever a test of a meter reveals it to have an average error of more than two percent (2%), H2GO shall bill or refund to the Consumer, as the case may be, such percentage of the amount reflected on bills covering the consumption indicated by the meter for the previous three (3) months, as the meter was found to be in error at the time of test, unless it can be shown to the satisfaction of H2GO that the error found had existed for a greater or lesser period, in which case the adjustment shall cover such actual period.

Section 3.8 Access

H2GO, its agents, contractors and employees shall have access at all reasonable hours to a Consumers premises for the purpose of operating and maintaining Brunswick Regional Water and Sewer Service Facilities and the Water System.

Section 3.9 Undeveloped Subdivisions

The construction of water mains, laterals, and H2GO Service Facilities by developers for service to undeveloped subdivisions shall be controlled by and subject to Appendix C, Water Distribution System Expansion Policy. All lines and fixtures shall be deeded of dedicated to

H2GO, all fees paid, approved from DENR and the H2GO Board of Commissioners prior to the installation of any meters.

Section 3.10 Application

Written Application for Water Service (on forms provided by H2GO) shall be made to H2GO by any person intending to construct Water Improvements in H2GO's district.

Section 3.11 Inspections of Required Improvements

Inspections during the installation of site improvements shall be made by the entity responsible for such improvements as required to certify compliance with approved site plans. No improvements shall be accepted for maintenance by H2GO unless and until the requirements regarding water and sewer improvements have been met.

Section 3.12 Site Plan Amendments

- a. Minor changes to the approved site plan, such as those resulting from field conditions, or which result in an equivalent or better performance may be approved by the Director in conjunction with the H2GO engineer.
- b. Significant changes to the approved site plan, as determined by the Director shall be resubmitted for review and approval by the approving authority as if they were a new application.
- c. Developer shall ensure accuracy of recorded maps against file copy of H2GO.

Section 3.13 Improvement Guarantees

- a. Security Required

In lieu of requiring the completion, installation, and dedication of all improvements prior to final plat approval, H2GO may enter into an agreement with the developer whereby the developer shall agree to complete all required water and sewer improvements. This agreement shall be accompanied by a survey plat indicating the property boundaries and lot lines (if applicable) of the area subject to the agreement. Once said agreement is signed by both parties and the security required herein is provided, the final plat may be approved by the Executive Director, if all other requirements of this rule are met. To secure this agreement, the developer shall provide, subject to the approval of the H2GO Board, either one or a combination of the following guarantees equal to 125% of the cost to install, test, certify, furnish as-builts, and make operational the water and sewer infrastructure improvements as provided herein:



1. Letter of Credit, Surety Performance Bond, or Cash Security
 - a. The developer shall deposit, 1) an irrevocable letter of credit issued by any financial institution licensed to do business in the State; or 2) a surety bond issued by any company authorized to do business in the State; or 3) other instrument readily convertible into cash at face value, either with H2GO or in escrow with a financial institution designated as an official depository of H2GO.
 - b. The amount of the deposit shall be equal to, either alone or in combination with any other security discussed in this section, to a total amount equal to 125% of the cost to install, test, furnish as-builts, and make operational the infrastructure improvements, as estimated, and sealed by the developer's engineer and approved by H2GO. If cash or other instrument is deposited in escrow with a financial institution as provided above, then the developer shall file with H2GO an agreement between the financial institution and the developer guaranteeing the following:
 - c. That said escrow account shall be held in trust until released by H2GO and may not be used or pledged by the developer in any other matter during the term of the escrow; and
 - d. That in the case of failure on the part of the developer to complete said improvements the financial institution shall, upon notification by H2GO and submission by H2GO to the financial institution of an engineer's estimate of the amount needed to complete the improvements, immediately either pay to H2GO the funds estimated to complete the improvements, up to the full balance of the escrow account, or deliver to H2GO any other instruments fully endorsed or otherwise made payable in full to H2GO.
2. The developer shall choose the duration of the performance guarantee with the minimum duration of one year. If the improvements are not complete and the current performance guarantee is expiring, the performance guarantee shall be extended, or a new performance guarantee issued for an additional minimum one year period until such required improvements are complete.
 - a. The expiration of a performance surety does not constitute satisfactory installation of the improvements.
 - b. An extension with or without a reduction in estimated quantities in a performance guarantee required by this section may be approved by the Executive Director.

- c. The form of an extension shall remain at the election of the developer, but any change in performance guarantee will require a new agreement with the H2GO Board of Commissioners.
- d. Any extension of a performance guarantee necessary to complete required improvements shall not exceed 125% of the reasonably estimated cost of completion for H2GO to install, test, certify, create as-builts, and make operational the improvements of the remaining incomplete infrastructure still outstanding at the time the extension is obtained.
- e. Any extension with a change of estimated quantities of the performance guarantee shall provide a reasonable estimated cost in the same manner indicated in subsection (1) (b).
- f. Unit pricing shall be current market rate of materials and labor which H2GO would be able to complete if the guarantee is defaulted.

b. Default

The developer shall demonstrate reasonable, good faith progress toward completion of the required improvements that are subject of the performance guarantee or any extension. Upon default, meaning failure on the part of the developer to complete the required improvements in a timely manner as spelled out in the performance guarantee or escrow agreement, then the surety, or the financial institution holding the escrow account shall pay all or any portion of the financial guarantee or escrow fund to H2GO up to the amount needed to complete the improvements based on an engineering estimate approved by H2GO. Upon payment, H2GO may expend such portion of said funds as it deems necessary to complete all or any portion of the required improvements.

c. Release of Guarantee Security

1. The Board of Commissioners may release a portion of any security posted as the improvements are completed, approved, certified, and proper deed and dedication is complete.
2. In the event that the applicant wishes to occupy any building or any portion of any building prior to the completion of the required site improvements, the financial guarantee guaranteeing improvements shall be retained by H2GO until the remaining required improvements are completed.
3. Regardless of the accepted performance guarantee in effect at the time, H2GO will not permit final service connections until the improvements are certified to the State, and roadways, adjacent to or leading to the utility improvements, meet the minimum

standards necessary for emergency vehicle access.

Section 3.14 Reserved

Section 3.15 Requirements for Water Improvements

Water Improvements shall meet the following requirements:

- a. All Water Improvements shall be designed and constructed in conformance with design standards for the System as designated and maintained by H2GO.
- b. The applicant shall employ a competent engineer at its expense to prepare plans for the Water Improvements. The engineer shall be registered in the State of North Carolina. H2GO will provide base sheets and one (1) set of technical master specifications (at cost) to be used to prepare the construction documents for the Water Improvements.
- c. The completed plans and specifications shall be submitted to H2GO for review by the Technical Review Committee (TRC) for approval prior to submittal to other agencies. Approval of plans and specifications by H2GO does not relieve the applicant from obtaining any and all approvals necessary for the construction of the Water Improvements.
- d. H2GO shall have the authority to release construction plans and specifications approved by it. Applications to other agencies shall be submitted in the name of H2GO. The applicant will pay all application fees.
- e. The applicant shall engage a licensed and reputable contractor, acceptable to and approved by H2GO, to construct the Water Improvements.
- f. H2GO shall inspect the Water Improvements during and after construction. Prior to placing Water Improvements in service, the applicant shall satisfy H2GO that they were built in accordance with the approved plans and specifications. The applicant's engineer will certify in writing that infiltration rates are within the limitations required in the specifications and the system has been installed in accordance with the plans and specifications.
- g. The applicant's engineer will modify the original approved drawings as necessary to provide accurate reproducible as-built drawings, both drawn and digital, to H2GO upon completion of construction.

- h. Through appropriate legal documents such as deeds and recorded plats, the applicant shall dedicate to H2GO all Water Improvements and all easements, rights-of-way, or fee simple parcels on which the Water Improvements may be located. When applicable, three-party encroachment agreements must be obtained from public authorities prior to the commencement of construction. Minimum easement width shall be thirty (20) feet unless the Technical Review Committee (TRC) determines that exceptional topographic characteristics justify a greater width.
- i. The applicant shall provide H2GO a notarized certification of payment of all contractors.
- j. The applicant shall indemnify H2GO for any damages or injury to persons or property by reason of the Sewer Improvements, their construction, maintenance, or repair.
- k. No construction of any Water Improvements shall be initiated until approvals have been granted by H2GO and all other appropriate agencies.
- l. Any subdivisions to which or in which the Water Improvements are to be made must have been approved by the County or the municipality in which the subdivision is located, as the case may be.
- m. No provisions in this section shall be construed to obligate H2GO to accept any Water Improvements that fail to comply with the requirements of these Rules and Regulations.

Section 3.16. Main Line Extensions

- a. All water main and/or lateral lines shall meet all requirements of the Rules for Governing Public Water Systems, North Carolina Administrative Code and any supplemental rules Brunswick Regional Water and Sewer may from time to time adopt.
- b. Residents in a subdivision and/or unofficial subdivision may apply to H2GO, install, or have installed a water main and/or laterals in their subdivision as follows:
 - 1. Apply to H2GO, for determination of impact fees, tap fees and/or meter relocation fees that may be applicable to said project.
 - 2. Provide H2GO with engineered plans and specifications, sufficient to meet the H2GO's requirements, apply and obtain approval of the project from the State of North Carolina and H2GO's Board of Commissioners.
 - 3. Provide Brunswick Regional Water and Sewer easements in which the main and lateral line(s) are to be placed.
 - 4. Install the water lines in accordance with the approved plans and specifications and provide H2GO with an Engineering Certification and a 'Deed of Dedication' upon

- completion. Pay all impact, capital recovery, tap and/or meter relocation fees.
5. Or: Petition Brunswick Regional Water and Sewer, provide H2GO with the method of funding, of obtaining necessary easements for the right of way, pay all the then determined cost of design and prior to construction, all estimated construction costs, impact, tap and/or meter relocation fees.
- c. In the event of an environmental and or health hazard H2GO may at its discretion, apply for and obtain necessary permits, determine the cost of, and the manner in which said cost shall be distributed, collect and/or set in motion the method of collection of the determined costs, have said water lines engineered, installed, and placed in service.

ARTICLE IV

Rates, Fees, and Charges

Section 4.1 Water Rates

H2GO shall annually, or more frequently if financial or other conditions dictate, establish Base Fees and Water Rates at least sufficient to cover all expenses for the ensuing Fiscal Year as identified in the Annual Budget. Base Fees and Water Rates will be determined in view of water use projections for each ensuing Fiscal Year. Base Fees and Water Rates thus established shall be billed to Consumers by H2GO as hereinafter provided on the basis of actual metered water used.

H2GO's Annual Budget for each Fiscal Year may include:

- a. Operating Expense Components
1. Current expenses.
 2. An operating maintenance reserve.
 3. Appropriations to repair/replacement reserves for purposes of timely correction of any mechanical/physical deficiencies which arise out of normal system use or which are not correctable from insurance proceeds or other monies readily available to H2GO.
 4. Debt Service, including such debt service reserves and other funds, accounts and reserves as may be required by instruments of debt authorization and such other amounts as may be required to comply with the covenants contained in instruments of debt authorization.
 5. An allowance for depreciation.

6. Such other components as H2GO shall direct in the exercise of good business and operating practices for comparable facilities.
- b. Capital Expense Components: Such other components regarding Water System development and growth as H2GO shall identify as being necessary or appropriate.

Section 4.2 Other Fees and Charges

H2GO may from time to time adopt and impose Tap-On Fees, Impact Fees, Capital Recovery, and such other rates and charges as it deems appropriate, the amount of which shall be set forth in the Rates and Fee Schedule. Tap-On Fees, Capital Recovery fees and Impact Fees shall be paid at the time of application for service. **No meters shall be installed until all fees have been paid.**

Section 4.3 Security Deposit

Each Customer may be required to make a Security Deposit at the time of applying for service in the appropriate amount set forth in the Deposit Policy in appendix B.

