





## Water Conservation Plan

2017 Interbasin Transfer Certificate

Yadkin Regional Water Supply

Union County, NC Town of Wingate, NC

Submitted to: NC Division of Water Resources

March 2019

## Introduction

In a letter dated May 25, 2017, Union County (the County) and the Town of Wingate (Applicants) were notified that at their May 11, 2017 meeting the Environmental Management Commission (EMC) granted an Interbasin Transfer (IBT) Certificate to transfer 23.0 million gallons per day (MGD) from the Yadkin River IBT Basin to the Rocky River IBT Basin.

The Union County Water System currently serves customers in both the Catawba River IBT Basin and the Rocky River IBT Basin, which is a sub-basin of the Yadkin River. The ridgeline between the Catawba River Basin and Yadkin River Basin divides the County, with neither of these two major rivers flowing within the County boundaries.

The County currently holds a 5 MGD authorized transfer (i.e., a grandfathered IBT amount) of water from the Catawba River IBT Basin to the Rocky River IBT Basin. This value is based upon the definition of a grandfathered IBT as stipulated in North Carolina Administrative Code 15A NCAC 02E .0401(d) where "a certificate is not required to transfer water from one river basin to another up to the full capacity of a facility to transfer water from one basin to another if the facility was existing or under construction on July 1, 1993. The full capacity of a facility to transfer water shall be determined as the capacity of the combined system of withdrawal, treatment, transmission, and discharge of water, limited by the element of this system with the least capacity as existing or under construction on July 1, 1993."

The County's 5 MGD authorized transfer from the Catawba River IBT Basin to the Rocky River IBT Basin is based upon the capacity of the water transfer infrastructure which was in place within the County as of July 1, 1993, as documented in the County's Grandfathered IBT Worksheet prepared by CH2MHill on behalf of the County and submitted to the North Carolina Division of Water Resources (DWR) on October 19, 2000.

To maintain compliance with the Catawba River IBT Basin grandfathered IBT, the County currently returns a portion of the transferred water back into the Catawba River IBT Basin via the Poplin Road wastewater pumping station. The County also has plans to build scalping infrastructure to allow the capability to return additional water to the Catawba River IBT Basin via the Crooked Creek Wastewater Treatment Plant. Additionally, the County currently holds a water purchase agreement (which will be automatically renewed in 2019, based on the 12-month notification deadline having passed) with Anson County for 4 MGD of water supply that is utilized in the County's Yadkin River Basin Service Area. The County is not required to have an IBT Certificate for this purchase since Anson County is the entity moving the water



from the Yadkin River IBT Basin to the Rocky River IBT Basin and they have secured a grandfathered IBT for this transfer.

As a condition of the most recent IBT Certificate granted, and pursuant to N.C.G.S. § 143-215.22L(n)(1), the Applicants are required to provide a water conservation plan that "specifies the water conservation measures, including a rate pricing structure that will be implemented by the Applicant in the receiving river basin to ensure the efficient use of the transferred water. Except in circumstances of technical or economic infeasibility or adverse environmental impact, each water conservation plan shall provide for the mandatory implementation of water conservation measures by each Applicant that equal or exceed the most stringent water conservation plan implemented by a public water system that withdraws water from the source river basin."

To facilitate the required water conservation and water shortage response plan comparisons, the Applicants have completed an evaluation of the conservation and water shortage response plans for 28 water systems in the basin that were identified for inclusion. This evaluation included both a system website review and, where needed, staff interviews relative to conservation plans and measures implemented. It also included a review of all available WSRPs relative to drought management measures.

Based on this review it was determined that the WSRPs are serving as both the conservation plan and drought management plan for all but a few of the more proactive systems or systems also under this same IBT requirement (i.e., Concord, Kannapolis, and Davidson Water).

A Conservation Plan Comparison Matrix was created to capture the six primary components expected in a conservation plan – rate structure, water loss reduction efforts, outdoor water use, plumbing retrofitting, public education, and alternative water management (i.e., reuse, etc). The Conservation Plan Comparison Matrix is included in Appendix A of this plan.

A Water Shortage Response Plan Comparison Matrix was created to capture response stages, triggers, and measures taken at all response stages. The Water Shortage Response Plan Comparison Matrix is included in Appendix B of this plan.

In order to evaluate these plans to determine the most stringent (effective), a Water Conservation Program Stringency/ Effectiveness Comparison Matrix was developed that has one to two measures for each of the six conservation categories for a total of eight measures. Each of the system plans were evaluated for all the established conservation measures. Those systems meeting at least four of the eight measures (Concord, Kannapolis, Mt Airy, and Union County) were further evaluated relative to the triggers used to implement the



conservation/drought response stages. The measure used for this last evaluation was the Yadkin Pee Dee LIP or Catawba Wateree LIP as the response trigger for the various response levels. To have a fully valid plan comparison the plans need a common trigger for the higher-level conservation implementation. The results of this evaluation are shown in the Conservation Plan Comparison Decision Matrix's figure in Appendix C.

In each case the Union County Conservation Plan and Water Shortage Response Plan is either equal to or exceeds the requirements and actions of other plans and therefore meets the requirements of N.C.G.S. 143-215.22L(n)(1). This Plan will be implemented by the Applicants.

# Purpose

This Water Conservation Plan is designed to promote efficient, wise, and more conservative water use among the County's Water System customers, including the Town of Wingate. Union County's attractive quality of life, coupled with its proximity to urban centers for employment and other activities, has led to significant growth in the County's population and, consequently, increased water use.

This Plan is designed to promote water conservation among the County's users on an ongoing, year-round basis. The County's current Water Use Ordinance (Appendix D) addresses operation of the County's water system – and water use restrictions - during normal conditions or drought conditions and other water shortage situations.

Through development of this Plan, the County will continue to:

- Demonstrate environmental stewardship.
- Defer/avoid capital costs associated with future water and wastewater system infrastructure.
- Reduce operations and maintenance costs.
- Maximize the availability of limited water supplies.
- Enhance service to its customers.

In summary, Union County's Water Conservation Plan has been designed for long-term management of water use to eliminate waste and maximize efficiency among its customers. This Plan promotes a more sustainable approach to the region's continued growth, given a limited water supply.



## Water Conservation Efforts to Date

The County has been undertaking water conservation efforts since at least 2001. That is when the County put an increasing block rate structure for water usage in place. The rate structure was revised to a more aggressive increasing block rate in 2008 to further discourage water usage over 10,000 gallons per month. The current rate structure not only has an increasing block rate based on water usage, but also an escalator based on drought stages. The rates have reduced usage over 10,000 gallons per month significantly since implementation.

The County has participated in multiple trainings on the AWWA Water Audit methodology and performed annual water audits since fiscal year (FY) 2014, including a 3<sup>rd</sup> party validation in July 2017. The water audits have identified many opportunities for improvement, including better documentation for data handling procedures and improving the County's meter testing process.

In response to the 2007 drought that Union County experienced, irrigation was restricted to two days per week. Union County voluntarily maintained this irrigation restriction until 2015 to reduce peak usage in the system. On May 4, 2015, the Union County Board of Commissioners adopted a new Water Use Ordinance that limits spray irrigation to a maximum of 3 days per week, year round. The Ordinance also allows for additional water restrictions during times of water shortage including drought and system capacity limitations.

Since adopting the Water Use Ordinance in 2015, the County has been communicating with customers through bill inserts, social media and email to ensure customers are aware of what water uses are restricted and the penalties for noncompliance. Additional tips for water conservation are also sent to customers several times per year and available on the Public Works website, UnionConserves.com.

In 2016, the County tested all 240 of their large meters, ranging in size from 1.5 to 6 inches. The County is currently replacing all of the large meters in the system that failed testing.

Collectively, these measures have reduced per capita consumption from 207 gallons per day at the peak in the past, to less than 120 gallons per day currently. As can be seen by the measures already in place, water conservation is not a new concept to Union County. This Water Conservation Plan is simply a continuation of the County's efforts and commitment to water conservation.



## Plan Overview and Goals

This enhanced Water Conservation Plan (the Plan) is designed to be fully implemented by the Applicants prior to withdrawals of Yadkin River water under the IBT Certificate issued May 11, 2017, which is estimated to begin in 2022. During the period before withdrawal has begun, the County's current water conservation practices and policies will be enhanced through the addition of resources dedicated to this effort. Specific Plan elements are proposed to be added throughout the implementation period. Goals and metrics for the Plan and water conservation measures are established and may be refined on an on-going basis.

The Water Conservation Plan includes both supply-side and demand-side water use management strategies. Supply-side elements focus on management strategies to be implemented by the Applicants in the operation of the water system and in getting water to customers. Demand-side elements focus on educational outreach and incentives (increasing block water rate structure) for the Applicants' customer base to increase water use efficiency and preserve this natural resource.

These efforts are grouped into the six primary components expected in a conservation plan mentioned above:

- Rate structure
- Water loss reduction efforts
- Outdoor water use
- Plumbing retrofitting
- Public education
- Alternative water management

It is anticipated that this Plan will be reviewed annually and that performance metrics will be utilized to measure progress. An effective Water Conservation Plan must establish goals that are challenging, yet achievable. In addition, an effective Plan must include a strong public outreach program and public partnerships. The Plan effectiveness will be evaluated annually based upon performance metrics.

Plan metrics provide objective measurements of progress. The key metrics for this Plan include:

- Reducing water loss
- Reducing residential water use (i.e. residential per capita use)



Reducing the peak day to average day water demand ratio

These goals and metrics seek to maintain an ongoing, continuous focus on improving the Plan.

## Rate Structure

### **Rate Pricing Structure**

Safe drinking water is essential to public health and welfare; and thus, should be reasonably priced while reflecting the cost of providing this commodity. Water is also a finite natural resource that should be valued by its users. Pricing of water requires a balance between affordability and eliminating wasteful use while still allowing the full funding of the true system costs. Union County water sales and capacity fees are used to fund operations, maintenance, and debt service of the water system.

Union County has had an increasing block rate structure in place since 2001. The rate structure was revised in 2008 to further discourage water usage over 10,000 gallons per month while still recovering the same overall revenue needed to sustain the utility. This increasing block rate structure encourages efficiency by charging higher prices for defined blocks of increased water use for residential and irrigation meters. The goal is to reduce demands from the County's highest water use customers – especially peak demand associated with outdoor irrigation. Additionally, both the County and Town of Wingate have adopted rate structures which increase rates on top of the standard increasing block based on the current drought stage to further incentivize water conservation by their customers. Union County's current, Board-approved 3-year Rate and Fee Schedule, applicable for FY2018 to FY2020, is included as Appendix E.

## Water Loss Reduction Efforts

#### **Water Audit**

Since FY 2014, Union County has performed annual water audits based on AWWA methodology. In July 2017, the County also had a 3<sup>rd</sup> party validation of a water audit for Calendar Year 2016. These audits have shown that system leaks are not a significant issue at this time, but the audits have identified several opportunities to reduce apparent water loss and effectively document water uses. These include better documentation for data



handling, additional tracking for operational uses including Volunteer Fire Districts, and improved meter testing processes for both supply and customer meters. Several large initiatives have already developed out of these audits, including a large meter testing and replacement program, AMI study, and leak detection program. This water audit plan will continue to be completed annually.

### Leak Detection and Repair

The County has invested in leak detection equipment and will be using this equipment to proactively seek out suspected water loss in the distribution system. The County is working toward metering all pressure zones to have the ability to find areas in its system where water demand is abnormally high. Combining the County's Asset Management program with this leak detection equipment, The County will be able to focus on areas of suspected loss and test these in the field. The current program involves providing leak detection in conjunction with the valve maintenance program. As valves are exercised crews also attach leak detection equipment on the distribution system to monitor potential water loss. As valves are identified for repair and leaks are identified, crews are dispatched to effect repairs.

### Meter Replacement and Testing

Based on increasing meter failure rates, the County began a meter replacement and testing plan. The County has increased its budget to replace and/or test meters annually to remove old or failing meters within the system. The County may request additional resources including a new position and associated meter testing equipment if a wholesale replacement program is not initiated.

Customer service and billing staff have created flags in the County's customer information system to notify them when there are suspected high or low readings, zero reads and missing reads. This data is sent to the County to manually read and inspect these meters to ensure proper operation of the meters.

As a service to the customers and to ensure proper operation of meters, the County tests ¾" meters at the request of the customer. The County will continue this practice going forward and also establish a testing frequency for all meter sizes in the initial phase of this plan.

The County has conducted an AMR/AMI Feasibility Study to determine the most appropriate technology for enhancing system reliability and providing real-time information on water use, for both the County's internal use and for customers' use. The concept of this effort is to



provide timely and accurate data to customers to make them more aware of their water use behavior to improve water conservation.

#### **Bulk Potable Water Use**

The County registers individuals and firms who utilize bulk potable water from the County via hydrant hook-up for agricultural purposes, pool filling, paving, dust control, street cleaning, or other uses. These individuals and companies report the amount of monthly water usage and are billed commensurate with this usage. The County is in the process of evaluating its current program to establish better controls and reporting on use. The anticipated changes will streamline the County's monitoring and enforcement of bulk water use and sales. It is likely that this approach will capture more metered water sales and reduce the volume of water losses.

## **Outdoor Water Use**

### **Irrigation Control**

Union County has had year-round, mandatory water use restrictions for irrigation in place since the 2007 drought. For several years after 2009, irrigation was restricted to 2 days per week. Initially put in place in response to the drought of 2007, the restrictions were voluntarily extended by the County as a means to reduce peak demands in the system while evaluating additional water supply options. With the adoption of the County's revised Water Use Ordinance in 2015, the County codified restriction of irrigation to three days per week under normal weather conditions, with reduction to two days, one day or no irrigation in response to drought condition, or other water supply limitations. During periods of drought, the County's irrigation schedule is governed by the Water Use Ordinance and the County's participation in the regional Catawba-Wateree Drought Management Advisory Group (CW-DMAG). Response during future droughts will continue to be driven by the requirements of the Water Use Ordinance, the CW-DMAG and the Yadkin-Pee Dee Low Inflow Protocol.

The Plan includes a year round (Stage 0) irrigation schedule that allows customers to irrigate lawn and landscape <u>only</u> according to a prescriptive schedule with a maximum of 3 days per week. This schedule is available at the County website for conservation information, UnionConserves.com. See the Water Shortage Response Plan included with the Drought Management Plan submitted along with this Plan for additional details, including restrictions at other stages.



The County is developing an Irrigation Evaluation Program which includes having irrigation experts evaluate residential irrigation systems to provide advice to homeowners on watering efficiency. This service is free to customers and will examine irrigation timing, irrigation zone application rates, overspray, and education on the amount of water needed tor lawn and landscaping. The program is anticipated to begin in 2019.

#### **Water Conservation Devices**

As of January 1, 2008, the County requires all timer-based irrigation systems are required to have rain sensors that deactivate the irrigation system after a ¼-inch of rain has fallen. This requirement is outlined in the County's Water Use Ordinance. The rain sensors are used to eliminate water waste through unnecessary outdoor irrigation. The County will establish a program that will identify homes with irrigation systems built prior to 2008 with a public education program to encourage those property owners to install rain sensing devices.

Rain barrels and similar devices reduce some potable water use by substituting collected rainwater for landscape irrigation. More significantly, these devices act as visual reminder of the value and scarcity of water, as well as the need to use resources effectively. Union County promotes rain barrels and similar devices for use by current customers and other County residents. Union County has and will continue to develop partnerships with other organizations (e.g., the NC Green Industry Council, Master Gardeners, local home improvement stores) to promote the purchase and use of rain barrels and similar devices.

## **Separate Irrigation Meters**

As required by the state of North Carolina, new irrigation systems installed after July 1, 2009, must be equipped with separate irrigation meters. This requirement facilitates evaluation of water use within the Union County system.

### **Operational Use**

The County routinely conducts flushing of certain areas in the water distribution system that may be experiencing taste and/or odor issues, or where necessary for regulatory compliance. During these flushing events, large volumes of water are discharged from the system unused.

The County conducts flushing in areas of water quality concern, after line repairs and in response to water quality complaints. Water used for system flushing is documented as it occurs and reported monthly. When system conversions (monochloramines to free chorine,



then returned to monochloramines) occur periodically, water flushed is documented and reported.

The County is also partnering with local fire departments to develop a plan that monitors and measures water used in fire department exercises and hydrant flow testing.

# Plumbing Retrofitting

#### **Household Fixtures and Devices**

Inside water use efficiency is directly related to plumbing fixture type and customer behaviors. More efficient plumbing devices such as faucet aerators and shower heads, in particular for older structures, can lead to significant water savings. The County has completed a preliminary evaluation of the potential effectiveness of a fixture replacement or rebate program. Plumbing code changes in 1990 set maximum water consumption standards for fixtures that were significantly lower than historical devices and these maximums have been revised downward multiple times since 1990. Based on preliminary GIS research, approximately 80% of Union County water customers have homes that were constructed after 1990. The County already inherently meets the goal of having homes and businesses fitted with low-flow devices, however the County also promotes water-conserving devices at public events by giving away low-flow fixtures and includes this in public education initiatives to emphasize its importance.

## **Public Education**

#### **Public Outreach and Education**

An important aspect of a successful water conservation plan is an active public outreach program. These programs need to be accessible, engaging and productive for maximum success. The County currently conducts a variety of outreach including:

- School presentations
- Representation at community events with conserving device giveaways
- Web page with key contacts, links and tips
- Bill inserts with tips on water conservation and information printed on bills



- Social media posts and customer email blasts
- Vehicle signage promoting current conservation stage and website
- Outbound customer calls
- Partnerships with municipalities on events

In addition to these current efforts, the County will also consider adding:

- Presentations to civic organizations
- Partnerships with gardeners and landscapers to promote xeriscaping

### WaterSense Program

Union County will become a partner with EPA's WaterSense Plan. The WaterSense Plan is EPA's national brand for water use efficiency. The brand serves as both a product label and a symbol of the importance of water efficiency in the United States. The WaterSense partnership includes manufacturers, retailers and distributors, promotional partners (e.g., Union County), landscape professionals, and certifying organizations. WaterSense encourages water-efficient equipment, behaviors, and the purchase of quality products that use less water.

# Alternative Water Management

#### **Water Reuse**

Water reuse is the process of using treated wastewater to take the place of certain water system demands that do not require a drinking water quality level of treatment. Landscape irrigation, cooling water, street sweeping, and dust control are all examples of where water reuse can be employed to ease demands on existing drinking water supplies. The County has conducted evaluations and made investments into water reuse opportunities. Currently, the County's 12 Mile Creek Water Reclamation Facility (WRF) is in the construction phase of a reuse irrigation demonstration project that will be completed as part of the ongoing expansion of this facility. In the Crooked Creek WRF service area, the County has partnered with the Town of Indian Trail to evaluate the feasibility of using reclaimed water to irrigate a new park complex the City has recently constructed as well as to identify other potential non-residential customers in the area. The County's Olde Sycamore WRF has provided reuse water for golf course irrigation since the late 1990s.



As part of this Plan the County will continue to identify opportunities for cost effective application of reclaimed water to meet irrigation and industrial water needs.

# Plan Implementation

The County is already doing the vast majority of efforts described in this plan, but ultimately the entirety of this plan shall be in place prior to commencement of withdrawals allowed under the IBT Certificate dated May 11, 2017. It is estimated that these withdrawals will occur in approximately 2022, with all programs included in the Plan to be developed and implemented by 2020 to allow for improvements and growth to be incorporated before withdrawals begin.

All measures and initiatives will be budgeted for each year, and will be available until the budget for the year has been expended. Union County will adjust the budget for this program each year based on demand for each measure/initiative of the program from the previous year.

# Water Shortage Response

As discussed in the Drought Management Plan submitted by the Applicants, Union County will declare a drought stage based upon the worst drought stage declared by either the Catawba-Wateree Low Inflow Protocol, the Yadkin-Pee Dee Low Inflow Protocol or the NC Drought Management Advisory Council. The Applicants will implement the appropriate measures, applicable to all customers regardless of location, based upon the most conservative drought stage at the time. Union County supplies all of the Town of Wingate's water, thus Town of Wingate will coordinate with Union County regarding drought stage.

This method of water shortage response will ensure the utmost protection of all of the source waters for the Applicants, including the IBT transfer from the Yadkin River.



# Water Conservation Reporting

Annually, both the County and the Town are required to file a Local Water Supply Plan with NC Department of Environmental Quality (NCDEQ). Within this document, the per capita water usage is calculated and reported. This measure is a good indicator of general water conservation effectiveness but must be compared to previous years and/or similar water systems. Any additional water conservation initiatives and measures will be included in the quarterly reports, as they are approved.





Appendix A

Conservation Plan Comparison Matrix

| Utility                      |   | Union Co  | Albemarle   | Anson Co  | Concord  | Davidson Water  |
|------------------------------|---|---|---|---|--|---|
|                              | Gallons included with<br>Base Rate  | Residential and Commercial  Base rate includes 0 gallons  | Residential & Commercial  Base rate includes 300 gallons  | Residential & Commercial  Base rate includes 2,000 gallons  | Residential & Commercial  Base rate includes 0 gallons   | Residential & Commercial  Base rate includes 2,000 gallons  |
| Water Rates                  | Structure   | Residential: 5 rate tiers - inclining block Irrigation: 5 rate tiers - inclining block Commercial: uniform rate  All rates increase based on drought stage except Tier 1 (<3,000 gallons)   | Declining block<br>Residential & Commercial: 3 rate tiers   | Declining block   | Residential: 3 rate tiers - inclining block Irrigation: uniform Commercial: uniform Tiers 2 and 3 increase 10% during drought stage  | Uniform rate  |
|                              | "Conservation Signal<br>Rate" (> 10,000<br>gal/month consumption)<br>from UNC Environmental<br>Finance Center study | Conservation signal (Tier 4): \$6.60/1,000 gallons Also have Tier 5: \$10.75 (>15,000 gal) Base rate: \$2.50/1,000 gallons  | N/A - Declining block   | N/A - Declining block   | Conservation signal: \$8.58/1,000 gallons (same as irrigation rate) Base rate: \$5.36/1,000 gallons  | N/A - Uniform rate  |
| Education                    |   | droughts/water shortages, preserves   | No education information or WSRP found on the website: however, website notes that due to their supply they did not have to implement mandatory restrictions in last severe drought.  No response to phone inquiries (2). | No information found on county website for water conservation other than the unauthorized use of fire hydrants is prohibited.  WSRP not found on Anson County website.  No response to phone inquiries (2). | Website prominently displays water conservation stage on Water Resources page with easy links to additional information.  Includes: Water use guidelines based on level of drought; WSRP; annual water reports; conservation tips including tips for watering plants in a drought.  Link to water resources which include facts of Concord's water usage and links to guidelines, conservation tips, checking for leaks, rain barrels, backflow prevention, and other water information. | Website contains Water Conservation as a primary tab on the site.  Extensive tips for customers as well as the complete water conservation plan and drought management plan for Davidson Water. |
| Wate                         | er Loss Reduction   | Annual AWWA water audit conducted with periodic 3rd party validation. Recommendations followed up on in next year. Perform leak detection, large meter testing and notify customers of high usage when meter read.  | No info found and no inquiry response.  | No info found and no response from phone inquiries (2).   | The website has a page with detailed instructions on how to use the water meter to determine if there are potential plumbing leaks.  | Website notes that Davidson Water monitor unaccounted for water monthly and utilizes SCADA system to detect leaks through tank levels and pump run times.                                       |
| Outdoor Water Use            |   | Mandatory year-round irrigation restrictions limiting all customers to 3 days per week irrigation regardless of water shortage status.  Policy requires rain sensors for all irrigation systems equipped with timers.  WSRP has progressively more restrictive irrigation restrictions depending on water shortage circumstances. | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  | No info found and no response from phone inquiries (2).   | Website has extensive information on ways to conserve water outdoors including information on species of drought tolerant plants for landscaping.  Outdoor water use restrictions in the WSRP are similar to other plans but with more detailed triggers for implementation.   | Conservation tips for outdoor conservation on website. Most measures are standard to all plans.   |
| Plumbing Retrofits           |   | Union County does not have a plumbing retrofit program, as more than 80% of the system and population served are relatively new with plumbing systems built under current low flow codes (post 1990).   | No info found and no response from phone inquiries (2).   | No info found and no response from phone inquiries (2).   | Concord has a toilet replacement credit of \$50 per toilet (limit 3) for the replacement of toilets installed before 1994.   | Conservation tips contain significant information on maintaining plumbing and appliances to save water.  No retrofit incentives found.  |
| Alternative Water Management |   | Provide reuse water to golf course from a small WWTP. Two other WWTPs permitted for reuse and the County has studied potential distribution network or bulk hauling options for use.  | No info found and no response from phone inquiries (2).   | No info found and no response from phone inquiries (2).   | WSRP recommends reusing household water to the greatest extent possible at all times.  | Conservation page on website gives specific tips on types of graywater usages.  |

