

**APPENDIX A:**  
**STUDY PLAN/SCOPE**



## Water Quantity Model for the Upper Broad River Basin

### Scope of Work – Phase I

#### 1.0 Introduction

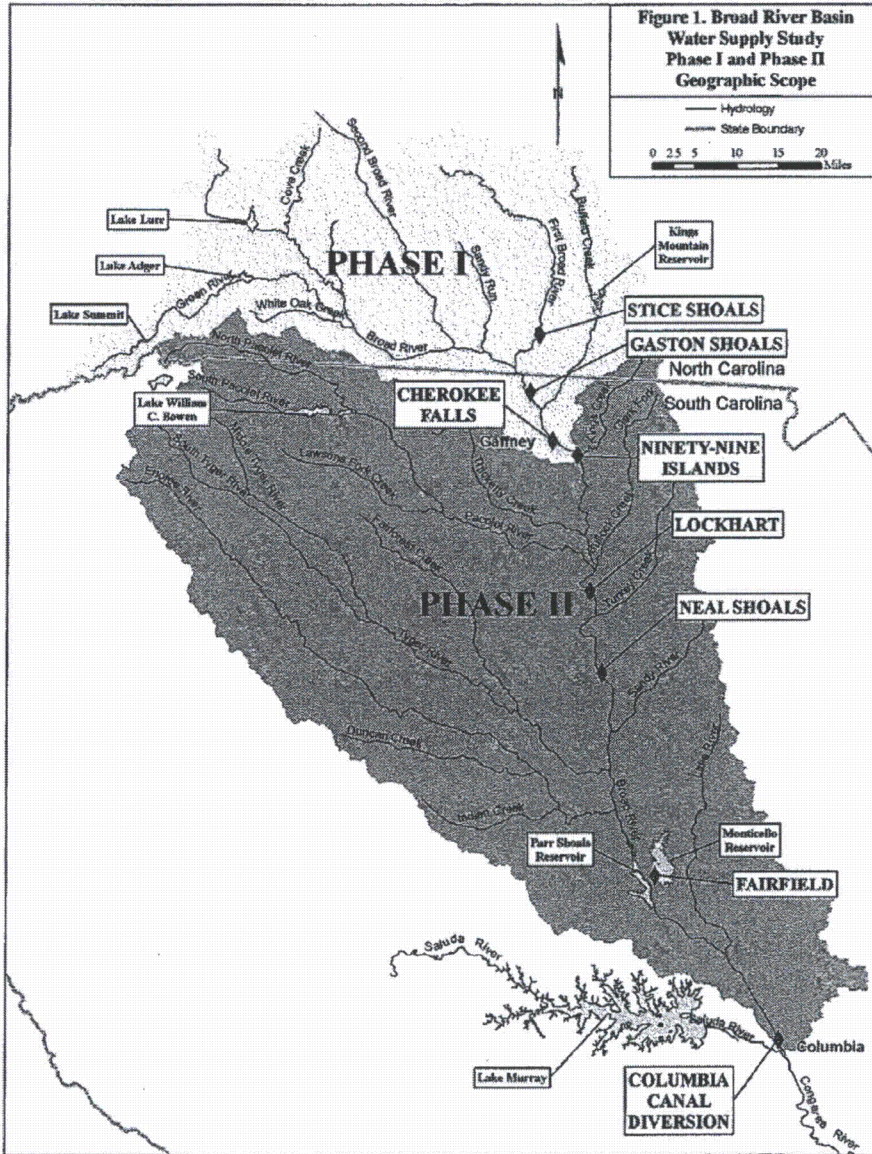
Duke Energy (Duke) is developing a water supply capacity model of the Upper Broad River Basin from its headwaters in North Carolina extending downstream to Duke's Ninety-Nine Islands Dam near Blacksburg, SC. Phase I of this Study is intended to explore the water supply capacity associated with the proposed expansion of Duke's Cliffside Steam Station, located near Cliffside, North Carolina and Duke's proposed construction of the Lee Nuclear Station (LNS), located near Blacksburg, South Carolina. Phase I of the Study will help Duke ensure a clear understanding of the total, long-term water supply picture at these power plant sites. The Study will determine the water supply capacity in the Upper Broad River Basin during low-flow, or drought, conditions and provide tools and analysis that will be used to support the application process for both proposed facilities.

This Study will incorporate eight existing reservoirs, beginning at Lake Lure and Lake Summit to the Northwest, Moss Lake to the Northeast, and ending at Ninety-Nine Islands, as well as routing of flows in identified riverine sections upstream of the proposed LNS. In addition to the water quantity model, this proposal includes performing a water supply Study to inventory current water withdrawals and returns, and project future water withdrawals and returns for the Upper Broad River Basin. The results of the water supply Study will be used to support the development of a dynamic water budget model (CHEOPS™). Subsequently, the information and model will be used to conduct safe yield analyses for the Upper Broad River Basin in support of Duke Energy's proposed power plant expansions.

A second phase (Phase II) of this Study is also planned and is described in Appendix A. Figure 1 depicts the geographical extent of the Phase I and Phase II study areas. The Phase I drainage area is approximately 1,550 square miles and the Phase II drainage area adds an additional 3,745 square miles, for a total drainage area of 5,295 square miles at the confluence of the Broad River and the Saluda River near Columbia, South Carolina.

#### 2.0 Approach

Devine Tarbell & Associates (DTA) has teamed with HDR, Inc. (both firms have business offices in Charlotte, NC) to provide the water quantity and water supply services outlined in this proposal. DTA and HDR worked together successfully in the past on the Duke Energy Catawba-Wateree Hydro Project relicensing, providing similar services to those outlined below. HDR will provide expertise in water supply analysis and projections of future water demand in the Upper Broad River Basin. DTA will develop a computer based water quantity model and provide expertise in performing scenario modeling and basin specific water budget projections based on results of the water supply Study combined with the CHEOPS model.