Section 4.4 Rates and Fee Schedule

The Rates and Fee Schedule is incorporated in and shall be a part of these Rules and Regulations.

Section 4.5 Out of District Rates

Service outside Brunswick Regional Water and Sewer annexed area will be determined on a case-by-case basis since the cost of service to developments could vary greatly and rates for each development can be established by actual cost.

Section 4.6 System Development Fees

System Development Fees (SDF), based on the most recently adopted System Development Fee Analysis and in accordance with North Carolina legislative guidance, will be charged and collected for all new connections to the water and sewer systems.

- a. An Equivalent Dwelling Unit (EDU) will be the basis of calculations for System Development Fees (SDF) to be charged for each new connection to H2GO's water and sewer systems. A daily flow design rate of 210 gallons per day (gpd) is one (1) EDU.

- b. Each single-family residential connection will be charged at the published water and sewer SDF rate as one (1) Equivalent Dwelling Unit (EDU).
- c. Multi-family residential units with individual unit meters will be charged at the published water and sewer SDF rate as 0.67 EDUs for one- and two-bedroom units, and one EDU for 3 or more-bedroom units.
- d. Multi-family residential units with master-meters will be charged at the published water and sewer SDF rate as 0.67 EDUs for one- and two-bedroom units, and one EDU for 3 or more-bedroom units.
- e. Non-Residential connections will be charged at the published water and sewer SDF rate for each EDU calculated from design flow rates provided by 15A NCAC 02T .0114.

Section 4.7 Interim Equivalent Dwelling Units (EDU)

- a. Multi-family residential units with master-meters may elect to request an adjusted daily flow design rate pursuant to 15A NCAC 02T .0114(f) to calculate an Interim Equivalent Dwelling Unit as the basis for System Development Fees to be charged and collected for the development.
- b. Non-residential units may elect to request an adjusted daily flow design rate pursuant to 15A NCAC 02T .0114(f) to calculate an Interim Equivalent Dwelling Unit as the basis for System Development Fees to be charged and collected for the development.

Section 4.8 Water System Development Fee True-Up

- a. If an owner or developer of new connections elects to request an Interim EDU as described above, H2GO will require the owner/developer to execute a System Development Fee True-Up Agreement that will be recorded with the Brunswick County Register of Deeds. The SDF True-Up Agreement will be binding upon and inure to the benefit of H2GO and the owner/developer and each of their respective future owners and successors in interest. The executed SDF True-Up Agreement will run with the property.
- b. If an owner or developer of new connections elects to request an Interim EDU as described above, H2GO will evaluate the development's usage records two (2) years after the development receives its certificate of occupancy and has made connection(s) to H2GO's water and sewer systems. The highest average daily

usage in a consecutive 12-month period will be used as a True-Up evaluation to determine whether the development's usage is more or less than the calculated Interim EDUs.

- c. If the average daily usage from the True-Up evaluation is more than the calculated Interim EDUs, the owner or developer will owe H2GO additional System Development Fees at the published water and sewer SDF rates in effect at the time of the True-Up evaluation.
- d. H2GO will provide the owner/developer with notice of its determinations regarding the True-Up evaluation. Additional water and sewer System Development Fees, if applicable, will be invoiced within thirty (30) days of such notice.
- e. No SDF Refunds – If the average daily usage from the True-Up evaluation is less than the calculated Interim EDUs, H2GO will not refund System Development Fees paid for the water and sewer connection(s).

ARTICLE V

Billing and Collection

Section 5.1 Bills

Commencing upon a Customer connecting to the Utility System, H2GO will mail each customer a bill each month covering charges during the previous period. Bills shall be calculated based on the charges in accordance with H2GO's Rates and Fee Schedule. All bills shall be sent to the billing address shown on the Application for Service unless a Customer notifies H2GO in writing of some other address to which bills are to be mailed. Failure to receive bills will not be considered justification for nonpayment of amounts due or permit an extension of the date when the account would be considered delinquent. H2GO may at any time correct any bills for service, which may be in error or in accordance with its Leak Adjustment Policy.

Utility Services shall be billed in the regular billing period. Opening and closing Bills may be pro-rated.

Each unit of a multi-family parcel and each mobile home in a mobile home park will be treated as a single-family unit and each unit will be responsible for all applicable Rates, Charges, Fees, and penalties pursuant to these Rules and Regulations.

Section 5.2 Billing Start Date



- a. Residential User, Commercial User, or Mobile Home Park Owner shall be liable to pay Brunswick Regional Water and Sewer's User Rates and the billing period shall commence on the date by which the Owner of the structure being served, or Mobile Home Park is required by these Rules and Regulations to connect to the System. If the Owner or Mobile Home Park fails to connect to the System within the time required, the Owner (rather than the User of the structure being served, if different from the Owner) shall pay the User Rates until connection to the System has been made and thereafter the User of the structure who receives the bill for the structure shall be responsible for paying the User Rates. Any User Rates required to be paid by a Customer before the Owner's premises are connected to the System shall be charged a Base Charge.
- b. The billing start date for Industrial Users shall be the date such User connects to the System.

Section 5.3 Payment

By applying for service, a Customer agrees to pay the rates, fees and charges of H2GO in accordance with these Rules and Regulations. Bills are due when rendered. A bill for any billing period shall be considered delinquent if not paid by the Customer on or before the 10th day of the month immediately following the end of the billing period for which the bill is rendered. If the payment is not received in the office before the 11th day of the month, a 10% late fee will be applied. Any bills not paid by the last day of each month will result in suspension of service. At any time after a Customer has presented a bad check/draft for the payment of any bill, H2GO requires that payment be made only in cash, by money order, or by certified check. If customer has two (2) returned checks in a six (6) month period, H2GO may suspend check writing privileges for a period of six (6) months.

Section 5.4 Uncollectible Accounts Receivable

Accounts not collected within 180 days/6 months of the due date shall be moved from accounts receivable to an Uncollected Accounts file. Uncollected accounts will be turned over to a collection agency and a 35% fee will be added.

Section 5.5 Broken Seals, Meter Failures

If a meter seal is removed other than by H2GO personnel or if a meter fails to register correctly or is stopped for any cause, the Customer agrees to pay each billing period an estimated water rate based on the average usage for the immediately preceding 12-month period, or such

shorter period of actual use.

Section 5.6 Adjustments for Leaks

Adjustments for leaks are for the sewer only. Any Customer desiring an adjustment for a leak from a line break shall notify H2GO of the existence of the leak and provide evidence of its repair. Upon determining that the leak existed, and the duration of the period of the leak, H2GO will, to the extent during the period the Customer's usage exceeds the average monthly usage of the Customer for the past 12 months (or such shorter period of actual use). Once the amount is determined, deduct the excess amount from the average on the sewer bill only for up to a maximum of two consecutive months. **Irrigation systems and Faulty toilets do not qualify for leak adjustments.** H2GO reserves the rights to require the Customer to have a licensed plumber verify the existence of a leak and to deny any adjustment without the approval of H2GO's board of Directors. Only two adjustments per year are allowed.

Section 5.7 Pool Adjustments

For pool adjustments there will be a minimum of 6000 gallons usage and this shall be limited to one time per calendar year deducted from sewer only.

ARTICLE VI

Reductions, Interruptions and Discontinuances

Section 6.1 Limitations on Service / Curtailment

H2GO's ability to deliver water may be affected by the amount of water available to it or the capacity of the Water System. If H2GO is required to reduce the amount of water delivered to Consumers, it will reasonably attempt to reduce or diminish the supply of water to each Consumer in the same proportion or ratio as the supply to other Consumers is reduced.

Section 6.2 Temporary Interruptions

H2GO may at any time shut off the water in the Water System in case of an accident or for the purpose of making connections, alterations, repairs, and changes or for any other lawful reasons. It is the obligation of Consumers and not H2GO to protect the Consumers facilities connected with the Water System so that damage will not occur if water is shut off.

Section 6.3 Other Interruptions

In addition to other rights and remedies afforded to H2GO herein, H2GO may also without notice discontinue or curtail service to prevent fraud or abuse, on account of a violation of these Rules and Regulations, to protect the public health, legal process, direction of public authorities, or for strike, riot, fire, flood, accident, or any other unavoidable cause.

Section 6.4 Irrigation Service

H2GO may curtail or terminate Irrigation Service at any time for any reason.

Section 6.5 Shut Off for Default

If payment of a water bill including penalties and /or miscellaneous charges are not paid before the last day of the month in which it is due, water service may without notice be suspended by H2GO. If the water bill remains unpaid for 60 days after service is suspended, then service may without notice be terminated. H2GO may also discontinue service after 30 days' notice when a Consumer violates any of these Rules and Regulations and fails to remedy or cure such violation within the 30-day notice period.

Section 6.6 Restoration of Service

- a. When water service has been suspended for nonpayment of water bills, water service will be restored upon payment in full of all delinquent bills, any current bill which is due but not delinquent, and the payment of a Reconnection Charge in accordance with H2GO's Rates and Fee Schedule. Reconnections will be made only between the hours of 9:00 a.m. and 5:00 p.m.
- b. When water service has been terminated (as opposed to suspended) for failure to pay a water bill, in addition to the requirements of subparagraph (a) of this section, the Consumer shall execute a new application for service and pay a new Security Deposit (which H2GO may elect to double pursuant to the provisions of Article IV hereof).

Section 6.7 Termination of Service by Consumer

H2GO will terminate service at the request of a Consumer upon written request for termination signed by the Consumer.

Section 6.8 No Liability

H2GO shall have no liability on account of interruptions of service, erroneous shutoffs, failure to deliver water or failure to deliver water at any particular (high or low) pressure.

ARTICLE VII

Errors In Bill

Section 7.1 Consumer Requests

A Consumer considering his water bill in error shall, before the bill becomes delinquent, deliver in person to H2GO's office a written statement of the reasons he considers the bill to be in error. Upon receiving such notice, H2GO will hold the disputed bill in abeyance and present the matter for consideration to H2GO Board at its next regularly scheduled meeting, at which meeting the consumer shall be entitled to appear and present the reasons he believes the bill to be in error. The Consumer shall pay the bill in full within 10 days after the Board makes its final decision concerning the matter.

Section 7.2 Late Notice

If a Consumer presents to H2GO a written notice required by *Section 7.1* above after the bill has become delinquent but before service is discontinued for nonpayment of the bill, the Consumer may nevertheless have the matter considered at the next available H2GO Board meeting provided that the Consumer pays the bill in full at the time of giving the notice. If H2GO Board makes an adjustment in the bill, a refund will be made to the Consumer or credit made to the Consumers account within ten **(10) days** after the Boards final decision.

ARTICLE VIII

Water Shortage Response Plan

Introduction

Brunswick Regional Water and Sewer henceforth referred to as the "BRWS" and the board of commissioners, henceforth referred to as the "commissioners" shall have the charge to protect Brunswick Regional Water and Sewer public water supply and to ensure that the benefactors of this system are assured an adequate supply of water even in times of water shortage. Water shortage can be the result of climatic conditions causing drought or it may be the result of a



physical breach in the County's and BRWS's water supply system (i.e., mechanical failure, cut or broken water main, etc.) impeding the flow of potable or raw water supply.

Section 8.1 Authorization

The Brunswick Regional Water and Sewer Director shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section 8.4 are met. In his absence, the Assistant Director will assume this role.

Section 8.2 Notification

The following notification methods will be used to inform water system employees and customers of a water shortage declaration: employee e-mail announcements, notices at municipal buildings, notices in water bills. Required water shortage response measures will be communicated through PSA announcements on local radio and cable stations. Declaration of emergency water restrictions or water rationing will be communicated to all customers via local media.