| Utility   |                                    | Davie Co  | Denton  | Dobson   | Elkin  | Hamlet Water System   |
|---|------------------------------------|---|---|--|--|---|
|   |                                    | Residential & Commercial  | Residential & Commercial  | Residential & Commercial   | Residential & Commercial   | Residential & Commercial  |
|   | Gallons included with<br>Base Rate | Base rate includes 3,000 gallons  | Base rate includes 1,000 gallons  | Base rate includes 0 gallons                                       | Base rate includes 2,000 gallons   | Base rate includes 2,500 gallons  |
|   |                                    | Uniform rate  | Uniform rate  | Declining block  | Uniform rate   | Inclining block<br>Residential & Commercial: 2 rate tiers   |
| Water Rates   | Structure                          |   |   |  |  |   |
| "Conservation Signal<br>Rate" (> 10,000<br>gal/month consumption<br>from UNC Environmenta<br>Finance Center study |                                    | vs. \$5.00/1,000 gallons for domestic use.  | N/A - Uniform rate  | N/A - Declining block  | N/A - Uniform rate   | N/A - Tier 2 initiates at 50,000 gallons  |
|   |                                    | WSRP not available on the website but noted   | website.  No active education program per phone                           | No info found on website and no response from phone inquiries (2). | No water conservation or WSRP info on website.  No active education program per phone interview.                                     | No information found on the website and no WSRP listed on NCWATER website and no active program per phone interview.  Annual water report available on website. |
|   | Education                          | that it was available at the county offices (It is available on NCWATER website).   |   |  |  |   |
|   |                                    |   |   |  |  |   |
| Wate  | er Loss Reduction                  | Use AMR meter system to assist in water loss reduction  | Use system SCADA to assist with leak identification.                      | No info found on website and no response from phone inquiries (2). | No specific measures per phone interview.  | No info found. No active measure per phone interview.   |
|   |                                    |   |   |  |  |   |
|   |                                    | WSRP requires 50% price increase of irrigation rates in Stage 1 Voluntary. Stage 2 Mandatory has 100% increase. Other outdoor use measures are standard reductions. | ranging from voluntary to mandatory depending on stage declared.          | No info found on website and no response from phone inquiries (2). | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared. | No info found on website. No active measure per phone interview.  |
| Out   | tdoor Water Use                    | No active programs per phone interview.   | No active program per phone interview.                                    |  | No active programs per phone interview.  |   |
| Plumbing Retrofits  |                                    | No active program per phone interview.  | tive program per phone interview.  No active program per phone interview. |  | No incentives per phone interview.   | No info found. No active measure per phone interview.   |
| Alternative Water Management  |                                    | No active program per phone interview.  | No active program per phone interview.                                    | No info found on website and no response from phone inquiries (2). | No active measures per phone interview.  | No info found. No active measures per phone interview.  |
|   |                                    |   |   |  |  |   |

| Utility                      |   | Handy Sanitary District  | Jonesville   | Kannapolis  | King  | Lexington   |
|------------------------------|---|--|--|---|---|---|
|                              |   | Residential & Commercial   | Residential & Commercial   | Residential & Commercial  | Residential & Commercial  | Residential & Commercial  |
|                              | Gallons included with<br>Base Rate  | Base rate includes 2,000 gallons   | Base rate includes 2,000 gallons   | Base rate includes 0 gallons  | Base rate includes 4,000 gallons  | Base rate includes 0 gallons  |
| Water Rates                  | Structure   | Uniform rate   | Uniform rate   | Residential: 2 rate tiers - inclining block<br>Commercial: uniform rate   | Uniform rate  | Uniform rate  |
|                              | "Conservation Signal<br>Rate" (> 10,000<br>gal/month consumption)<br>from UNC Environmental<br>Finance Center study |  | N/A - Uniform rate   | Tier 2 and irrigation rate \$6.44/1,000 gallons Base rate: \$6.15/1,000 gallons   | N/A - Uniform rate  | N/A - Uniform rate  |
|                              |   | Website provides water conservation tips such as shortening showers, don't run water for cold/hot (use fridge/stove), no running water for washing fruits/veggies or brushing teeth, fill sink with water to wash dishes, water lawn early in morning, let grass grow longer to lessen evaporation, sweep walkways/driveways and wash cars with a bucket of water. | Website has WSRP and annual water quality report available.  No other conservation information found on website and no active conservation education program per phone interview.            |   | conservation tips such as repairing leaks/drips, running full loads of laundry and dishes in the dishwasher, using a broom to clean off walkways/driveways, only watering the lawn/landscape when it needs it, and reporting leaks in fire hydrants, plumbing or other public facilities.  A Word version of conservation tips is | No water conservation education information found on the website.  Water conservation measures found in Code of Ordinances (WSRP).  All levels of conservation activated by declaration by the board of commissioners.  No active conservation education program per interview. |
| Wate                         | er Loss Reduction   | Tips sheet on website page on identifying leaks in plumbing systems.   | No specific recommendations found for water loss reduction for customers.  Per phone interview, distribution staff perform visual inspections and stream chlorine samples to look for leaks. | Use of Smart Meter technology to detect water loss on customer plumbing.  Tips sheet on identifying leaks in plumbing systems.        | No specific recommendations found for water loss reduction for customers or the distribution system.  | No specific recommendations found for water loss reduction for customers or the distribution system.  No active measures per phone interview.   |
| Out                          | door Water Use  | Website has list of water conservation tips for outdoor use.   | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared. No specific active measures per phone interview.        | homepage.  Numerous tips given on info page which is well linked.   | WSRP has standard mandatory outdoor use conservation measures of varying degrees depending on water storage stage declared.  First water shortage stage includes outdoor water use restrictions to one day per week and limits on washing vehicles or surfaces and limits on hydrant usage.                                       | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  |
| Plui                         |   | Website has tips for locating leaks, decreasing toilet flush volumes, and water saving devices.  No retrofit incentives found.   | No incentives per phone interview.   | No plumbing retrofit incentives found.  Website provides slightly more detail on water saving devices and insulating pipes than most. | No info found on website and no response from phone inquiries (2).  | WSRP recommends use of water saving devices on a voluntary basis.  No retrofit incentives per phone interview.  |
| Alternative Water Management |   | No info found on website.  | No program per phone interview.  | Promotes Smart Meters as a technology to prevent water loss.  | No information found and no response to phone interview.+P10:P11  | Per phone interview they provide reuse water to a golf course from a small WWTP but no other customers.   |

| Jtility                      |   | Mocksville   | Montgomery Co   | Mount Airy  | North Wilkesboro  | Norwood   |
|------------------------------|---|--|---|---|---|---|
|                              |   | Residential & Commercial   | Residential: Base and flat rates include 1,000 gallons  | Residential & Commercial  | Residential & Commercial  | Residential & Commercial  |
|                              | Gallons included with<br>Base Rate  | Base rate includes 3,000 gallons   | Commercial: Base rate includes 0 gallons  | Base rate includes 0 gallons  | Base rate includes 0 gallons  | Base rate includes 1,000 gallons  |
| ater Rates                   | Structure   | Uniform rate   | Residential: 3 rate tiers - inclining block<br>Commercial: 2 rate tiers - declining block<br>\$7.40 to \$2.99/1000 gallons for > 1MG/mo   | Combined Residential & Commercial Tier 1: Base rate Tier 2: inclining block (<1MG) Tier 3: declining block (>1MG)   | Uniform rate  | Declining block   |
|                              | "Conservation Signal<br>Rate" (> 10,000<br>gal/month consumption)<br>from UNC Environmental<br>Finance Center study | N/A - Uniform rate   | Conservation signal = \$8.00/1,000 gallons (Residential only) Tier 1 = \$4.00 Tier 2 = \$6.00 WSRP has water shortage rates provision.  | Conservation signal - \$3.34/1,000 gallons Base rate: \$2.37/1,000 gallons  | N/A - Uniform rate  | N/A - Declining block   |
|                              | Education   | No water conservation education program or information on website.   | No water conservation education information found on the website.  Water conservation measures found in Code of Ordinances (WSRP).  All levels of conservation activated by declaration by the board of commissioners.  No response from phone interview inquiries (2). | Recommendations for water conservation found in Utility Billing FAQ under high bill causes.  No active conservation education program per phone interview.                              | Downloads section on water leak impacts to consumption and billing. | No water conservation information found on the website other than the WSRP contained in the Code of Ordinances (#106).  Per phone interview, no active conservation program.              |
| Wate                         | r Loss Reduction  | No specific recommendations found for water loss reduction for customers or the distribution system.  No active measures per Mocksville staff. | "Waste of Water" defined in ordinance to include repairable leaks or allowing surface runoff (paraphrased).  No response from phone interview inquiries (2).  | WSRP Stage 1 Voluntary includes a statement to repair all leaks.  Per phone interview, SCADA is used with meter data to monitor unaccounted water on supply side.                       | · · ·   | No specific recommendations found for water loss reduction for customers or the distribution system.  Per phone interview, track water production and billing volumes for unaccounted for |
| Outdoor Water Use            |   | No info found on website. No active measures per phone interview.  | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  Per phone interview, no active customer measures. | Per phone interview, no active measures.                            | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  Per phone interview, no active measures.            |
| Plumbing Retrofits           |   | No plumbing retrofit program.  | No information found and no response from phone interview inquiries (2).  | WSRP recommends use of water saving devices on a voluntary basis.  No retrofit incentives.  | No retrofit incentive program per phone interview.                  | No retrofit incentive program per phone interview.  |
| Alternative Water Management |   | No info found on website. No active measures per phone interview.  | No information found and no response from phone interview inquiries (2).  | WSRP has recommendation to "re-utilize" household water where possible. No water reuse program.   | No alternative water use measures per phone interview.              | No alternative water use measures per phone interview.  |

| Utility   |                                    | Pilot Mountain   | Richmond County  | Rockingham  | Salisbury   | Thomasville   |  |
|---|------------------------------------|--|--|---|---|---|--|
|   |                                    | Residential & Commercial   | Residential & Commercial   | Residential & Commercial  | Residential & Commercial  | Residential & Commercial  |  |
|   | Gallons included with<br>Base Rate | Base rate includes 1,000 gallons   | Base rate includes 2,000 gallons   | Base rate includes 2,000 gallons  | Base rate includes 0 gallons  | Base rate includes 0 gallons  |  |
| Water Rates   | Structure                          | Uniform rate   | Residential: 8 rate tiers, declining<br>Commercial: 8 rate tiers, declining  | Declining block   | Uniform rate  | Uniform rate  |  |
|   |                                    |  |  |   |   |   |  |
| "Conservation Signal<br>Rate" (> 10,000<br>gal/month consumption<br>from UNC Environmenta<br>Finance Center study |                                    |  | N/A - Declining block  | N/A - Declining block   | N/A - Uniform rate  | N/A - Uniform rate  |  |
| Education   |                                    | No conservation program found other than WSRP.  No voluntary conservation measures found.  No response from phone interview inquiries (2).   | No water conservation information found on the county website and no response from phone interview inquiries (2).  WSRP on NCWater website notes that brochures on water conservation are available at the Water Billing Department. | No active conservation education program per phone interview.   | Salisbury has environmental education position that includes conservation education.  | Water conservation policy available through Code of Ordinances link on the website.  No active conservation education program per phone interview.                              |  |
| Wate  | er Loss Reduction                  | No specific recommendations found for water loss reduction for customers or the distribution system.  No response from phone interview inquiries (2).  | WSRP Stage 1 Voluntary includes a statement to repair all leaks.  No response from phone interview inquiries (2).  | WSRP Stage 1 Voluntary includes a statement to repair all leaks.  No active customer measures per phone interview.  | Use AMI for customer leak analytics and have historically performed water audits.   | No specific Water Loss measures found beyond the customer conservation requirements in the ordinance.  System tracking of unaccounted for water with billing data.              |  |
| Out   | tdoor Water Use                    | WSRP has standard outdoor use conservation measures for outdoor use for mandatory restrictions depending on stage declared.  No voluntary measures found and no response from phone interview inquiries (2). | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  No response from phone interview inquiries (2).  | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  No customer measures per phone interview. | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  No other specific measures per phone interview. | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  No specific measures per phone interview. |  |
| Plumbing Retrofits  |                                    | No retrofit incentive program found on website or WSRP and no response from phone interview inquiries (2).   | WSRP recommends use of water saving devices on a voluntary basis.  No info found for retrofit incentives and no response from phone interview inquiries (2).   |   | WSRP recommends use of water saving devices on a voluntary basis.  No plumbing retrofit incentives per phone interview.   | WSRP recommends use of water saving devices on a voluntary basis.  No plumbing retrofit incentives per phone interview.   |  |
| Alternative Water Management  |                                    | No info found and no response from phone interview inquiries (2).  | No info found and no response from phone interview inquiries (2).  | Website has guidance on cistern use for water conservation. No other measures per phone interview.  | WSRP has recommendation to "re-utilize" household water where possible.  No other measures per phone interview.   | No alternative water use measures per phone interview.  |  |

| Utility            |   | Wilkesboro   | Wingate   | Winston-Salem  | Yadkinville   |
|--------------------|---|--|---|--|---|
|                    | Gallons included with<br>Base Rate  | Residential & Commercial  Base rate includes 3,000 gallons   | Residential & Commercial  Base rate includes 1,500 gallons  | Residential & Commercial  Base rate includes 0 gallons   | Residential & Commercial  Base rate includes 3,000 gallons  |
| Water Rates        | Structure   | Uniform rate   | Inclining block<br>Residential & Commercial: 3 rate tiers   | Residential & Commercial: 3 rate tiers, inclining block until 150,000 gallon/month.  Tier 4: similar rate as Tier 1 for industrial volumes.  | Declining block<br>4 rate tiers   |
|                    | "Conservation Signal<br>Rate" (> 10,000<br>gal/month consumption)<br>from UNC Environmental<br>Finance Center study |  | Conservation signal: \$6.25/1,000 gallons (Tier 2) Base rate: \$4.95/1,000 gallons  | Conservation signal: \$4.81/1,000 gallons<br>Base rate: \$2.80/1,000 gallons   | N/A - Declining block   |
|                    | Education   | Website has a downloadable PDF offering water conservation tips.  No active education program per phone interview.   | Water conservation policy available through Code of Ordinances link on the website.  No active conservation education program per phone interview.  | Website has list of steps to conserve water.  Lists challenges/solutions for leaks, saving water and using water wisely, water trivia, kids links, quizzes, links to other websites about water.  Lists volunteer opportunities (Adopt-A-Stream), don't dump oil down the drain.  Workshops about water quality. | No active conservation education program per phone interview.   |
| Wate               | er Loss Reduction   | Perform annual water audit for the distribution system. Website brochure post information regarding water loss due to varying size leaks for customers. Assist customers with identifying demand side leaks. | No specific Water Loss measures found beyond the customer conservation requirements in the ordinance.  Monitor water billing data for abnormalities per phone interview.  | No specific Water Loss measures found beyond the customer conservation requirements in the ordinance.  | Monitor water billing usage data for abnormalities.   |
| Outdoor Water Use  |   | Website brochure provides tips on outdoor water conservation.  No other outdoor use measures per phone interview.  | WSRP has standard outdoor use conservation measures for outdoor use ranging from voluntary to mandatory depending on stage declared.  Policy requires rain sensors for all irrigation systems equipped with timers.  No other measures per phone interview. | Stage 1 has voluntary limits on irrigation, washing vehicles and sidewalks and filling pools.  Stage 2 initiates mandatory irrigation schedule and recommends 3 gallon hand watering.  Stage 3 eliminates most outdoor water use.  Penalties limited to \$200 but does allow for misdemeanor charge.             | Require rain sensors on all irrigation systems which must be used in water shortage.  No other active outdoor water use measures per phone interview. |
| Plumbing Retrofits |   | Website brochure included tip to install water saving devices.  No plumbing retrofit incentives per phone interview.   | WSRP recommends use of water saving devices on a voluntary basis.  No plumbing retrofit incentives per phone interview.   | Voluntary Stage 1 recommends fixing leaks and replacing water devices with low flow.  No incentives found.   | No plumbing retrofit incentive programs per phone interview.  |
| Alternativo        | e Water Management  | No alternative water use measures per phone interview.   | WSRP has recommendation to "re-utilize" household water where possible.  No other alternative use measures per phone interview.   | No info found.   | Customers requested to reuse household water to water plants.  No other alternative water use measures per phone interview.                           |



| ity      | Union Co   |  |  |                          |   |   |   |                             |  | Albemarle                                    |  |  | Anson Co  |                                    |
|----------|--|--|--|--------------------------|---|---|---|-----------------------------|--|--|--|--|---|------------------------------------|
| e Charge | Base Facility Fee – month  | nly fixed charge p   | er meter for reside  | ential and non-re        | sidential water cust                        | omers (based on   | meter size).                            |                             |  | Monthly Fix                                  | ed Charges   |  | Residential Unit Base F<br>(per single unit if multi    |                                    |
|          | METER SIZE   | FY 2018  | FY 2019  | FY 2020                  |   |   |   |                             |  | WA   | TER / SEWER RAT  | E SCHEDULE   | Commercial Unit Base                                    |                                    |
|          | 3/4"   | \$9.65   | \$10.30  | \$10.95                  |   |   |   |                             |  |  |  |  | (per single unit if multi                               | i-unit)                            |
|          | 1"   | \$24.25  | \$25.85  | \$27.55                  |   |   |   |                             |  |  | er - Inside Corporate Limits<br>00 Cubic Feet (minimum)  | \$11.64  |   |                                    |
|          | 1 1/2"   | \$48.00  | \$51.10  | \$54.40                  |   |   |   |                             |  | 301  | - 30,000 c.f.  | \$2.54 per 100 c.f.  |   |                                    |
|          | 2"   | \$76.75  | \$81.75  | \$87.05                  |   |   |   |                             |  |  | 01 - 275,000 c.f.<br>r 275,000 c.f.  | \$2.19 per 100 c.f.<br>\$1.60 per 100 c.f.   |   |                                    |
|          | 3"   |  |  |                          |   |   |   |                             |  |  | •  | 31.00 pci 100 c.i.   |   |                                    |
|          |  | \$215.95   | \$230.00   | \$244.95                 |   |   |   |                             |  |  | er - Outside Corporate Limits<br>00 Cubic Feet (minimum)   | \$23.26  |   |                                    |
|          | 4"   | \$479.95   | \$511.15   | \$544.35                 |   |   |   |                             |  | 301  | - 30,000 c.f.  | \$5.10 per 100 c.f.  |   |                                    |
|          | 6"   | \$671.85   | \$715.50   | \$762.00                 |   |   |   |                             |  |  | 01 - 275,000 c.f.<br>r 275,000 c.f.  | \$4.39 per 100 c.f.<br>\$1.60 per 100 c.f.   |   |                                    |
| dential  | Volumetric Rates - charg<br>  Residential<br>  Tier 1 0 - 3,0<br>  Tier 2 3,001 - 7,0<br>  Tier 3 7,001 - 10,1<br>  Tier 4 10,001 - 15,1 | FY 2<br>00 gallons \$2.<br>00 gallons 3.<br>000 gallons 4. | Standard Rates / Water Shortage Stage I  1018 FY 2019 FY 35 \$2.50 \$20 3.40 \$55 4.85 | <u> </u>                 | Jater Shortage<br>Stage II                  | Water Sta    20 FY 2018 FY    \$2.35 \$3.20 \$3.905 \$5.500 \$5 | Shortage<br>age III                     | 0 FY 2018<br>\$3.20<br>4.80 | Water<br>Shortage<br>Stage IV<br>FY 2019 FY 2020<br>\$3.40 \$3.60<br>5.10 5.45<br>10.80 11.50<br>20.70 22.05 | Wate 0 - 3 301 30,0 Over Wate 0 - 3 301 30,0 | er - Inside Corporate Limits 00 Cubic Feet (minimum) - 30,000 c.f. 01 - 275,000 c.f 275,000 c.f. er - Outside Corporate Limits 00 Cubic Feet (minimum) - 30,000 c.f. 01 - 275,000 c.f 275,000 c.f. | \$11.64<br>\$2.54 per 100 c.f.<br>\$2.19 per 100 c.f.<br>\$1.60 per 100 c.f.<br>\$23.26<br>\$5.10 per 100 c.f.<br>\$4.39 per 100 c.f.<br>\$1.60 per 100 c.f. | Usage Rate \$   | 4.32/per 1,000 gallons             |
| mercial  | Tier 5 > 15,000  Volumetric Rates – charg  | 0 gallons 10.  |  |                          | 18.30 19.50                                 |   | 1.30 33.35                              | 31.80<br>Dunty Manag        | 33.85 36.05 er.  |  | TER / SEWER RAT  | E SCHEDULE   | Usage Rate 10,000 gallons 25,000 gallons 50,000 gallons | \$45.09<br>\$91.24<br>\$168.15     |
|          |  |  | Water Shorta<br>Stage I  | age                      | Water Shortag<br>Stage II<br>2018 FY 2019 F |   | Water Shorta<br>Stage III<br>18 FY 2019 |                             | Shortage<br>Stage IV<br>Y 2018 FY 2019 FY 2020   | 301<br>30,0                                  | 00 Cubic Feet (minimum)<br>- 30,000 c.f.<br>01 - 275,000 c.f.<br>r 275,000 c.f.  | \$11.64<br>\$2.54 per 100 c.f.<br>\$2.19 per 100 c.f.<br>\$1.60 per 100 c.f.   | 100,000 gallons<br>250,000 gallons<br>500,000 gallons   | \$317.97<br>\$721.84<br>\$1,390.78 |
|          | Non-Residenti<br>All Usage   | <u>al</u><br>\$3.2   | 25 \$3.45 \$3  | 3.70 3.45                | 3.65 3.90                                   | 3.75 4  | 1.00 4.25                               | 4.45                        | 4.75 5.05  |  | er - Outside Corporate Limits<br>00 Cubic Feet (minimum)   | \$23.26  |   |                                    |
|          | Wholesale<br>All Usage   | \$2.6  | 50 \$2.77 \$3  | 2.95 \$2.60              | \$2.77 \$2.95                               | \$2.85 \$3  | 3.05 \$3.25                             | \$3.15                      | \$3.35 \$3.55  | 301<br>30,0                                  | 00 Cubic Peet (Minimum)<br>- 30,000 c.f.<br>01 - 275,000 c.f.<br>r 275,000 c.f.  | \$5.10 per 100 c.f.<br>\$4.39 per 100 c.f.<br>\$1.60 per 100 c.f.  |   |                                    |
|          |  |  |  |                          |   |   |   |                             |  |  |  |  |   |                                    |
| ion      | Volumetric Rates – charg   | e for water per 1,   |  | -                        | current Water Shor                          | tage Stage as dec   | lared by the Co                         | ounty Manag                 | 1007-1000-100  | No separate                                  | e irrigation rates   |  | No separate irrigation                                  | rates.                             |
|          |  |  | Standard Rat<br>Water Short  | tage                     | Water Shortag<br>Stage II                   | e   | Water Shorta<br>Stage III               | ge                          | Water<br>Shortage  |  |  |  |   |                                    |
|          |  | F  | Stage I<br>Y 2018 FY 2019  |                          |   | Y 2020 FY 20  |   | FY 2020 F                   | Stage IV<br>Y 2018 FY 2019 FY 2020   | 0  |  |  |   |                                    |
|          | Irrigation   |  |  |                          |   |   |   |                             |  |  |  |  |   |                                    |
|          | Tier 1 0 - 3,0<br>Tier 2 3,001 - 7,0   |  | 1 1  | 5.15 \$4.55<br>5.15 4.55 | \$4.85 \$5.15<br>4.85 5.15                  |   | 0.65 \$10.30<br>0.65 10.30              | \$10.15<br>10.15            | \$10.80 \$11.50<br>10.80 11.50   |  |  |  |   |                                    |
|          | Tier 3 7,001 - 10,0  |  | 1 1  | 5.15 4.55                | 4.85 5.15                                   |   | 0.65 10.30                              | 10.15                       | 10.80 11.50  |  |  |  |   |                                    |
|          |  |  | 1 1  |                          |   |   |   |                             |  | 1  |  |  | 1   |                                    |
|          | Tier 4 10,001 - 15,0   | 000 gallons 6.<br>0 gallons 10.                            | 60 7.05  | 7.50 10.55               | 11.25 12.00                                 | 18.00 19  | 20.40                                   | 19.45                       | 20.70 22.05  |  |  |  |   |                                    |

| Utility             | Concord  |   | Davidson Water  | Davie Co   | Denton   |
|---------------------|--|---|---|--|--|
| Utility Base Charge | Base Charge  Inside City: Ot 34.04 \$ | utside City: 1.54 1.61 1.35 7.29 1.123 1.111 00.36 59.70 29.13 26.73  | Dependent on meter size Residential Unit Base Fee (3/4 inch meter) \$13.35 includes 2,000 gallons | Davie Co Bi-monthly Base Charge \$26.00 includes 3,000 gallons   | Denton  Base Charge (1,000 gallons): In town  \$25.00  \$50.00   |
| Residential         | Usage Rate  Residential volume charges inside city: Residential service: Block 1 (0 - 6,000 gallons/month) Block 2 (6,001 - 8,999 gallons/month) Block 3 (9,000+ gallons) & Irrigation service: Residential volume charges outside city: Residential service: Block 1 (0 - 6,000 gallons/month) Block 2 (6,001 - 8,999 gallons/month) Block 3 (9,000+ gallons) & Irrigation service  | \$5.36/1,000 gallons<br>\$6.97/1,000 gallons<br>\$8.58/1,000 gallons<br>\$6.44/1,000 gallons<br>\$3.37/1,000 gallons<br>\$10.30/1,000 gallons   |   | Uniform usage rate \$5/1,000 gallons above 3,000 gallons in base charge.  Projected Bill 3,000 gallons \$20.50 4,000 gallons \$25.50 5,000 gallons \$30.50 10,000 gallons \$55.50 15,000 gallons \$55.50                                   | Usage Rate  Inside: \$6.15/1,000 gallons  Outside: \$12.30/1,000 gallons  Projected Bill Inside Outside 3,000 gallons \$37.30 \$74.60 4,000 gallons \$43.45 \$86.90 5,000 gallons \$43.60 \$99.20 10,000 gallons \$80.35 \$160.70 15,000 gallons \$111.10 \$222.20 |
| Commercial          | Usage Rate  Commercial and institutional volume charges inside city:     Commercial/institutional service     Commercial/institutional irrigation service Commercial and institutional volume charges outside city:     Commercial/institutional service     Commercial/institutional irrigation service Industrial volume charge inside city:     Industrial service Industrial volume charge outside city:     Industrial volume charge outside city:     Industrial irrigation service Industrial irrigation service Industrial irrigation service  | \$5.41/1,000 gallons<br>\$8.58/1,000 gallons<br>\$6.50/1,000 gallons<br>\$10.30 /1,000 gallons<br>\$4.00/1,000 gallons<br>\$8.58/1,000 gallons<br>\$4.80/1,000 gallons<br>\$10.30/1,000 gallons |   | Commercial and residential rate the same.  Projected Bill 10,000 gallons \$55.50 25,000 gallons \$130.50 50,000 gallons \$255.50 100,000 gallons \$505.50 250,000 gallons \$1.255.50 500,000 gallons \$1,255.50 500,000 gallons \$2,505.50 | Usage Rate    Inside   |
| Irrigation          | Residential Irrigation Base Fee (Based on meter size)  Residential Irrigation Usage Rate \$8.58/1000 gallons for inside city and \$10.3  |   | No separate irrigation rates  | Uniform rate of \$5.67 per 1000 gallons above 3,000 gallons in base.   | No separate irrigation rates   |