### Water Quantity Model

The water quantity modeling phase of the project will encompass the upstream constraints in the Upper Broad River Basin down to the Ninety-Nine Islands Hydroelectric facility in Cherokee County, South Carolina. The water quantity model of the Upper Broad River Basin will allow for the evaluation of the cooling water supply potential of the study area while taking into consideration the restrictions that are in place on the river system. The restrictions and characteristics to be modeled include daily hydrology of both direct inflows to the reservoirs and lateral inflows, reservoir operations, hydro unit performance and generation capacity for the facilities to be modeled as hydroelectric generation projects, water (consumptive and non-consumptive use) withdrawals and returns, and operating restrictions. The model will incorporate known withdrawal and return points and characterization of flow travel time between nodes either by a direct time lag or the U.S. Army Corps of Engineers HEC-1 program's Normal Depth routing scheme. The routing characteristics of the reaches will be derived from a combination of field measurement and topographic estimations for representative reaches in the study area.

The majority of the Upper Broad River Basin information to be used in the development of the CHEOPS model will be acquired from the existing HEC-1 model developed for the calculation of the 1997 Ninety-Nine Islands Probable Maximum Flood (PMF) Study. This work was developed by current DTA engineering staff.

The headwaters of the Broad River originate in the Blue Ridge Mountains through the foothills to the Piedmont. The major tributaries to the Broad River above the Ninety-Nine Islands facility are the Green River, the Hungry River, the Second Broad River, and the First Broad River. These tributaries incorporate the two proposed public water system reservoirs in Cleveland County, North Carolina, on the First Broad River and Buffalo Creek. The Ninety-Nine Islands Hydroelectric Station is on the Broad River in Cherokee County, South Carolina and has a drainage area of approximately 1,550 square miles. The dam is located approximately 6 miles south of Blacksburg, South Carolina, and approximately 9 miles southeast of Gaffney, South Carolina. It is approximately 90 miles north of the confluence of the Broad River and Saluda River near Columbia, South Carolina. The Ninety-Nine Islands project will be modeled as a peaking facility. There are a number of existing dams upstream of Ninety-Nine Islands:

- Tuxedo (Lake Summit) on the Green River
- Turner Shoals (Lake Adger) on the Green River
- Lake Lure on the Broad River
- Stice Shoals on the First Broad River
- Gaston Shoals on the Broad River
- Cherokee Falls on the Broad River
- Kings Mountain Reservoir (Moss Lake) on Buffalo Creek





Tuxedo Dam (Lake Summit)

The Tuxedo Hydroelectric Project is located on the Green River in Henderson County, North Carolina, approximately 2 miles west of the Town of Saluda, NC. Tuxedo Dam impounds Lake Summit. Lake Summit has a surface area of approximately 300 acres and a shoreline of about 10 miles at full pond elevation of 2,012.6 ft msl. The project will be modeled as a generating modified run-of-river facility.

Turner Shoals Dam (Lake Adger)

The Turner Shoals Hydroelectric Project is located on the Green River in Polk County, North Carolina, approximately 3 miles northwest of the Town of Mill Springs, NC. Turner Shoals Dam impounds Lake Adger, which has a surface area of approximately 438 acres and a shoreline of about 15 miles at full pond elevation of 911.6 ft msl. The project will be modeled as a generating modified run-of-river facility.

Lake Lure Dam

The Federal Energy Regulatory Commission (FERC) licensed Lake Lure Hydroelectric Project is located on the Broad River in Rutherford County, North Carolina, on the eastern side of the Town of Lake Lure, NC. Lake Lure has a surface area of approximately 900 acres at full pond elevation of 991 ft msl, which makes it the largest reservoir upstream of Ninety-Nine Islands. The project will be modeled as a fill-and-spill reservoir due to the availability of project information.

Stice Shoals Dam

The Stice Shoals Hydroelectric Project is located on the First Broad River in Cleveland County, North Carolina, approximately 4 miles upstream of the confluence with the Broad River and is approximately 5.5 miles southwest of the City of Shelby, NC. The project will be modeled as a fill-and-spill reservoir due to the availability of project information and negligible storage capacity.

Gaston Shoals Dam

The FERC-licensed Gaston Shoals Hydroelectric Project is located on the Broad River in Cherokee County, South Carolina, approximately 7 miles upstream of Ninety-Nine Islands Reservoir. Gaston Shoals has a drainage area of approximately 1,300 square miles, including the Green River, the Hungry River, the Second Broad River, and the First Broad River. The reservoir volume is estimated to be 2,500 acre-feet, based on the 1997 Ninety-Nine Islands PMF Study. The project will be modeled as a peaking facility.

Cherokee Falls Dam

The FERC-licensed Cherokee Falls Hydroelectric Project is a Federal Energy Regulatory Commission (FERC) licensed project located approximately 4.5 miles upstream of the Ninety-Nine Islands development on the Broad River in Cherokee County, South Carolina. The project will be modeled as a fill-and-spill reservoir due to the availability of project information and negligible storage capacity.



Kings Mountain Dam (Moss Lake)

Kings Mountain Dam (Moss Lake) is located in Cleveland County, North Carolina, on Buffalo Creek, approximately 5 miles northwest of the City of Kings Mountain, NC. The project will be modeled as a fill-and-spill reservoir due to the availability of project information.

There are also two reservoirs in the Upper Broad River Basin that are in the early planning stages:

- Cleveland County Sanitary District's proposed reservoir is to be located on the First Broad River in Cleveland County, North Carolina. This facility will be modeled as a storage facility.
- Kings Mountain's proposed reservoir is to be located on Muddy Fork Creek in Cleveland County, North Carolina. Currently, there are no plans to model this facility due to limited available preliminary design information.

There are also number of ponds and small lakes in the Ninety-Nine Islands watershed. These features will not be modeled as reservoirs. However, depending on the location of the routing reaches and the water withdrawals, a small pond or reservoir may have to be included in the routing calculations. The CHEOPS model will be used to route the water between each of the facilities to analyze the travel time of releases from existing or proposed storage projects. The focus of the modeling is to analyze streamflow and water quantity at specific points along the Broad River during low river flow (drought) conditions. Therefore, calibration of the model will be performed over a range of "in-bank" river flows. To facilitate calibration of the routing of the river flows between points of interest along the river (nodes), DTA is proposing to install level logger instrumentation that will record stage and timing of flows. DTA is also proposing to develop four point stage-flow rating curves at approximately 10 locations in the basin above Ninety-Nine Islands. This data is essential in the calibration of parameters used in the CHEOPS model for performing river routing between nodes.