Section 8.3 Public Comment

Customers will have several opportunities to comment on the provisions of the water shortage response plan. A draft plan will be available at the BRWS offices for customers to view. Customers will be notified per section 8.2. All revisions to the plan will be available at least 30 days prior to an adoption vote by commissioners of Brunswick Regional Water and Sewer.

Section 8.4 Levels of Response

Three levels of water shortage response are outlined in the table below. The three levels of water shortage response are: Stage 1- Water Conservation Alert, Stage 2- Water Shortage Warning, Stage 3- Water Shortage Danger. A detailed description of each response level and corresponding water reduction measures follow below.

- a. *Declaration of water emergency.* The director or his authorized representative is authorized to declare that a water emergency exists. Depending on the severity of the emergency, voluntary (Stage 1) and mandatory (Stage 2 and Stage 3) staged water use restrictions as described in this article shall be imposed upon all water customers.
- b. *Staged water use restrictions.*

1. Stage 1--Water Conservation Alert. A Stage 1 water shortage emergency may be declared in the event of an immediate water shortage, as so declared by state and/or local officials, or when there are three (3) consecutive days when water demand exceeds eighty (80) percent of the water production capacity. Water production capacity shall be defined as the maximum volume of water that meets or exceeds state and federal standards that the water treatment process can produce during a twenty-four (24) hour period. Water production capacity can vary depending on system component reliability and/or raw water conditions. During a declared Stage 1 water shortage emergency the following voluntary water conservation practices shall be encouraged:
 - a. Inspect and repair all faulty and defective parts of faucets and toilets.
 - b. Use shower for bathing rather than bathtub and limit shower to no more than five (5) minutes.
 - c. Do not leave faucets running while shaving, brushing teeth, rinsing, or preparing food.
 - d. Limit the use of clothes washers and dishwashers and when used, operate fully loaded. Operate dishwashers after the peak demand hours of 6:00 p.m. to 10:00 p.m.
 - e. Limit lawn watering to that necessary for plant survival. Water lawns before the peak demand hours of 6:00 a.m. to 10:00 a.m.
 - f. Water shrubbery the minimum required. Water shrubbery before the peak demand hours of 6:00 a.m. to 10:00 a.m.
 - g. Limit vehicle washing to a minimum.
 - h. Do not wash down outside areas such as sidewalks, driveways, patios, etc.
 - i. Install water saving showerheads and other water conservation devices.
 - j. Use disposable and biodegradable dishes where possible.
 - k. Install water saving devices in toilets such as early closing flappers.
 - l. Limit hours of water-cooled air conditioners.
 - m. Do not fill swimming pools and wading pools.
2. Stage 2--Water Shortage Warning. A Stage 2 water shortage emergency may be declared in the event of an immediate water shortage, as so declared by state and/or local officials, or when there are two (2) consecutive days when water demand exceeds ninety (90) percent of the water production capacity. Water production capacity shall be defined as the maximum volume of water that meets or exceeds state and federal standards that the water treatment process can produce during a twenty-four (24) hour period. Water production capacity can vary depending on system component reliability

and/or raw water conditions. During a declared Stage 2 water shortage emergency the following activities shall be prohibited:

- a. Watering lawns, grass, shrubbery, trees, flower, and vegetable gardens except by handheld hoses, container, or drip irrigation system. A person who regularly sells plants will be permitted to use water on their commercial stock. A golf course may water their greens. State and county licensed landscape contractors may water any plants by handheld hose or drip irrigation under a written warranty.
 - b. Filling swimming or wading pools either newly constructed or previously drained. Make up water for pools in operation will be allowed.
 - c. Using water-cooled air conditioners or other equipment, in which cooling water is not recycled, unless there are health or safety concerns.
 - d. Washing any type of mobile equipment including cars, trucks, trailers, boats, or airplanes. Any persons involved in a business of washing motor vehicles may continue to operate.
 - e. Washing outside surfaces such as streets, driveways, service station aprons, parking lots or patios.
 - f. Washing the exterior of office buildings, homes, or apartments.
 - g. Using water for any ornamental fountain, pool, pond, etc., unless recycled.
 - h. Serving drinking water in food establishments such as restaurants or cafeterias, unless requested to do so by a customer.
 - i. Using water from a public or private fire hydrant for any reason other than to suppress a fire or other public emergency or as authorized by director or his authorized representative.
 - j. Using water to control or compact dust.
 - k. Intentionally wasting water.
 - l. Commercial and industrial water customers shall achieve mandatory reductions in water usage through whatever means are available. A minimum reduction of twenty (20) percent shall be the target; however, a greater target reduction percentage may be required depending on the severity of the water shortage emergency. Compliance with the reduction target shall be determined by the director or his authorized representative. Variances to the target reduction may be granted by director or his authorized representative to designated public health facilities.
3. Stage 3--Water Shortage Danger. A Stage 3 water shortage emergency may be declared in the event of an immediate water shortage, as so declared by state and/or local officials, or when there is one (1) day when water demand exceeds one hundred

(100) percent of the water production capacity. Water production capacity shall be defined as the maximum volume of water that meets or exceeds state and federal standards that the water treatment process can produce during a twenty-four (24) hour period. Water production capacity can vary depending on system component reliability and/or raw water conditions. During a declared Stage 3 water shortage emergency the following activities shall be prohibited, in addition to activities prohibited under Stage 2:

- a. Watering lawns, grass, shrubbery, trees, and flowers.
 - b. Washing motor vehicles at commercial car wash establishments.
 - c. Watering any vegetable garden except by handheld hose, container, or drip irrigation.
 - d. Commercial and industrial water customers shall achieve mandatory reductions in water usage through whatever means are available. A minimum reduction of fifty (50) percent shall be the target; however, a greater target reduction percentage may be required depending on the severity of the water emergency. Compliance with the reduction target shall be determined by the director or his authorized representative. Variances to the target reduction may be granted by the director or his authorized representative to designated public health facilities.
 - e. In the event that the prohibition of the activities listed above is not sufficient to maintain an adequate supply of water for fire protection, all use of water for purposes other than maintenance of public health and safety shall be prohibited. Residential water use shall be limited to the amount necessary to sustain life through drinking, food preparation and personal hygiene.
- c. *Compliance plan during Stage 2 and Stage 3 emergencies.* The director or his authorize representative may require that commercial and industrial water customers prepare plans detailing measures to be taken by them to achieve mandatory reductions in daily water usage during Stage 2 and Stage 3 emergencies. Such plans shall be completed within sixty (60) calendar days after receipt of notice to prepare them.

Section 8.5 Triggers

Brunswick Regional Water and Sewer is provided water solely by purchase from the Brunswick County. When Brunswick County declares a water shortage Brunswick Regional Water and Sewer is required to do so as well. During this time Brunswick Regional Water and Sewer Director will stay in close contact with Brunswick County and follow their triggers.

Section 8.6 Enforcement



The provisions of the water shortage response plan will be enforced by Brunswick Regional Water and Sewer personnel. Violators may be reported to the BRWS’s main office. Violations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

Water Shortage Level	First Violation	Second Violation	Third Violation
Stage 1	N/A	N/A	N/A
Stages 2	Warning	\$250	Discontinuation of Service
Stage 3	\$250	Discontinuation of Service	Discontinuation of Service

Penalties for violation of mandatory restrictions. Any user who is found to have failed to comply with any of the mandatory restrictions set forth in these regulations may be fined in accordance with the list of rates and charges currently in force for each violation.

Authority to discontinue service. Pursuant to the provisions of this article, water service may be temporarily discontinued for failure to comply with the mandatory restrictions in this article. All applicable penalty fees may be applied in the event of such service suspensions. In the event of continued non-compliance with this article, removal of meter and service will be deemed proper, and service will be discontinued and tap fees and account deposits shall be forfeited.

Appeals by customers of penalties and termination of service. Any user who receives a penalty and/or has service terminated as a result of violations of the mandatory restrictions in this article may appeal upon notification to the director. The director shall be the final decision maker for appeals and shall transmit a written copy of the final decision by registered or certified mail within seven (7) days after notification.

Adoption and enforcement of plan by public or private water system. Public or private water systems purchasing water from the BRWS shall adopt and enforce this entire article as a condition of water service. Upon declaration of a water shortage emergency, the public or



private water systems shall enforce the appropriate water use restrictions for the level of declared emergency.

Termination of restrictions. A water emergency declaration will expire when the director or his authorized representative determines that the condition that causes the emergency has abated. The expiration or cancellation of a water shortage emergency declaration shall be promptly and extensively publicized.

Section 8.7 Variance Protocols

Applications for water use variance requests are available from the BRWS Office. All applications must be submitted to the BRWS Office for review by the Director or his designee. A decision to approve or deny individual variance requests will be determined within two weeks of submittal after careful consideration of the following criteria: impact on water demand, expected duration, alternative source options, social and economic importance, purpose (i.e., necessary use of drinking water) and the prevention of structural damage.

Section 8.8 Effectiveness

The effectiveness of the Brunswick Regional Water and Sewer water shortage response plan will be determined by comparing the stated water conservation goals with observed water use reduction data. Other factors to be considered include frequency of plan activation, any problem periods without activation, total number of violation citations, desired reductions attained, and evaluation of demand reductions compared to the previous year's seasonal data.

Section 8.9 Reclaimed water usage policy

- a. *Purpose.* The purpose of this policy is to set forth the principles and guidelines to encourage and permit the usage of reclaimed water for irrigation of golf courses, development common areas, commercial landscaped areas, public parks, agricultural lands, forestry lands, and residential lots.
- b. *Background.* This reclaimed water usage policy is an integral part of an overall water conservation program to reduce the demand for potable water used for irrigation. The demand for potable water used for non-potable uses such as irrigation continues to increase. Due to limited availability of water resources, BRWS must use all water as a resource.

- c. *Definitions.* *Available* means that a reclaimed water distribution main is located within the right-of-way of the street or road adjacent to the property requesting installation of a meter for irrigation.
1. **Cross connection** means any physical connection that would allow reclaimed water back into the potable water system or potable water into the reclaimed water system.
 2. **Department** shall mean the Brunswick Regional Water and Sewer H2GO.
 3. **Director** shall mean the director of the Brunswick Regional Water and Sewer H2GO.
 4. **Irrigation system** shall mean a device or combination of devices including pipes, emitters, sprinkler heads, and similar devices that transmit water from BRWS system to landscaped areas including lawns and shrubbery.
 5. **NC DENR Rules** shall mean the regulations for reclaimed water and water reuse as stated in the North Carolina Administrative Code and as amended from time to time.
 6. **Reclaimed water** means water that has been treated at a water reclamation facility to a level that meets or exceeds the water quality requirements defined by the NC DENR Rules.
 7. **Reclaimed water distribution system** shall mean all equipment, piping, valves, pumps, and associated materials and equipment used to transmit reclaimed water from the wastewater treatment plant to the reclaimed water user.
 8. **Reclaimed water transmission main** means those conduits used to supply reclaimed water from the wastewater treatment plants to potential reclaimed water users.
 9. **Service line shall** mean that conduit from the reclaimed water distribution system to the property line.
- d. *Connection.*
1. After construction of a reclaimed water transmission main such that reclaimed water is available to the property, the property owner may connect to the reclaimed water system upon submission of plans and specifications for the proposed connection, receipts of all required permits, and approval of the connection by the director. Reclaimed water may be used only for irrigation or groundwater recharge purposes and shall be in accordance with NC DENR Rules and local ordinances rules and regulations. Any other use must be approved in advance by the director. The property owner shall be responsible

for compliance with all applicable rules and regulations associated with the use of the reclaimed water on their property.