| Utility     | Dobson   |   |   | Elkin  |                          |                            | Hamlet Water System  |                               |                        | Handy Sanitary District             |                                     |
|-------------|--|---|---|--|--------------------------|----------------------------|--|-------------------------------|------------------------|-------------------------------------|-------------------------------------|
| Base Charge | Dependent on meter size.                                     | Inside                                  | Outside                                 |  | Inside                   | Outside                    |  | Insid                         | <u>Outside</u>         | A minimum monthly bill is \$21.0    | 0 and includes up to 2,000 gallons. |
|             | Residential Unit Base Fee<br>(per single unit if multi-unit) | \$12.50                                 | \$25.00                                 | Residential Unit Base Fee<br>(per single unit if multi-unit) | \$15.50                  | \$31.00                    | Residential Unit Base Fee<br>(per single unit if multi-unit) | \$21.00                       | \$31.00                | , .                                 | , , ,                               |
|             | Commercial Unit Base Fee<br>(per single unit if multi-unit)  | \$12.50                                 | \$25.00                                 | Commercial Unit Base Fee<br>(per single unit if multi-unit)  | \$15.50                  | \$31.00                    | Commercial Unit Base Fee<br>(per single unit if multi-unit)  | \$21.00                       | \$31.00                |                                     |                                     |
|             |  |   |   |  |                          |                            |  |                               |                        |                                     |                                     |
| Residential | Usage Rate   |   |   | Usage Rate   |                          |                            | Usage Rate   |                               |                        | Usage Rate                          |                                     |
|             |  | 3.10/1,000 gallon:<br>1.82/1,000 gallon | s                                       | \$6/1,000 gallons over 2,000 ga                              | allons usage inside      | city                       |  | 1,000 gallon:<br>1,000 gallon |                        | \$6/1,000 gallons over initial 2,00 | 0 gallons                           |
|             |  |   |   | Projected Bill   | Inside                   | Outside                    | Outside city rates double                                    | 1,000 galloli                 | 5                      | 3,000 gallons                       | \$27.00                             |
|             | Projected Bill<br>3,000 gallons                              |   | Outside<br>\$43.60                      | 3,000 gallons<br>4,000 gallons                               | \$21.50<br>\$24.50       | \$43.00<br>\$55.00         | Projected Bill   | Inside                        | <u>Outside</u>         | 4,000 gallons<br>5,000 gallons      | \$33.00<br>\$39.00                  |
|             | 4,000 gallons<br>5,000 gallons                               | \$24.90<br>\$28.00                      | \$49.80<br>\$56.00                      | 5,000 gallons<br>10,000 gallons                              | \$33.50<br>\$63.50       | \$67.00<br>\$127.00        | 3,000 gallons<br>4,000 gallons                               | \$21.70<br>\$23.10            | \$32.40<br>\$35.20     | 10,000 gallons<br>15,000 gallons    | \$69.00<br>\$99.00                  |
|             | 10,000 gallons<br>15,000 gallons                             | \$43.50                                 | \$87.00<br>\$118.00                     | 15,000 gallons   | \$93.50                  | \$187.00                   | 5,000 gallons<br>10,000 gallons<br>15,000 gallons            | \$24.50<br>\$31.50<br>\$38.50 | \$38.00                |                                     |                                     |
| Commercial  | Usage Rate   |   |   | Usage Rate   |                          |                            | Usage Rate   |                               |                        | Usage Rate                          |                                     |
| Commercial  |  |   |   |  |                          |                            |  |                               |                        |                                     |                                     |
|             | Commercial rate same as reside                               | ntial                                   |   | Commercial rate same as resid                                | lential                  |                            | Commercial rate same as residen                              | tial                          |                        | Commercial rates same as reside     | ntial rates                         |
|             | Projected Bill<br>10,000 gallons                             | <u>Inside</u> <u>0</u><br>\$43.50       | <u>Sutside</u><br>\$87.00               | Projected Bill<br>10,000 gallons                             | <u>Inside</u><br>\$63.50 | <u>Outside</u><br>\$127.00 | Projected Bill<br>10,000 gallons                             | <u>Inside</u><br>\$31.50      | Outside<br>\$52.00     | 10,000 gallons<br>25,000 gallons    | \$69.00<br>\$159.00                 |
|             | 25,000 gallons   | \$90.00                                 | \$180.00                                | 25,000 gallons   | \$153.50                 | \$307.00                   | 25,000 gallons   | \$52.50                       | \$94.00                | 50,000 gallons                      | \$309.00                            |
|             | 50,000 gallons<br>100,000 gallons                            |   | \$335.00<br>\$645.00                    | 50,000 gallons<br>100,000 gallons                            | \$303.50<br>\$603.50     | \$607.00<br>\$1,207.00     | 50,000 gallons<br>100,000 gallons                            | \$87.50<br>\$162.50           | \$164.00<br>\$314.00   | 100,000 gallons<br>250,000 gallons  | \$609.00<br>\$1,509.00              |
|             | 250,000 gallons<br>500,000 gallons                           |   | 1,580.00<br>5,185.00                    |  | \$1,503.50<br>\$3,003.50 | \$3,007.00<br>\$6,007.00   | 250,000 gallons<br>500,000 gallons                           | \$387.50<br>\$762.50          | \$764.00<br>\$1,514.00 | 500,000 gallons                     | \$3,009.00                          |
|             | Soloto gallons   | <b>4</b> 3351.30 <b>4</b> 3             | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Societa gamana   | 45,003.30                | <b>4</b> 0,007.00          | Section gaments  | Ç/OLISO                       | <i>\$2,52.4,66</i>     |                                     |                                     |
| Irrigation  | No separate irrigation rates.                                |   |   | No separate irrigation rates                                 |                          |                            | No separate irrigation rates                                 |                               |                        | No separate irrigation rates        |                                     |
| -9          |  |   |   |  |                          |                            |  |                               |                        |                                     |                                     |
|             |  |   |   |  |                          |                            |  |                               |                        |                                     |                                     |

| Utility     | Jonesville   | Kannapolis  | King  |
|-------------|--|---|---|
| Base Charge | Inside Outside   |   | Unit Base Fee   |
|             | Residential Unit Base Fee \$24.20 \$48.40  Commercial Unit Base Fee \$24.20 \$48.40  Commercial Unit Base Fee (per single unit if multi-unit)  See \$24.20 \$48.40   | Residential Unit Base Fee \$6.95 \$8.15 (per single unit if multi-unit)   | inside City \$28.99/bi-monthly 0-4,000 gallons Outside City \$36.25/bi-monthly 0-4,000 gallons  |
| Residential | Usage Rate   | Usage Rate  | Usage Rate  |
|             | \$9.75/1,000 gallons over initial 2,000 gallon usage  Projected Bill Inside Outside 3,000 gallons \$33.95 \$67.90 4,000 gallons \$43.70 \$87.40 5,000 gallons \$53.45 \$106.90 10,000 gallons \$102.20 \$204.40 15,000 gallons \$150.95 \$301.90   | Individual Water Service: (less than 2 inch) (Note 1)   • Tier 1 per 1,000 gallons (0-7,000 gals)                                 | Inside City \$3.11/bi-monthly per thousand gallons over 4,000 gallons Outside City \$3.89/bi-monthly per thousand gallons over 4,000 gallons            |
| Commercial  | Usage Rate  Commercial rates same as residential  Project Bill Inside Outside 10,000 gallons \$102.20 \$204.40 25,000 gallons \$248.45 \$496.90 50,000 gallons \$492.20 \$884.40 100,000 gallons \$979.70 \$1,959.40 250,000 gallons \$2,442.20 \$4,884.40 500,000 gallons \$4,879.70 \$9,759.40 | • Tier 1 per 1,000 gallons (0-7,000 gals) \$ 6.15 \$ 7.30   | Usage Rate Inside City \$3.11/bi-monthly per thousand gallons over 4,000 gallons Outside City \$3.89/bi-monthly per thousand gallons over 4,000 gallons |
| Irrigation  | No separate irrigation rates   | Inside Outside Irrigation Base Fee \$6.95 \$8.15  Usage Rate Inside city: \$6.44/1,000 gallons Outside city: \$7.65/1,000 gallons | No separate irrigation rates  |

| Utility             | Lexington                              |   |  | Mocksville  | Montgomery Co  |
|---------------------|--|---|--|---|--|
| Utility Base Charge | Meter   Size                           | Inside City Limits  Monthly B: \$14.60 \$36.50 \$73.00 \$116.80 \$219.00 \$365.00 \$730.00 \$1,168.00 | Outside City Limits use Charge \$29.93 \$74.83 \$149.65 \$239.44 \$448.95 \$748.25 \$1,496.50 \$2,394.40 | Mocksville Residential Unit Base Fee S29.69 that includes up to 3000 gallons                | Montgomery Co  Residential Unit Base Fee (per single unit if multi-unit)  Commercial Unit Base Fee (per single unit if multi-unit)  \$38.00 Flat Rate (per single unit if multi-unit)                                |
| Residential         | Monthly Volume Charges !               | inside City Outside City<br>\$1.89/CCF \$3.87/CCI   |  | Monthly Volume Charges (>3000 gal) Inside City \$4.21/1000 gal Outside City \$7.18/1000 gal | Flat Charge \$5.00/flat rate for 1-1,000 gallons Low Usage \$4.00/per 1,000 gallons between 1,001-2,000 Medium Usage \$6.00/per 1,000 gallons between 2,001-4,000 High Usage \$8.00/per 1,000 gallons between >4,000 |
| Commercial          | Monthly Volume Charges All Meter Sizes | Inside City Outside City<br>\$1.89/CCF \$3.87/CC  | F  | Monthly Volume Charges (>3000 gal) Inside City \$4.21/1000 gal Outside City \$7.18/1000 gal | Low Usage \$7.40/per 1,000 gallons between 0-1,000,000 High Usage \$2.99/per 1,000 gallons between >1,000,000  |
| Irrigation          | No separate irrigation rates           |   |  | No separate irrigation rates  | No separate irrigation fees  |

| Utility     | Mount Airy   |   |   |  | North Wilkesboro               |  | Norwood  | Pilot Mountain, Town of  |
|-------------|--|---|---|--|--------------------------------|--|--|--|
| Base Charge |  | Minimum Monthly Charge:   |   |  | Unit Base Fee                  |  |  | Unit Base Fee  |
|             | Inside City Limits   |   | 1.00<br>2.50<br>5.00<br>8.00<br>16.00<br>25.00<br>50.00<br>80.00  | \$ 10.77<br>\$ 26.93<br>\$ 53.85<br>\$ 86.16<br>\$ 172.32<br>\$ 269.25<br>\$ 538.50<br>\$ 861.60       | In Town<br>Out of Town         | \$9.08 - Minimum Charge<br>\$13.61 - Minimum Charge  | city.  | Inside Town Limits \$16.50 includes 1,000 gallons Outside Town Limits \$30.50 includes 1,000 gallons |
|             | Outside City Limits  | Meter Size  3/4 Inch 1.0 Inch 1.5 Inch 2.0 Inch 3.0 Inch 4.0 Inch 6.0 Inch 8.0 Inch | 1.00<br>2.50<br>5.00<br>8.00<br>16.00<br>25.00<br>80.00   | \$ 21.54<br>\$ 53.86<br>\$ 107.70<br>\$ 172.32<br>\$ 344.64<br>\$ 538.50<br>\$ 1,077.00<br>\$ 1,723.20 |                                |  |  |  |
| Residential | Inside City Limits  Volumetric Rates:  Usage Block  1 2 3 Outside City Limits  Volumetric Rates: | Monthly Usage  0 - 2,000 2,001 - 1,000,000  Over 1,000,000                          | Rate Per 1,00 Water \$ 2.37 \$ 3.34 \$ 2.86   | \$ 2.68<br>\$ 3.76<br>\$ 3.23  | Usage Rate In Town Out of Town | \$3.98/per 1,000 gallons<br>\$5.79/per 1,000 gallons | 1001 - 5000 gal/mo \$4.24/1,000 gallons \$5001 - 10,000 gal/mo \$3.95/1,000 gallons \$0.000 gal/mo \$0.00 | Usage Rate Inside Town Limits \$5.95/per 1,000 gallons Outside Town Limits \$11.90/per 1,000 gallons |
| Commercial  | Usage Block  1 2 3 Inside City Limits Volumetric Rates:  | Monthly Usage 0 - 2,000 2,001 - 1,000,000 Over 1,000,000                            | Water         Wa           \$ 4.74         \$           \$ 6.68         \$           \$ 5.72         \$ | 5.36<br>7.52<br>6.46   | Usage Rate Commercial rate san | me ac residential                                    | Commercial rates same as residential   | Usage Rate Inside Town Limits \$5.95/per 1,000 gallons   |
|             | Usage Block  1 2 3  Outside City Limits  | Monthly Usage  0 - 2,000 2,001 - 1,000,000  Over 1,000,000                          | Rate Per 1,00 Water \$ 2.37 \$ 3.34 \$ 2.86   | Wastewater   \$ 2.68   | In Town<br>Out of Town         | \$3.98/per 1,000 gallons<br>\$5.79/per 1,000 gallons |  | Outside Town Limits \$11.90/per 1,000 gallons  |
|             | Volumetric Rates:  Usage Block  1 2 3  | Monthly Usage 0 - 2,000 2,001 - 1,000,000 Over 1,000,000                            | Rate Per 1,00 Water \$ 4.74 \$ 6.68 \$ 5.72   | 0 Gallons Wastewater \$ 5.36 \$ 7.52 \$ 6.46   |                                |  |  |  |
| Irrigation  | No separate irrigation fees  |   |   |  | No separate irrigatio          | on rates   | No separate irrigation rates   | No separate irrigation rates   |

| Utility     | Richmond County Rockingham  |   | Salisbury  | Thomasville  |  |  |  |
|-------------|---|---|--|--|--|--|--|
|             | Residential Unit Base Fee \$22.65   | Base charge of \$9.30/mo including first 2,000 gallons of   | Monthly Rates:<br>3/4" \$4.11  | WATER DESCRIPTION RATE   |  |  |  |
|             | (per single unit if multi-unit)  Commercial Unit Base Fee \$31.00 (per single unit if multi-unit) | consumption   | 3/4" \$4.11 1" \$6.08 1-1/2" \$9.35 2" \$13.28 3" \$25.73 4" \$44.07 6" \$94.50 8" \$160.00 10" \$251.70 12" \$330.30 16" \$657.80 | DESCRIPTION         RATE           3/4" WATER INSIDE         \$ 9.70           1" WATER INSIDE         \$ 24.25           2" WATER INSIDE         \$ 155.20           4" WATER INSIDE         \$ 242.50           6" WATER INSIDE         \$ 485.00           8" WATER INSIDE         \$ 776.00           10" WATER INSIDE         \$ 1,115.50           3/4" WATER OUTSIDE         \$ 21.83           1" WATER OUTSIDE         \$ 54.56           2" WATER OUTSIDE         \$ 174.60           3" WATER OUTSIDE         \$ 545.63           6" WATER OUTSIDE         \$ 1,091.25           8" WATER OUTSIDE         \$ 1,746.00 |  |  |  |
| Residential | Usage Rate  | Usage Rate  | Usage rate   | Monthly Consumption Rate   |  |  |  |
|             | Decreasing block with 8 tiers   | 2001-50,000 gallons \$2.20/1,000 gallons \$5,001-250,000 gallons \$1.90/1,000 gallons \$1.50/1,000 gallons \$1.50/1,000 gallons | \$3.80/100 cf  | Inside City Limits \$5.04/per 1,000 gallons Outside City Limits \$11.34/per 1,000 gallons  |  |  |  |
| Commercial  | Usage Rate  | Usage Rate  | Commercial rates same as residential   | Monthly Consumption Rate   |  |  |  |
|             | Decreasing block with 8 tiers   | Commercial rates same as residential  |  | Inside City Limits \$5.04/per 1,000 gallons Outside City Limits \$11.34/per 1,000 gallons  |  |  |  |
| Irrigation  | No separate irrigation rates  | No separate irrigation rates  | No separate irrigation rates   | No separate irrigation rates   |  |  |  |

| Utility     | Wilkesboro  |   | Wingate   | Winston-Salem  | Yadkinville   |  |  |
|-------------|---|---|---|--|---|--|--|
| Base Charge | Monthly minimum-first 3,000 gallor  | ns  |   | Base charges based on meter size for residential   | Minimum Monthly Rate  |  |  |
|             | Residential \$6.73 Apartment \$6.73 Commercial \$16.79 Industrial \$16.79                       | Outside<br>\$13.46<br>\$13.46<br>\$33.58<br>\$33.58 | gallons monthly Inside Outside Residential Unit Base Fee \$11.00 \$22.00  (per single unit if multi-unit) | and commercial and have different rate schedules based on geographical area  | In Town \$12.46 includes 3,000 gallons Out of Town \$24.94 includes 3,000 gallons |  |  |
|             |   |   |   |  |   |  |  |
| Residential | Usage Rate (per 1,000 gallons)    Inside   1.98     Residential   \$1.98     Apartment   \$1.98 | Outside<br>\$3.96<br>\$3.96                         | 1,501-9,999 gallons \$4.95/1,000 gallons 10,000-19,999 gallons \$6.25/1,000 gallons                       | Usage Rate (City rates shown)  1-600 cf \$2.10/100 ccf 601-1800 cf \$3.12/100 ccf 1801-40,000 cf \$3.48 / 100 ccf          | Usage Rate (per 1,000 gallons)    In Town   |  |  |
|             |   |   |   | Over 40,000 cf \$2.11/100 ccf  | Next 30,000 gallons \$3.33 \$6.65<br>Next 50,000 gallons \$3.14 \$6.28            |  |  |
| Commercial  | Usage Rate (per 1,000 gallons)  |   |   | Usage Rate   | Usage Rate (per 1,000 gallons)  |  |  |
|             | Commercial \$1.98<br>Industrial \$1.98  | <u>Outside</u><br>\$3.96<br>\$3.96                  |   |  | In Town   Qut of Town   |  |  |
| Irrigation  | No separate irrigation rates  |   | No separate irrigation rates  | Irrigation Base Fee  | No separate irrigation fees   |  |  |
|             |   |   |   | Based on meter size  1-600 cf \$2.10/100 cd between 601-1,800 cd \$3.12/100 cd between Over 1,800 cf \$3.48/100 cd between |   |  |  |

## **UNC Environmental Finance Center Dashboard Comparison**

| Utility   | Union Co | Albemarle | Anson Co | Concord | Davidson Water | Davie Co | Denton    | Dobson | Elkin  | Hamlet Water<br>System | Handy Sanitary<br>District | Jonesville | Kannapolis | King  | Lexington |
|---|----------|-----------|----------|---------|----------------|----------|-----------|--------|--------|------------------------|----------------------------|------------|------------|-------|-----------|
| Affordability (Water Bills as % Median Household Income)                    | 0.41%    | 0.75%     | 0.90%    | 0.66%   | 0.72%          | 2.07%    | 1.64%     | 1.91%  | 1.03%  | 0.85%                  | 1.29%                      | 2.71%      | 0.99%      | 0.52% | 1.08%     |
| Conservation Signal<br>(Water Price/1,000 gallons,<br>after 10,000 gallons) | \$6.60   | \$ 53.53  | \$ 3.08  | \$ 56   | \$5.05         | \$15.73  | \$ \$6.15 | \$4.85 | \$6.00 | \$1.40                 | \$ \$6.00                  | \$9.75     | \$6.44     | \$6   | \$2.30    |

Source: <a href="https://efc.sog.unc.edu/resource/north-carolina-water-and-wastewater-rates-dashboard">https://efc.sog.unc.edu/resource/north-carolina-water-and-wastewater-rates-dashboard</a> Accessed September 2018

## **UNC Environmental Finance Center Dashboard Comparison**

| Utility   | Mocksville | Montgomery Co | Mount Airy | North Wilkesboro | Norwood | Pilot Mountain,<br>Town of | Richmond County | Rockingham | Salisbury | Thomasville | Wilkesboro | Wingate | Winston-Salem | Yadkinville |
|---|------------|---------------|------------|------------------|---------|----------------------------|-----------------|------------|-----------|-------------|------------|---------|---------------|-------------|
| Affordability<br>(Water Bills as % Median Household<br>Income)              | 0.93%      | 1.00%         | 0.86%      | 1.84%            | 1.11%   | 1.25%                      | 1.60%           | 0.60%      | 0.97%     | 1.14%       | 0.36%      | 0.94%   | 0.68%         | 0.65%       |
| Conservation Signal<br>(Water Price/1,000 gallons,<br>after 10,000 gallons) | \$6        | \$6 \$8.00    | \$3.27     | \$3.98           | \$6     | \$5.95                     | \$5.47          | \$ \$2.20  | \$5.08    | \$5.04      | 56         | \$6.25  | \$4.65        | \$3.50      |

В

Appendix B

Water Shortage Response Plan Comparison Matrix

| Utility                                  | Union Co  | Albemarle   | Anson Co | Concord <sup>2</sup>   | Davidson Water  | Davie Co  | Denton   | Dobson       | Elkin  | Hamlet Water System | Handy Sanitary District  |
|--|---|---|----------|--|---|---|--|--------------|--|---------------------|--|
| Source Water                             | Catawba River & Blewett Fall<br>Lake (Anson County -<br>Finished)   | Tuckertown Reservoir & Badin<br>Lake  |          | Lake Howell (WSACC) - 2007 IBT<br>from Catawba Basin (Charlotte<br>Water - Finished) & Yadkin<br>Basin (Albemarle - Finished),<br>Purchase (Kannapolis - Finished  | Yadkin River  | South Yadkin River & Yadkin<br>River  | Tuckertown Reservoir   | Fisher River | Big Elkin Creek  | Water Lake          | Town of Denton (Tuckertown Reservoir)  |
| Level 1<br>or<br>Voluntary Reductions    | Catawba-Wateree LIP Year-round irrigation restrictions to 3 days per week, regardless of drought status  Catawba-Wateree LIP Demand: >80% of available capacity for the average of a 7 day period | Lake Levels: High Rock Lake: -4.0 ft Badin Lake: -4.0 ft Demand: >85% of available water supply capacity for 5 consecutive days  Lake Levels: High Rock Lake: -8.0 ft Badin Lake: -6.0 ft Tuckertown Reservoir: -2.0 ft | YPDLIP   | US Drought Monitor: 0 Stage 0  Most stringent of: Yadkin Pee Dee LIP: High Rock Lake or WSACC Drought Operations Plan: Lake Howell or Catawba Wateree LIP Drought Response Plan  US Drought Monitor: 1 Stage 1  Most stringent of: Yadkin Pee Dee LIP: High Rock | Lake Level: Reservoir Levels on-site @ WTP: < 85% Streamflows: < 400 cfs Demand: 7 day average > 21.6 mgd (80%)  Lake Level: Reservoir Levels on-site @ WTP: < 80% Streamflows: < 350 cfs | US Drought Monitor: 0 or 1 Streamflows: Water demand exceeds 25% of accessible flow to either intake for 7 consecutive days  US Drought Monitor: 1 or 2 Streamflows: Water demand exceeds 50% | Lake Storage: Usable Storage <75%  Lake Level: 4.5ft < full  Lake Storage: Usable Storage <65%  Lake Level: 6.5ft < full | None         | River flow < 2.34 cfs for 7 consecutive days  Pump run times increase >30% to maintain previous rates  Event causing loss of system capacity >30%  River flow < 1.67 cfs for 3 consecutive days  Pump run times increase >50% to maintain previous rates | None                | Handy Sanitary District implements Town of Denton plan since they are water supplier  Lake Storage: Usable Storage <75%  Lake Level: 4.5ft < full  Lake Storage: Usable Storage <65%  Lake Level: 6.5ft < full |
| Level 2<br>or<br>Mandatory Reductions I  | aay period  | Demand: >75% of available<br>water supply capacity for 5<br>consecutive days  |          | Lake or WSACC Drought Operations Plan: Lake Howell or Catawba Wateree LIP Drought Response Plan  | < 350 CTS  Demand: 7 day average > 22.95mgd (85%)   | of accessible flow to either intake for 7 consecutive days  | Lake Level: 6.5ft < full   |              | Event causing loss of system capacity >30%   |                     |  |
| Level 3<br>or<br>Mandatory Reductions II | Catawba-Wateree LIP  Demand: >90% of available capacity for the average of a 7 day period   | Lake Levels: High Rock Lake: -14.0 ft Badin Lake: -8.0 ft Tuckertown Reservoir: -3.0 ft Demand: >65% of available water supply capacity for 5 consecutive days  | YPDLIP   | US Drought Monitor:<br>2 Stage 2<br>Most stringent of:<br>Yadkin Pee Dee LIP: High Rock<br>Lake<br>or<br>WSACC Drought Operations<br>Plan: Lake Howell<br>or<br>Catawba Wateree LIP Drought<br>Response Plan   | Lake Level: Reservoir Levels on-site @ WTP: < 75% Streamflows: < 300 cfs  Demand: 7 day average > 24.3 mgd (90%)  | Only one Mandatory level, presumed to same as level 2.  | Lake Storage: Usable<br>Storage <50%<br>Lake Level: 8.5ft < full   | None         | River flow < 1.22 cfs at any point  Pump run times increase >65% to maintain previous rates  Event causing loss of system capacity >65%  | None                | Lake Storage: Usable Storage <50%  Lake Level: 8.5ft < full  |
| Level 4<br>or<br>Emergency Reductions    | Catawba-Wateree LIP  Demand: >100% of available capacity for the average of a 7 day period  | Lake Levels:<br>High Rock Lake: -24.0 ft<br>Badin Lake: -10.0 ft<br>Tuckertown Reservoir: less<br>than 50% useable storage  | YPDLIP   | US Drought Monitor: 3 Stage 3  Most stringent of: Yadkin Pee Dee LIP: High Rock Lake or WSACC Drought Operations Plan: Lake Howell or Catawba Wateree LIP Drought Response Plan  | Lake Level: Reservoir Levels on-site @ WTP: < 60% Streamflows: < 250 cfs Demand: 7 day average > 25.65 mgd (95%)  | US Drought Monitor:<br>2 or 3<br>Streamflows:<br>Compare to 7 day demand<br>System Specific Indicators:<br>7 day average demand as % of<br>flow >75%  | Lake Storage: Usable<br>Storage <30%<br>Lake Level: 12.5ft < full  | None         | River flow < 0.67 cfs at any point  Pump run times increase >80% to maintain previous rates  Event causing loss of system capacity >80%  | None                | Lake Storage: Usable Storage <30%  Lake Level: 12.5ft < full   |
| Level 5<br>or<br>Water Rationing         | Catawba-Wateree LIP  Demand: If demand continues to exceed available capacity such that an extreme water shortage is in effect due to such capacity limitations for 30 consecutive days           | Lake Levels:<br>Badin Lake: -22.0 ft  | YPDLIP   | US Drought Monitor: 4 Stage 4  Lake Levels: High Rock Lake: YPDLIP  Inflow: Lake Howell: WSACC  Stream Inflow: YPDLIP  | None  | Same as Level 4   | Lake Storage: Usable<br>Storage <0%<br>Lake Level: Below top of<br>lower intake  | None         | No specific rationing level  | None                | Lake Storage: Usable Storage <0%  Lake Level: Below top of lower intake  |