As part of the Broad River Water Quantity Model Project, a Water Supply Study will be completed for the Ninety-Nine Islands Reservoir and drainage basin. The initial phase of the Water Supply Study will be completed by HDR and consist of data compilation and development of future projected water withdrawals and returns within the Upper Broad River Basin. The Water Quantity Model will be used for a series of scenario runs, which apply the future projected withdrawals developed by HDR to determine the safe yield for the Ninety-Nine Islands Reservoir. The future projected withdrawals will be incrementally applied to drought hydrology to determine the safe yield.

**Water Supply Study**

The objective of the Broad River Basin Water Supply Study is to inventory current water withdrawals and returns, and project future water withdrawals and returns for the Broad River Basin that begins in western North Carolina and extends into western South Carolina. The results of this Study will be used (by others) to support the development of a dynamic water



budget model (CHEOPS). Subsequently, the information and model will be used to conduct safe yield analyses for the Upper Broad River Basin in support of Duke Energy's proposed LNS project, as well as other interests.

The Study will produce the following information:

- A listing of all significant water users (power, agricultural/irrigation, public water suppliers, and industrial) withdrawing and/or returning water to/from the surface waters of the Broad River Basin.
- Current water withdrawal and return rates, on an annual average basis, with monthly variability factors, where available, for each significant user identified.
- Projected water withdrawal and return rates, on an annual average basis, with monthly variability factors, where available, for each significant entity identified. Projections will be provided every year for 60 years beyond the base year (assumed as 2015).

#### **Geographic and Temporal Scope**

The Study will cover all water withdrawals and returns greater than 100,000 gallons per day (gpd) to/from the Broad River and its surface water tributaries within the Upper Broad River Basin. Additionally, existing and potential future inter-basin transfers (IBTs) into or out of the Upper Broad River Basin will be estimated and included.

#### **Summary of Existing Data**

The following is a list of existing available data that may be useful in the development of this Study:

1. Local Water Supply Plans (LWSPs) of North Carolina public water suppliers (updated every five years)
2. Withdrawals in South Carolina registered in compliance with the South Carolina Surface Water Withdrawal and Reporting Act
3. South Carolina Water Plan (1998 or latest)
4. National Pollutant Discharge Elimination System (NPDES) permit information for wastewater treatment facilities
5. Public domain Geographic Information Systems (GIS) information



### 3.0 Scope of Project

#### Water Quantity Model

##### 1. Acquire System Information

This task includes collecting, compiling, reviewing, and organizing project operating characteristics data. It is assumed that the majority of the necessary Basin information is available in the existing HEC-1 model developed in 1997 for the calculation of the Ninety-Nine Islands PMF Study.

Necessary information:

- a. Hydro Facilities
  - i. Physical Features
    1. Reservoir Storage Curve
    2. Tailwater Curve
    3. Spillway Curve
    4. Reservoir Area Curve
    5. Turbine Curves – For generating facilities
    6. Generator Curves – For generating facilities
    7. Head loss Coefficients – For generating facilities
    8. Flashboards – If any
  - ii. Operations
    1. Withdrawals and Returns
    2. Bypass Flows and Return Points
    3. Operation Type – Peaking vs. run-of-river
    4. Operating Band – Minimum, maximum, and target
    5. Historic Operations
      - a. Lake Elevations
      - b. Generation – Preferably monthly
      - c. Withdrawals and Returns
- b. Non-Generating Facilities
  - i. Physical Features
    1. Reservoir Storage Curve
    2. Spillway Curve
    3. Reservoir Area Curve
    4. Flashboards – If any
  - ii. Operations
    1. Withdrawals and Returns
    2. Bypass Flows and Return Points
    3. Operating Band – Minimum, maximum, and target
- c. Routing Reaches
  - i. Channel Geometry
  - ii. Stage/Flow Relationships
  - iii. Inflow and Outflow Points



1. Lateral Inflows
2. Withdrawals and Returns

**2. Develop Hydrology**

This task includes the development of unimpaired hydrology at each of the node locations using available USGS gage records and historic plant information.

**3. Develop Model**

This task includes the development of the CHEOPS model for reservoir interactions and flow regimes. This will require custom coding for the routing and withdrawal sections as well as the specific reservoir operations for water supply support.

- a. Incorporate Withdrawal Points
  - i. River Reaches
  - ii. Reservoirs
- b. Develop Routing
  - i. HEC-1 Set-up
  - ii. HEC-1 Calibration
  - iii. Incorporate into CHEOPS
- c. Develop existing conditions scenario and interactions between reservoirs

**4. Model Calibration**

This task includes model calibration runs for representative wet, dry, and normal hydrology years for which historical operating data is available. Additional model runs will be made for current operation constraints for the hydrology period of record to establish a long-term data set of existing operation as a baseline. The routing routines will be calibrated for a range of normal operating flows.

**5. Scenario Runs and Analysis**

This task includes a series of runs necessary to define the water supply capacity of the Upper Broad River Basin in reference to the proposed LNS project. This process will be performed in conjunction with HDR for the development of the safe yield at the Ninety-Nine Islands Reservoir. DTA assumes 30 runs will be needed to quantify the water supply capacity for specific drought periods, and 5 runs for a long-term record.

**6. Report and Summary**

This task includes compiling the modeling scenario results, summary preparation, and preparing a technical report for the Study participants.

**7. Deliverables**

- Hydrology Report
- Calibration Report
- Summary Report
- Compiled Model



#### **8. Schedule**

To support the Nuclear Regulatory Commission (NRC) combined construction and operating license application process for the proposed LNS project, the CHEOPS tool will be calibrated by the end of May 2007 and available to run simulations from June through August 2007.

#### **Water Supply Study**

##### **1. Document Current and Projected Water Withdrawals and Returns**

- Compile current permitted surface water withdrawals and returns greater than 100,000 gpd or more in the Upper Broad River Basin, including any identified IBTs.
- Review and reconcile the information presented in the LWSPs of North Carolina communities and in the Water Plan of South Carolina for South Carolina communities.
- Arrange and conduct interviews with entities that produce significant withdrawals and/or returns to obtain current data that is more accurate and discuss, in more detail, future projections.
- Compile future population and growth projections from various sources within the Upper Broad River Basin.
- Review current and future industrial growth trends by industry type in the Upper Broad River Basin (including power production facilities).
- Review USGS information associated with current and future agricultural/irrigation water demands.
- Develop a set of 60-year future water withdrawal and return projections for all entities identified in the Study. Projections will utilize population and growth rates estimated based on an evaluation of local and regional factors, trends, and influences.
- Review any available information on population projections, etc.
- Provide technical memorandum summarizing the water withdrawal and return projections.