2. Connection to the reclaimed water system by developments with existing irrigation systems is encouraged but not required. BRWS may require developments with more than five hundred (500) residential units planned for construction and approved for construction after the effective date of this policy to utilize irrigation systems capable of using reclaimed water to irrigate required common areas.

e. Rates, rules, and regulations.

1. The board of commissioners shall have the authority to establish rates for the connection and use of reclaimed water. All connection fees and usage charges shall be included in the public utilities schedule of fees and charges ordinances and may be amended as required.
2. The board of commissioners shall have the authority to establish such rules and regulations concerning the connection to the reclaimed water distribution system and use of reclaimed water as required for the system to operate within the NC DENR Rules and local ordinances. The board of commissioners shall have the authority to establish priorities for the distribution of reclaimed water and establish priorities for the extension of reclaimed water transmission mains.

f. Conditions for use of reclaimed water.

1. BRWS may terminate, discontinue, or suspend reclaimed water service in accordance with this policy and other BRWS policies in the event that the customer fails to pay their bill by the due date, tampers with the metering device, violates any NC DENR reclaimed water permits, has a cross connection with the potable water system, or conducts any other action or has any other condition that is detrimental to the potable water system or reclaimed water system.
2. The property owners will be required to install an RPZ backflow prevention device on a potable water system that serves the property receiving reclaimed water. The property owner is responsible for the installation, maintenance, and testing of this backflow prevention device.
3. BRWS utilities personnel shall have the right to enter the property to inspect the irrigation system for the purposes of determining compliance with this policy.
4. BRWS reserves the right to interrupt or temporarily discontinue service to any portion or all of the reclaimed water system as deemed necessary by the

director. In addition, the director shall have the authority to establish and regulate service pressures within the reclaimed water distribution system. Delivery pressures may vary widely and be insufficient to use for direct irrigation without improvements to the property owner's irrigation system.

5. BRWS shall have the right to refuse service to any property owner and makes no guarantee of future service to any property owner.

Section 8.10 Return to Normal

When water shortage conditions have abated and the situation is returning to normal, water conservation measures employed during each phase will be decreased in reverse order of implementation. Permanent measures directed toward long-term monitoring and conservation will be implemented or continued so that the community will be in a better position to prevent shortages and respond to recurring water shortage conditions.

Section 8.11 Revision

The water shortage response plan will be reviewed and revised as needed to adapt to new circumstances affecting water supply and demand, following implementation of emergency restrictions, and at a minimum of every five years in conjunction with the updating of our Local Water Supply Plan and Brunswick County's water shortage response plan.

ARTICLE IX

Reclaimed Water System

Section 9.1 Purpose and Intent

It is H2GO's purpose and intent to establish a reclaimed water system and to extend such system to certain areas of the District where the H2GO Board of Commissioners determines that the extension of such a system is practical and economical. Once such reclaimed water is made available to a property, use of reclaimed water will be required for landscape and grounds irrigation systems and will be permitted for other authorized uses. The reclaimed water distribution system will be constructed in sections and phases to provide reclaimed water service to designated areas as determined by H2GO and pursuant to the terms and conditions set forth herein.

Section 9.2 Reclaimed Water System Part of H2GO Utility System

- a. The reclaimed water system is a part of the H2GO utility system. Reclaimed water facilities are generally recognized by federal and state regulations as part of the sewer system because of their reliance on highly treated wastewater effluent as a supply source. Reclaimed water is, however, a valuable resource that offsets potable water demand, and thus has a relationship with both water and sewer systems. All provisions of Articles I through VIII shall apply to the reclaimed water system unless otherwise indicated herein. To this end, the terms water system, water pipe, H2GO water, waterworks, water service, water distribution system, water, water meters, water mains and other references to the water system contained in Articles I through VIII shall be deemed to include and mean such portions of the reclaimed water system, unless in conflict with the provisions contained in this Article IX, or specifically excluded herein.
- b. For the purpose of this article, the definitions contained in this section shall apply unless otherwise specifically stated.

Available means that a reclaimed water distribution main is or will be located at a property line of a property on which an irrigation system is installed or proposed, or a property proposed to be serviced with reclaimed water.

Cross-connection means any physical connection or arrangement which would allow the movement of fluids between the potable water system and any other piping system, such as the reclaimed water system.

Customer means the H2GO reclaimed water customer and the actual user of the reclaimed water.

Director means the Executive Director of H2GO and his or her designee.

Distribution mains means those conduits used to supply reclaimed water to service lines from transmission mains.

Irrigation system means a device or combination of devices having a hose, pipe, or other conduit installed in the landscape which transmits H2GO water, through which device or combination of devices H2GO water is drawn and applied to residential or commercial lawns, landscapes or greenspace.

North Carolina rules means the regulations for reclaimed water and water reuse as stated in the North Carolina administrative code section 15A NCAC 2H.0200 as amended from time to time.

Potable water means potable water treated, produced, purchased and/or delivered by the H2GO water system.

Reclaimed water means water that has received at least advanced secondary treatment, meets water quality requirements defined by the North Carolina rules and is reused after flowing out of a wastewater treatment facility.

Reclaimed water system means all equipment, piping, valves and associated hardware and other appurtenances, including meters, from the customer's reclaimed water meter back to, and including the reclaimed water production and pumping facility.

Service line means that conduit for reclaimed water from the distribution main to the property line.

Transmission mains means those conduits used to supply reclaimed water from the pumping station or treatment plant to the distribution mains.

Section 9.3 Generally

- a. Once reclaimed water is available to property, the property owner must connect to the reclaimed water system upon submission of a fully executed application as required by the Director, and upon compliance with all other H2GO requirements. Reclaimed water may be used for irrigation purposes and for other non-potable water purposes in accordance with federal, state, and local ordinances, rules, and regulations. If reclaimed water is to be used for any purpose other than land irrigation, the customer shall obtain prior approval of such use from the Director.
- b. As an incentive to development of an initial demonstration phase of this project, customers that have signed letters of intent for the initial phase of the reclaimed water project may have conditions in their agreements with H2GO that are different from the conditions in this article.

Section 9.4 Mandatory use of reclaimed water for irrigation systems

It is unlawful to use potable water for irrigation systems 90 days after a property owner or water customer has been notified by the Director that reclaimed water is available to a particular property or site ("notification of availability").

Section 9.5 Connection to reclaimed water system

- a. Customers with existing irrigation systems. When reclaimed water becomes available to a property, the Director shall provide written notice to the H2GO water customer located on that property of such availability. Customers with existing irrigation systems using potable water who desire to continue to maintain such systems using H2GO water, must apply for reclaimed water in accordance with the application procedures specified in this article and must disconnect said systems from H2GO's potable water system and connect to the reclaimed water system within 90 days of such written notice of availability. The Director shall have the authority to grant temporary exemptions from this section in the event of reclaimed water shortages or for other good cause, in which case the temporary exemption shall not exceed 180 days.
- b. Customers with new irrigation systems. All new irrigation systems designed to use H2GO water constructed after the effective date of this article must connect to the reclaimed water system at construction, if reclaimed water is available to the property. Such connection must be made prior to, or contemporaneously with connection of other improvements on the property to H2GO's potable water system. If reclaimed water is not available to a property at the time of construction of an irrigation system, connection to the reclaimed water system must be made within 90 days of notice of availability from the Director.

Section 9.6 Reclaimed water service application requirements

Applications for reclaimed water service shall be made and will be accepted in the same manner as applications for water and sewer service, subject to the provisions of this article.

Section 9.7 Installation of lines and easement dedications

H2GO will be responsible for reclaimed water service lines to the meter box, provided easements or other access is available to H2GO. The applicant shall be responsible for all costs and expenses of installation and maintenance of the reclaimed water line and all appurtenances from the meter box on their property. In the event H2GO is required to locate the reclaimed water meter or any other part of H2GO's reclaimed water system on applicant's property, the applicant shall dedicate land or perpetual easements on, over and through applicant's land for the reclaimed water transmission and distribution facilities as necessary to provide reclaimed water service to applicant's property. No reclaimed water lines or other facilities will be installed or accepted by H2GO for maintenance unless such lines or facilities are in a dedicated public right-of-way or dedicated public easement. Any new easement shall be adequately sized to accommodate construction and maintenance of the reclaimed water

line or system component. No obstruction of any kind shall be planted, built, or otherwise created within the limits of the easement or right-of-way without written permission of the Director.

Section 9.8 Meter requirements

Metering of reclaimed water is mandatory. There will be no exceptions to this requirement. Metering requirements are outlined in this chapter and in H2GOs standard specifications.

Section 9.9 Permits

All applicants for reclaimed water, at the applicant's own cost and expense, shall apply for, obtain and meet all requirements of all necessary permits, licenses, conditions, and approvals for the initial construction and the operation of the onsite reclaimed water facilities and the use of reclaimed water.

Section 9.10 Authority to adopt rules and regulations

The H2GO Board of Commissioners may by resolution establish reasonable rules and regulations concerning the reclaimed water system and the use of reclaimed water. Additional standard policies and procedures may be adopted concerning the reclaimed water system. Insofar as there is not conflict with the provisions of this article, H2GO policies and procedures pertaining to potable water service shall apply.

Section 9.11 Authority to adopt rates, fees and charges

The H2GO Board of Commissioners may by resolution, duly adopted after a public hearing, establish rates, fees and charges for the reclaimed water system and provide terms and conditions for the payment and collection of same. After the initial establishment of a reclaimed water rate, and fee or charge for connection to the reclaimed water system, these rates, fees and charges will normally be reviewed and adjusted annually as part of the annual budgeting cycle.

Section 9.12 Priorities for extending reclaimed water service

The H2GO Board of Commissioners will establish priorities for extension of the reclaimed water system, as it does for water and sewer system extensions. The H2GO Board may establish priorities for extension of service outside the utility service boundaries.

Section 9.13 Conditions of reclaimed water service use

- a. General. H2GO may terminate, discontinue, or suspend reclaimed water service in accordance with this chapter and H2GO policies and procedures in the event of (i) a violation of this article or H2GO regulations, policies or procedures, (ii) failure to pay bills by the due date, (iii) tampering with any utility service, (iv) the existence of a plumbing cross-connections with another water source, or (v) any customer condition or action that may be detrimental to H2GO's potable water system, its reclaimed water system, or its wastewater collection and treatment system. H2GO may, at its option, suspend service until the condition is corrected and all costs due H2GO are paid. These costs may include delinquent billings, connection charges, and payment for any damages caused to the potable water, reclaimed water, or wastewater collection or water distribution system. The details of H2GO's procedures for discontinuing service are found in this chapter and in appropriate H2GO policies and procedures.
- b. Cross-connection control. There shall be no cross connections between the reclaimed water system on a customer's property and H2GO potable water system. In all premises where reclaimed water service is provided, the public or private potable water supply shall be protected by an approved cross-connection control plan. The plan for cross-connection control must be submitted with the application for reclaimed water service and must receive the prior approval of the Director. In the event a cross-connection is found, the cross-connection shall be immediately disconnected, and reclaimed water service will be suspended. Before reconnection of the reclaimed water service, the public potable water system shall be protected against the possibility of future cross connections to the Director's satisfaction. Additional protection against cross-connection may be required as specified by the Director at the customer's expense before reclaimed water service is resumed.
- c. Right of entry. The Director may enter any premises to determine the presence of any cross connections or other potential hazards to H2GO's potable water system. Each customer of reclaimed water service shall, by completing the reclaimed water application, give written consent to such entry upon the customer's premises.