Water Shortage Response Plan Comparison Matrix: Triggers

| Utility                                  | Jonesville   | Kannapolis <sup>2</sup>   | King  |
|--|--|---|---|
| Source Water                             | Yadkin River   | 2007 IBT from Catawba Basin (Charlotte Water-<br>Finished) & Yadkin Basin (Salisbury - Finished),<br>Grandfathered IBT from Yadkin Basin (Second<br>Creek - Raw), Purchase (Concord - Finished) | Yadkin River  |
| Level 1<br>or<br>Voluntary Reductions    | Jonesville Board of Commissioners decides when and what stage conservation should be implement based on information from the Town manager. There are no predetermined response triggers. | US Drought Monitor: 0 Stage 0  Most stringent of: Yadkin Pee Dee LIP: High Rock Lake or WSACC Drought Operations Plan: Lake Howell or Catawba Wateree LIP Drought Response Plan                 | Website contains recommended tips for voluntarily conserving water.  No voluntary restriction level in drought management/WSRP plan or water conservation ordinance. Stage 1 considered mandatory.              |
| Level 2<br>or<br>Mandatory Reductions I  |  | Most stringent of:<br>Yadkin Pee Dee LIP: High Rock Lake<br>or<br>WSACC Drought Operations Plan: Lake Howell<br>or<br>Catawba Wateree LIP Drought Response Plan                                 | Mandatory:  USGS flow gage at ENON: <1000 cfs  Stream height over lower intake: <10 inches  Tank levels: Less than 60%  System Demand: peak flow 2.4 mgd for 2 days  Drought: Declared by State or local agency |
| Level 3<br>or<br>Mandatory Reductions II |  | US Drought Monitor: 2 Stage 2  Most stringent of: Yadkin Pee Dee LIP: High Rock Lake or WSACC Drought Operations Plan: Lake Howell or Catawba Wateree LIP Drought Response Plan                 | No Level II Mandatory level   |
| Level 4<br>or<br>Emergency Reductions    |  | Most stringent of:<br>Yadkin Pee Dee LIP: High Rock Lake<br>or<br>WSACC Drought Operations Plan: Lake Howell<br>or  | Mandatory:  USGS flow gage at ENON: <600 cfs  Stream height over lower intake: <6 inches  Tank levels: Less than 40%  System Demand: peak flow 2.4 mgd for 5 consecutive days                                   |
| Level 5<br>or<br>Water Rationing         |  | US Drought Monitor: 4 Stage 4  Lake Levels: High Rock Lake: YPDLIP  Inflow: Lake Howell: WSACC  Stream Inflow: YPDLIP   | Mandatory:  USGS flow gage at ENON: <350 cfs  Stream height over lower intake: <4 inches  Tank levels: Less than 25%  System Demand: 2.7 mgd for 2 consecutive days   |

| May have been seemed as the control of the control  | And State of the control of the cont   | Utility                 | Lexington                              | Mocksville                       | Montgomery Co                                      | Mount Airy                         | North Wilkesboro                      | Norwood <sup>1</sup>                   | Pilot Mountain, Town of  | Richmond County                                 |
|--|--|-------------------------|--|----------------------------------|--|------------------------------------|---------------------------------------|--|--|---|
| Secretary Secretary  And Secretary Secretary   | Manual Part of the Control of the Co   | Canty                   |  |                                  |  | •                                  |                                       |  | ,  | ·   |
| Date for "Turner Free Free Free Free Free Free Free  | Source of Tributes of Control Tributes of Cont   |                         |  |                                  | 1  |                                    |                                       | ,                                      |  |   |
| Date for "Turner Free Free Free Free Free Free Free  | Source of Tributes of Control Tributes of Cont   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Miles of the property of the control of the property of the p | See the second of the second o   | Source Water            |  |                                  |  |                                    |                                       |  |  |   |
| Miles of the property of the control of the property of the p | See the second of the second o   |                         |  |                                  |  |                                    |                                       |  |  |   |
| And the second process of the second process | See the second of the second o   |                         |  |                                  |  |                                    |                                       |  |  |   |
| The second of th | Make  |                         | Consults with Thomasville and Davidson | Water Demand exceeds 25% of flow | YPDLIP   | Water level at 1029.5 ft mean sea  | River flow - 30 cfs for 7 consecutive | Lake Levels:                           | No voluntary measures provided in water conservation           | Consumption: Average daily use of 80% of        |
| Just to the ear of 200 and the e | Make 2 February 19 minus 19 mi   |                         | Water                                  |                                  |  |                                    | days                                  | Lake Tillery: -5 ft                    |  | production capacity for 3 consecutive days.     |
| And the first of the control of the  | Best State   |                         | Usable Storage: < 75%                  | days                             |  |                                    | Pump Rup Times - 30% increase to      | Declaration of Voluntary Conservation  | rationing measures.  | Lake Level: < 94ft as reported by energy        |
| The of a control of the control of t | Service of the control of the contro   |                         | Sabie storage: 17570                   |                                  | potential shortage of water supply is maicuted     | o. dam 1030 dasamed,               |                                       | _                                      |  |   |
| Part of the control o | ### Part of the pa   |                         | Lake Level: 2'-9" below full           |                                  |  |                                    |                                       | shortage of water supply is indicated" |  | 24hrs.  |
| Modern Francisco  Application of the Company of the | Security Principals of the Control of Control  |                         |  |                                  |  |                                    |                                       |  |  | The Water Treatment Blant Superintendent, the   |
| See Suggest 200.  See Suggest  | Part  |                         |  |                                  |  |                                    | reduction in system capacity          |  |  |   |
| Audit Storage - 68%  We never 1-1/2 fortunal or security of the control of the co | Act Storage 1997  When Journal and Storage 1997  When Journal and Storage 1997  Act Storage 1997  When Journal and St   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Duals increas 1986  All Land I. F. F. New fill  All Land I | Make Strategy 1755 was already and 1950 from the control of the co   |                         |  |                                  |  |                                    |                                       |  |  |   |
| and the first of the company of the  | A procedure of the control of the co   |                         |  |                                  |  |                                    |                                       |  |  | of water shortages and subsequent restrictions. |
| and the first of the company of the  | A procedure of the control of the co   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Letter 19 10' Seem will  And Event 19 10' Seem will | A procedure of the control of the co   |                         | Usable Storage: ∠ 6E%                  | Water Demand exceeds EOV of flow | Whenever the heard of commissioners finds that you | Water level at 1029 02 ft moan see | River flow - 19 cfc for E consecutive | Lake Levels                            | Whenever the town experiences a notantial water shortess, the  | Consumption: Average daily use of 95% of        |
| was taken from the following promoted bearing and the service of the company of t | wear before the grant product to be dispersion of the composition of t   |                         | 03abic 3tolage. \ 03/0                 |                                  |  |                                    |                                       |  |  |   |
| Interest of the competence and experience and exper | set of se   |                         | Lake Level: 3'-10" below full          | days                             | reservoir levels or groundwater levels) are        | dam with plant not operating. (Top |                                       | ,                                      |  | , ,   |
| Control of Authorized Control Of Authorize   | Manager 100 Counts of Accounts of Manager 100 Counts of Accounts of Manager 100 Counts of Accounts of Manager 100 Counts of Accounts 100 Manager 100 Counts of Accounts 100 Manager 100 Counts of Accounts 100 Manager 100 Counts 100 Manager 100 Counts 100 Manager 100 Manager 100 Counts 100 Manager 100 Manage   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Sold 2 and may not be designate to make frame already, and 18 above make manufaced, and 18 above make manufaced and force sociality evidence of a four exempts.    Mark   Data   Data | we may not be designate to main round such, and for the service of   |                         |  |                                  |  |                                    | maintain previous rates               |  |  |   |
| Absorbed federation of Market Post Supplier of Market  | Monatory Reactions I was a series of the ser   | Level 2                 |  |                                  | •  |                                    | Any event that causes a 50%           |  |  |   |
| Additionage of 60%.  Additionage of 60% of 6 | Address Contagn - 6800.  Water Contagn and another SNG of the  |                         |  |                                  |  |                                    | reduction in system capacity          |  |  |   |
| Usable Storage < 20% Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is bridge for Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided to Colorective days  Well Demand exceeds 20% of flow which is provided | Company of the control of the cont   | Mandatory Reductions I  |  |                                  | there is scientific evidence of a future shortage  |                                    |                                       |  |  |   |
| Models Storage - 60% Library Rescuences Lovel 3 Or you en level of Mandatory Netwoer Vigorian Andrews Apply Mandatory Rescuences Lovel 3 Or you en level of Mandatory Netwoer Vigorian Andrews Apply Mandatory Rescuences Lovel 3 Or you en level of Mandatory Netwoer Vigorian Andrews Apply Mandatory Rescuences Lovel 3 Or you en level of Mandatory Netwoer Vigorian Andrews Apply Mandatory Rescuences Lovel 3 Or you en level of Mandatory Netwoer Vigorian Andrews Apply Mandatory Rescuences Lovel 3 Or you en level of Mandatory Netwoer Vigorian Andrews Apply Mandatory Rescuences Label Titrey - 13 2 H  Water Demand exceeds 7% of Mon Accordance Andrews Apply Mandatory Rescuences Label Titrey - 13 2 H  Water Demand exceeds 7% of Mon Accordance Andrews Apply Mandatory Rescuences Label Titrey - 13 2 H  Water Demand exceeds 7% of Mon Accordance Andrews Apply Mandatory Rescuences Apply Mandatory Rescuences Label Titrey - 13 2 H  Water Demand exceeds 7% of Mon Accordance Andrews Apply Mandatory Rescuences Apply Mandatory Res | Water Demand success JON of November 1991 and success JON of Novem   |                         |  |                                  |  |                                    |                                       | adequate to meet normal needs          |  |   |
| Like Level. 5-7° below full Like Level. 5-7° below full Like Level. 5-7° below full Like Level. 5-8° below full Li | Account of the Comment of the Comm   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Like Level. 5-7° below full Like Level. 5-7° below full Like Level. 5-7° below full Like Level. 5-8° below full Li | Account of the Comment of the Comm   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Like Level. 5-7° below full Like Level. 5-7° below full Like Level. 5-7° below full Like Level. 5-8° below full Li | Account of the Comment of the Comm   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Level 3 or Mandatory reductions is level 4 or Farman exceeds 75% of flow water descriptions and seeds and that serious shortage seeds and that serious shortages seeds of any water specific and seeds and that serious shortages seeds of any water specific and seeds and that serious shortages seeds of any water specific and seeds and that serious shortages seeds of any water specific and seeds and that serious shortages seed water specified and seed water specified and seeds and that serious shortages and subsequent exercisions.  Whenever caucilla have seed and that serious water shortages and subsequent exercisions.  Whenever the town board, upon the advect and swater foreign specified water in swater shortages and swater shortages and swater shortages and swate | Level 3  And of or 1  Level 4  Or 2  Level 5  Chregency Reductions  Level 5  Or 2  Level 5  Or 3  Or 3  Or 3  Or 3  Or 3  Or 4  Or 2  Level 5  Or 5  O   |                         | Usable Storage: < 60%                  |                                  | Only one level of Mandatory between Voluntary and  | Water level at 1028.75 ft mean sea | None                                  | Lake Levels:                           | None, only one stage of mandatory.                             | Consumption: Average daily use of 85% of        |
| Level 3 or Manifoldroy Reductions II  Level 3 or Manifoldroy Reductions II  Usable Storage < 50% Like Level: 6"4" below full  Level 4 or Emergency Reductions  Usable Storage < 40%  Witer Demand exceeds 5% of flow excessable to intake for 3 consecutive days  Well and the reduction of the level recessary to meet more than 200 assumed)  Well and the reduction of the level recessary to meet more than 200 assumed)  Well and the reduction of the level recessary to meet more than 200 assumed)  Well and the reduction of the level recessary to meet more than 200 assumed)  Well and the reduction of the level recessary to meet more than 200 assumed)  Well and the reduction of the level recessary to meet more than 200 assumed)  Well and the reduction of the level recessary to meet more than 200 assumed)  Well and the reduction of the county flow assumed and that sensus shortages and subsequent restrictions.  Well and the reduction of the county flow assumed and that sensus shortages and subsequent restrictions.  Well and the reduction of the level recessary to meet more than 200 assumed and that sensus shortages and subsequent restrictions.  Well and the reduction of the county flow assumed and that sensus shortages and subsequent restrictions.  Well and the reduction of the county flow assumed and that sensus shortages and subsequent restrictions.  Well and the reduction of the county flow assumed and that sensus shortages and subsequent restrictions.  Well and the reduction of the county flow assumed and that sensus shortage and subsequent restrictions.  Well and the reduction of the county flow assumed and that sensus the reduction of the county of the reduction of the county of the reduction of the reduction of the county of the reduction of the reduct | Loel 3 or Maindatory Reductions II Loel 4 or Maindatory Reduction II Loel 4 or Maindatory Reduction II Loel 4 or Maindato   |                         | Laba Lavali El 71 halavi fili          |                                  | Emergency  |                                    |                                       | Lake Tillery: -13.2 ft                 |  | production capacity for 3 consecutive days.     |
| Level 3  Usable Sorrage < 50%  Usable Sorrage < 50%  Usable Sorrage < 40%  Usable Sorrag | Level 3 or Mandstory Reductions I believe 1 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 4 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 2 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 or Mandstory Reduction I believe 3 - School Level 3 -  |                         | Lake Level: 5 -7 below full            | days                             |  |                                    |                                       |  |  | Lake Level: < 90ft as reported by energy        |
| Level 3 Compared Storage < 50% Mater Demand exceeds 25% of flow accessible to intake for 3 consecutive days  Usable Storage < 50% Lake Level: 6-6" below full Lake Level: 6-6" below full Lake Level: 8-6" below full Lake Level: 8-6" below full Level 5 Compared Reductions  Usable Storage < 40% And the Demand exceeds 25% of flow accessible to intake for 3 consecutive days  Whenever the board of commissioners finds that raw water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies and that serious the full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies are below the level encessary to meet a full-cert water upplies and the full-cert water uppl | Level 3 O  |                         |  |                                  |  | o. dam 1030 dasamed,               |                                       |  |  |   |
| Mandatory Reductions II  Usable Storage - 50%  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Lake Level: 6'-6' below full  Level 4 or First-gency Reductions  Usable Storage - 40%  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 3 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessible to intake for 7 conscrutive days  Water Demand exceeds 75% of flow accessi | Wherever the bound of commissioners finds that raw after supplies are below the level encessary to meet normal needs and that serious shortages exist  Level 4 or Emergency Reductions  Usable Storage: < 40%  Water Demand exceeds 75% of flow accessible to make for 3 consecutive days  Whenever the bound of commissioners finds that raw water supplies are below the level encessary to meet normal needs and that serious shortages exist  of alm 1300 assumed)  Water Demand exceeds 75% of flow accessible to make for 3 consecutive days  Whenever Loanel finds 'raw water supplies are below the level increase to of dam 1300 assumed)  Whenever Council finds 'raw water supplies are below the level necessary to meet normal needs, the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the county Manager will determine the sevents spale in order to balance a limited available supplies are below the level necessary to meet normal needs and that serious shortages exist  Whenever Council finds 'raw water supplies are below the level necessary to be dain 1300 assumed)  Whenever the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town manager, upon the advice and recommendation of the town m   |                         |  |                                  |  |                                    |                                       |  |  | 24hrs.  |
| Mandatory Reductions II  Usable Storage: < 50% Lake Level: 6 -6" below full Level 4 Emergency Reductions  Usable Storage: < 40% Level 5 -6" below full Level 6 -6" below full Level 7 -6" below full Level 8 - | Mandatory Reductions I  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Energency Reductions  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to int   | Level 3                 |  |                                  |  |                                    |                                       |  |  | The Water Treatment Plant Superintendent, the   |
| Usable Storage: < 50% Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Whenever the board of commissioners finds that raw water supplies are below the level at 1028.58 ft mean sea with plant not operating. [Top of any event that causes a 70% reduction is system Gapacity  Usable Storage: < 40% Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Whenever the board of commissioners finds that raw water supplies are below the level at 1028.58 ft mean sea water shortage of treated water, or when consumption: > 90% on any one day.  Usable Storage: < 40% Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow  | Usable Storage < 50%  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Level 4 or Emergency Reductions  Usable Storage < 40%  | **                      |  |                                  |  |                                    |                                       |  |  |   |
| Usable Storage: < 50%  Usable Storage: < 50%  Usable Storage: < 40%  Emergency Reductions  Usable Storage: < 40%   | Usable storage: < 50%  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Level 4 or Emergency Reductions  Usable Storage: < 40%  Usable Storage: < 40%  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Whenever the board of commissioners finds that raw water supplies are below the level necessary to ment pump flum Times - 70% increase to maintain previous rates  Usable Storage: < 40%  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Whenever the board of commissioners finds that raw water supplies are below the level heroughs well in Stewarts Creek end with plant not operating. Top of dam 1030 assumed)  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county water supplies are below the level mean sea accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Whenever the town board, upon the advice and exceeds and the service of the water or water supplies and the various stages of water shortage and the various stages of water shortage and with plant not operating. Top of a manual previous and the service of the water or water  | Manuatory Reductions II |  |                                  |  |                                    |                                       |  |  |   |
| Usable Storage: < 50%  Usable Storage: < 60%  | Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Level 4 or Emergency Reductions  Level 4 or Emergency Reductions  Usable Storage: < 50%  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Whenever the board of commissioners finds that raw water supplies are below the level necessary to meet of dam 1030 assumed)  Whenever Council finds "new water supplies are below the level necessary to meet or dam with plant not operating, [Top of dam 1030 assumed)]  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Whenever Council finds "new water supplies are below the level necessary to meet of dam 1030 assumed)  Whenever Council finds "new water supplies are below the level necessary to meet or dam with plant not operating, [Top of dam 1030 assumed)]  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 3 consecutive days  Whenever the board of commissioners of the county water supplies are below the level necessary to meet through well in \$15 \text{ ewant stemple}\$ in the water supplies are below the level necessary to meet through well in \$15 \text{ ewant stemple}\$ in the water supplies are below the level necessary to meet through well in \$15 \text{ ewant stemple}\$ in the water supplies are below the level necessary to meet through well in \$15 \text{ ewant stemple}\$ in the water supplies are below the level necessary to meet through well in \$15 \text{ ewant stemple}\$ in the water supplies are below the level necessary to meet through well in \$15 \text{ ewant stemple}\$ in the water supplies are below the level necessary to meet through well in \$15 \text{ ewant stemple}\$ in the |                         |  |                                  |  |                                    |                                       |  |  |   |
| accessible to intake for 3 consecutive days  Lake Level: 6'-6' below full  Lake Level: 8'-6' bel | accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days and that serious shortages exist and that serious shortages exist.  Level 4 or  Emergency Reductions  Usable Storage: < 40%  Lake Level: 8-6" below full  Usable Storage: < 40%  Lake Level: 8-6" below full  Level 5 or  Whenever Council finds "row water supplies are below the level necessary to meet normal needs, and that serious shortage emergency of dam 1030 assumed)  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level 5 below full  Level 5 below full  Level 5 below full  Level 5 below full  Supplies in order to balance a limited availabile supplies, an order to balance lamited availabile supplies, and seal to provide for the equitable distribution of critically limited treater is available to preserve bubble health and safety of the citizens, the town board  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Whenever Council has declared an Emergency and  |                         |  |                                  |  |                                    |                                       |  |  | of water shortages and subsequent restrictions. |
| accessible to intake for 3 consecutive days  Lake Level: 6'-6' below full  Lake Level: 8'-6' bel | accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days and that serious shortages exist and that serious shortages exist.  Level 4 or  Emergency Reductions  Usable Storage: < 40%  Lake Level: 8-6" below full  Usable Storage: < 40%  Lake Level: 8-6" below full  Level 5 or  Whenever Council finds "row water supplies are below the level necessary to meet normal needs, and that serious shortage emergency of dam 1030 assumed)  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level 5 below full  Level 5 below full  Level 5 below full  Level 5 below full  Supplies in order to balance a limited availabile supplies, an order to balance lamited availabile supplies, and seal to provide for the equitable distribution of critically limited treater is available to preserve bubble health and safety of the citizens, the town board  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Whenever Council has declared an Emergency and  |                         |  |                                  |  |                                    |                                       |  |  |   |
| accessible to intake for 3 consecutive days  Lake Level: 6'-6' below full  Lake Level: 8'-6' bel | accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days and that serious shortages exist and that serious shortages exist.  Level 4 or  Emergency Reductions  Usable Storage: < 40%  Lake Level: 8-6" below full  Usable Storage: < 40%  Lake Level: 8-6" below full  Level 5 or  Whenever Council finds "row water supplies are below the level necessary to meet normal needs, and that serious shortage emergency of dam 1030 assumed)  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level 5 below full  Level 5 below full  Level 5 below full  Level 5 below full  Supplies in order to balance a limited availabile supplies, an order to balance lamited availabile supplies, and seal to provide for the equitable distribution of critically limited treater is available to preserve bubble health and safety of the citizens, the town board  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Whenever Council has declared an Emergency and  |                         |  |                                  |  |                                    |                                       |  |  |   |
| accessible to intake for 3 consecutive days  Lake Level: 6'-6' below full  Lake Level: 8'-6' below full  Whenever the board of commissioners of the county water supply shortage and subsequent restrictions.  None  Lake Level: 8'-6' below full  Whenever Council has declared a water shortage emergency and finds a manager, upon the advice and recessary to meet normal needs, she that the full water supplies are below the level necessary to meet normal needs and that serious shortage in the supplies are below the level necessary to meet normal needs and that serious shortage energency  Whenever Council hinds 'rew water supplies are below the level necessary to meet normal needs and that seriou | accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days accessible to intake for 3 consecutive days and that serious shortages exist and that serious shortages exist.  Level 4 or  Emergency Reductions  Usable Storage: < 40%  Lake Level: 8-6" below full  Usable Storage: < 40%  Lake Level: 8-6" below full  Level 5 or  Whenever Council finds "row water supplies are below the level necessary to meet normal needs, and that serious shortage emergency of dam 1030 assumed)  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level at 1028.42 ft mean sea level through were in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water Level 5 below full  Level 5 below full  Level 5 below full  Level 5 below full  Supplies in order to balance a limited availabile supplies, an order to balance lamited availabile supplies, and seal to provide for the equitable distribution of critically limited treater is available to preserve bubble health and safety of the citizens, the town board  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of alm 1030 assumed)  Whenever Council has declared an Emergency and  |                         | Usable Storage: < 50%                  | Water Demand exceeds 75% of flow | Whenever the board of commissioners finds that raw | Water level at 1028.58 ft mean sea | River flow - 9 cfs for 24 hour period | Lake Levels:                           | When the town experiences a shortage of treated water, or when | Consumption: > 90% on any one day.              |
| Level 4 or Emergency Reductions  Usable Storage: < 40% Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county accessible to intake for 7 consecutive days  Whenever the town board, upon the advice and water shortage and the various stages of water shortage critically.  Whenever the town board, upon the advice and water shortage critically shorted and sacrous shorted and shorted to declare a water shortage critically shorted and sacrous shorted and sacrous shorted and sacrous shorted and sacrous sh | Level 4 or Emergency Reductions  Usable Storage: < 40% Level 5 or Core Level: 8'-6" below full Level: 8'-6" below full or or Core Core Core Core Core Core Cor   |                         |  |                                  |  |                                    |                                       |  |  |   |
| Level 4 or Emergency Reductions  Usable Storage: < 40% Lake Level: 8'-6" below full Level 5 or Core Core Core Core Core Core Core C  | Level 4 or Emergency Reductions  Usable Storage: < 40%  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Level 5 or Part of The Water system has declared a water shortage emergency water supplies, and to ensure that sufficient water is supplies are below the level necessary to meet normal needs and that serious shortage emergency water supplies are below the level necessary to meet normal needs and that serious shortage emergency water shortage emergency water shortage emergency will determine the severity of water supply shortage and the county water system has declared a water shortage emergency will determine the severity of water supply shortage and the various stages of water shortage level through well in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever the town board, upon the advice and recommendation of the town manager, has declared a water shortage emergency will determine the severity of water supply shortage and subsequent restrictions.  Whenever the town board, upon the advice and recommendation of the town manager, has declared a water shortage emergency water supply shortage and the service of water shortage emergency and finds a meet of provide for the equitable distribution of critically limited treated water or water supplies to ensure that sufficient water is available supplies to ensure that sufficient water is available to preserve public health and safety of the citizens, to equitable distribution of critically immediately and finds a "need to provide for the equitable distribution of critically immediately and safety of the citizens, to equitable distribution of critically immediately and safety of the citizens, to equitable distribution of critically preserve public health and safety of the citizens, to equit the destination of the co   |                         | Lake Level: 6'-6" below full           | days                             | normal needs and that serious shortages exist      |                                    |                                       |  |  |   |
| Level 4 or Emergency Reductions  Usable Storage: < 40% Lake Level: 8'-6" below full Level 5 or  Level 5 or  Emergency Reductions  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever the board of commissioners of the county water system has declared a water shortage engregory and finds a need to provide for the equitable distribution of critically limited water or water supplies, and to ensure that sufficient water is supplies, and to ensure that sufficient water is  | Level 4 or Emergency Reductions  Usable Storage: < 40% Lake Level: 8'-6" below full Level 5 or  Or  Or  Or  Or  Or  Emergency Reductions  Usable Storage: < 40% Lake Level: 8'-6" below full Or  Or  Or  Or  Or  Or  Or  Or  Or  O   |                         |  |                                  |  | of dam 1030 assumed)               | maintain previous rates               |  |  |   |
| Emergency Reductions  Usable Storage: < 40%  Usable Storage: < 40%  Accessible to intake for 7 consecutive days  Level 5  Or  Usable Storage: < 40%  Usable Storage: < 40%  Accessible to intake for 7 consecutive equitable distribution of critically imited available supplies, and to ensure that sufficient water is supplies in order to balance a limited available supplies, and to ensure that sufficient water is available supplies, and to ensure that sufficient water is available on the equitable distribution of critically.  Water Level at 1028.42 ft mean sea None  Lake Levels:  Lake Levels:  Lake Levels:  Lake Levels:  Whenever the town board, upon the advice and recommendation of the town manager, has declared a water shortage emitted varies and subsequent restrictions.  Whenever the town board upon the advice and recommendation of the town manager, has declared a water shortage equitable distribution of critically limited water supplies in order to balance a limited available supplies, and to ensure that sufficient water is available to preserve public health and safety of the citizens, the town board  | Emergency Reductions    Usable Storage: < 40%   Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days   | Level 4                 |  |                                  |  |                                    | Any event that causes a 70%           |  | , and a state of water shortage emergency                      |   |
| Usable Storage: < 40%  Usable Storage: < 40%  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Level 5  or  Usable Storage: < 40%  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county water system has declared a water shortage emergency and finds a need to provide for the equitable distribution of critically limited water supplies in order to balance a limited available to supplies, and to ensure that sufficient water is   | Usable Storage: < 40% Level 5 or  Usable Storage: < 40% Lake Level: 8'-6" below full Level 5 or  Usable Storage: < 40% Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Whenever the board of commissioners of the county water system has declared a water shortage emergency and finds a need to provide for the equitable distribution of critically limited water supplies in order to balance a limited available supplies, and to ensure that sufficient water is a pulpies, and to ensure that sufficient water is a pulpies, and to ensure that sufficient water is a pulpies, and to ensure that sufficient water is a pulpies, and to ensure that sufficient water is a pulpies, and to ensure that sufficient water is a pulpies, and to ensure that sufficient water is a pulpie supplies and the various stages of water severity of water supplies of water supplies and the various stages of water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Water Demand exceeds 75% of flow water shortage and subsequent restrictions.  Whenever the town board, upon the advice and recommendation of the town manager, has declared a water shortage emergency and finds a "need to provide for the equitable distribution of critically imited treated water or water supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board   | or                      |  |                                  |  |                                    | reduction in system capacity          | shortages exist"                       |  |   |
| Usable Storage: < 40%  | Usable Storage: < 40% Lake Level: 8'-6" below full Level 5 or  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive days  Water system has declared a water shortage emergency and finds a need to provide for the equitable distribution of critically limited water supplies, and to ensure that sufficient water is  Whenever the board of commissioners of the county water system has declared a water shortage level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever Council has declared an equitable distribution of critically supplies to ensure that sufficient treated water or water supplies, and to ensure that sufficient water is  | Emergency Reductions    |  |                                  |  |                                    |                                       |  |  |   |
| Usable Storage: < 40%  Usable Storage: < 40%  Usable Storage: < 40%  Lake Level: 8'-6" below full  Level 5  or  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive emrgency and finds a need to provide for the equitable distribution of critically limited water supplies in order to balance a limited available supplies, and to ensure that sufficient water is  Water Demand exceeds 75% of flow accessible to intake for 7 consecutive water system has declared a water shortage level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Water level at 1028.42 ft mean sea level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever Below Top of Lower Intake recommendation of the town manager, has declared a water shortage evil and to the provide for the equitable distribution of critically limited treated water or water supplies in order to balance a limited available to supplies, and to ensure that sufficient water is  water system has declared a water shortage level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever Council has declared an equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board   | Usable Storage: < 40% Water Demand exceeds 75% of flow accessible to intake for 7 consecutive based of system has declared a water shortage emergency and finds a need to provide for the equitable distribution of critically limited water supplies in order to balance a limited available supplies, and to ensure that sufficient water is a consumption of the control of water shortage and subsequent restrictions.  Whenever the board of commissioners of the country water system has declared a water shortage elvel through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever Council has declared an emergency and finds a "need to provide for the equitable distribution of critically limited treated water or water supplies in order to balance a limited available supplies, and to ensure that sufficient water is  |                         |  |                                  |  |                                    |                                       |  |  |   |
| accessible to intake for 7 consecutive days  Level: 8'-6" below full  Accessible to intake for 7 consecutive days  Emergency and finds a need to provide for the equitable distribution of critically limited water or water  Supplies in order to balance a limited available supplies, and to ensure that sufficient water is  Supplies, and to ensure that sufficient water is  Level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever Council has declared an equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to the equitable distribution of critically-  The preserve public health and safety of the citizens, the town board  | accessible to intake for 7 consecutive days  Leke Level: 8'-6" below full  Level S'-6" below full  Level S'-6" below full  Level S'-6" below full  Level S'-6" below full  Lovel S Consecutive days  Level S Consecutive days  Menever Council has declared an equitable distribution of critically limited treated water or water supplies in order to balance a limited available supplies, and to ensure that sufficient water is available to supplies, and to ensure that sufficient water is available to supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board  Lake Tillery: Below Top of Lower Intake recommendation of the town manager, has declared a water of shortage crisis and determines a need to provide for the equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board  |                         |  |                                  |  |                                    |                                       |  |  |   |
| accessible to intake for 7 consecutive days  Level: 8'-6" below full  Accessible to intake for 7 consecutive days  Emergency and finds a need to provide for the equitable distribution of critically limited water or water  Supplies in order to balance a limited available supplies, and to ensure that sufficient water is  Supplies, and to ensure that sufficient water is  Level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever Council has declared an equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to the equitable distribution of critically-  The preserve public health and safety of the citizens, the town board  | accessible to intake for 7 consecutive days  Leke Level: 8'-6" below full  Level S'-6" below full  Level S'-6" below full  Level S'-6" below full  Level S'-6" below full  Lovel S Consecutive days  Level S Consecutive days  Menever Council has declared an equitable distribution of critically limited treated water or water supplies in order to balance a limited available supplies, and to ensure that sufficient water is available to supplies, and to ensure that sufficient water is available to supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board  Lake Tillery: Below Top of Lower Intake recommendation of the town manager, has declared a water of shortage crisis and determines a need to provide for the equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board  |                         |  |                                  |  |                                    |                                       |  |  |   |
| accessible to intake for 7 consecutive days  Level: 8'-6" below full  Accessible to intake for 7 consecutive days  Emergency and finds a need to provide for the equitable distribution of critically limited water or water  Supplies in order to balance a limited available supplies, and to ensure that sufficient water is  Supplies, and to ensure that sufficient water is  Level through weir in Stewarts Creek dam with plant not operating. (Top of dam 1030 assumed)  Whenever Council has declared an equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to the equitable distribution of critically-  The preserve public health and safety of the citizens, the town board  | accessible to intake for 7 consecutive days  Leke Level: 8'-6" below full  Level S'-6" below full  Level S'-6" below full  Level S'-6" below full  Level S'-6" below full  Lovel S Consecutive days  Level S Consecutive days  Menever Council has declared an equitable distribution of critically limited treated water or water supplies in order to balance a limited available supplies, and to ensure that sufficient water is available to supplies, and to ensure that sufficient water is available to supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board  Lake Tillery: Below Top of Lower Intake recommendation of the town manager, has declared a water of shortage crisis and determines a need to provide for the equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board  |                         | Usable Storage: < 40%                  | Water Demand exceeds 75% of flow | Whenever the board of commissioners of the county  | Water level at 1028.42 ft mean sea | None                                  | Lake Levels:                           | Whenever the town board, upon the advice and                   | None  |
| equitable distribution of critically limited water of dam 1030 assumed)  Level 5  or  dequitable distribution of critically limited water of dam 1030 assumed)  Whenever Council has declared an equitable distribution of critically limited treated water or water supplies in order to balance a limited available to supplies, and to ensure that sufficient water is  the equitable distribution of critically preserve public health and safety of the citizens, the town board  | equitable distribution of critically limited water supplies in order to balance a limited available or supplies, and to ensure that sufficient water is an allowed to supplies, and to ensure that sufficient water is an allowed to supplies, and to ensure that sufficient water is an allowed to supplies, and to ensure that sufficient water is an allowed to supplies, and to ensure that sufficient water is an allowed to supplie to the equitable distribution of critically limited treated water or water supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the town board  |                         |  |                                  | •  |                                    |                                       |  |  |   |
| Level 5 supplies in order to balance a limited available or supplies, and to ensure that sufficient water is supplies, and to ensure that sufficient water is the equitable distribution of critically-preserve public health and safety of the citizens, the town board   | Level 5 supplies in order to balance a limited available or the equitable distribution of critically-  |                         | Lake Level: 8'-6" below full           | days                             |  |                                    |                                       | Mhanasan Casa III.                     |  |   |
| or the equitable distribution of critically- preserve public health and safety of the citizens, the town board   | or the equitable distribution of critically- preserve public health and safety of the citizens, the town board   | Level 5                 |  |                                  |  | or dam 1030 assumed)               |                                       |  | 1 7  |   |
|  |  |                         |  |                                  |  |                                    |                                       |  |  |   |
|  |  | Water Rationing         |  |                                  |  |                                    |                                       |  |  |   |
|  |  |                         |  |                                  |  |                                    |                                       |  |  |   |
|  |  |                         |  |                                  |  |                                    |                                       |  |  |   |
|  |  |                         |  |                                  |  |                                    |                                       |  |  |   |