##### **2. Assemble and Coordinate Data for Use in the CHEOPS Model**

- Compile water withdrawal and return information into spreadsheets usable for loading into the CHEOPS model.
- Coordinate with DTA staff on modeling issues related to the withdrawal and return projections.

##### **3. GIS Mapping**

- Develop a GIS map and database that documents the water withdrawal and return entities included in the Study.
- Load relevant data for each entity into the GIS system including name, phone number, current water withdrawals and returns, and future water withdrawal and returns.



**4. Safe Yield Analysis**

- Evaluate preliminary safe yields for water withdrawal interests in the Upper Broad River Basin.
- Evaluate impacts of future water supply modifications (e.g. new reservoirs, intake modifications) on safe yields.
- Provide technical memorandum on safe yield results and potential impacts of future water supply modifications.





## APPENDIX A

### Water Quantity Model for the Lower Broad River Basin

#### Proposed Scope of Work – Phase II

#### 1.0 Introduction to Phase II

Duke Energy (Duke) recognizes that other organizations rely on the Broad River as well for drinking water, industrial and agricultural water needs, and other uses and Duke wants to ensure that all the major water quantity interests are considered in the Study. Therefore, in addition to developing a water quantity model for the Upper Broad River Basin, as described above, Duke is also considering a future second phase of this Study. Phase II would extend the geographic scope of the water quantity model and water supply Study from Ninety-Nine Islands Dam downstream to the Broad River's confluence with the Saluda River near the Columbia Canal Diversion Dam in Columbia, South Carolina. This would more than double the scope of the original Phase I Study by adding an additional 90 miles of river making up the Lower Broad River Basin. Note that the Phase I drainage area is approximately 1,550 square miles and the Phase II drainage area adds an additional 3,745 square miles, for a total drainage area of 5,295 square miles at the confluence of the Broad River and the Saluda River near Columbia, South Carolina.

#### 2.0 Phase II Approach

The approach for the proposed Phase II Study would replicate that of the Phase I Study described above, only it would be applied to the Lower Broad River Basin. The result would be a single model and water supply Study covering the entire Broad River watershed from the headwaters in western North Carolina to the confluence with the Saluda River near Columbia, South Carolina. Phase II will require the development of hydrology downstream of the Ninety-Nine Islands facility and the acquisition of the physical and operational characteristics of the Lockhart facility, Neal Shoals facility, Fairfield facility, Monticello Reservoir, Parr Shoals facility, and the Columbia Canal facility near Columbia, South Carolina.

The majority of the Lower Basin information necessary for the development of the CHEOPS model would be acquired from publicly available data. Modeling of the hydroelectric facilities would be limited to the availability of operational and physical data for the facilities.

##### Lockhart Dam

The FERC-licensed Lockhart Dam is located in Chester and Union counties, South Carolina, on the Broad River. This project would be modeled as a peaking facility.



Neal Shoals Dam

The FERC-licensed Neal Shoals Dam is located in Chester and Union counties, South Carolina, on the Broad River, approximately 10 miles south of Lockhart Dam. This project would be modeled as a peaking facility.

Fairfield Dam

The FERC-licensed Fairfield Dam is located in Fairfield County, South Carolina, on the Broad River. Fairfield Dam is a pump-storage facility for the Monticello Reservoir. This project could be modeled as either a storage facility or a pump-storage facility, in tandem with the Monticello Reservoir, depending on data availability and participation of stakeholders.

Parr Shoals Dam

The FERC-licensed Parr Shoals Dam is located in Newberry and Fairfield counties, South Carolina, on the Broad River. This project would be modeled as a run-of-river reservoir due to the availability of project information, negligible storage capacity, and current run-of-river operations.

Columbia Canal Diversion Dam

The FERC-licensed Columbia Canal Diversion Dam is located in Richland County, South Carolina, on the Broad River. This project would be modeled as a run-of-river reservoir due to the availability of project information and negligible storage capacity.

### **3.0 Determination to Proceed with Phase II**

Because Duke is concerned with water supply capacity as it pertains to the proposed expansion of Cliffside Steam Station and the proposed construction of LNS (Lee Nuclear Station), the Upper Broad River Basin Study, as outlined in Phase I above, is Duke's primary interest. However, Duke also recognizes that its facilities are part of a larger watershed with a growing population that has many diverse water interests and needs. Therefore, Duke is planning to pursue Phase II of this Study with the following criteria:

- A Broad River Water Supply Study Advisory Group (SAG – see Appendix B for a description) is established during the Phase I Study with representatives from Duke, South Carolina Electric & Gas (SCE&G), state resource agencies, and a representative cross-section of public water system owners, industrial and agricultural water users from both North Carolina and South Carolina.
- The SAG works collaboratively during Phase I of the Study to use the resulting tools, analysis, and information for sound decision making purposes.
- Duke's interests are met with respect to filing an application for a LNS combined construction and operating license with the NRC by October 2007.
- The SAG makes a recommendation that Phase II of the Study be pursued, identifies the deliverables of such a Study, and as part of that decision, considers a cost-sharing approach to Phase II.



Note: Duke will make the final decision regarding whether or not it proceeds with Phase II of the Study.

It is anticipated that a final decision as to whether to proceed with Phase II of the Study would need to occur by July 31, 2007, near the end of the Phase I Study. If a decision to proceed with Phase II is made, the expected completion date of the Phase II Study would be near the end of November 2007.



## APPENDIX B

### Broad River Water Supply Study Advisory Group

#### Background

Duke Energy (Duke) is planning to expand its coal-fired power plant located at Cliffside, NC and to develop a new nuclear power plant (the Lee Nuclear Station), just east of Gaffney, SC. Both of these power plant sites are located in the Broad River Basin (Basin) that begins in the foothills and mountains of North Carolina and extends into the piedmont region to Columbia, SC. As part of the planning effort, Duke is conducting a Phase I Water Supply Study that includes both an analysis of water supply needs and the development of a water quantity model for the portion of the Basin upstream from the Ninety-Nine Islands Hydroelectric Project (located near Gaffney, SC). Phase I of the Study will help Duke ensure a clear understanding of the total, long-term water supply picture at its Broad River power plant sites. Duke recognizes other organizations rely on the Broad River as well for drinking water, industrial and agricultural water needs, and other uses and Duke wants to ensure that all the major water quantity interests are considered in the Study.