Section 9.14 Service interruption

H2GO reserves the right to temporarily discontinue service to any portion or all of the reclaimed water system as deemed necessary by the Director. In addition, the Director shall have the authority to establish schedules which restrict the use of reclaimed water at certain times in order to reduce maximum pressure demands on the system and to regulate usage during

periods of limited reclaimed water availability.

Section 9.15 Maintenance by customer

The property owner and/or customer shall be responsible for the maintenance of all reclaimed water lines and appurtenances on the customer's property, unless the meter was, of necessity, located beyond the customer's property line, in which case the customer shall be responsible for all reclaimed water lines and appurtenances beyond the meter. H2GO reserves the right to disconnect the service to any property when the reclaimed water system and appurtenances are not properly maintained. In addition, should the customer require reclaimed water at different pressures, or different quality, or in any way different from that normally supplied by H2GO, the customer shall be responsible for the necessary devices to make adjustments and for obtaining approval by the Director.

Section 9.16 Conservation of water resources

It is the policy of H2GO to wisely use natural resources. In addition to all other conservation measures contained in this chapter H2GO may terminate, suspend or discontinue reclaimed water service if customer usage of reclaimed water varies substantially from the overall loading rates outlined in the customer's application for service.

Section 9.17 Right to refuse service

H2GO makes no guarantees that reclaimed water service will be provided, or, once provided, continued. H2GO may, at any time, and from time to time, refuse to extend or suspend or terminate service on the basis of a use detrimental to the system, an inadequate supply of reclaimed water, the failure to pay required fees, or for any other reason which, in the judgment of the Director, will cause the extension not to be to the benefit of H2GO.

Section 9.18 Ownership by H2GO

In accordance with Articles I through VIII, all reclaimed water facilities and appurtenances within dedicated public easements when constructed or accepted by H2GO, shall become and remain the property of H2GO. No person shall by payment of any charges provided herein, or by causing any construction of facilities accepted by H2GO, acquire any interest or right in any of these facilities or any portion thereof, other than the privilege of having their property connected thereto for reclaimed water service in accordance with this article and any amendments thereof.

APPENDIX A

Cross Connection Control Program

CURRENT APPROVED BACKFLOW PREVENTION ASSEMBLIES AND DIAGRAMS ARE ON FILE AT BRUNSWICK REGIONAL WATER AND SEWER OFFICE AT 516 VILLAGE RD. LELAND, NC.

These regulations are enacted in accordance with the Federal Safe Drinking Water Act (P.L. 93-523), the North Carolina State Administrative Code (Title 15A, Subchapter 18C), and the North Carolina State Plumbing Code (Volume II) as they pertain to cross connections with the public water supply.

A. Objectives of Program

The specific objectives of the Cross-Connection Control Program for Brunswick Regional Water and Sewer

- a. To eliminate all cross connections within Brunswick Regional Water and Sewer public potable water supply.
- b. To protect the public potable water supply of Brunswick Regional Water and Sewer against actual or potential contamination by isolating within each consumer's water system, contaminants or pollutants which could, under adverse conditions, backflow through uncontrolled cross connections into the public water system.
- c. To eliminate or control existing cross connections, actual or potential, between the potable water system(s) of consumers and non-potable or industrial piping system(s).
- d. To provide a continuing inspection program of cross connection control which will systematically and effectively control all actual or potential cross connections which may be installed in the future.

B. Responsibilities

1. State of North Carolina

The North Carolina Department of Environment, and Natural Resources (NCDENR) Division of Environmental Health has the responsibility for promulgating and enforcing laws, rules, regulations, and policies to be followed in carrying out an effective Cross Connection Control Program.

The N.C. Division of Environmental Health also has the primary responsibility of ensuring the water purveyor operates the public potable water system free of actual or potential sanitary hazards, including unprotected cross connections. They have the further responsibility of ensuring that Brunswick Regional Water and Sewer provides an approved water supply at the service connection to the consumer's water system and, further require the installation, testing, and maintenance of an approved backflow prevention assembly on the service connection when required.

2. Brunswick Regional Water and Sewer

Except as otherwise provided herein, Brunswick Regional Water and Sewer's responsibility is to ensure a safe water supply beginning at the source and continuing throughout all of the public water distribution system, including the service connections, and ending at the point of delivery to the water system(s) of consumers. In addition, Brunswick Regional Water and Sewer shall exercise reasonable vigilance to ensure that the consumer has taken the proper steps to protect the public potable water system. To ensure proper precautions are taken, Brunswick Regional Water and Sewer is required to determine the degree of hazard or potential hazard to the public potable water system, to determine the degree of protection required, and to ensure proper containment protection through an on-going inspection program.

When it is determined that a backflow prevention assembly is required for the protection of the public system, Brunswick Regional Water and Sewer shall require the consumer, at the consumers expense, to install an approved backflow prevention assembly at each service connection, to test immediately upon installation and thereafter at a frequency determined by Brunswick Regional Water and Sewer, to properly repair and maintain such assembly or assemblies and to keep adequate records of each test and subsequent maintenance and repair, including materials and/or replacement parts.

3. Brunswick County Plumbing Inspections

The code enforcement department of Brunswick County has the responsibility to not only review building plans and inspect plumbing as it is installed, but also to prevent cross connections from being designed and built into plumbing systems. Where the review of building plans suggests or detects the potential for cross connection being made an integral part of the plumbing system, the plumbing inspector has the responsibility, under the North Carolina Plumbing Code, for requiring that such cross connections be either

eliminated or provided with backflow prevention equipment approved by the N.C. Building Code.

The plumbing inspector's responsibility begins at the point of delivery or where the service line approaches private property and continues throughout the entire length of the consumer's water system. The plan inspector should inquire about the intended use of water at any point where it is suspected that a cross connection might be made or where one is actually called for by the plans. When such is discovered, it shall be mandatory that a suitable, approved backflow prevention assembly approved by the North Carolina Plumbing Code be required by the plans and be properly installed. The primary protection assembly for containment purposes only shall have approval from Brunswick Regional Water and Sewer, the North Carolina Plumbing Code, and the NCDENR.

4. Responsibility: Consumer

Each consumer has the primary responsibility of preventing pollutants and contaminants from entering his potable water system(s) or Brunswick Regional Water and Sewer's public potable water system. The responsibility of each consumer starts at the point of delivery to the consumer from the public potable water system and includes all of the consumer's water system(s). Each consumer, at the consumer's own expense, shall install, operate, test, and maintain approved backflow prevention assemblies as directed by Brunswick Regional Water and Sewer. Each consumer shall maintain accurate records of tests and repairs made to backflow prevention assemblies and shall maintain such records for a minimum period of three (3) years. The records shall be on forms approved by Brunswick Regional Water and Sewer and shall include the list of materials or replacement parts used, and the dates of all tests and repairs and the identity of the contractor, if such work is not performed by the consumer. Following any repair, overhaul, re-piping, or relocation of a consumer's backflow prevention assembly, the consumer shall have it tested to ensure that it is in good operating condition and will prevent backflow. Tests, maintenance, and repairs of backflow prevention assemblies shall be made by a certified backflow prevention assembly tester.

5. Certified Backflow Prevention Assembly Tester

When employed by the consumer to test, repair, overhaul, or maintain backflow prevention assemblies, a backflow prevention assembly tester will have the following responsibilities:

The tester will be responsible for making competent inspections and for repairing or overhauling backflow prevention assemblies and making reports of such repair to the

consumer and responsible authorities on forms approved by Brunswick Regional Water and Sewer. The tester shall be equipped with and be competent to use all the necessary tools, gauges, manometers, and other equipment necessary to properly test, repair, and maintain backflow prevention assemblies. It will be the tester's responsibility to ensure that the original manufactured parts are used in the repair of or replacement of parts in a backflow prevention assembly. It will be the tester's further responsibility not to change the design, material, or operational characteristics of an assembly during repair or maintenance without prior approval of Brunswick Regional Water and Sewer. A certified tester shall provide a copy of all test and repair reports to the consumer and to Brunswick Regional Water and Sewer within ten (10) business days of any completed test or repair work. A certified tester shall maintain such records for a minimum period of three (3) years.

All certified backflow prevention assembly testers must obtain and employ backflow prevention assembly test equipment, which has been evaluated and/or approved by Brunswick Regional Water and Sewer. All test equipment shall be registered with Brunswick Regional Water and Sewer. All test equipment shall be checked for accuracy annually (at a minimum), calibrated, if necessary, and certified to Brunswick Regional Water and Sewer as to such calibration, employing an accuracy/calibration method acceptable to Brunswick Regional Water and Sewer.

All backflow prevention assembly testers must become certified or re-certified every two (2) years through a North Carolina AWWA/WEA approved backflow prevention certification program.

C. Definitions

1. **Air Gap Separation** shall mean a physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An "approved air gap separation" shall be at least double the diameter of the supply pipe measured vertically above the overflow rim of the receiving vessel- in no case less than 1 inch (2.54 cm).
2. **Approved** used in reference to water supply shall mean a water supply that has been approved by the NCDENR and by Brunswick Regional Water and Sewer.
3. **Backflow** shall mean the undesirable reversal of flow of water or mixtures of water and other liquids, gases, or other substances into the distribution pipes of the consumer or public potable water system from any source or sources.
4. **Backflow Prevention Assembly Approved** shall mean an assembly used for containment and/or isolation purposes that has been investigated and approved by Brunswick

Regional Water and Sewer and has been shown to meet the design and performance standards of the American Water Works Association (AWWA), or the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California. Brunswick Regional Water and Sewer will provide a list of such Assemblies upon request.

5. **Backflow Prevention Device Approved** shall mean a device used for isolation purposes that has been shown to meet the design and performance standards of the American Society of Sanitary Engineers (ASSE) and the AWWA. The types are:
 - a. Hose Bibb Atmospheric Vacuum Breaker (HBVB).
 - b. Atmospheric Vacuum Breaker (AVB).
6. **Backflow Prevention Assembly Unapproved** shall mean an assembly that has been investigated by Brunswick Regional Water and Sewer and has been determined to be unacceptable for installation within Brunswick Regional Water and Sewer water system. Consideration for disapproval and removal from the approved list shall be based on, but not limited to, the following criteria:
 - a. Poor performance standards;
 - b. Lack of or unavailability of repair parts; and/or
 - c. Poor service or response from assembly's factory representative.
7. **Backflow Prevention Assembly Type** shall mean an assembly used to prevent backflow into a consumer or public potable water system. The type of assembly used should be based on the degree of hazard either existing or potential. The types are:
 - a. Double Check Valve Assembly (DCVA)
 - b. Double Check Detector Assembly (Fire System) (DCDA)
 - c. Pressure Vacuum Breaker (PVB)
 - d. Reduced Pressure Principle Assembly (RP)
 - e. Reduced Pressure Principle-Detector Assembly (Fire System) (RPDA)
8. **Backflow Prevention Assembly Tester Certified** shall mean a person who has proven their competency to the satisfaction of Brunswick Regional Water and Sewer. Each person who is certified to make competent test, or to repair, overhaul, and make reports on backflow prevention assemblies shall be knowledgeable of applicable laws, rules, and regulations, shall be a licensed plumber or plumbing contractor, or have equivalent qualifications acceptable to Brunswick Regional Water and Sewer, and must hold a

- certificate of completion from a North Carolina AWWA/WEA approved training program.
9. **Back-Pressure Backflow** shall mean an elevation in the consumer water system above the supply pressure at the point of delivery which would cause – or tend to cause a reversal of the normal direction of flow.
 10. **Back Siphonage Backflow** shall mean a reversal of the normal direction of flow in the pipeline due to negative pressure being created in the supply line with the backflow source subject to atmospheric pressure.
 11. **Check Valve Approved** Shall mean a check valve that is drip tight in the normal direction of flow when the inlet pressure is at least one (1) psi, and the outlet pressure is zero. The closure element shall be internally loaded to promote rapid and positive closure.
 12. **Consumer** shall mean any person, firm, or corporation using or receiving water from Brunswick Regional Water and Sewer water system.
 13. **Consumer's Water System** shall include any water system commencing at the point of delivery and continuing throughout the consumer's plumbing system, located on the consumer's premises, whether supplied by public potable water or an auxiliary water supply. The system or systems may be either a potable water system or an industrial piping system.
 14. **Consumer's Potable Water System** shall mean that portion of the privately owned potable water system lying between the point of delivery and point of use and/ or isolation protection. This system will include all pipes, conduits, tanks, receptacles, fixtures, equipment, and appurtenances used to produce, convey, store, or use potable water.
 15. **Containment** shall mean preventing the impairment of the public potable water supply by installing an approved backflow prevention assembly at the service connection.
 16. **Contamination** shall mean an impairment of the quality of the water which creates a potential or actual hazard to the public health through the introduction of hazardous or toxic substances or through the spread of disease by sewage, industrial fluids, or waste.
 17. **Cross Connection** shall mean any unprotected actual or potential connection or structural arrangement between a public or a consumer's water system and any other source or system through which it is possible to introduce any contamination or pollution, other than the intended potable water with the system is supplied. By-pass arrangements, jumper connections, removable sections, swivels or change over devices, and other temporary or permanent devices through which or because of which "backflow" can or may occur are considered to be cross connections.