| Utility                                  | Rockingham  | Salisbury   | Thomasville   | Wilkesboro <sup>1</sup>   | Wingate   | Winston-Salem <sup>1</sup>   | Yadkinville   |
|--|---|---|---|---|---|--|---|
|  | Roberdel Lake and City Pond   | Yadkin River  | Lake Thom-a-Lex                                       | Yadkin River  | Pee Dee River & Catawba River   | Yadkin River and Salem Lake  | South Deep Creek  |
| Source Water                             |   |   |   |   |   |  |   |
| Level 1<br>or<br>Voluntary Reductions    | Roberdel Lake<br>Storage @ 75% and Level @ 10ft<br>City Pond<br>Storage @ 75% and Level @ 6 ft        | River flows at USGS Yadkin College gage: >750 cfs but <1000 cfs and US Drought Monitor (USDM): Moderate through Exceptional  OR  River flows at USGS Yadkin College gage: >500cfs but <750cfs and US Drought Monitor: Abnormally through Severe | Lake Level: 2'-0" below full                          | US Drought Monitor: Severe Lake Levels: W. Kerr Scott Reservoir: <= 1027 ft. Streamflow: <=300 cfs System Demand: 3 consecutive days > 85%                                  | Demand: Sustained demand for 80% of the town water system treatment and/ or transmission capacity.  Catawba-Wateree LIP | US Drought Monitor: Severe Lake Levels: W. Kerr Scott Reservoir: <= 1027 ft. Streamflow: <=554 cfs System Demand: 3 consecutive days > 85%                               | Daily river/reservoir levels not conforming to seasonal expectations as determined by ORC or demand approaching 95% of capacity |
| Level 2<br>or<br>Mandatory Reductions I  | Roberdel Lake<br>Storage @ 65% and Level @ 9ft<br>City Pond<br>Storage @ 65% and Level @ 5 ft         | River flows at USGS Yadkin College gage: >350 cfs but <500 cfs and US Drought Monitor (USDM): Extreme and Exceptional OR  River flows at USGS Yadkin College gage: >250cfs but <350cfs and US Drought Monitor: Abnormally through Severe        | Usable Storage: < 65%<br>Lake Level: 3'-3" below full | US Drought Monitor: Extreme  Lake Levels: W. Kerr Scott Reservoir: <= 1023 ft.  Streamflow: <=130 cfs more than 5 consecutive days  System Demand: > 90% capacity           | Town Manager to determine.  Catawba-Wateree LIP   | US Drought Monitor: Extreme  Lake Levels: W. Kerr Scott Reservoir: <= 1023 ft.  Streamflow: <=200 cfs 5 consecutive days  System Demand: > 90% capacity                  | Staff gauge reading 1 ft 3 inches and no rain forecasted  |
| Level 3<br>or<br>Mandatory Reductions II | Roberdel Lake<br>Storage @ 50% and Level @ 7ft<br>City Pond<br>Storage @ 50% and Level @ 4 ft         | River flows at USGS Yadkin College gage: >250 cfs but <350 cfs and US Drought Monitor (USDM): Extreme and Exceptional OR  River flows at USGS Yadkin College gage: >200cfs but <250cfs and US Drought Monitor: Abnormally through Exceptional   | Usable Storage: < 50%<br>Lake Level: 5'-0" below full | US Drought Monitor: Extreme  Lake Levels: W. Kerr Scott Reservoir: <= 1019 ft.  Streamflow: <=100 cfs more than 3 consecutive days  System Demand: 3 consecutive days > 90% | Town Manager to determine. Catawba-Wateree LIP  | US Drought Monitor: Extreme  Lake Levels: W. Kerr Scott Reservoir: <= 1019 ft. Streamflow: <=175 cfs 3 consecutive days System Demand: 3 consecutive days > 90% capacity | Staff gauge reading 1 ft 2 inches and no rain forecasted  |
| Level 4<br>or<br>Emergency Reductions    | Roberdel Lake<br>Storage @ 30% and Level @ 4ft<br>City Pond<br>Storage @ 30% and Level @ 2 ft         | River flows at USGS Yadkin College gage: >150 cfs but <200 cfs and US Drought Monitor (USDM): Abnormally through Exceptional  | Usable Storage: < 40%<br>Lake Level: 6'-0" below full | US Drought Monitor: Extreme  Lake Levels: W. Kerr Scott Reservoir: <= 1015 ft.  Streamflow: <=80 cfs more than 2 consecutive days  System Demand: > 95% capacity            | Town Manager to determine.  Catawba-Wateree LIP   | US Drought Monitor: Extreme  Lake Levels: W. Kerr Scott Reservoir: <= 1015 ft.  Streamflow: <=125 cfs 2 consecutive days  System Demand: > 95% capacity                  | Staff gauge reading 1 ft 1 inches and no rain forecasted  |
| Level 5<br>or<br>Water Rationing         | Roberdel Lake Storage @ 0% and Level @ 4ft City Pond Storage @ 0% and Level below top of lower intake | River flows at USGS Yadkin College gage: <150 cfs<br>and<br>US Drought Monitor (USDM): Abnormally through<br>Exceptional  | Usable Storage: < 30%<br>Lake Level: 8'-0" below full | None  | Town Manager to determine. Catawba-Wateree LIP  | None   | Staff gauge reading 1 ft and no rain forecasted   |

| Utility                               | Union Co   | Albemarie  | Anson Co | Concord  | Davidson Water  | Davie Co   | Denton  | Dobson |
|---------------------------------------|--|--|----------|--|---|--|---|--------|
| Level I or Voluntary Reductions       | Voluntary.  Live water-saving devices and methods.  Form as a solar day belt volunting white having, brushing is a solar day belt volunting white having, brushing is solar day and the solar day and solar sola | Valuations: Spray impairs should be limited to hours between 7.00 Spray impairs out of the control of the contr | None     | Voluntary.  Household water should be resultated to the greatest extent the process of the proce   | Voluntary:  - Use drovers for bathing and limit to four minutes.  - Use drovers for bathing and limit to four minutes.  - Use the second of th  | Voluntary.  Increase conservation educational campage.  Increase the parts of intered integration water by 50 for the  Increase the parts of intered integration water by 50 for the  Increase the parts of intered integration water by 50 for the  Increase the parts of the parts o | Vocationary Reductions; all water reares with the saked to reduce their normal water use by \$15.  Customer education and outerach programs will encourage water conservations and water conservations and encourage water conservations are required individually and the provided provide | None   |
| Level 2 or or Mandatory Reductions 1  | Voluntary.  - Immigrated all voluntary conservation measures above.  - Limit Spery Irrigation System use to no more than two (2) for the part of the p | Mandatory :  Inrigation should not be done except by handheld interest in the house between 7.00 PM and color of the color of usidad area is prohibited. Residential washing of cars and other vehicles is prohibited. Residential washing of cars and other vehicles is prohibited. Residential washing of cars and other vehicles is prohibited. Commercial, industrial and construction operations shall commercial industrial and construction operations and construction and construction and color of the promotion of the color of th | None     | Mandatory: Pleating of new ornamental plants and seeding of lawns should be not placed and seeding of lawns and se   | Voluntary:  All voluntary measures should be followed.  Mandatory:  All of the above mandatory measures should be followed.  - Linkt one hour of outdoor watering between the hours of the control outdoor watering between the contro  | Voluntary.  All voluntary measures should be followed.  Mandelstory.  All of the above mandatory measures should be followed.  Increase the price of nettered irrigation water by 1000 is of the command price.  Landcape watering between the house of 8:000 PM and 8:00 MAI, using a hard held container, house, or dry pringration.  Landcape watering between the house of 8:000 PM and 8:00 MAI was a small be for hardcape irrigation except hance.  Each filling of water into any pond, ornamental fourtain, pond, or to thub.  Each used of exister first own pond, ornamental fourtain, pond, or to thu be a small produce of the state of each control or compaction.  Each used or disease for data country or compaction.  Restaurants shall serve water only upon customer's request and use single enemy entities, plates, and one of the supervision or public energency.  Restaurants shall serve water only upon customer's request and use single enemy entits, plates, and one unside areas such as street, dinneways, parking loss sidewalls, parts, or exteriors of any building.  | Mondatory Reductions I  Accurates are expected to reduce their water use by IVIN is comparison to their previous monthly water falls.  In addition to continuing to encourage all voluntary reduction actions, the following enterticions apply— enter  | None   |
| Level 3 or Mandatory Reductions II    | Valuntary:  Valuntary:  Inspirement all voluntary conservation measures above.  Mandatory:  Comply with all mandatory restrictions above.  Sergys irrigation on more than the IC/J days per week and  Sergy irrigation on more than the IC/J days per week and  SEO PM. with IC/J days per week and  Limit flushing and hydrant testing programs.   | Mandatory of walth or inspating lawns, gardens, and/or other<br>Jam's town challed.  The use of water for walth down or outside area is probleted.  The use of water down thoman or outside area is probleted.  The washing of cars, whichs, and/or other equipment is a probleted.  Set area to the set of the set of the set of the equipment of the aparton.  Set area to the set of the patron.  A learn attendable water, including filling of pools, and addition to serving where the patrons only at the request of the patron.  Commencial, industrial, and construction activates settlings and the settlement of the patron.  Commencial, industrial, and construction activates with all achieve mandatory reductions in daily water usage of 20%, 50%, or 75% through whaters mean are available.  The through water means are available, the bound or waveled at the discretion of the Director of Public Utilities of the discretion of the Director of Public Utilities of the Water Sets in made pursuant on an eisting contract, bulk water seles shall be prohibited.   | None     | Manidation rigidion shall be allowed two days per week and<br>hall occur only between 8:00 PM and 8:00 AM on the two<br>days each week.  - The use of hand-held water containers is permitted on any<br>day without.  - The water of the permitted on any<br>day without.  - The water of the permitted on the permitted on any<br>section of the permitted on the permitted on the<br>section of the section of the<br>section of the<br>section of the<br>section of the<br>section of the<br>section of the<br>section of<br>section of<br>section<br>section of<br>section of<br>section of<br>section of<br>section of<br>sect | Voluntary:  All voluntary measures should be followed.  Mandatory:  - All of the above mandatory measures should be followed.  Mandatory:  - All of the above mandatory measures should be followed.  - All of the above mandatory measures by handwhild garden  7500 PM to \$500 PM on the following days, Tueldays.  - Ban filling of new or used swimming pools or ornamental unitaridary, Saturdays.  - Ban filling of new or used swimming pools or ornamental unitaridary, Saturdays.  - Ban filling of new or view of which the state of the state o | Same as Level 2  | Mandatory Reductions II  Guidoners must continue actions from all provious stages and their reduce water use by 20x compared to their previous month's seater IIII.  Market Pall.  Marke  | None   |
| tevel 4<br>or<br>Emergency Reductions | Voluntary  Inipiement al voluntary conservation measures above.  Inepiement al voluntary conservation measures above.  Florcourage indexistation and security and | Mandatory:  - All use of water for purposes other than the maintenance of purposes other than the maintenance of purposes other than the maintenance of purpose of the maintenance of th | None     | Mandatory:  Outdoor ringston shall be allowed two days per week and had cause only between 8:00 PM and 8:00 AM on the two days each week.  days each week.  of processing the processing the state including filling of pools in prohibited.  I hydrant flushing and testing programs are prohibited.  | Voluntary.  "All voluntary measures should be followed.  All voluntary measures should be followed.  Mandadespe.  "All of the above mandatory measures should be followed.  "No outside use of water, except emergency use involving fire or accident.  | Veloritary:  All volativity measures should be followed.  All volativity measures should be followed.  All of the above mandatory measures should be followed.  All of the above mandatory measures should be followed.  Lock out all improved weet or control to the property of the above mandatory measures serving livestod or should be above mandatory measures of the above mea | Mandatory Emergency Customers must continue all actions from provious stages and further reduce five water provious stages and further reduce five water monthly water stall. Also no all use of orinized water except to protect public health and startly is implemented and dought survapes increase to 2 times the normal water rate.   | None . |
| Level 5<br>or<br>Water Rationing      | Voluntary . Implement all voluntary conservation measures above.<br>Nanodatory . Implement all voluntary conservations above.<br>- Prohibit all mandatory restrictions above.<br>- Prohibit all anno-essential water our encluding the<br>prohibition of all restricted in righton, implement of<br>commercial stock, and filling of point to vastain aquastic life.<br>and the prohibition of all restrictions are supported as<br>security of the prohibition of an account of the<br>security of the prohibition of the<br>security of the<br>- Require the use of disposable steroids and plates at all<br>restaurants.  | Nane   | None     | Mandative:  - All us of water conditions for any purposes other than maintenance of public safety is prohibited.  - All us conditions continues and construction activities in the residential water continues and construction activities are constructed as activities are constructed as a structure of the continues and construction activities are constructed as a structure of the construction activities are constructed as a structure  | Rose  | Same as seed 4   | Water Rationing is to provide dirikling water in protect guildic health (e.g., but a protect guildic health (e.g., and the protect guildic health (e.g., and e.g., and  | Rose   |