#### Broad River Water Supply Study Advisory Group Description

Duke believes that the quality and usefulness of the Study can be substantially enhanced by the formation of a Broad River Water Supply Study Advisory Group (SAG). The SAG would consist of representatives from the two large power producers in the Basin (i.e., Duke and South Carolina Electric & Gas (SCE&G)), state resource agencies, and a representative cross-section of public water system owners, industrial and agricultural water users from both North Carolina and South Carolina. The SAG would review and provide technical input for the development of water use projections and the water quantity model, in addition to guiding the development of future water use scenarios. Participation on the SAG shall be entirely advisory in nature and in no way represents approval or endorsement of either the methodology or results of the Study or of the development plans at Duke's power plants. It is understood that both North and South Carolina have preferred water quantity modeling platforms (NC-Oasis & SC-HEC ResSim). It is also understood that data developed for the Duke water quantity model (CHEOPS) will be made available to each state in two standard modeling formats to facilitate study and analysis using tools other than CHEOPS. The input data will be available in standard column and row ASCII format and output from CHEOPS will be available in ASCII and COE HEC-DSS (Data Storage System) formats after the study is completed. Once the products from Phase I are nearing completion, the SAG would also provide Duke with additional input so a final decision can be made as to whether to proceed with Phase II of the Study. This would extend the data collection, water use projections, and modeling efforts from Ninety-Nine Islands Dam to the mouth of the Broad River in Columbia, SC.



**Proposed SAG Membership**

The following is a *proposed* list of 9-13 potential members of the SAG {Note: "large" in reference to water intakes means intakes that typically withdraw 1 Million Gallons per Day (MGD) or more}:

Large Power Producers (One representative each)

- Duke – Ed Bruce
- SCE&G – Bill Argentieri

State Resource Agencies (One representative each)

- North Carolina – Department of Environment and Natural Resources (NC-DENR-DWR) – Steve Reed (primary), Tom Fransen and Don Rayno
- North Carolina Wildlife Commission – Chris Goudreau
- South Carolina – Department of Health and Environmental Control (SC-DHEC) – Larry Turner and Chuck Gorman
- South Carolina – Department of Natural Resources (SC-DNR) – Andy Wachob

Public Water Suppliers

- A representative from each of 1-2 large NC public water system owners
- A representative from each of 1-2 large SC public water system owners

Industrial/Agricultural Users

- A representative from each of 1-2 large NC industrial or agricultural water intake owners
- A representative from each of 1-2 large SC industrial or agricultural water intake owners

Project Consultants for Duke Energy

- DTA – J. Christopher Ey, P.E.
- HDR – Kevin Mosteller, P.E.

Water intake owners interested in being on the SAG can notify Duke or its consultant within one week following the regional Study kick-off meetings. SAG members from the power companies and state agencies will meet within two weeks following the regional kick-off meetings to decide on the remaining SAG membership. Every effort will be made to include representation from the proposed Phase II Study region, as well as the Phase I Study region.

The consulting company conducting the Study for Duke will facilitate the meetings and provide all logistical support for the SAG. Duke will also ensure that communications mechanisms are in place to keep other water supply interests (in addition to those that are on the SAG) informed about the Study.

**APPENDIX B:**  
**DATA REQUEST LETTER**



ONE COMPANY | *Many Solutions*™

{Date}

{Name}

{Title}

{Entity}

{Address}

{City, State and Zip}

Re: Broad River Water Supply Evaluation  
Information Request  
HDR Project No. 202573-48692

Dear {Name}:

Duke Energy is in the process of completing a Water Supply Study (Study) for the Broad River Basin (Basin). This Study will include a basin-wide analysis of water use. Specifically, the Study will document current water withdrawals and returns (i.e. discharges), and make projections that will extend to the Year 2075. This information will then be utilized in a water quantity model being developed for the Basin that will facilitate a more thorough analysis of water supply safe yields. Duke Energy is conducting this Study to ensure a thorough understanding of the water quantities available to support its possible power plant expansion at Cliffside, NC, and its proposed new nuclear plant near Blacksburg, SC. Duke Energy recognizes that your organization also relies on the Broad River and wants to ensure that the water supply in the Broad River Basin continues to support municipal, industrial, power, and other needs into the foreseeable future.

Devine, Tarbell & Associates, Inc. (DTA), in association with HDR Engineering, Inc. of the Carolinas (HDR), is assisting Duke Energy to complete this Study. The scope and purpose of the Water Supply Study has been communicated to regulatory agencies within both states including the North Carolina – Department of Environment and Natural Resources (NC-DENR), the South Carolina – Department of Health and Environmental Control (SC-DHEC), and the South Carolina – Department of Natural Resources (SC-DNR). Duke Energy is committed to close coordination and communication with regulatory agencies and area stakeholders throughout this project.

In order to perform a thorough analysis of the water supply needs within the Broad River Basin, we are requesting your assistance in gathering pertinent data for the assessment of current water withdrawals and water returns, and making future projections.

HDR Engineering, Inc. of the Carolinas

2000 Sam Rittenberg Blvd.  
Suite 2020  
Charleston, SC 29407

Phone: (843) 414-3700  
Fax: (843) 414-3701  
www.hdrinc.com





The following is the list of data and information we are requesting that your organization provide:

Withdrawals

- 1995, 2000, 2005, and 2006 average water withdrawn, by month if available, by location.
- Withdrawals and number of customers by class (e.g. residential, industrial, etc).
- Any water forecasts or projections your organization has already prepared.
- Any other statements regarding your facilities relevant to our forecasting exercise.

Returns (Discharges)

- 1995, 2000, 2005, and 2006 average water discharged, by month if available, and by location for each NPDES permitted facility.
- Discharges and number of customers by class (e.g. residential, industrial, etc).
- Any water discharge forecasts or Projections your organization has already prepared.
- Any other statements regarding your facilities relevant to our forecasting exercise.

The above data will be used in a water quantity model of the Broad River Basin. The model will provide information on the ability of the Broad River Basin to meet the future water use demands.