18. **Double Check Valve Assembly** shall mean an assembly composed of two (2) independently acting approved check valves, including tightly closing shut off valves attached at each end of the assembly and fitted with properly located test cocks. This assembly shall be used to protect against a non-health hazard.
19. **Double Check Detector Assembly** shall mean a specifically designed assembly composed of a line-size approved double check valve assembly with a specific bypass water meter and a meter-sized approved double check valve assembly. This assembly shall only be used to protect against a non-health hazard.
20. **Enclosure** Any structure to prevent a backflow preventer from freezing and is ASSE 1060 approved.
21. **Hazard-Degree Of** shall mean an actual or potential threat of contamination of a physical, hazardous, or toxic nature to the public or consumer's potable water system to such degree or intensity that there would be a danger to health.
22. **Hazard- Health** shall mean an actual or potential threat of contamination of a physical, hazardous, or toxic nature to the public or consumer's potable water system to such a degree or intensity that there would be a danger to health.
23. **Hazard-Non-Health** shall mean an actual or potential threat to the quality of the public or the consumer's potable water system. A non-health hazard is one that, if introduced into the public water supply system could be a nuisance to water customers but would not adversely affect human health.
24. **Hazard-Pollution** shall mean an actual or potential threat to the quality or the potability of the public or the consumer's potable water system, but which would not constitute a health or a system hazard, as defined. The maximum degree or intensity of pollution to which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause minor damage to the system or its appurtenances.
25. **Health Agency** The term "health agency" shall mean the NCDEHNR Section of Health Services.
26. **Industrial Fluids** The term "industrial fluids" shall mean any fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, or non-health hazard if introduced into a public or consumer potable water system. Such fluids may include, but are not limited to process waters; chemicals in fluid form; acids and alkalis; oils, cases; etc.

27. **Industrial Piping System – Consumer’s** The term “consumer’s industrial piping system” shall mean any system used by the consumer for transmission of or to confine or store any fluid, solid or gaseous substance other than an approved water supply. Such a system would include all pipes, conduits, tanks, receptacles, fixtures, equipment, and appurtenances used to produce, convey, or store substances, which are or may be polluted or contaminated.
28. **Isolation** “Isolation” is the act of confining a localized hazard within a consumer’s water system by installing approved backflow prevention assemblies. Disclaimer; Brunswick Regional Water and Sewer may make recommendations, upon facility inspection, as to the usages of isolation devices/assemblies, but does not assume or have responsibility whatsoever for such installations.
29. **Point Of Delivery** “Point of delivery” shall generally be at the property line of the customer, adjacent to the public street where Brunswick Regional Water and Sewer mains are located or at a point on the customer’s property where the meter is located. The customer shall be responsible for all water piping and control devices located on the customer’s side of the point of delivery.
30. **Pollution** The term “pollution” shall mean an impairment of the quality of water to a degree which does not create an actual hazard to the public health, but which does adversely and unreasonably affect the aesthetic qualities of such waters for domestic use.
31. **Potable Water** shall mean water from any source which has been investigated by the NCDENR Division of Health Services and which has been approved for human consumption.
32. **Public Potable Water System** shall mean any publicly or privately owned water system operated as a public utility, under a current NCDENR permit, to supply water for public consumption or use. To include all sources, facilities, and appurtenances, between the source and the point of delivery such as valves, pumps, pipes, conduits, tanks, receptacles, fixtures, equipment, and appurtenances used to produce, convey, treat, or store potable water for public consumption or use.
33. **Reduced Pressure Principle Backflow Prevention Assembly** shall mean an assembly containing within its structure a minimum of two (2) independently acting, approved check valves, together with a hydraulically operating, mechanically independent, pressure differential relief valve located between the check valves and at the same time below the first check valve. The assembly is designed to protect against a health hazard.

34. **Reduced Pressure Principle Detector Assemble** shall mean a specially designed assembly composed of a line size approved reduced pressure principle backflow prevention assembly with a specific bypass water meter and a meter sized approved reduced pressure principle backflow prevention assembly. This assembly shall be used to protect against health hazard.
35. **Service Connections** shall mean the terminal end of a service connection from the public potable water system, where Brunswick Regional Water and Sewer lose jurisdiction and sanitary control over the water at its point of delivery to the consumer's water system.
36. **Vacuum Breaker Atmospheric Type** shall mean a device containing a float check, a check seat, and an air inlet port. An atmospheric vacuum breaker is designed to protect against a non-health hazard under a back siphonage condition only.
37. **Vacuum Breaker Pressure Type** shall mean an assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. This assembly is designed to protect against a health hazard under a back siphonage condition only.
38. **Water Purveyor** shall mean the owner or operator of a public potable water system, providing an approved water supply to the public.
39. **Water Supply- Approved-** shall mean any public potable water supply which has been investigated and approved by the NCDENR. The system must be operating under a valid health permit.
40. **Water Supply – Auxiliary** shall mean any water supply on or available to the premises other than the purveyor's approved public potable water supply.
41. **Water Supply – Unapproved** shall mean a water supply, which has not been approved, for human consumption by the NCDENR.
42. **Water – Used** shall mean any water supplied by a water purveyor from a public water system to a consumer's water system after it has passed through the point of delivery and is no longer under the control of the water purveyor.

This program is gender neutral, and the masculine gender shall include feminine and vice versa. Shall is mandatory, may is permissive and discretionary. The use of the singular shall be construed to include the plural and the plural shall include the singular as indicated by the context of its use.

D. Right of Entry

Authorized representatives from Brunswick Regional Water and Sewer shall have the right to enter, upon presentation of proper credentials and identification, any building, structure, or premises during normal business hours, or at any time during the event of an emergency, to perform any duty imposed by these regulations. Those duties may include sampling and testing of water, or inspections and observations of all piping systems connected to the public water supply. Where a user has security measures in force which would require proper identification and clearance before entry into their premises, the user shall make all necessary arrangements with the security guards so that upon presentation of suitable identification, Brunswick Regional Water and Sewer employees will be permitted to enter, without delay, for the purposes of performing their specific duties. Refusal to allow entry for these purposes may result in discontinuance of water service.

On request, the consumer shall furnish Brunswick Regional Water and Sewer any pertinent information regarding the water supply system on such property where cross connections and backflow are deemed possible.

E. Elimination of Cross Connections: Degree of Hazard

When cross connections are found to exist, the owner, his agent, occupant, or tenant will be notified in writing to disconnect the same within the time limit established by Brunswick Regional Water and Sewer. Degree of protection required, and maximum time allowed for compliance will be based upon the potential degree of hazard to the public water supply system. The maximum time limits are as follows:

1. Cross Connections with private wells or other auxiliary water supplies – immediate disconnection.
2. All facilities which pose a health hazard to the potable water system must have a containment assembly in the form of a reduced pressure principle backflow prevention assembly within sixty (60) days.
3. All industrial and commercial facilities not identified as a “health hazard” shall be considered non-health hazard facilities. All non-health hazard facilities must install, as a minimum containment assembly, a double check valve assembly within 90 days.
4. If, in the judgment of Brunswick Regional Water and Sewer, an imminent health hazard exists, water service to the building or premises where a cross connection exists may be terminated unless an air gap is immediately provided, or the cross connection is immediately eliminated.

5. Based upon the recommendation from Brunswick Regional Water and Sewer, the consumer is responsible for installing sufficient internal isolation backflow prevention assemblies and/or methods (air gap, pressure vacuum breakers, reduced principle backflow prevention assemblies, double check valve assembly).
6. Water mains served by Brunswick Regional Water and Sewer but not maintained by Brunswick Regional Water and Sewer should be considered cross connections, with the degree of hazard to be determined by Brunswick Regional Water and Sewer. The degree of protection shall be based upon the degree of hazard, as determined by Brunswick Regional Water and Sewer.
7. In the event that a Brunswick Regional Water and Sewer Cross Connection Control Inspector does not have sufficient access to every portion of a private water system to allow a complete evaluation of the degree of hazard associated with such private water systems, an approved reduced pressure principle assembly shall be required as a minimum of protection.
8. No person shall fill special tanks or tankers containing pesticides, fertilizers, other toxic chemicals, or their residues from the public water system except at a location equipped with an air gap or an approved reduced pressure principle backflow prevention assembly properly installed on the public water supply.
9. All backflow assemblies that are not installed to the specifications set forth in the installation specifications shall be brought to code upon notification. Assemblies previously installed below ground without the proper drain size shall be considered cross connections and should be brought to date with present standards. (Drain sizes shall be two times the fire service supply or two times the fire service connection. Drain shall follow by gravity to sunlight.)
10. All services outlined by this regulation that do not have containment assemblies installed shall install assemblies by the restrictions outlined.
11. THERE ARE NO GRANDFATHER CLAUSES THAT EXIST FOR BACKFLOW ASSEMBLY INSTALLATIONS.

F. Approved Backflow Prevention Assemblies- *(The guidelines listed below should be considered prior to installation of any backflow prevention assembly. Local plumbing laws and regulations shall be followed.)*

1. Brunswick Regional Water and Sewer should be contacted for the assistance in selection of an assembly due to the different pressure zones in Brunswick Regional Water and Sewer.
2. For a list or approved backflow assemblies please refer to the latest edition of the Southern California's Foundation for Cross Connection Control and Hydraulic Research list of approved backflow assemblies or contact Brunswick Regional Water and Sewer.
3. Brunswick Regional Water and Sewer reserve the right to add or remove from the approved list any reduced pressure principle assembly, double check valve assembly.
4. It is a requirement that all backflow prevention assemblies be tested immediately after installation and at least once a year thereafter by a certified backflow tester authorized by Brunswick Regional Water and Sewer.
5. Brunswick Regional Water and Sewer will conduct random testing of backflow prevention assemblies to ensure that the assemblies are operating properly. The owner will be given adequate notice prior to the test date.
6. When cross connections are found to exist, the owner, his agent, occupant, or tenant will be notified in writing to disconnect the cross connection within the time limit established by Brunswick Regional Water and Sewer. Degree of protection required, and maximum time allowed for compliance will be based upon the potential degree of hazard to the public water system. Maximum time limits are as follows:

G. Installation of Assemblies – *(Approved backflow prevention assemblies and diagrams are on file with Brunswick Regional Water and Sewer and with the Clerk to the Board.)*

1. All backflow prevention assemblies shall be installed in accordance with the specifications furnished by Brunswick Regional Water and Sewer and/or the manufacturer's installation instructions and /or in the latest edition of the North Carolina Building Code, whichever is most restrictive.
2. All backflow installations will require a plumbing permit within the inspections and/or code enforcement jurisdiction of the work which is being performed. These permits can be obtainable from the various jurisdictions throughout Brunswick Regional Water and Sewer's service area. A copy of this permit will be required by Brunswick Regional Water and Sewer before the installation process is started.
3. All new construction plans and specifications, when required by the North Carolina Building Code and the NCDENR shall be made available to Brunswick Regional Water and Sewer for review and approval, and to determine the degree of hazard.