| Conservation Measures                 |  |      | Handy Sanitary District  |  | T   | 1-   |  |  |
|---------------------------------------|--|------|--|--|---|--|--|--|
| Level 1<br>Voluntary Reductions       | relined and regar all faulty and deflective parts of faucets and toollest causing water wasts.  Funget and regar all faulty and deflective parts of faucets and toollest causing water wasts.  Funders and the bathing eather than bathshad and limit shower to no more than the (5) minutes.  On not leave faucets running while abundang, rinning define or brauhality seeks.  On not leavest faults and and braubards, princing define or brauhality seeks.  Funders and all their outside waster cut, even addresses water on the seeks of the seeks o | None | Voluntary. Users asked to reduce usage 5%.  -Maxemum of 1 and per week impallor  -Maxemum of 1 and per week impallor  surfaces.  - Washing full loads  - Identifying and repairing leabs   | Voluntary. — Limit law and shrukbery watering to that which is necessary for plants to survive. — Increase and the plants to survive. — Refrain from availing down outside areas such as idewalds, patios, etc. — Live showers, and limit showers to no more than four moutant of the plants of the plan | Voluntary: Limit irrigation to Rijem until Ram for a max of two days per used: Limit irrigation to Rijem until Ram for a max of two days per used: Limit irrigation of the commencial plants and seeding of lawns should be derived. — Household water should be missed to the present proposable extent for exact blood and to several proposable extent for exact flower of both days and so that the should be invested used be fit maning. — The use of chickes washing machines and dishwashers should be limited on the term units should be limited and the units should be limited and the units should be limited as the proposable of care or other vehicles should be limited to the two designated days are used. — The use of water saving devices is encouraged. — The little goods shall be simited to house thevener 950 PM and 5-bouncers should be used for bathing and the length should be limited. | Town website has education information on water conservation to be rever cround use. The first declared water obstrate or drought management stage is for based on their water system and streams flows at their intake.   | Violations; violation in examined in the content of | Voluntary:  - Uben saked to reduce usage 5%  - Maximum of 1 and; per used inrigation  - Maximum of 1 and; per used inrigation  - Washing full based and underfirent impervious surfaces  - Identifying and repairing leaks   |
| Level 2<br>Mandstory Reductions I     | Manufactory  (Water Inhabetry, trees, onamental juints, flowers and vegetable gardens, Water Inhabetry, trees, onamental juints, flowers and vegetable gardens, Water Inhabetry, trees, onamental juints, flowers and vegetable gardens, which is the property of the property | None | Mandatory - Continue all voluntary actions - Continue all voluntary actions - Continue all voluntary actions - Indigenous  | Violutinary. "All volutinary measures should be followed.  Mandatory. "All volutinary measures should be followed.  Mandatory."  No watering of lawns, grass, shrubbery, trees, flowers or regestable graders except between the hours of 6.00 PM and on the control of 6.00 PM and  | Mandatory, "All voluntary measures become mandatory plus-<br>-All voluntary measures become mandatory plus-<br>-Residential car washing prohibited<br>- Oralined or new pook, filled by permit only   | Mundation: Visiter laws, grass, shrubbery, trees, flower and vegetable gardens except between the hour of 200 PM and 200 AM and 200 AM. Visiter laws, except between the hour of 200 PM and 200 AM and 200 AM. Visiter laws and except laws accordance not to exceed three gallons expect for commercial purposes. "Washing down outside areas except for commercial". Washing down outside areas except for commercial "Law waster from pulsic or private fire hybridants for any purpose other than fire protection services, other public emergency or water department reset. "Use water from pulsic department reset." "Use water from pulsic department reset." "Use water for dual control of compaction." "Internationally waste treated seeter."  | Mandatory.  All of the above mandatory measures should be followed.  All of the above mandatory measures should be followed.  All of the above mandatory measures should be followed.  All of the above mandatory measures and the above mandatory measures and the above with a spring-loaded nourie, by container, by drip irrigation for the above with a spring-loaded nourie, by container, by drip irrigation of the above mandatory and the abo | Mandatory. Continue all voluntary actions.  Continue all voluntary actions.  Indicate the second sec |
| Level 3 or or Mandatory Reductions II | Manufactory is stable or business to:  "Water lawns of do any other acution seatong except by hand-hald boose with a "Water lawns of do any other acution seatong except by hand-hald boose with a "Water lawns of the seaton of t | None | Mandatory — Continue all level 2 mandatory actions — Reduce water usage by 20%.  Reduce water usage by 20% — Continue all reviews and the second water usage by 20% — Continue and the second water usage by 20% — Continue and the second water | Voluntary:  All Voluntary measures should be followed.  Mandatory:  All of the above mandatory measures should be followed.  No water of lawns, grass, shrubbery, trees, flowers or expectable grafes.  - No swater of lawns, grass, shrubbery, trees, flowers or expectable grafes.  - No serving of dirinking water in food establishments, except upon request.   | Mandatory, All Voluntary measures become mandatory plus-<br>Autochranty measures become mandatory plus-<br>Autochrant car washing prohibitand<br>An ercentional sure building pools<br>enrigation only allowed once per week<br>england use and testing only for public health or water<br>quality  | Ong policy only has 3 levels. All are mandatory.   | Mondatory, All of the above mandatory measures should be followed. It shall be unisufation: Market or similar bear some parties, and, shrubs or flowers that the similar some parties, and, shrubs or flowers where the similar some parties, and shrubs or flowers.  **Des water counties a structure for any size other than emergency on involving fine or accident.  **Introduce water into a swimming or wating pool.**  **Introduce water into a swimming or water pool.**  **Introduce wa | Mandatory Continue III level 2 mandatory actions - Reduce water usage by 20% Reduce water usage by 20% in manufacture for plant survival imagence inserted continuents for plant survival Water raise surcharge of \$1.54 implemented.   |
| Level 4<br>or<br>Emergency Reductions | Mandatory: The following mandatory water restrictions shall be imposed: "All use of water for purposes other than maintenance of public health and safety. "All use of water for purposes other than maintenance of public health and safety. "Lange by individuals shall be limited to those amounts necessary to sustain life through driving, nod preparation and personal fugiene. "Excessive use water rates: Any customer who exceeds the allotment will be undept to five (f) times the normal rate.  | Mone | Mandatory:  - Continue all level 3 mandatory actions - Reduce water usage by 25% - Reduce water usage by 25% - Water stage secret public health and safety - Water rate surcharge of 2.0% implemented  | Voluntary.  All voluntary measures should be followed.  All voluntary measures should be followed.  Mondatory.  All of the above mandatory measures should be followed.  The source was recorded of structure for any use other than emergencies involving fire.  Part introducing was the save was any use of their than the save and the | Mandatory:  - Residential water use not to exceed 300 gallons per day, - All use of water our clooms for any purposes other than - All use of water our clooms for any purposes other than - Non-residential water outstoems and construction activities - Non-residential water outstoems and construction activities - Good or many gallons water per day, are required to reduce daily water usage through whatever means is - waiting to the target percentages.  | Mandatory:  All of the abor.  All of the symmetry measures should be followed:  All of the symmetry measures should be followed:  Valetar or sprintle any grass, shrubbery, trees, flower and  Valeta should be found to the symmetry of the symmetry of the symmetry of the symmetry.  Valeta should be equipment.  Valeta should be equipment.  Valeta should be equipment.  Valeta should be equipment of the symmetry of t | Mandatory  All of the above mandatory measures should be followed.  Commercial and industrial water customers will be required to result in water and sustained and the second of the result in water and sustained are also specified to account, at the commercial in water and sustained rates.  [2] times the adopted rates.   | Mandatory:  - Continue all level 3 mandatory actions  - Reduce water sugge by 25%  - Graphic suggest s |
| Level 5<br>or<br>Water Rationing      | to specific rationing measures but stage 4 contains water use statements comparable to rationing.  | None | Mandatury – Continue all lived in mandatory actions – Ban on all outdoor water usages except for fighting – Valter rates archange of 5.00. Implemented   | Voluntary. "All voluntary measures should be followed.  Mandanory." All of the above mandatory measures should be followed.  All of the above mandatory measures should be followed.  Fire protection will be maintained, tank nucles shall use raw water.  Limited to those uses necessary to meet essential health mandatory needs.  Versible percentage rationing among all water users   |   | Mandatory: All of the above mandatory measures should be followed: Factioning: Valent conforms must achieve an immediate further Valent conforms must achieve an immediate further Valent conforms which was a conformation of the conformation of service to specific areas in the water system on a rotating basis.  Prohibition of all industrial uses of potable water or All of the conformation of the conformat | Mondations, All of the above mandatory measures should be followed.  Like water at the minimum magnine for public health protections.  The protections of the minimum magnine for public health protections.  There shall be no industrial use of water.  There shall be no industrial used of water.  There shall be no industrial used of water.  There shall be no intermed used or water.  There shall be no intermed used or water.  There shall be no intermed used water.  There shall be no intermed used or water.  There shall be no intermed used in the possible water.  Whenever possible, trainer for truck shall use one optable water.  Whenever possible, trainer for truck shall use one optable water.  Whenever possible, trainer for truck shall use one optable water.  Whenever possible, trainer for truck shall use one optable water.  Whenever possible, trainer for truck shall use one optable water.   | Mandatory - Continue all level 4 mandatory actions - Continue all level 4 mandatory actions - Ban on all outdoor water usages except fire fighting - Water rate surcharge of 5.0% implemented - Water rate surcharge of 5.0% implemented   |

| Conservation Measures                    |  |  |  |  |  |   |  |   |
|--|--|--|--|--|--|---|--|---|
| Utility                                  | Montgomery Co  | Mount Airy   | North Wilkesboro   | Norwood  | Pilot Mountain, Town of  | Richmond County   | Rockingham   | Salisbury   |
|  | Voluntary:  Ask customers to limit Class 3 water uses.  Class 3: Nonessential uses of water.  Ornamental purposes. Fountains, reflecting pools, and artificial waterfalls.   | Voluntary:  - Education and outreach programs - Irrigation a maximum of 1 inch per week - preventing water waste and runoff of impervious areas - washing full loads   | Limit Class III uses: - Operation of water<br>fountains, ornamental<br>pools, and swimming<br>pools serving less than 25<br>people   | volumary.   - Ask customers to limit uze (especially Class 3 uses) and eliminate the waster  of water.   - Class I: Essential Water Uses   - Domestic Use: Water necessary to sustain human life and the lives of  domestic pets, and to maintain minimum standards of hyglene and sanitation.   - Health Cane Facilities: Patient care rehabilitation, including swimming pools  used for nathert care and rehabilitation.  | None   | voluntary:  - Check for leaks: faucets, tollets, and outdoor spigots - Take short showers.  - Cut water off while brushing teeth and/or shaving.  - Install a low-flow showerhead and aerators on bathroom and kitchen fauc   | voluntary.  Customers asked to reduce usage 5%  - Mas of 1 inch per week irrigation  - Prevent water runoff on impervious areas  - Wash only full loads  - Use spring-loaded hose nozzles  - Repair all leaks  | voluntary.  - increase conservation educational campaign.  - 5% potable water use reduction goal.  - Watering of laws and ornamental plants should be limited to that necessary for plant survival only. Irrigation uses should be limited to between the hours of 9:00 PM and 4:00 PM.  - Household water should be resultiled to the greatest extent  |
| Level 1<br>or<br>Voluntary Reductions    | Gardens, Jaums, parks, gall courses (except greens), playing infests and other recentrolar area.  Filling and operation of recreational variants.  Filling and operation of recreational variants are selected in the process of the pr | using spirit globaded nozizier on water<br>hoses<br>- i dendrifying and repairing leaks  | Non-commercial washing of motor whitee, sidewalks, houses, etc.     Non-commercial water of gardens, lawns, park, playing field, and other rec areas.  | Class 2:  Not defined in the policy although it is noted in the Emergency Reduction stage  Class 3: Non-esternial uses of water  Class 3: Non-esternial uses of water  Class 3: Non-esternial uses of water  Commental Purposes: Fourtains, reflecting pools, and artificial waterfails.  Outdoor Non-commercial watering (public or private): Gardens, lawns, particular policy of course; lecenge feering, playing felical and other recreational area. Elling and operation of recreational swamming pools which severe fewer than 25 restaurants, class or setting places except by such creaming a conditioning-refilling cooling towers after draining except as specified in Class 1.  Public User: Fer by lectars area process, including used of privates capa and testing fire apparatus and for fire department of effic. except as sisting in Class 1.  Flushing of severs and hydrantic except as lated in Class 1. |  | Valter leavan only in the early mornings or late evening,<br>"Leava brown instead of a host to clean driveway, walks<br>and pation." Vasta care less to fine a late of the clean of the<br>"Leava care less to files." "Also are a feat to the leava for<br>"And one's installation or substantially improved irrigation<br>systems that are equipped with a stantastic times and which<br>directly or indeed vise fishmood Coanty Mort shall be<br>equipped with automatic rain and coal mostuse sensors that<br>some control of the coal of the coal of the coal of the<br>systems while rain is falling or soil moisture is adequate.  |  | possible for washering.  "Lose of water for ovariation of outside areas should be cursuled.  "Lose of water for ovariation of outside areas should be cursuled.  "But and washing machines and dishwashers should be for a second or the second of the second |
| Level 2 or or Mandatory Reductions I     | Mandatory.  - Econogy voluntary water conservation measures.  - Ban on all Class 3 water cues.   | Customers replaced for reduce concumption 12% Conflient valuation years are shared as a standard conflient or shared as a standard conflient or shared as a shared | Mandatory:  - All users to adhere to voluntary measures, plus all Class III uses banned - Class III outdoor watering limited to specified days - Industrial and bulk customers to develop julianto to develop julianto to reduce use 25% - Potential to implement 35% rate surcharge | Toluntary measures should be followed.  Authorizing measures should be followed.  Mandatory.  All of the above mandatory measures should be followed.  Ban on all Class 3 water uses.  | Mandatory:  It stall be unlawful to use water for the following purposes:  Water laws, grass, Shrubbery, trees, Rower and vegetable.  Water laws, grass, Shrubbery, trees, Rower and vegetable greater easy patients that the control of the control o | Mandatory:  Whater laws, grait, Shrubbery, Iven, Tower and vegetable generation scene; or Montender and Swadner of Commercial Swadners, grait, Shrubbery, Iven, Tower and vegetable generation scene; or Montenders and Swadner of Commercial Wash automobiles, Tucks, Iralien, Exota, Iralien, Commercial Wash automobiles, Tucks, Iralien, Exota, Iralien, Commercial purposes.  What Swadners of Swadners or Commercial purposes, Wash down contains are except for commercial purposes, Wash down contains are except for commercial purposes, branch down contains a commercial purpose.  What down contains are except for commercial purposes, burgoos of the think of the Commercial purposes.  Line waster for duals control or compaction.  Line water for duals control or compaction.  Line water for duals control or compaction.  Line water for duals control or compaction. | Cootinue veluntary measures with reduction increase to 30%<br>Mandatory.  Mandatory  The Cootine of the Cootine o | Violutary. "All voluntary measures should be followed.  Mondatory.  **All voluntary measures should be followed.  Mondator **Sa possible voleter use reduction goal.  **Monitor compliance with water use bans and enforce when recessary.  **Irrigation of lawns and onnamental trees or plants: shall not deduce except during the hours between 9:00 PM and 4:00  AM.  |
|  | Montgomery County only has one Mandatory level between<br>Yoluntary and Emergency  | Continue previous efforts plus:  - 20% water usage reduction  - Non-essential uses banned -irrigation limited to plant survival  | None   | No level 2 Mandatory   |  | Mandatory: Unitwide to use water for the following purposes: Unitwide to use water for the following purposes: Sourcey.  There shall be no introduction of water into any onamental contains, pool, or proof or other structure mading initial rule of water.  "Washing of automobiles is strictly prohibited expect for  | Non-commercial car washing prohibited     Commercial car washes limited to historical max month with meter removal at the limit  | Mandatory: 7 % potable water use reduction goal. Monitor compliance with water use bars and enforce when necessary. Household water shall be restallized to the greatest exhen recessary. Thousehold water shall be restallized to the greatest exhen the water shall be restallized to the greatest exhen The use of washing machines and obsweathers shall be limited. These units cloud be operated with loads when  |
| Level 3<br>or<br>Mandatory Reductions II |  |  |  |  |  | commercial purposes.  | No outdoor washing of improvious unifices such as driveways, observable, or building.     Fee suppression only from hydrasts.     No water for dust control or compaction activities.  | indiance. Inside units should be operated when that looks when<br>In-impost not favour and ormaneted traces or plants shall not<br>be done except during the hours between 9:00 pm. and 4:00<br>pm. Variances for commercial implation may be lossed.<br>- Planting of new ormanerial plants for trees or seeding of<br>loss when the properties of the properties of the properties of<br>10 cell water for washfound or disable series is published.<br>- Use of water for washfound or disable series is published<br>to the properties of the properties of the properties of<br>properties desired por shartly and soft founds.<br>- Commercial and industrial operations shall eliminate all<br>possible watering of which the properties of<br>propositive watering of which<br>- Newly constructed or drained pools shall be filled by<br>permit only.  |
| Level 4<br>or<br>Emergency Reductions    | Mandatory : Theosity Class I customers for voluntary conservation institutions. Bane Class 3 uses. Ban Class 3 uses.   | Centinue previous efforts plus: -25% water unger reduction -All uses banned every to option! - public health and safety - exite surcharge of 1.5 implemented - exite surcharge of 1.5 implemented  | Mandatory:  -All users to adhere to voluntary measures, plus all Class III uses banned  - Class III outdoor watering banned  - Industrial and bulk customers to implement plans to reduce use  - Potential for 30% rate surcharge  | Voluntary.  All voluntary measures should be followed.  Mandatory:  All of the above mandatory measures should be followed.  All of the above mandatory measures should be followed.  Class II shall be benned.  | Mendestroy:  I stall be unlawful to use water for the following purposes:  Water or spinisk any grass, shanbeer, trees, flower and  weighted genders with troated water.  Watch automobiles, flowcis, trailers, boats, anjulanes, or any  Watch automobiles, flowcis, trailers, boats, anjulanes, or any  Watch down codated seres such as street, diverways,  service stallon apoons, pasking lock, office buildings, senteriors  for more or apartimes, idenvilles, pasto, or other similar  purposes.  Fill poods, swimming pools, watering pools, but tube, spass,  spass, etc., that have been diamete or partially drained.  Served circling water in restaurants, caferies, or other  food establishments, except upon request.  Use treated water ordiced a structure for any use other  than an emergency use involving the protection services or  than any ordinary or any ordinary ordinary or any  strondors. Water into any ormanental fountain or similar  structure.   | Mandatory Cultivated to use water for the following purposes:  - Any variation purposes other than emergency fire suppression.  - Water service may be discontinued or reduced.  - Water service may be discontinued or reduced.  - Reduction in heating fooding systems demand.  | All measures in stage 1 and 2 are mandatory.  No outdoor use except fire suppression  Reduction of cooling demand for water cooled HVAC  | Mondatory:  1.2 hi potable water use reduction goal.  Monitor compliance with water use bars and enforce when conscisus, few and other plants is prohibited.  Irrigation of serv, wholese and enjoyment is prohibited.  Irrigation of serv, selection and enjoyment is prohibited.  Restaurants and does arring establishments shall utilize disposable service uternitis and plates in all cases.  Restructional use of possible water is prohibited.  1-tage scale commercial and inflastrati water customers  solitoring who thousands 5000 or more galono of water per  solitoring who thousands 5000 or more galono of water per  solitoring who thousands 5000 or more galono of water per  strongth whatever means are available.  |
| Level 5<br>or<br>Water Rationing         | Controller retinning measures for a number of cultomer classes with the goal of all usage being limited to public health and safety.   | continue previous efforts plus:  - All uses banned except to protect poblic health and con visual surface of 2.0 implemented  - vise surchange of 2.0 implemented  | None   | Mandatony: Implement zationing (detailed rationing measures described in ordinance).   | Mandature;  Ineplament rationing,  -Water customers must achieve an immediate further reduction in water on index to extend existing water reduction in water on index to extend existing water and a second process of the control of  | Name  | Mandatory, Only use Water for justice Health purposes.  Fire suppression Only outdoor use  | Mandancy:  1.5 y poble was true reduction goal.  -Monitor compliance with water use bairs and enforce when consensary, was for proposes other than maintenance of guide least and safety was prohibited.  -Where the city ystem is still functional, disaly residential water use shall be limited to the amount encessary to sustain the through drinking, and operaturations and personal hygienes.  Increases you to sustain life through drinking, food preparation and personal hygiene.   |

| Conservation Measures<br>Utility     | Thomasville  | luillaskasa  | Wingate  | Internal Colors  | Variation dilla  |
|--------------------------------------|--|--|--|--|--|
| Level 1 or Voluntary Reductions      | Voluntary: member to inform the patient.  Analogy care for subtrage other patient showers to no more than four minutes.  Linkt toler flushing by multiple usages between flushes.  Den clearer fuscurs running.  Linkt used clinthe washers and deliwashers.  Linkt used vanishers and the incercasing her glants to survive.  Linkt used washers and demonstration of the survive of the sur | Voluntary. The second residence of the residence residence of the residenc     | Voluntary.  I will care washing.  - Lite only shopes with spring extraction from the watering and confidence of the conf | Voluntary. Limiting the webring of laves, londscaping, and other control of the control of laves and webring webs. Limiting the web three the laves of laves of laves and webring webs. The laves of laves and laves of laves and laves of laves and laves of laves and laves and defective parts of facutes and tollets.  - Healthing west from verticative showenheads and water showing for root more than 5 minutes.  - Turning off facutes.  - Limiting the water of laves and dishwashers, and the laves of  | Voluntary, valued to reduce range 5%. Continues above the will be supplied to the continues of the reduce of the continues of the reduce of the continues of th |
| Level 2 or<br>Mandatory Reductions 1 | All solutions pressures should be followed.  Mandatory:  Where drushberry, trees, flowers and garders except from 8:00 PM on Mandaty to 8:00 AM.  Where drushberry, trees, flowers and garders except from 8:00 PM on Mandaty to 8:00 AM.  Where drushberry, trees, flowers and garders except from 8:00 PM on Mandaty to 8:00 AM.  Where drushberry, trees, flowers and except from 8:00 PM on Mandaty to 8:00 AM.  Possible automatic of control of the equipment, excluding commercial car washing is prohibited.  Where any control of the except from 8:00 PM on Mandaty to 8:00 PM on Mandaty to 8:00 PM on PM on Mandaty to 8:00 PM on PM | Class III water conservation measures<br>"Unitering Swam and other registration should occur shart-day and Sunday from 6.00 PM<br>until 5:00 AM (Swamper Swamper S | <ul> <li>- All volunitary measures should be followed.</li> <li>Mandatory:</li> <li>- The town nursager may choose to carry out additional water use restrictions.</li> </ul>  | Valuary. "An electrical ymeasures should be followed.<br>Mandatory." All of the above mandatory measures should be followed.<br>"Watering of lawns, Landscaping, and other vegetation shall<br>"Watering of lawns, Landscaping, and other vegetation shall<br>show a followed and 500 AM.<br>Watering of the present of the shall be allowed to be<br>such continued by steep and the shall be allowed to do such<br>storest address number. Such and the allowed to do<br>such<br>storest address numbers are even shall be allowed to<br>do such sprinkling on even numbered days of the month.  | Contained included in Contained in Contained in Contained and American Amer |
| Level 3 or                           | Voluntary. "All voluntary measures should be followed.  Mandatory.  **All of the above mandatory measures should be followed.  **The following shall be prohibited:  **Undergor spraise by jume, graren, sod, shrubs or flowers except with nonpotable water.  **Due of water outsides a structure for any use other than emergency use involving filer or actient.  **Due of water outsides a structure for any use other than meagency use involving filer or actient.  **Due of pressure water outsides particularly and pressure structure for any use of the structure of the stru | Mandatory. All of the above mandatory measures should be followed.  **Water of I mins and other vegetation should occur shutudy form 12:00.AM until 5:00  **Water of I mins and other vegetation should occur shutudy form 12:00.AM until 5:00  **Lome Class it postate water one-exerted using age.  **Enforce a system-wide 2:5 % water user reduction goal.  **Enforce a system-wide 2:5 % water user reduction goal.  **Bins all root-committed pressure weathing and washdown of imprevious surfaces.  **The town manager may choose to carry out additional water use restrictions.  | Valentary:  - All vulnary measures should be followed.  Mandatory:  - All of the above mandatory measures should be followed.  The following shall be prohibited:  - Valenting lasms; provided that shrubbery, trees, flowers and vegetable gardeen may be watered by hand or by drip  - Conducting residently which was waited and the shall be above.  - Valenting lasms; possible sand streets.  - Unique water for doctored during construction.  - Conducting flushing or hydrant stating programs.  - Filling new summing possible sands of called a some streets.  - Filling new summing possible sands, called some shall be sh | Voluntary, Measures should be followed.  Mandatory, All voluntary measures should be followed.  Mandatory, All of the above mandatory measures should be followed.  -The vatering of lawns, inducing, and other vegetation.  The vatering of lawns, inducing, and other vegetation as a contract of the state of | The desired process of the second process of |
| Level 4 or Emergency Reductions      | Voluntary:  All voluntary:  All voluntary:  All or observed in the desired of the | Mandatory:  All apply from probots liveric.  Ban Class I can be seemed use.  Ban Class I can be seemed use.  Ban of all one essential case is usage.  Request concervation from Class I (separatial users.  Ban of all one essential case is usage.  Request concervation from Class I (separatial users.)  Request concervation from Class I (separatial users.)  Repeated concervation from Class I (separatial users.)  | Voluntary: - All voluntary measures should be followed.  Marcatory: - All of which was been mandatory measures should be followed.  Marcatory: - All of the above mandatory measures should be followed. The following shall be prohibited: - Induction water into any pool Induction water into any pool Induction water into any pool Encourage for any use other than an evergracy moleonicy and mandatory Encourage the following: - The protection to be mantatured by drafting of ponds, rivers and the list, wherever possible and the list, wherever possible and the list, wherever possible of present an evaporative air conditioner which recycles water recept during operating flours of business Use possible water for road construction practices.  | Voluntary,  "All voluntary measures should be followed.  "All voluntary measures should be followed.  And of the above randatory measures should be followed.  "And of the above randatory measures should be followed.  "And of the above randators for non-emergency related reasons.  "Any use of water outdoors for non-emergency related reasons.  The state of the same of the same should be above the same should be approximated only with the use of a water can or other hand held container or device, not exceeding three gallons in size.  "The sharing of same same should be an or other hand held container or device, not exceeding three gallons in size.  "The sharing of pools.  "The Assistant City Manager shall temporarly impose restrictions on automated and manual irrigation systems.   | Mandatory:  -34 of the reluctory resource are mandatory.  -34 of the reluctory resources are mandatory.  -44 or of finding unit are except for public health and safety based whater sale surcharge of 2x.   |
| Level 5<br>or<br>Water Rationing     | All mandatine y requirements plus: The industrial or control use of water Allo institutional use of water Allo institutional use of water Clauge limited to sanstury needs and fire suppression  | None   | None   | hooe   | Mondatury, All of the voluntary measures are mandatory. All other voluntary measures are mandatory. All use of drinning water except for public health and safety banned. Water rates surcharge of 5x  |