We are aware that gathering this data will take some time and we appreciate your efforts to begin assembling the information as soon as possible. *Please send the collected information to me by {Date}.* The success and reliability of the Study will be due, in part, to the use of the best available data. When warranted, HDR plans to arrange individual meetings to learn more about system operations and future planning considerations.

Once we have completed the work associated with the Study, we intend to provide a summary of results to all participants.

We appreciate your cooperation in this important Study. If you have any questions, please contact me at {HDR Phone Number}, or by email at {HDR Email Address}.

Best regards,

**HDR Engineering Inc. of the Carolinas**

{HDR Employee}  
{Title}

HDR Engineering, Inc. of the Carolinas

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**APPENDIX C:**  
**WITHDRAWAL AND RETURN SUMMARY SHEETS**

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin             | Entity                        | Facility                        | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|-----------------------|-------------------------------|---------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                       |                               |                                 | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
| Lake Summit (LS)      | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                       | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | New Industrial <sup>3,4</sup> |                                 | n/a              | n/a         | n/a         | n/a         | 0.03            | 0.05        | 0.07        | 0.10        | 0.15        | 0.22        | 0.32        |
|                       | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                       | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
| Sub-Basin Wide Demand |                               | n/a                             | 0.59             | 0.60        | 0.61        | 0.63        | 0.67            | 0.70        | 0.73        | 0.77        | 0.81        | 0.85        |             |
|                       |                               | <b>TOTAL FLOW –<br/>NODE LS</b> | <b>0.00</b>      | <b>0.59</b> | <b>0.60</b> | <b>0.61</b> | <b>0.66</b>     | <b>0.71</b> | <b>0.77</b> | <b>0.83</b> | <b>0.92</b> | <b>1.03</b> | <b>1.17</b> |
| Turner Shoals (LA)    | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                       | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | New Industrial <sup>3,4</sup> |                                 | n/a              | n/a         | n/a         | n/a         | 0.07            | 0.10        | 0.15        | 0.22        | 0.33        | 0.49        | 0.72        |
|                       | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                       | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
| Sub-Basin Wide Demand |                               | n/a                             | 0.67             | 0.68        | 0.69        | 0.72        | 0.75            | 0.79        | 0.83        | 0.87        | 0.91        | 0.96        |             |
|                       |                               | <b>TOTAL FLOW –<br/>NODE LA</b> | <b>0.00</b>      | <b>0.67</b> | <b>0.68</b> | <b>0.69</b> | <b>0.78</b>     | <b>0.85</b> | <b>0.94</b> | <b>1.05</b> | <b>1.20</b> | <b>1.40</b> | <b>1.68</b> |
| Node 1                | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                       | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | New Industrial <sup>3,4</sup> |                                 | n/a              | n/a         | n/a         | n/a         | 0.00            | 0.00        | 0.00        | 0.00        | 0.00        | 0.01        | 0.01        |
|                       | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                       | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
| Sub-Basin Wide Demand |                               | n/a                             | 0.00             | 0.00        | 0.00        | 0.00        | 0.00            | 0.00        | 0.00        | 0.00        | 0.00        | 0.01        |             |
|                       |                               | <b>TOTAL FLOW –<br/>NODE 1</b>  | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.01</b> | <b>0.01</b> | <b>0.01</b> | <b>0.01</b> | <b>0.01</b> | <b>0.01</b> |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin             | Entity   | Facility                        | Historical Flows |             |             |             | Projected Flows |              |              |              |              |              |              |
|-----------------------|--|---------------------------------|------------------|-------------|-------------|-------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                       |  |                                 | 1995             | 2000        | 2005        | 2006        | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
| <b>Lake Lure (LL)</b> |  |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | <u>Public Water Supply</u>                     |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | None   |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                       | <u>Industry</u>                                |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | New Industrial <sup>3,4</sup>                  |                                 | n/a              | n/a         | n/a         | n/a         | 0.03            | 0.05         | 0.08         | 0.11         | 0.17         | 0.24         | 0.36         |
|                       | <u>Power</u>                                   |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | None   |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                       | <u>Agriculture/Irrigation</u>                  |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | Sub-Basin Wide Demand                          |                                 | n/a              | 0.65        | 0.67        | 0.67        | 0.70            | 0.73         | 0.77         | 0.80         | 0.84         | 0.89         | 0.93         |
|                       |  | <b>TOTAL FLOW –<br/>NODE LL</b> | <b>0.00</b>      | <b>0.65</b> | <b>0.67</b> | <b>0.67</b> | <b>0.73</b>     | <b>0.78</b>  | <b>0.84</b>  | <b>0.92</b>  | <b>1.01</b>  | <b>1.13</b>  | <b>1.29</b>  |
| <b>Node 3</b>         |  |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | <u>Public Water Supply</u>                     |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | Broad River Water Authority                    | Broad River Water Authority WTP | 6.07             | 5.40        | 3.57        | 3.01        | 5.47            | 10.17        | 10.75        | 11.42        | 12.20        | 13.12        | 14.20        |
|                       | <u>Industry</u>                                |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | New Industrial <sup>3,4</sup>                  |                                 | n/a              | n/a         | n/a         | n/a         | 0.07            | 0.10         | 0.14         | 0.21         | 0.32         | 0.47         | 0.69         |
|                       | <u>Power</u>                                   |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | None   |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                       | <u>Agriculture/Irrigation</u>                  |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | Sub-Basin Wide Demand                          |                                 | n/a              | 0.28        | 0.29        | 0.29        | 0.31            | 0.32         | 0.34         | 0.36         | 0.37         | 0.39         | 0.41         |
|                       |  | <b>TOTAL FLOW –<br/>NODE 3</b>  | <b>6.07</b>      | <b>5.68</b> | <b>3.86</b> | <b>3.30</b> | <b>5.84</b>     | <b>10.59</b> | <b>11.23</b> | <b>11.99</b> | <b>12.89</b> | <b>13.98</b> | <b>15.30</b> |
| <b>Node 2</b>         |  |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | <u>Public Water Supply</u>                     |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | Polk County - Future Water System <sup>5</sup> |                                 | 0.00             | 0.00        | 0.00        | 0.00        | 1.00            | 1.16         | 1.35         | 1.56         | 1.81         | 2.11         | 2.44         |
|                       | <u>Industry</u>                                |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | New Industrial <sup>3,4</sup>                  |                                 | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.15         | 0.22         | 0.32         | 0.48         | 0.71         | 1.05         |