4. Ownership, testing, and maintenance of the assembly shall be the responsibility of the customer.
5. The backflow preventer must be installed a maximum distance of five (5) feet from the meter service or before any wyes, tees, or bypasses. Installation of backflow preventers within the DOT right-of-way will not be accepted, it must be installed on the customers property.
6. Bypass piping is not permitted unless the by-pass piping is equipped with an approved backflow prevention assembly of the same type and brand as the main line assembly. In many instances it will be necessary to install two approved backflow prevention assemblies to ensure continuous water service.
7. All backflow preventers must be installed above ground including double check valves. Backflow preventers installed inside must be a minimum of twelve (12) inches above the floor, and no higher than four (4) feet above floor. Customer must maintain adequate clearance around the assembly for testing, and/or repair of the assembly. Wherever a reduced pressure principle backflow preventer is installed inside a building an air gap drain of adequate size must be installed.
8. Backflow prevention assemblies installed outside must be protected with an ASSE 1060 approved enclosure. The assembly must maintain a minimum distance of twelve (12") inches and a maximum of distance of thirty (30") inches above ground. Landscaping is allowed around any assembly provided it does not interfere with the testing and/or repairing of the assembly.
9. Protective enclosures must be used to prevent from freezing or vandalism for backflow prevention assemblies installed outside above ground. Freeze proof enclosures that meet or exceed North Carolina Plumbing Code Standards are acceptable provided the insulation is at least 7.05 R factor and have the 1060 ASSE approval plate. Adequate drainage shall be provided by hinged door drain or ports along the bottom walls of the protective enclosure. The enclosure will require to be mounted to the ground or existing grade. If the structure is not removable it must be accessible by doors large enough for entrance and repair.
10. Backflow prevention assemblies two and one half (2 ½") inches or larger must be supported to allow for the weight of the backflow prevention assembly. Support construction can consist of cinder block, brick, or steel. Supports must have proper footing to rest on. Supports should be spaced so they do not cause interference with the testing and/or repair of the assemblies.

11. All piping must be of ductile iron, cast iron, steel, or other approved equal.
12. In order to prevent obstruction during the testing or repair of the assembly, additional piping and/or valves shall not be located within and/or under the enclosure.
13. All backflow prevention assembly installations shall be inspected by Brunswick Regional Water and Sewer prior to initial connection to the potable water system.
14. Before installation of any backflow preventer, contact Brunswick Regional Water and Sewer at (910) 371-9949 to assist in the proper selection and installation.
15. All Reduced pressure (RP) principle assemblies must be installed in a horizontal position and in a location in which no portion of the assembly can become submerged in any substance under any circumstances (pit and/or below grade installations are prohibited). Double check valve assemblies may be installed in a vertical position with prior approval from Brunswick Regional Water and Sewer provided the flow of water is in an upward direction or assembly has been approved by the Southern California's Foundation for Cross Connection Control and Hydraulic Research approval for this intended use.
 - a. All existing commercial or high hazard commercial water services that are renewed shall have containment assemblies installed at the service connection raised above ground in a freeze proof enclosure.
 - b. All facilities that change the intended use of the water supply shall install containment assemblies.
 - c. All existing facilities that change the name or are sold to new owners, are required to install a containment backflow assembly at the service connection on existing water services.
 - d. All outdoor above ground backflow assemblies are required to have an ASSE 1060 approved protective enclosure. (In accordance with NC State plumbing code section 608.14.1)
16. All assemblies below ground that fail the annual test and are considered in a nuisance installation and are considered probable cause of a potential cross connection shall be raised above ground and placed in a freeze proof enclosure.
17. Assembly owners are responsible for the environment where assemblies are installed. Assembly owners are responsible for supplemental heat when assemblies are endangered of freezing.
18. Installation drawings shall be submitted to Brunswick Regional Water and Sewer before prior installation for upgrades to be approved by Brunswick Regional Water and Sewer.

19. Assemblies below ground installed, that do not have working gravity drains and drains that are not two times the supply size of the water service supplying assemblies shall be raised and placed in a freeze proof enclosure.
20. The installation of a backflow prevention assembly, which is not approved, must be replaced with an approved backflow prevention assembly.
21. The installer is responsible to make sure a backflow prevention assembly is working properly upon installation and is required to furnish the following information to Brunswick Regional Water and Sewer within fifteen (15) days after a reduced pressure principle backflow preventer (RP), double check valve assembly (DCVA), pressure vacuum breaker (PVB), double check detector assembly (DCDA), or reduced pressure principle detector assembly (RPDA) is installed;
 - a. service address where assembly is located
 - b. owner and mailing address
 - c. description of assembly's location
 - d. date of installation
 - e. installer (including name, company, license number, and project permit number)
 - f. type of assembly, size of assembly
 - g. manufacturer, model number and serial number
 - h. test results/report
22. When it is not possible to interrupt water service, provisions shall be made for a parallel installation of backflow prevention assemblies. Brunswick Regional Water and Sewer will not accept an unapproved bypass around a backflow prevention device when the assembly is in need of testing, repair, or replacement.
23. The consumer shall, upon notification, install the appropriate containment assembly not to exceed the following time frame:
 - a. Health hazard----- 60 days
 - b. Non-health Hazard----90 days
24. Following installation, all RP, DCVA, PVB, DCDA, and RPDA are required to be tested by a certified backflow prevention assembly tester that is registered with Brunswick Regional Water and Sewer within ten (10) days.

H. Testing and Repair of Assemblies

1. Testing of backflow prevention assemblies shall be made by a certified backflow prevention assembly tester at the customer's expense. Such tests are to be conducted upon installation and annually thereafter or at a frequency established by Brunswick Regional Water and Sewer regulations. A record of all testing and repairs is to be retained by the customer. Copies of the records must be provided to Brunswick Regional Water and Sewer within ten (10) business days after the completion of any testing or repair work.
2. Any time that repairs to backflow prevention assemblies are deemed necessary, whether through annual or required testing or routine inspection by the owner or by Brunswick Regional Water and Sewer, these repairs must be completed within a specified time in accordance with the degree of hazard. In no case shall this time period exceed:
 - a. Health Hazard Facilities – 14 days
 - b. Non-Health Hazard Facilities – 21 days
3. All backflow prevention assemblies with test cocks are required to be tested annually or as frequently required by Brunswick Regional Water and Sewer. Testing requires water shut down usually lasting five (5) to twenty (20) minutes. For facilities, which require an uninterrupted supply of water, and when it is not possible to provide water service from two separate meters, provisions shall be made for a parallel installation of backflow prevention assemblies.
4. All certified backflow prevention assembly testers must obtain and employ backflow prevention assembly test equipment, which has been evaluated and/or approved by Brunswick Regional Water and Sewer. All test equipment shall be registered with Brunswick Regional Water and Sewer and will be checked annually for accuracy. All test equipment shall be checked for accuracy annually, calibrated, if necessary, and certified to Brunswick Regional Water and Sewer as to such accuracy/calibration, employing a calibration method acceptable to Brunswick Regional Water and Sewer.
5. It shall be unlawful for any customer or certified tester to submit any record to Brunswick Regional Water and Sewer, which is false or incomplete material in any respect. It shall be unlawful for any customer or certified tester to fail to submit to Brunswick Regional Water and Sewer any record, which is required by this program. Such violations may result in any of the enforcement actions outlined in Section K of this program in its entirety.

I. Facilities Requiring Protection

Approved backflow prevention assemblies shall be installed on the service line to any premises that Brunswick Regional Water and Sewer has identified as a potential for backflow.

The types of facilities or services listed below have been identified by Brunswick Regional Water and Sewer as having a potential for backflow of non-potable water into the public water supply system. Therefore, an approved backflow prevention assembly will be required on all such services according to the degree of hazard present. Other types of facilities or services not listed below may also be required to install approved backflow prevention assemblies if determined necessary by Brunswick Regional Water and Sewer. As a minimum requirement, all commercial services will be required to install a Double Check Valve Assembly, unless otherwise listed below.

DCVA = Double Check Valve Assembly

RP = Reduced Pressure Principle Assembly

DCDA = Double Check Detector Assembly

RPDA = Reduced Pressure Detector Assembly

AG = Air Gap

PVB = Pressure Vacuum Breaker

1. Aircraft and Missile Plants: RP
2. Automotive Services Stations, Dealerships, etc.
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
3. Automotive Plants: RP
4. Auxiliary Water Systems:
 - a. Approved Public/Private Water Supply: DCVA
 - b. Unapproved Public/Private Water Supply: AG
 - c. Used Water and Industrial Fluids: RP
5. Bakeries:
 - a. No Health Hazards: DCVA
 - b. Health Hazard: RP

6. Beauty Shops/Barber Shops:
 - a. No Health Hazards: DCVA
 - b. Health Hazards: RP
7. Beverage Bottling Plants: RP
8. Breweries: RP
9. Buildings- Hotels, apartment houses, public and private buildings, or other structures having unprotected cross connections.
 - a. (Under five stories) NO Health hazards: DCVA
 - b. (Under five stories) Health Hazards: RP
 - c. (Over five stories) All: RP
10. Canneries, packing houses, and rendering plants: RP
11. Chemical plants- Manufacturing, processing, compounding, or treatment: RP
12. Chemically contaminated water systems: RP
13. Commercial car wash facilities: RP
14. Commercial greenhouses: RP
15. Commercial sales establishments (department stores, malls, etc.)
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
16. Concrete/asphalt plants: RP
17. Dairies and cold storage plants: RP
18. Dye works: RP
19. Farms: RP
20. Film laboratories: RP
21. Fire Systems:
 - a. Systems $\frac{3}{4}$ " (inch) to 2" (inch)
 - 1.) No health hazard: DCVA
 - 2.) Health Hazard: (Booster pumps, foam, antifreeze solution, etc.): RP
 - b. Systems 2 $\frac{1}{2}$ " (inch) to 10" (inch) or larger

- 1.) No health hazard: DCDA
- 2.) Health hazard: (Booster pumps, foam, antifreeze solution, etc.) RPDA
22. Hospitals, medical buildings, sanitariums, morgues, mortuaries, autopsy facilities, nursing and convalescent homes, medical clinics, and veterinary hospitals: RP
23. Industrial facilities:
 - a. No health hazard: DCVA
 - b. Health hazard: RP
24. Laundries:
 - a. No health hazard: DCVA
 - b. Health hazard: (i.e., Dry cleaners): RP
25. Lawn irrigation systems: RP
26. Metal Manufacturing, cleaning, processing, and fabricating plants: RP
27. Mobile Home Parks:
 - a. No health hazard: DCVA
 - b. Health hazard: RP
28. Oil and Gas production, storage, or transmission properties: RP
29. Paper and paper products: RP
30. Pest control: RP
31. Plating plants: RP
32. Power plants: RP
33. Radioactive materials or substances: RP
34. Restaurants:
 - a. No health hazard: DCVA
 - b. Health hazard: RP
35. Restricted, classified, or other closed facilities: RP
36. Rubber plants: RP
37. Sand and gravel plants: RP
38. Schools and colleges: RP

39. Sewage and storm drain facilities: RP
40. Swimming pools: RP
41. Waterfront facilities and industries: RP

All assemblies and installations shall be subject to inspection and approval by Brunswick Regional Water and Sewer.