Appendix C

Conservation Plan Decision Matrix

#### **Continuous Conservation Measures**

|                              |   | Union Co | Albemarle | Anson Co | Concord | Davidson Water | Davie Co | Denton | Dobson |
|------------------------------|---|----------|-----------|----------|---------|----------------|----------|--------|--------|
| Conservation Category        | Measure   |          |           |          |         |                |          |        |        |
|                              |   |          |           |          |         |                |          |        |        |
| Rate Structure               | Rate Structure Inclining (Residential)  |          |           |          |         |                |          |        |        |
| nate 3ti ucture              | Conservation signal rate (>10,000 gal/month) >1.5 times the lowest volumetric rate                                |          |           |          |         |                |          |        |        |
| Public Education             | Year-round public education via website or other media or<br>external activities promoting conservation           |          |           |          |         |                |          |        |        |
| Water Loss Reduction         | Unaccounted for water studies, SCADA monitoring for water loss, smart water meters, or other measures implemented |          |           |          |         |                |          |        |        |
| Outdoor Water Use            | Irrigation mandatorily limited to 3 or less days per week<br>Stage 0 or 1 (Typically Voluntary Stages)            |          |           |          |         |                |          |        |        |
| Gutador Water Ose            | Outdoor washing prohibited (except commercial or essential use) at Stage 2 or earlier                             |          |           |          |         |                |          |        |        |
| Plumbing Retrofitting        | Retrofit incentive program or prevalence of plumbing fixtures installed after 1990                                |          |           |          |         |                |          |        |        |
| Alternative Water Management | Water Reuse / Reclaimed Water Program   |          |           |          |         |                |          |        |        |



#### Note:

#### **Continuous Conservation Measures**

| Conservation Category        | Measure   | Elkin | Hamlet Water System | Handy Sanitary District | Jonesville | Kannapolis | King | Lexington | Mocksville |
|------------------------------|---|-------|---------------------|-------------------------|------------|------------|------|-----------|------------|
|                              |   |       |                     |                         |            |            |      |           |            |
|                              |   |       |                     |                         |            |            |      |           |            |
| Rate Structure               | Rate Structure Inclining (Residential)  |       |                     |                         |            |            |      |           |            |
|                              | Conservation signal rate (>10,000 gal/month) >1.5 times the lowest volumetric rate                                |       |                     |                         |            |            |      |           |            |
| tublia Education             | Year-round public education via website or other media or   |       |                     |                         |            |            |      |           |            |
| Public Education             | external activities promoting conservation  |       |                     |                         |            |            |      |           |            |
| Water Loss Reduction         | Unaccounted for water studies, SCADA monitoring for water loss, smart water meters, or other measures implemented |       |                     |                         |            |            |      |           |            |
| Outdoor Water Use            | Irrigation mandatorily limited to 3 or less days per week<br>Stage 0 or 1 (Typically Voluntary Stages)            |       |                     |                         |            |            |      |           |            |
| water osc                    | Outdoor washing prohibited (except commercial or essential use) at Stage 2 or earlier                             |       |                     |                         |            |            |      |           |            |
| Plumbing Retrofitting        | Retrofit incentive program or prevalence of plumbing fixtures<br>installed after 1990                             |       |                     |                         |            |            |      |           |            |
| Alternative Water Management | Water Reuse / Reclaimed Water Program   |       |                     |                         |            |            |      |           |            |



#### Note:

#### **Continuous Conservation Measures**

| Conservation Category        | Measure   | Montgomery Co | Mount Airy | North Wilkesboro | Norwood | Pilot Mountain, Town of Richmond County | Rockingham | Salisbury |
|------------------------------|---|---------------|------------|------------------|---------|---|------------|-----------|
|                              |   |               |            |                  |         |   |            |           |
|                              |   |               |            |                  |         |   |            |           |
| Rate Structure               | Rate Structure Inclining (Residential)  |               |            |                  |         |   |            |           |
| ate structure                | Conservation signal rate (>10,000 gal/month) >1.5 times the lowest volumetric rate                                |               |            |                  |         |   |            |           |
| ublic Education              | Year-round public education via website or other media or<br>external activities promoting conservation           |               |            |                  |         |   |            |           |
| Water Loss Reduction         | Unaccounted for water studies, SCADA monitoring for water loss, smart water meters, or other measures implemented |               |            |                  |         |   |            |           |
| Outdoor Water Use            | Irrigation mandatorily limited to 3 or less days per week Stage 0 or 1 (Typically Voluntary Stages)               |               |            |                  |         |   |            |           |
| vater ose                    | Outdoor washing prohibited (except commercial or essential use) at Stage 2 or earlier                             |               |            |                  |         |   |            |           |
| lumbing Retrofitting         | Retrofit incentive program or prevalence of plumbing fixtures installed after 1990                                |               |            |                  |         |   |            |           |
| Alternative Water Management | Water Reuse / Reclaimed Water Program   |               |            |                  |         |   |            |           |



#### Note:

#### **Continuous Conservation Measures**

| Conservation Category        | Measure   | Thomasville | Wilkesboro | Wingate | Winston-Salem | Yadkinville |
|------------------------------|---|-------------|------------|---------|---------------|-------------|
|                              |   |             |            |         |               |             |
|                              |   |             |            |         |               |             |
| Rate Structure               | Rate Structure Inclining (Residential)  |             |            |         |               |             |
| nate structure               | Conservation signal rate (>10,000 gal/month) >1.5 times the lowest volumetric rate                                |             |            |         |               |             |
| Public Education             | Year-round public education via website or other media or external activities promoting conservation              |             |            |         |               |             |
| Water Loss Reduction         | Unaccounted for water studies, SCADA monitoring for water loss, smart water meters, or other measures implemented |             |            |         |               |             |
| Outdoor Water Use            | Irrigation mandatorily limited to 3 or less days per week Stage 0 or 1 (Typically Voluntary Stages)               |             |            |         |               |             |
| Outdoor water ose            | Outdoor washing prohibited (except commercial or essential use) at Stage 2 or earlier                             |             |            |         |               |             |
| Plumbing Retrofitting        | Retrofit incentive program or prevalence of plumbing fixtures installed after 1990                                |             |            |         |               |             |
| Alternative Water Management | Water Reuse / Reclaimed Water Program   |             |            |         |               |             |



#### Note:

#### **Response Triggers**

| Conservation Stage Trigger Utilized | Union Co | Concord | Kannapolis | Mount Airy |
|-------------------------------------|----------|---------|------------|------------|
|                                     |          |         |            |            |
| Yadkin Pee Dee LIP                  |          |         |            |            |
| or                                  |          |         |            |            |
| Catawba Wateree LIP                 |          |         |            |            |

Criteria Scoring Legend:

System meets criteria
System substantially meets criteria
System does not meet criteria
No information posted on website, in WSP, and no response to phone calls on this criteria

#### Results:

All identified water systems were screened using the process described in the Conservation Plan Comparison Decision Matrix. This process was a two step process to identify the most stringent (and most effective) conservation plan to compare to the Union County plan.

For each of the conservation categories one or two measures were selected based on those most likely to effective measurable water use reductions. This created 8 measures for the six categories (two measures within rates and two within Outdoor Use). Each of system plans were evaluated against these eight measures. Three systems met at least four of eight measures in addition to Union County - Concord, Kannapolis, and Mount Airy.

The final criteria, which was applied to all three of the shortlisted systems was what drought stage trigger is used to implement most of the measures. To make a true comparison of stringency (effectiveness) the triggers would need to be the same, otherwise the actually timing of the stage implementations could be significantly different. For this comparison, the Yadkin Pee Dee Low Inflow Protocol and Catawba Wateree Low Inflow Protocol were used since they are accepted practice in each river basin. Only Kannapolis and Concord, along with Union County, use this criteria to implement drought response stages.

Based on the slight differences in each WSRP there isn't a single conservation plan or WSRP that can be considered most stringent. The Concord and Kannapolis plans could be considered equally stringent/effective. The Union County conservation and drought management plan meets, and in some cases, exceeds the requirements of all these plans. Therefore the Union County Conservation Plan meets the requirements of GS 143-215.22L(n)(1) of being equal or exceeding the most stringent water conservation plan implemented by a public water system that withdraws water from the source river basin.

<u>Appendix D</u>

Union County Water Use Ordinance

## Union County Water Use Ordinance

May 4, 2015

## Article I. Purpose

BE IT ORDAINED by the Union County Board of Commissioners that the purpose of this Ordinance is to maintain and protect the public health, safety, and welfare of Union County ("County") residents by establishing short and long-term demand management strategies to effectively manage the limited resource of the water supply in the County. This Ordinance effectively manages the water supply in the County by requiring efficient and responsible use of water within the County and by establishing measures and procedures for reducing potable water use during times of water shortage resulting from drought, capacity limitations, and system emergencies.

The water demand management strategies set forth in this Ordinance reduce the rate of increase in overall water use through year-round water conservation practices that maximize the County's existing and planned water supply sources and reduce seasonal peak day demands that result in the need for costly expansion of water treatment, storage, and transmission facilities. The implementation of voluntary and mandatory water reduction measures within the County water service area extends the available water supply with regard for domestic water use, sanitation and fire protection, and minimizes the adverse impacts in the event a water shortage is declared.

This Ordinance is also designed to be in accordance with the Catawba-Wateree Low Inflow Protocol ("CW-LIP") for the Catawba-Wateree River Basin. The CW-LIP was developed pursuant to the Comprehensive Relicensing Agreement for the Catawba-Wateree Hydro Project (FERC Project No. 2232) dated December 22, 2006 (the "Relicensing Agreement"), to which Union County is a party. The Relicensing Agreement establishes the CW-LIP as the agreed-upon methodology to deal with water shortages during periods of drought. Thus, Union County, as a signatory to the Relicensing Agreement, is required to comply with the CW-LIP. The CW-LIP establishes a policy for how Duke Energy Carolinas, LLC, regional water users, and other stakeholders will operate water systems during periods of drought by progressing through a series of staged water use restrictions during worsening drought conditions. The goal of the CW-LIP is to delay the point at which the Catawba River's usable water storage is fully depleted and to provide additional time to allow precipitation to restore stream flow, reservoir levels, and groundwater levels to normal ranges.

The Union County Water Shortage Response Plan ("WSRP"), adopted by the Union County Board of Commissioners on May 4, 2015, is hereby adopted and incorporated into this Ordinance by reference. The WSRP is also made an exhibit to this Ordinance. An official copy of the WSRP shall be available for public inspection in the office of the Clerk to the Union County Board of Commissioners. If there is any conflict between the WSRP and this Ordinance, the provisions of this Ordinance shall control.

## Article II. Applicability

The provisions of this Ordinance apply to all persons, customers, and property utilizing water supplied through the County's water utility system; however, it does not apply to reuse or reclaimed water. Water uses from private drinking water wells, as that term is defined in N.C.G.S. § 87-85 and ponds are not regulated by this Ordinance. This Ordinance also supersedes the Union County Water Conservation Ordinance originally adopted by the Union County Board of Commissioners on July 13, 1992, as subsequently amended and/or restated by any amendments or restatements thereto.

#### **Article III. Definitions**

<u>Bona Fide Farm Use</u> means water uses for the production and activities relating or incidental to the production of crops, grains, fruits, vegetables, ornamental and flowering plants, dairy, livestock, poultry, and all other forms of agriculture, as defined in N.C.G.S. § 106-581.1.

**County** means Union County, North Carolina.

<u>County Manager</u> means, for the purposes of this Ordinance, the person currently occupying the position of Union County Manager (which includes a County Manager with an acting or interim designation), or in the absence of such a person, the Executive Director of Public Works.

<u>Customer</u> means a person, company, organization, or any other entity (individuals, corporations, partnerships, associations, and all other legal entities) using water supplied by the County's water utility, or in whose name an account for water utility service is maintained by the County.

<u>CW-LIP</u> means the Catawba-Wateree Low Inflow Protocol for the Catawba River Basin, as developed pursuant to the Relicensing Agreement.

<u>Essential Water Use</u> means the use of water necessary for firefighting, health, and safety, and sustaining human and animal life. Specifically, for certain types of water uses set forth below, the following is considered Essential Water Use:

- a. Domestic Use- Water use necessary to sustain human life and the lives of domestic pets, as well as to maintain minimum standards of hygiene and sanitation.
- b. Commercial Use- Water use integral to the production of goods and/or services by any establishment having profit as its primary aim, except as otherwise specifically prohibited by this Ordinance.
- Industrial Use- Water use in processes designed to convert materials of lower value into forms having greater usability and value, except as otherwise specifically prohibited by this Ordinance.
- d. Institutional Use- Water use by government; public and private educational institutions, churches and places of worship; water utilities; and other public organizations; except as otherwise specifically prohibited by this Ordinance.

- e. Health Care Facility Use- Water use in patient care and rehabilitation, including swimming pools used for patient care and rehabilitation, in nursing homes, and other care facilities.
- f. Public Use- Water use for firefighting, including testing and drills by a fire department if performed in the interest of public safety; water system operations; and water necessary to satisfy federal, state, and local public health, safety, or environmental protection requirements.
- g. Correctional Facility Use- Water use necessary to sustain human life and to maintain minimum standards of hygiene and sanitation.

Non-Essential Water Use means any use of water that does not meet the definition of Essential Water Use.

Ordinance refers to this Union County Water Use Ordinance.

<u>Rate Ordinance</u> means the Ordinance Setting Charges, Fees, Rates and Deposits for Customers Served by the Union County Water and Sewer System.

<u>Relicensing Agreement</u> means the Comprehensive Relicensing Agreement for the Catawba-Wateree Hydro Project (FERC Project No. 2232) dated December 22, 2006.

<u>Spray Irrigation System</u> means a system of application of water to landscaping by means of a device, other than a hand-held hose or watering container, which projects water through the air in the form of particles or droplets.

<u>UCPW</u> means the Union County Public Works Department.

<u>WSRP</u> means the Water Shortage Response Plan adopted by the Union County Board of Commissioners on May 4, 2015.

## **Article IV. Declaration of a Water Shortage**

In the event that a water shortage of any degree occurs, as such an event triggering a water shortage is set forth in this Ordinance and the WSRP, the Executive Director of Public Works shall notify the County Manager of said water shortage. The County Manager is authorized by this Ordinance to declare a water shortage, designate a water shortage stage, and implement the water use reduction measures or restrictions corresponding with such a stage, as such water use reduction measures or restrictions are outlined in this Ordinance. The County Manager shall report the declaration of a water shortage, as well as the water shortage stage, to the Board of Commissioners at its next regular meeting.

In designating any water shortage stage pursuant to this Ordinance, the County Manager may limit the applicability of the requirements of this Ordinance to certain sections of the County, whether by township or other description, as appropriate.

The declaration of a water shortage and designation of a water shortage stage becomes effective immediately upon issuance by the County Manager, unless otherwise stated in such declaration. When

a water shortage stage is declared or changed, the stage shall remain in effect until reduced or rescinded by the County Manager, upon recommendation of the Executive Director of Public Works, when it is deemed that the condition(s) which caused the water shortage has abated. Any declaration of a water shortage, or any designated change in a water shortage stage, shall be promptly and extensively publicized in a manner corresponding with the updated and current designated stage, in the manner of notification set forth in the WSRP.

## **Article V. Determination of a Water Shortage**

A water shortage refers to a condition that exists when the demands and requirements of water Customers served by the Union County water system cannot be satisfied without depleting the available supply of treated water or the available water supply to or below a critical level; i.e., the level at which water is available for Essential Water Use. Conditions contributing to a water shortage may include, but are not limited to, the following:

- Resource Limitations
- Capacity Limitations
- System Emergencies

A water shortage stage is determined by the criteria set forth in the WSRP, or as otherwise provided in this Ordinance.

## **Article VI. Water Shortage Stage Measures and Restrictions**

#### A. Year-Round Water Conservation (Stage 0 Water Shortage)

This Ordinance establishes the implementation of mandatory and voluntary year-round water use restrictions and conservation measures. These water use restrictions and water conservation measures are in effect under normal conditions and will serve as Stage 0 Water Shortage restrictions (Stage 0 Water Shortage is the minimum water shortage stage that will always be in effect in the County if there is no declaration of a heightened stage). In the event a Stage 0 Water Shortage is in place, all Customers shall be required to adhere to the following mandatory water use restrictions:

#### **Mandatory Water Use Restrictions**

- Customer Spray Irrigation System use shall be limited to three (3) days per week.
- Customers shall at all times comply with the Spray Irrigation System schedule for use set forth in the declaration of water shortage stage and in the WSRP.

Those Customers using drip irrigation or any handheld water methods are still allowed to water any day and time. Customers regularly engaged in the sale of plants, shrubbery, trees, and flowers are permitted to use water by any method at any time for irrigation of their commercial stock.

Voluntary water conservation measures for this water shortage stage, as described in the WSRP, shall also be encouraged, but not required.

#### B. MODERATE Water Shortage (Stage 1 Water Shortage)

In the event a Stage 1 Water Shortage is declared, all Customers shall be required to adhere to the following mandatory water use restrictions:

#### **Mandatory Water Use Restrictions**

- Comply with all Stage 0 Water Shortage Mandatory Water Use Restrictions.
- The transport of water from within the County to outside of the County where such water has been drawn by tanker truck from a hydrant of the County water utility system is prohibited; provided, however, that transport outside of the County shall be allowed for emergency fire protection and Bona Fide Farm Uses.

Those Customers using drip irrigation or any handheld water methods are still allowed to water any day and time. Customers regularly engaged in the sale of plants, shrubbery, trees, and flowers are permitted to use water by any method at any time for irrigation of their commercial stock.

Voluntary water conservation measures, as described for this water shortage stage in the WSRP, shall also be encouraged, but not required.

#### C. SEVERE Water Shortage (Stage 2 Water Shortage)

In the event a Stage 2 Water Shortage is declared, all Customers shall be required to adhere to the following mandatory water use restrictions:

#### **Mandatory Water Use Restrictions**

- Comply with all Stage 1 Water Shortage Mandatory Water Use Restrictions.
- Limit Spray Irrigation System use to no more than two (2) days per week and only between the hours of 12:00 a.m. until 8:00 a.m. and 8:00 p.m. until 12:00 a.m., on the days identified in the WSRP
- Eliminate personal vehicle washing unless using a commercial carwash.
- Eliminate the filling of new swimming pools and fountains (unless considered Essential Water Use as defined herein).
- Eliminate public building, sidewalk, and street washing activities (unless considered Essential Water Use as defined herein).
- Limit construction uses of water (e.g. dust control)
- Limit flushing and hydrant testing programs, except as necessary to maintain water quality and in other special circumstances.

Those Customers using drip irrigation or any handheld water methods are still allowed to water any day and time. Customers regularly engaged in the sale of plants, shrubbery, trees, and flowers are permitted to use water by any method at any time for irrigation of their commercial stock.

Unless otherwise declared mandatory, Customers are encouraged, but not required, to implement voluntary water conservation measures set forth for a Stage 1 Water Shortage in the WSRP.

#### D. EXTREME Water Shortage (Stage 3 Water Shortage)

In the event a Stage 3 Water Shortage is declared, all Customers shall be required to adhere to the following mandatory water use restrictions:

#### **Mandatory Water Use Restrictions**

- Comply with all Stage 2 Water Shortage Mandatory Water Use Restrictions, unless a more stringent requirement is imposed below.
- Limit Spray Irrigation System use to no more than one (1) day per week and only between the hours of 12:00 a.m. until 8:00 a.m. and 8:00 p.m. until 12:00 a.m., on the day identified in the WSRP.
- Eliminate the filling of all swimming pools, hot tubs, fountains, and decorative ponds (except when necessary to support aquatic life or considered Essential Water Use as defined herein).
- Eliminate construction uses of water (e.g. dust control)
- Eliminate flushing and hydrant testing programs, except as necessary to maintain water quality and in other special circumstances.
- Eliminate the serving of drinking water from the County water system in restaurants, cafeterias, and other food establishments (except upon patron request).
- Eliminate variances for landscape irrigation.

Those Customers using drip irrigation or any handheld water methods are still allowed to water any day and time. Customers regularly engaged in the sale of plants, shrubbery, trees, and flowers are permitted to use water by any method at any time for irrigation of their commercial stock, but only in amounts necessary to prevent the loss of their commercial stock.

Voluntary water conservation measures, as described for this water shortage stage in the WSRP, shall also be encouraged, but not required.

#### E. EXCEPTIONAL Water Shortage (Stage 4 Water Shortage)

In the event a Stage 4 Water Shortage is declared, all Customers shall be required to adhere to the following mandatory water use restrictions:

#### **Mandatory Water Use Restrictions**

- Comply with all Stage 3 Water Shortage Mandatory Water Use Restrictions, unless a more stringent requirement is imposed below.
- Prohibit all Non-Essential Water Use as defined herein (including the prohibition of all residential irrigation, irrigation of commercial stock, and filling of ponds to sustain aquatic life).
- Prohibit the use of water outside a structure for any use other than a fire emergency.

 Require the use of disposable utensils and plates at all restaurants, cafeterias, and other food establishments.

Voluntary water conservation measures, as described for this water shortage stage in the WSRP, shall also be encouraged, but not required.

## **Article VII. Additional Water Use Regulation Authority**

The County Manager, acting in the best interests of the health, safety, and welfare of the citizens of Union County, may further regulate water usage on the following bases: (i) time of day; (ii) day of week; (iii) Customer type, including, without limitation, residential, commercial, industrial, and institutional uses; and (iv) physical attribute, such as address.

#### **Article VIII. Water Conservation Rates**

During a declared water shortage due to resource or capacity limitations, water rates increase to ensure adequate operating revenue and to encourage conservation. Rate increases are not utilized in response to a system emergency water shortage condition. The rates for all user types are defined in the Rate Ordinance. Customers will be charged the rates established in the then current Rate Ordinance corresponding to the water shortage stage in effect at the time bills are rendered. If a system emergency occurs while in a water shortage situation, the rates applied shall be those corresponding to the current water shortage response due to resource or capacity limitations.

## Article IX. Compliance Required in the Event of Water Supply Shortage

In addition to any other violation of law prescribed in this Ordinance, if the County Manager declares a water shortage stage as described in this Ordinance, it shall be unlawful for any person, firm or corporation to use or permit the use of water from the County water system in a manner inconsistent with the provisions of this Ordinance.

#### **Article X. Enforcement and Penalties**

- A. Compliance with the provisions of this Ordinance shall be enforced by UCPW personnel, independent contractors engaged by UCPW for such purpose, and such other personnel as designated by the County Manager.
- B. The use of water from the County water system by a Customer in violation of any mandatory water use restriction at any water shortage stage imposed pursuant to this Ordinance is unlawful. Further, the refusal or failure of a Customer or other person acting on the Customer's behalf to cease immediately a violation of a water use restriction, after being directed to do so by a person authorized to enforce the provisions of this Ordinance, is unlawful. Each Customer is responsible for any use of water that passes through the service connection associated with the Customer's account or otherwise passes through the Customer's private water system.

C. Any Customer who violates, or permits the violation of, any mandatory water use restriction imposed pursuant to this Ordinance shall be subject to civil penalties and/or termination of service as follows in the table below:

| Stage | Union County<br>Designation      | 1st<br>Violation | 2nd<br>Violation | 3rd<br>Violation | 4th<br>Violation | 5th and<br>Additional<br>Violations |
|-------|----------------------------------|------------------|------------------|------------------|------------------|-------------------------------------|
| 0     | Year-Round Water<br>Conservation | Warning          | Warning          | \$250            | \$500*           | \$1000*                             |
| 1     | Moderate Water<br>Shortage       | Warning          | \$100            | \$500            | \$500*           | \$1000*                             |
| 2     | Severe Water<br>Shortage         | Warning          | \$200            | \$500            | \$500*           | \$1,000*                            |
| 3     | Extreme Water<br>Shortage        | \$100            | \$500            | \$750            | \$1000*          | \$1,500*                            |
| 4     | Exceptional Shortage Emergency   | \$200            | \$500            | \$1,000          | \$1,000*         | \$2,000*                            |

<sup>\*</sup>Includes termination of service

Each day that a violation of a mandatory water use restriction occurs or continues to occur after delivery of notice pursuant to subarticle (H) below shall be considered a separate and distinct violation.