|                       | <u>Power</u>                                   |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | None   |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                       | <u>Agriculture/Irrigation</u>                  |                                 |                  |             |             |             |                 |              |              |              |              |              |              |
|                       | Sub-Basin Wide Demand                          |                                 | n/a              | 0.69        | 0.71        | 0.71        | 0.74            | 0.78         | 0.82         | 0.87         | 0.91         | 0.96         | 1.01         |
|                       |  | <b>TOTAL FLOW –</b>             | <b>0.00</b>      | <b>0.69</b> | <b>0.71</b> | <b>0.71</b> | <b>1.84</b>     | <b>2.09</b>  | <b>2.39</b>  | <b>2.76</b>  | <b>3.21</b>  | <b>3.78</b>  | <b>4.51</b>  |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin             | Entity                         | Facility                | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|-----------------------|--------------------------------|-------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                       |                                |                         | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
| <b>NODE 2</b>         |                                |                         |                  |             |             |             |                 |             |             |             |             |             |             |
| <b>Node 4</b>         |                                |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | <u>Public Water Supply</u>     |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                           |                         | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         |             |
|                       | <u>Industry</u>                |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | New Industrial <sup>3,4</sup>  |                         | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.15        | 0.22        | 0.32        | 0.48        | 0.71        | 1.05        |
|                       | <u>Power</u>                   |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                           |                         | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         |             |
|                       | <u>Agriculture/Irrigation</u>  |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | Sub-Basin Wide Demand          |                         | n/a              | 0.45        | 0.46        | 0.47        | 0.49            | 0.51        | 0.54        | 0.57        | 0.60        | 0.63        | 0.66        |
|                       | <b>TOTAL FLOW –<br/>NODE 4</b> |                         | <b>0.00</b>      | <b>0.45</b> | <b>0.46</b> | <b>0.47</b> | <b>0.59</b>     | <b>0.66</b> | <b>0.76</b> | <b>0.89</b> | <b>1.08</b> | <b>1.34</b> | <b>1.72</b> |
| <b>Node 5</b>         |                                |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | <u>Public Water Supply</u>     |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | Town of Forest City            | Forest City WTP         | 4.58             | 5.30        | 4.49        | 4.36        | 5.67            | 6.10        | 6.56        | 7.07        | 7.62        | 8.21        | 8.86        |
|                       | <u>Industry</u>                |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | New Industrial <sup>3,4</sup>  |                         | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.15        | 0.22        | 0.32        | 0.47        | 0.70        | 1.04        |
|                       | <u>Power</u>                   |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                           |                         | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         |             |
|                       | <u>Agriculture/Irrigation</u>  |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | Sub-Basin Wide Demand          |                         | n/a              | 0.01        | 0.01        | 0.01        | 0.01            | 0.01        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        |
|                       | <b>TOTAL FLOW –<br/>NODE 5</b> |                         | <b>4.58</b>      | <b>5.31</b> | <b>4.51</b> | <b>4.37</b> | <b>5.78</b>     | <b>6.26</b> | <b>6.79</b> | <b>7.40</b> | <b>8.11</b> | <b>8.93</b> | <b>9.92</b> |
| <b>Cliffside (CS)</b> |                                |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | <u>Public Water Supply</u>     |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | None                           |                         | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         |             |
|                       | <u>Industry</u>                |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | New Industrial <sup>3,4</sup>  |                         | n/a              | n/a         | n/a         | n/a         | 0.00            | 0.00        | 0.00        | 0.00        | 0.01        | 0.01        | 0.01        |
|                       | <u>Power</u>                   |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | Duke Energy <sup>2</sup>       | Cliffside Power Station | n/a              | 6.72        | 6.72        | 6.72        | 20.68           | 20.68       | 20.68       | 20.68       | 20.68       | 20.68       | 20.68       |
|                       | <u>Agriculture/Irrigation</u>  |                         |                  |             |             |             |                 |             |             |             |             |             |             |
|                       | Sub-Basin Wide Demand          |                         | n/a              | 0.85        | 0.87        | 0.88        | 0.92            | 0.96        | 1.02        | 1.07        | 1.13        | 1.19        | 1.25        |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                       | Entity                             | Facility                   | Historical Flows |             |             |             | Projected Flows |              |              |              |              |              |              |
|---------------------------------|------------------------------------|----------------------------|------------------|-------------|-------------|-------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                 |                                    |                            | 1995             | 2000        | 2005        | 2006        | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
| <b>TOTAL FLOW –<br/>NODE CS</b> |                                    |                            | <b>0.00</b>      | <b>7.57</b> | <b>7.59</b> | <b>7.60</b> | <b>21.60</b>    | <b>21.65</b> | <b>21.70</b> | <b>21.75</b> | <b>21.81</b> | <b>21.87</b> | <b>21.94</b> |
| <b>Node 6</b>                   |                                    |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | <u>Public Water Supply</u>         | Cleveland County SD<br>WTP |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | Cleveland County Sanitary District |                            | 3.44             | 3.39        | 3.43        | 3.56        | 4.04            | 4.67         | 5.38         | 6.21         | 7.16         | 8.27         | 9.54         |
|                                 | <u>Industry</u>                    |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | New Industrial <sup>3,4</sup>      |                            | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.15         | 0.22         | 0.32         | 0.48         | 0.71         | 1.05         |
|                                 | <u>Power</u>                       |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | None                               | n/a                        | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                                 | <u>Agriculture/Irrigation</u>      |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand              | n/a                        | 1.15             | 1.18        | 1.19        | 1.24        | 1.30            | 1.37         | 1.44         | 1.52         | 1.60         | 1.68         |              |
| <b>TOTAL FLOW –<br/>NODE 6</b>  |                                    |                            | <b>3.44</b>      | <b>4.54</b> | <b>4.61</b> | <b>4.74</b> | <b>5.38</b>     | <b>6.12</b>  | <b>6.97</b>  | <b>7.98</b>  | <b>9.16</b>  | <b>10.57</b> | <b>12.27</b> |