J. Connections with Unapproved Sources of Supply

1. No person shall connect or cause to be connected any supply of water not approved by the NCDENR to the water system supplied by Brunswick Regional Water and Sewer. Any such connections allowed by Brunswick Regional Water and Sewer must be in conformance with the backflow prevention requirements of this program.
2. In the event of contamination or pollution of a public or consumer potable water system, the consumer shall notify Brunswick Regional Water and Sewer immediately in order that appropriate measures may be taken to overcome and eliminate the contamination or pollution.

K. Fire Protection Systems

1. All connections for fire protection systems connected with the public water system, two (2) inches or smaller, shall be protected with an approved double check valve assembly as a minimum requirement. All fire systems using toxic additives or booster pumps shall be protected by an approved reduced pressure zone assembly at the main service connection or within the FDC system.
2. All existing backflow prevention assemblies two and one-half (2 1/2) inches and larger installed on fire protection systems (that were initially approved by Brunswick Regional Water and Sewer) in operation at the time these regulations become effective shall be allowed to remain on the premises, as long as they are being properly maintained, tested, and repaired as required by this program. If, however, the existing assembly must be replaced, or in the event of proven water theft through an un-metered source, the consumer shall be required to install an approved double check detector assembly or reduced pressure principle detector assembly as required by this provision.
3. All backflow preventers for fire protection should also meet the requirements of the building and fire codes of Brunswick County Code Enforcement.

L. Enforcement

1. The owner, manager, supervisor, or person in charge of any installation found not to be in compliance with the provisions of this program shall be notified in writing with regard to the corrective action (s) to be taken. The time for compliance shall be in accordance with Section F.
2. The owner, manager, supervisor, or person in charge of any installation which remains in non-compliance after the time prescribed in the initial notification, as outlined in Section F shall be considered in violation of these regulations and may be issued a citation by Brunswick Regional Water and Sewer. Said citation shall specify the nature of the violation and the provisions of this program violated, and further notify the offender that the penalty for said violation is as set forth in paragraph (3) below and is to be paid to Brunswick Regional Water and Sewer within thirty (30) days. If the penalty prescribed herein is not paid within the time allowed, Brunswick Regional Water and Sewer may initiate a civil action in the nature of a debt and recover the sums set forth in paragraph (3) below plus the cost of the action.
3. Any offender who shall continue any violation beyond the time limit provided for in the aforementioned notification shall be subject to a penalty of up to \$1000.00 per violation. Each day in which a violation of any provision of this program shall occur or continue shall constitute a separate and distinct offense.
4. If, in the judgment of Brunswick Regional Water and Sewer, any owner, manager, supervisor, or person in charge of any installation found to be in non-compliance with the provisions of this program, neglects their responsibility to correct any violation, a discontinuance of water service may be directed until compliance is achieved.
5. Failure of a customer or certified tester to submit any record required by this program, or the submission of falsified reports/records may result in a penalty of up to \$1,000.00 per violation. If a certified backflow prevention assembly tester submits falsified records to Brunswick Regional Water and Sewer shall take the necessary actions to revoke certification to test backflow prevention assemblies within the potable water system for a time period not to exceed one (1) year. Falsification made to records/reports after becoming re-certified shall result in the permanent revocation of backflow testing certification, in addition to a penalty (as stated herein).
6. Enforcement of this program shall be administered by the Brunswick Regional Water and Sewer Executive Director or his authorized representative.

7. Request for extension of time shall be made in writing to the Brunswick Regional Water and Sewer Executive Director or his authorized representative. All other appeals shall be made in accordance with the following procedure:
 - a. A customer assessed a penalty under this section shall have the right to a hearing before Brunswick Regional Water and Sewer upon making written demand, identifying the specific issues to be contended, to the Brunswick Regional Water and Sewer Executive Director within thirty (30) days following notice of final decision to assess a penalty. Unless such demand is made within the time specified herein, the decision on the penalty assessment shall be final and binding.
 - b. Appeal Hearing: Any decision of Brunswick Regional Water and Sewer made as a result of a hearing held under paragraph (a) of the section may be appealed to Brunswick Regional Water and Sewer Board of Commissioners upon written demand within ten (10) days of receipt of notice of the decision. Hearings held under this section shall be conducted in accordance with Brunswick Regional Water and Sewer Board of Commissioners hearing procedures. Failure to make written demand within the time specified herein shall bar further appeal. Brunswick Regional Water and Sewer Board of Commissioners shall make a decision on the appeal within ninety (90) days of the date the appeal was filed and shall transmit a written copy of its decision by registered or certified mail.
 - c. Official Record: When a final decision is issued under Section (b) above, Brunswick Regional Water and Sewer shall prepare an official record of the case that includes:
 1. All notices, motions, and other like pleadings;
 2. A copy of all documentary evidence introduced;
 3. A certified transcript of all testimony taken if testimony is transcribed. If testimony is taken and not transcribed, then a narrative summary of any testimony taken.
 4. A copy of the final decision of Brunswick Regional Water and Sewer.

APPENDIX B

DEPOSIT POLICY

1. “The User agrees to pay a deposit as described in the rate schedule now in force or as hereinafter amended. In the event service is terminated, either voluntarily by the User, or by the H2GO for cause, the deposit shall be held and applied to any unpaid balance owed on the User’s account.
2. Should the account be fully paid at the time of termination of the service to the User, the deposit shall be refunded by H2GO within a reasonable period of time thereafter at the User’s last known address.
3. Any existing customer who has no deposit and becomes delinquent (i.e., have not paid current bill for 30 days, or has had two or more delinquencies in any consecutive 24-month period), shall be deemed to have an unsatisfactory payment record and will be required to pay a maximum deposit to continue service.
4. A customer who has had service terminated for non-payment shall be required to pay a maximum deposit prior to reconnection to H2GO’s utility system.

Commercial Applicants

1. Commercial applicant’s deposit will be determined in the following manner:

A. Water and Irrigation Service - Based on Meter Size:

3/4” - 1”	\$ 75 per service
2” - 3”	\$150 per service
4”	\$300 per service
6”	\$400 per service

B. Sewer Service:

2” Force main	\$ 75
4” Gravity	\$ 75
6” Gravity	\$175

General

1. Deposits are required to be paid prior to the time a connect order is issued.



2. Deposits are not transferable from one service address to another.
3. Upon termination of service, the deposit will be applied against any unpaid bills of the customer.
4. Any remaining balance will be returned to the consumer.
5. H2GO will not accept a letter of credit in lieu of paying a deposit.
6. Deposits shall not draw interest.

Application Fee

The fee for applying for service shall be \$25.

APPENDIX C

Water Distribution System Expansion Policy

1. The Company, person or persons developing the project, hereinafter referred to as the 'Developer', and/or Developer's Engineer must have Brunswick Regional Water and Sewer, H2GO Specifications.
2. A licensed, registered Engineer must draw plans and produce specifications as per Section .0303 SUBMISSION REQUIRED BY ENGINEER AND APPLICANT of the DENR Rules Governing Public Water Systems and must meet the minimum requirements of Brunswick Regional Water and Sewer.
3. The Developer and/or Engineer shall submit two (2) sets of preliminary plans and specifications to H2GO for review by the Technical Review Committee (TRC) 30 days prior to any submission to the Board of Commissioners.
4. Upon approval, H2GO will notify the Developer and/or engineer along with an indication that H2GO will provide water to the proposed system, pending State of N.C. approval, satisfactory test results, Engineering Certification, and final approval by the State of North Carolina.
5. The Developer's Engineer shall submit plans, specifications, and an application from H2GO to the State of North Carolina for approval as per section .0302 SUBMITTALS of the DENR Rules Governing Public Water Systems.
6. The approved Contractor must construct all taps to H2GO Mains.
7. The Developer shall employ a licensed, reputable utility contractor, acceptable to H2GO to install the water facilities proposed for dedication to Brunswick Regional Water and Sewer.
8. The Developer's Engineer shall submit one (1) set of material submittal for the TRC in order for H2GO and/or H2GO Engineer to review them. All submittals **must** indicate approval by the Developer's Engineer. Any changes in plans or Specifications after initial approval must be again submitted for approval as per Section .0306 CHANGES IN ENGINEERING PLANS OR SPECIFICATIONS AFTER APPROVAL of the DENR Rules Governing Public Water Systems.
9. Before any construction can begin, the Developer must schedule a pre-construction conference with the Contractor and H2GO. The conference shall include, but is not limited to: H2GO Personnel, H2GO Engineer, Developer, Developer's Engineer,

Developer's Contractor, or their respective Representatives. Topics of the meeting shall include but is not limited to the following:

- a. A discussion of the time schedule to be used for construction
 - b. The scheduling of tapping of H2GOs Main Lines.
 - c. Approval of the Developer's Contractor. The Developer must provide the name and phone number of the Contractor's foreman and/or contact person.
 - d. Approval of material submittals.
10. All permits, fees, encroachments, pavement repairs and approvals are the responsibility of the Developer. Three (3) party encroachment agreements must be used.
 11. Periodic inspections of the installations shall be made by the Design Engineer sufficient for him or them to provide assurance of general compliance with the approved plans and specification. H2GO Personnel and/or authorized H2GO Contract Personnel shall have access to the property at all times.
 12. Upon completion of construction all installed water lines must be pressure tested in the presence of the Design Engineer or his representative along with the H2GO inspector.
 13. Upon satisfactorily passing the pressure test, the lines must be super-chlorinated, flushed and a bacteriological sample taken and passing sample results submitted as per the minimum Specifications to H2GO. **All water for flushing will be charged** to the contractor.
 14. The Developer's Engineer shall provide written certification to H2GO indicating the facilities were installed according to the approved plans and specifications.
 15. H2GO shall submit the Engineer's Certification along with other required certifications to the State of North Carolina and request final approval.
 16. The Developer's Engineer shall provide one (1) set of final 'as built' drawings to H2GO. These drawings must show tap location from property lines, location of individual meter boxes and other information pertinent to the water lines. Submission of the drawings on digital media in AutoCAD version 2004 or higher is required.
 17. H2GO personnel shall turn the water on, and individual taps completed only after H2GO has received final approval from the State of North Carolina.
 18. The following documents must be submitted to the Director of the Brunswick Regional Water and Sewer:
 - a. Test results.
 - b. Engineer's certification.



- c. One (1) sets of final 'as built' drawings and one (1) digital in AutoCAD.
 - d. Legal Letter certifying no debt is owed on the water system and all materials and labor has been paid.
 - e. Deed of Dedication.
 - f. Letter stating monetary value of the installed water system.
 - g. Any other documents pertinent to the installation and dedication of the installed water system shall be submitted to Brunswick Regional Water and Sewer.
19. Upon receipt, by H2GO, of final approval from the State of North Carolina, all applicable fee's, deed and dedication and Board approvals, H2GO shall notify the Developer that services may now be installed on the lines.
20. The Developer shall warrant to Brunswick Regional Water and Sewer, the materials and workmanship or the water system installation and that all equipment will operate as intended, for a period of one (1) year from the date of acceptance by Brunswick Regional Water and Sewer. If for any reason any part of the system should fail due to failure of materials, workmanship, or installation that part will be repaired or replaced at the Developers cost.

REVISED AND RE-ADOPTED this the 16th day of November 2022.

Ronnie Jenkins, Chairman

Deana Greiner, Clerk to the Board