- D. Violations shall be accumulated by Customers on a calendar year basis for purposes of accrual of civil penalties. For example, a second violation of a Stage 1 Water Shortage water use restriction by a Customer during a calendar year shall result in a civil penalty of one hundred dollars (\$100), but the next subsequent violation, if incurred by that same Customer during the following calendar year, shall result in a warning for a first violation. Notwithstanding the foregoing, the Customer shall remain liable for payment of all civil penalties regardless of when accrued. Violations of any mandatory water use restrictions of any water shortage stage shall accumulate with violations of other stages. Should a Customer move, or cease and renew service, during a calendar year, the Customer's violations shall continue to accumulate as if such move or cessation had not occurred.
- E. Each civil penalty associated with a first, second, or third violation and assessed against a Customer pursuant to this Ordinance shall be added to the Customer's water bill and shall be paid in the same manner as the payment of water bills. A Customer's partial payment of a water bill shall be applied first to satisfaction of the civil penalties. Failure to pay all or any portion of a water bill, including

any civil penalty assessed pursuant to this Ordinance, by the due date indicated on the bill may result in the termination of water service.

- F. Each civil penalty associated with a fourth or subsequent violation and assessed against a Customer pursuant to this Ordinance shall be added to the Customer's water bill, but shall be payable within ten (10) calendar days of delivery of notice of violation. Failure to pay all or any portion of a civil penalty associated with a fourth or subsequent violation assessed pursuant to this Ordinance by the tenth day following delivery of the notice of violation shall result in termination of water service, unless such action is stayed pending appeal.
- G. The violation of any water use restriction or provision of this Ordinance may be enforced by all remedies authorized by law for noncompliance with County ordinances, including without limitation the assessment of a civil penalty and action for injunction, order of abatement or other equitable relief; provided, however, that no violation of any water use restriction or provision of this Ordinance shall be a basis for imposing any criminal remedy. The Board of Commissioners may release billing information, as such term is defined in N.C.G.S. 132-1.1(c), of Customers who violate, or have violated, the provisions of this Ordinance, when the Board in its sole discretion and acting pursuant to N.C.G.S. 132-1.1(c)(2), determines that the release of such billing information during times of mandatory water conservation is necessary to assist the County to maintain the integrity and quality of services it provides.
- H. UCPW shall send notice of first, second, and third violations to the Customer by regular U.S. mail at the Customer's billing address on file with UCPW. Such notice shall be deemed to have been delivered three days from the date mailed. In the event of a fourth or subsequent violation, UCPW shall send notice of the violation and intent to terminate water service by regular U.S. mail and by certified mail, return receipt requested, to the Customer's billing address on file with UCPW. Such notice shall be deemed to have been delivered on the earlier of (i) three days from the date of mailing by regular U.S. mail, or (ii) the date indicated on the return receipt.
- I. The notice of violation shall specify the following:
  - 1. The nature of the violation and the date and time it occurred;
  - 2. The method by which payment of any civil penalty may be paid, including a statement indicating that it will be included on the Customer's next water bill;
  - 3. A warning that additional or continued violations may result in increased penalties, including termination of water service;
  - 4. A warning that failure to pay a water bill, including any civil penalty assessed pursuant to this Ordinance, may result in termination of water service;
  - 5. The telephone number at UCPW where the Customer may direct any questions or comments; and

6. Information indicating the manner in which the Customer may appeal a violation or a pending termination pursuant to Article XII of this Ordinance.

#### **Article XI. Termination of Service**

In addition to the payment of any civil penalty assessed pursuant to Article X of this Ordinance, a Customer shall be subject to termination or restriction of water service following four (4) or more violations of any water use restrictions or other provision imposed pursuant to this Ordinance. Water service will not be restored at such service connection until the Customer pays all the Customer's outstanding obligations, including, without limitation, all charges for water service, all civil penalties and other fees charged in accordance with the provisions of this Ordinance, and the current disconnect processing fee. In the event water service is terminated a second time for violations pertaining to use of water obtained by the Customer through an irrigation meter, service to such irrigation meter shall remain terminated for the remainder of the calendar year. A Customer may appeal such a termination of service pursuant to Article XII of this Ordinance.

## **Article XII. Appeals**

A Customer who receives a notice of violation for a first, second, or third violation may appeal the violation by written notice to UCPW indicating through supporting documentation the factual basis for the Customer's position that either (i) the violation was issued in error, or (ii) the Customer had no opportunity to prevent the violation. The appeal must be delivered to UCPW at the specified address within fifteen (15) calendar days of delivery of the notice of violation. The Executive Director of Public Works or his/her designee shall conduct such review of the appeal as may be necessary to determine whether the documentation provided by the Customer supports the Customer's assertion that the violation was issued in error or the Customer had no opportunity to prevent the violation. The Executive Director of Public Works or his/her designee shall respond in writing within twenty (20) business days of receipt of the appeal.

A Customer who receives a notice of violation for a fourth or subsequent violation of the Ordinance indicating that the Customer's water service is subject to termination pursuant to this Article may appeal the pending termination of water service by filing a written notice of appeal with the Executive Director of Public Works, or in absence, his or her designee. The notice of appeal must be delivered to UCPW at the specified address within ten (10) calendar days from delivery of the notice of violation and must include a copy of the notice of violation being appealed. A hearing shall be held on such appeal within ten (10) business days of UCPW's receipt of the notice of appeal, or by such other date as mutually agreed upon by UCPW and the Customer.

#### **Article XIII. Variances**

A. UCPW is authorized to issue variances in accordance with this Article permitting any Customer satisfying the requirements of this Article to use water for a purpose that would otherwise be prohibited by water use restrictions then in effect.

- B. UCPW may issue variances during Stage 0, Stage 1 and Stage 2 provided that each of the following conditions is satisfied: (i) the Customer applies for a variance using forms provided by UCPW; (ii) the Customer pays a variance registration fee in such amount as determined by the Executive Director of Public Works, not to exceed fifty dollars (\$50.00); (iii) the application pertains to a new lawn and/or landscape installed incident to new construction, or to newly installed replacement sod, complete reseeding, or natural ground cover within the parameters of an established lawn; (iv) if pertaining to new lawn and/or landscape installed incident to new construction, the Customer applies for a variance either before issuance of a certificate of occupancy or within ninety (90) days after issuance of a certificate of occupancy relative to this new construction; and (v) the Customer submits with the application such supporting documentation as required by UCPW to substantiate that these conditions have been satisfied.
- C. Upon receipt of a variance from UCPW, the Customer may be permitted to water such newly installed lawn and/or landscape, or such newly installed replacement sod, complete reseeding, or natural ground cover, for a period not to exceed forty-five (45) days from the date of issuance of the variance. During the period that the variance is in effect, the Customer shall post signage provided by UCPW to signify the Customer's temporary exempt status from water use restrictions otherwise in effect. The Customer shall post such sign within two (2) feet of the driveway entrance. In any variance issued pursuant to this Article, UCPW may impose such conditions and restrictions as are appropriate to require that water used from the County water system be minimized to the extent practical.
- D. Variances issued pursuant to this Article shall terminate upon the earlier occurrence of the following: (i) forty-five (45) days from the date of issuance; or (ii) declaration by the County Manager of a Stage 3 or State 4 Water Shortage. In addition, the County Manager may, upon the recommendation of the Executive Director of Public Works, direct that UCPW cease issuance of new variances in the event it is determined that further issuance will likely result in increased demand that will equal or exceed the treatment and/or transmission capacity of the system or portions thereof.
- E. Any Customer receiving a variance pursuant to this Article who violates the terms thereof shall be subject to a civil penalty pursuant to Article X(C) of this Ordinance and to revocation of the variance. Any person who has violated the terms of any variance issued pursuant to this Article or any mandatory water use restrictions imposed pursuant to this Ordinance may be denied a variance, notwithstanding any provision of this Article to the contrary.

## **Article XIV. Irrigation Systems Requirements**

- A. All non-residential accounts shall have a separate service for irrigation which is metered separately. All residential properties platted and recorded after July 1, 2009, are required by N.C.G.S. § 143-355.4 to have a separate meter for in-ground irrigation systems.
- B. Irrigation systems shall not be allowed to operate during periods of rainfall.
- C. All automatic Spray Irrigation Systems with a timer shall be equipped with rain sensors as approved by Union County. Rain sensors shall be activated to prevent the Spray Irrigation System from operating after one fourth (1/4) inch of rain has fallen.

## **Article XV. Maintenance of Spray Irrigation Systems**

- A. The County recognizes that irrigation systems utilizing water from the County water system should be properly maintained in order to maximize efficiency and prevent waste. Additionally, the County recognizes that such maintenance may occur on days and at such times as would otherwise be prohibited under this Ordinance and the WSRP. However, during the period that a Stage 2 or Stage 3 Water Shortage is in effect, existing irrigation systems may be operated on such days and at such times as would otherwise be prohibited, provided that all of the following requirements are satisfied.
  - Such operation must be incident to bona fide maintenance and/or repair of an existing
    irrigation system performed by a professional irrigation contractor in the business of
    performing such work. UCPW may require registration of such contractors, and may
    require on a given project that the contractor establish, to the satisfaction of UCPW, the
    need for such maintenance or repair.
  - 2. The irrigation contractor shall post signage provided by UCPW at the drive entrance to the property during such time, and only such time, that maintenance and/or repair services are being provided. Such signs shall be at all times the property of UCPW, and UCPW may charge a reasonable fee for provision of signs. The irrigation contractor shall not transfer, loan, or otherwise allow use of UCPW signs by anyone other than employees of the irrigation contractor and shall immediately report any lost or stolen signs to UCPW.
  - 3. The irrigation contractor shall remain on-site at all times while the irrigation system is in operation for maintenance and/or repair.
- B. Any irrigation contractor who violates the requirements of this Article shall be subject to a civil penalty in the amount of five hundred dollars (\$500) and shall forfeit the opportunity afforded pursuant to this Article to provide maintenance and/or repair of irrigation systems during dates

and times that watering is prohibited by a Stage 2 or Stage 3 Water Shortage declaration. In the event an irrigation contractor fails to comply with these requirements, UCPW shall send notice of violation indicating imposition of the civil penalty and demanding return of the UCPW signs assigned to him. Such notice shall be sent by certified mail, return receipt requested, to the contractor's billing address on file with UCPW.

C. An irrigation contractor who receives a notice of violation may appeal such decision by filing a written notice of appeal with the Executive Director of Public Works, or his or her designee. The notice of appeal must be delivered to the Executive Director of Public Works or his/her designee within ten (10) calendar days from delivery of the notice of violation and must include a copy of the notice of violation being appealed. A hearing shall be held on such appeal within ten (10) business days of receipt of the notice of appeal, or by such other date as mutually agreed upon by the Executive Director of Public Works, or his/her designee, and the contractor.

## **Article XVI. Severability**

If any article, section, subdivision, subarticle, clause, or provision of this Ordinance shall be adjudged invalid, such adjudication shall apply only to such article, section, subdivision, subarticle, clause, or provision so adjudged, and the remainder of this Ordinance may be declared valid once effective.

#### **Article XVII. Effective Date**

This Ordinance is effective upon adoption by the Union County Board of Commissioners on this the 4<sup>TH</sup> day of May, 2015.

E

Appendix E

Union County Rate and Fee Schedule

# UNION COUNTY WATER AND SEWER DISTRICT RATE AND FEE SCHEDULE

<u>SECTION I.</u> The following rates, fees, and charges shall apply on and after the Effective Date of this rate and fee schedule (Schedule). For purposes of this Schedule, FY 2018 shall mean July 1, 2017, to June 30, 2018; FY 2019 shall mean July 1, 2018, to June 30, 2019; and FY 2020 shall mean July 1, 2019, to June 30, 2020; provided that this Schedule may extend beyond June 30, 2020, in accordance with the provisions of Section IV.

#### 1. WATER RATES

A. Base Facility Fee – monthly fixed charge per meter for residential and non-residential water customers (based on meter size).

| METER SIZE | FY 2018  | FY 2019  | FY 2020  |
|------------|----------|----------|----------|
| 3/4"       | \$9.65   | \$10.30  | \$10.95  |
| 1"         | \$24.25  | \$25.85  | \$27.55  |
| 1 1/2"     | \$48.00  | \$51.10  | \$54.40  |
| 2"         | \$76.75  | \$81.75  | \$87.05  |
| 3"         | \$215.95 | \$230.00 | \$244.95 |
| 4"         | \$479.95 | \$511.15 | \$544.35 |
| 6"         | \$671.85 | \$715.50 | \$762.00 |

- **B. Volumetric Rates** charge for water per 1,000 gallons of usage based on the current Water Shortage Stage as declared by the County Manager.
  - i. Residential Rates applies to accounts classified as residential.
  - ii. Irrigation Rates applies to residential and non-residential accounts with a separate meter for irrigation systems.
  - **iii.** Non-residential Rates applies to accounts classified as commercial, industrial or institutional.

|        | Standard Rates / Water Shortage Stage I |         | •       | Water Shortage<br>Stage II |         |         | Water Shortage<br>Stage III |         |         | Water<br>Shortage<br>Stage IV |         |         |         |         |
|--------|---|---------|---------|----------------------------|---------|---------|-----------------------------|---------|---------|-------------------------------|---------|---------|---------|---------|
|        |   |         | FY 2018 | FY 2019                    | FY 2020 | FY 2018 | FY 2019                     | FY 2020 | FY 2018 | FY 2019                       | FY 2020 | FY 2018 | FY 2019 | FY 2020 |
|        | <u>Residential</u>                      |         |         |                            |         |         |                             |         |         |                               |         |         |         |         |
| Tier 1 | 0 - 3,000                               | gallons | \$2.35  | \$2.50                     | \$2.65  | \$2.35  | \$2.50                      | \$2.65  | \$2.35  | \$2.50                        | \$2.65  | \$3.20  | \$3.40  | \$3.60  |
| Tier 2 | 3,001 - 7,000                           | gallons | 3.20    | 3.40                       | 3.60    | 3.20    | 3.40                        | 3.60    | 3.20    | 3.40                          | 3.60    | 4.80    | 5.10    | 5.45    |
| Tier 3 | 7,001 - 10,000                          | gallons | 4.55    | 4.85                       | 5.15    | 4.55    | 4.85                        | 5.15    | 9.05    | 9.65                          | 10.30   | 10.15   | 10.80   | 11.50   |
| Tier 4 | 10,001 - 15,000                         | gallons | 6.60    | 7.05                       | 7.50    | 10.55   | 11.25                       | 12.00   | 18.00   | 19.15                         | 20.40   | 19.45   | 20.70   | 22.05   |
| Tier 5 | > 15,000                                | gallons | 10.75   | 11.45                      | 12.20   | 17.20   | 18.30                       | 19.50   | 29.40   | 31.30                         | 33.35   | 31.80   | 33.85   | 36.05   |
|        | <u>Irrigation</u>                       |         |         |                            |         |         |                             |         |         |                               |         |         |         |         |
| Tier 1 | 0 - 3,000                               | gallons | \$4.55  | \$4.85                     | \$5.15  | \$4.55  | \$4.85                      | \$5.15  | \$9.05  | \$9.65                        | \$10.30 | \$10.15 | \$10.80 | \$11.50 |
| Tier 2 | 3,001 - 7,000                           | gallons | 4.55    | 4.85                       | 5.15    | 4.55    | 4.85                        | 5.15    | 9.05    | 9.65                          | 10.30   | 10.15   | 10.80   | 11.50   |
| Tier 3 | 7,001 - 10,000                          | gallons | 4.55    | 4.85                       | 5.15    | 4.55    | 4.85                        | 5.15    | 9.05    | 9.65                          | 10.30   | 10.15   | 10.80   | 11.50   |
| Tier 4 | 10,001 - 15,000                         | gallons | 6.60    | 7.05                       | 7.50    | 10.55   | 11.25                       | 12.00   | 18.00   | 19.15                         | 20.40   | 19.45   | 20.70   | 22.05   |
| Tier 5 | > 15,000                                | gallons | 10.75   | 11.45                      | 12.20   | 17.20   | 18.30                       | 19.50   | 29.40   | 31.30                         | 33.35   | 31.80   | 33.85   | 36.05   |
|        | Non-Residential All Usage               |         | ć2.25   | ¢2.45                      | ć2.70   | 2.45    | 2.65                        | 2.00    | 2.75    | 4.00                          | 4.25    | 4.45    | 4.75    | F 0F    |
|        |   |         | \$3.25  | \$3.45                     | \$3.70  | 3.45    | 3.65                        | 3.90    | 3.75    | 4.00                          | 4.25    | 4.45    | 4.75    | 5.05    |
|        | <u>Wholesale</u><br>All Usage           |         | \$2.60  | \$2.77                     | \$2.95  | \$2.60  | \$2.77                      | \$2.95  | \$2.85  | \$3.05                        | \$3.25  | \$3.15  | \$3.35  | \$3.55  |

#### **C.** Hydrant Meters

- i. Temporary Hydrant Meters requires a \$300 deposit. Monthly usage will be billed at the Non-Residential rate and a base facility fee based on meter size is charged for each month (or partial month) the meter is used.
- ii. Hydrant Permit Fee \$100 annual fee per vessel for permitted water service vehicles to obtain water from approved County hydrants. Monthly usage will be billed at the Non-Residential rate plus a monthly base facility fee based on meter size.
- D. Automatic Fire Extinguishing Systems Base Facility Fee customers with a separate water connection used specifically for the purpose of fire protection service will be charged a \$100 base facility fee annually. Actual usage, if any, will be charged at the Non-Residential rate.

## 2. SEWER RATES

A. Base Facility Fee – monthly fixed charge per meter for residential and non-residential sewer customers (based on meter size).

| METER SIZE | FY 2018  | FY 2019  | FY 2020  |
|------------|----------|----------|----------|
| 3/4"       | \$11.85  | \$12.60  | \$13.40  |
| 1"         | \$30.00  | \$31.95  | \$34.05  |
| 1 1/2"     | \$59.65  | \$63.55  | \$67.70  |
| 2"         | \$95.30  | \$101.50 | \$108.10 |
| 3"         | \$268.20 | \$285.65 | \$304.20 |
| 4"         | \$596.10 | \$634.85 | \$676.10 |
| 6"         | \$834.45 | \$888.70 | \$946.45 |
| Flat Rate* | \$40.85  | \$43.50  | \$46.35  |

<sup>\*</sup>Flat Rate Sewer – applies to residential customers who do not purchase water from UCPW

**B. Volumetric Rates** – charge for sewer per 1,000 gallons of water usage.

|                    | FY 2018 | FY 2019 | FY 2020 |
|--------------------|---------|---------|---------|
| <u>Residential</u> |         |         |         |
| 0 - 12,000 gallons | \$5.65  | \$6.00  | \$6.40  |
| > 12,000 gallons   | \$0.00  | \$0.00  | \$0.00  |
| Non-Residential    |         |         |         |
| All Usage          | \$5.65  | \$6.00  | \$6.40  |

## 3. CAPACITY FEES

**A. Water Capacity Fees** – one-time charges, based on water meter size, to new service connections (or increases in service by an existing customer).

| METER SIZE      | FEE      |  |
|-----------------|----------|--|
| 3/4"            | \$1,200  |  |
| 1"              | \$2,900  |  |
| 1 1/2"          | \$5,800  |  |
| 2" & Greater    | SEE NOTE |  |
| Fire Connection | NO FEE   |  |

Note: Water Capacity Fees for meter sizes 2" and greater are a multiple of the estimated water demand as compared to the water demand of one (1) Equivalent Residential Unit (ERU). An ERU represents water usage of a typical single-family residential unit with a ¾" meter. For the purposes of this calculation, 1 ERU = 703 gpd (gallons per day).

Water capacity fees are not charged for residential irrigation meters when installed in addition to a domestic meter.

**B. Sewer Capacity Fees -** one-time charges, based on water meter size, to new service connections (or increases in service by an existing customer).

| METER SIZE      | FEE      |  |
|-----------------|----------|--|
| 3/4"            | \$3,090  |  |
| 1"              | \$7,720  |  |
| 1 1/2"          | \$15,440 |  |
| 2" & Greater    | SEE NOTE |  |
| Fire Connection | NO FEE   |  |

Note: Sewer Capacity Fees for meter sizes 2" and greater are a multiple of the estimated sewer demand as compared to the sewer demand of one (1) Equivalent Residential Unit (ERU). The number of sewer capacity ERU's shall be equivalent to the number of ERU's as calculated for Water Capacity Fees unless the applicant can demonstrate that there is water consumption within their development that would not generate wastewater flow.

Sewer capacity fees are not charged for irrigation meters.

#### 4. TAP FEES

**A.** Water Tap Fees – amount charged for installing a new water tap (based on meter size).

| METER SIZE      | FEE   |
|-----------------|-------|
| 3/4"            | \$400 |
| 1"              | \$525 |
| ≥ 1 1/2"        | COST  |
| Fire Connection | COST  |

**B. Sewer Tap Fees -** amount charged for installing a new sewer tap (based on line size).

| SIZE OF LINE | FEE   |
|--------------|-------|
| 4"           | \$630 |
| 6"           | \$825 |
| >6"          | COST  |

## 5. MISCELLANEOUS FEES

| A. | Account Setup Fee – a fee charged for establishing a new account or transferring an account.   | \$25.00  |
|----|--|--|
| B. | <b>Deposit Fee</b> – amount collected when service is established for a customer who does not own the property. The deposit, less the final bill amount, is returned to the customer when service is terminated. Deposit balances of less than \$1.00 will not be refunded. Interest accrued on deposits is not refundable to customers. | \$50.00  |
| C. | Late Payment Fee – applied when customer has not paid monthly bill by due date.  | \$10.00 or 5%<br>of the current<br>past due amount,<br>whichever is more |
| D. | <b>Disconnect Processing Fee</b> – applied when customer has two outstanding bills and has not paid the balance by the due date of the 2 <sup>nd</sup> bill. Fee applicable at 5:00 p.m. on the due date of the 2 <sup>nd</sup> bill whether the service is physically disconnected or not.  | \$50.00  |
| E. | Returned Check Fee – fee charged when checks are returned, automatic drafts are rejected or credit/debit card transactions are reversed after payment has been credited to a customer's account.   | \$25.00  |
| F. | Meter Verification Fee – fee charged if customer requests a meter test and the meter is found to be registering correctly. If the meter is registering incorrectly, this fee is not charged.   | \$25.00  |

**G. Meter Installation Fee** – fee charged at the time of meter set (actual cost of meter assembly plus labor costs to install).

| METER SIZE   | INSTALLATION FEE |  |
|--------------|------------------|--|
| 3/4"         | \$185            |  |
| 1"           | \$275            |  |
| 1 ½"         | \$1,400          |  |
| 2" & Greater | ACTUAL COST      |  |

H. Meter Removal Fee – fee charged for the removal of a meter whether at the request of the customer or initiated by UCPW for meter tampering.

\$25.00

**I. Meter Reset Fee** – fee charged for resetting a meter.

\$25.00

J. Meter Tampering Fee – fee charged for damage or alteration of a meter assembly or for bypassing or relocating a meter.

| 1 <sup>st</sup> Offense | \$100 |
|-------------------------|-------|
| 2 <sup>nd</sup> Offense | \$200 |
| 3 <sup>rd</sup> Offense | \$300 |

- K. Temporary Construction Meter Deposit Fee an amount collected for a meter set at the beginning of or during the construction phase of any new development (residential or non-residential), prior to the issuance of a Certificate of Occupancy. The amount of the deposit will vary based on meter size and will be equal to the Meter Installation Fee. The deposit, less amounts owed for services provided or damages to County property, is returned to the customer when service is converted to a permanent service. Deposit balances of less than \$1.00 will not be refunded. Interest accrued on deposits is not refundable to customers.
- L. Service Charges Charges for repairs to the utility system caused by third-party damages or for additional services requested by customers of the system. Labor charges will be the average hourly rate (including benefits) by position of personnel performing the work. Equipment charges will be the hourly rates established by the Federal Emergency Management Agency (as listed on FEMA.gov). Materials will be charged at cost plus 10%. Restoration (landscaping, concrete, asphalt)

or other services performed by a third-party vendor will be charged at cost. Amounts for the labor and equipment reimbursement charges set forth herein may be administratively determined on an annual basis.

M. Plan Review Fees – fees charged for review and approval of engineering plans submitted for new development:

Residential \$100 plus \$20 per lot

Non-residential \$100 plus \$10 per 1,000 sq. ft.

of building(s) area

<u>SECTION II.</u> Partial payments will be applied first to late charges or fees, then to sewer charges, and then to water charges.

SECTION III. This Schedule shall supersede any schedule, or any portion of a schedule, that conflicts with this Schedule. Except as superseded, such other schedule(s) shall continue in full force and effect.

SECTION IV. This Schedule shall become effective as of the 1st day of July, 2017 (the "Effective Date"), and shall continue until amended, superseded, or repealed. In the event this Schedule is not amended, superseded, or repealed for that period following June 30, 2020, the provisions of this Schedule (including the rates, fees, and charges established for FY 2020) shall continue to apply until this Schedule is amended, superseded, or repealed.