| <b>Stice Shoals (S)</b>         |                                    |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | <u>Public Water Supply</u>         |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | none                               | n/a                        | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                                 | <u>Industry</u>                    |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | New Industrial <sup>3,4</sup>      | n/a                        | n/a              | n/a         | n/a         | 0.09        | 0.14            | 0.20         | 0.30         | 0.45         | 0.66         | 0.98         |              |
|                                 | <u>Power</u>                       |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | None                               | n/a                        | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                                 | <u>Agriculture/Irrigation</u>      |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand              | n/a                        | 0.64             | 0.65        | 0.66        | 0.69        | 0.72            | 0.76         | 0.80         | 0.84         | 0.88         | 0.93         |              |
| <b>TOTAL FLOW –<br/>NODE S</b>  |                                    |                            | <b>0.00</b>      | <b>0.64</b> | <b>0.65</b> | <b>0.66</b> | <b>0.78</b>     | <b>0.86</b>  | <b>0.96</b>  | <b>1.10</b>  | <b>1.29</b>  | <b>1.54</b>  | <b>1.91</b>  |
| <b>Node 7</b>                   |                                    |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | <u>Public Water Supply</u>         |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | None                               | n/a                        | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                                 | <u>Industry</u>                    |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | New Industrial <sup>3,4</sup>      | n/a                        | n/a              | n/a         | n/a         | 0.01        | 0.01            | 0.02         | 0.02         | 0.03         | 0.05         | 0.07         |              |
|                                 | <u>Power</u>                       |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | None                               | n/a                        | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
|                                 | <u>Agriculture/Irrigation</u>      |                            |                  |             |             |             |                 |              |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand              | n/a                        | 0.08             | 0.08        | 0.08        | 0.08        | 0.09            | 0.09         | 0.10         | 0.10         | 0.11         | 0.11         |              |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                     | Entity                        | Facility       | Historical Flows |             |             |             | Projected Flows |             |             |             |             |              |              |
|-------------------------------|-------------------------------|----------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|--------------|--------------|
|                               |                               |                | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065         | 2075         |
| <b>TOTAL FLOW – NODE 7</b>    |                               |                | <b>0.00</b>      | <b>0.08</b> | <b>0.08</b> | <b>0.08</b> | <b>0.09</b>     | <b>0.10</b> | <b>0.11</b> | <b>0.12</b> | <b>0.13</b> | <b>0.15</b>  | <b>0.18</b>  |
| <b>Node 8</b>                 |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
| <u>Public Water Supply</u>    |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | City of Shelby                | Shelby WTP     | -                | -           | -           | 5.02        | 5.22            | 5.45        | 5.70        | 5.95        | 6.22        | 6.50         | 6.79         |
| <u>Industry</u>               |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | New Industrial <sup>3,4</sup> |                | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.15        | 0.22        | 0.32        | 0.48        | 0.71         | 1.05         |
| <u>Power</u>                  |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | None                          |                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a          | n/a          |
| <u>Agriculture/Irrigation</u> |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | Sub-Basin Wide Demand         |                | n/a              | 1.15        | 1.18        | 1.19        | 1.24            | 1.30        | 1.37        | 1.44        | 1.51        | 1.59         | 1.67         |
| <b>TOTAL FLOW – NODE 8</b>    |                               |                | <b>0.00</b>      | <b>1.15</b> | <b>1.18</b> | <b>6.20</b> | <b>6.56</b>     | <b>6.90</b> | <b>7.28</b> | <b>7.72</b> | <b>8.21</b> | <b>8.80</b>  | <b>9.51</b>  |
| <b>Node 9</b>                 |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
| <u>Public Water Supply</u>    |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | City of Kings Mountain        | TJ Ellison WTP | 4.92             | 4.96        | 3.18        | 3.13        | 3.99            | 4.47        | 5.03        | 5.69        | 6.46        | 7.37         | 8.44         |
| <u>Industry</u>               |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | CNA Holdings, Inc.            | Shelby Plant   | -                | -           | -           | 0.42        | 0.54            | 0.72        | 0.96        | 1.28        | 1.70        | 2.26         | 3.02         |
|                               | New Industrial <sup>3,4</sup> |                | n/a              | n/a         | n/a         | n/a         | 0.04            | 0.06        | 0.08        | 0.13        | 0.19        | 0.27         | 0.41         |
| <u>Power</u>                  |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | None                          |                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a          | n/a          |
| <u>Agriculture/Irrigation</u> |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | Sub-Basin Wide Demand         |                | n/a              | 0.70        | 0.72        | 0.73        | 0.76            | 0.80        | 0.84        | 0.88        | 0.93        | 0.97         | 1.02         |
| <b>TOTAL FLOW – NODE 9</b>    |                               |                | <b>4.92</b>      | <b>5.66</b> | <b>3.90</b> | <b>4.27</b> | <b>5.32</b>     | <b>6.04</b> | <b>6.91</b> | <b>7.97</b> | <b>9.27</b> | <b>10.88</b> | <b>12.88</b> |
| <b>Kings Mountain (KM)</b>    |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
| <u>Public Water Supply</u>    |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | None                          |                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a          | n/a          |
| <u>Industry</u>               |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | New Industrial <sup>3,4</sup> |                | n/a              | n/a         | n/a         | n/a         | 0.06            | 0.09        | 0.13        | 0.20        | 0.29        | 0.44         | 0.65         |
| <u>Power</u>                  |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |
|                               | None                          |                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a          | n/a          |
| <u>Agriculture/Irrigation</u> |                               |                |                  |             |             |             |                 |             |             |             |             |              |              |



Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                       | Entity | Facility             | Historical Flows |              |             |             | Projected Flows |              |              |              |              |              |              |
|---------------------------------|--------|----------------------|------------------|--------------|-------------|-------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                 |        |                      | 1995             | 2000         | 2005        | 2006        | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
| Sub-Basin Wide Demand           |        |                      | n/a              | 0.40         | 0.41        | 0.41        | 0.43            | 0.45         | 0.48         | 0.50         | 0.53         | 0.55         | 0.58         |
| <b>TOTAL FLOW –<br/>NODE KM</b> |        |                      | <b>0.00</b>      | <b>0.40</b>  | <b>0.41</b> | <b>0.41</b> | <b>0.49</b>     | <b>0.54</b>  | <b>0.61</b>  | <b>0.70</b>  | <b>0.82</b>  | <b>0.99</b>  | <b>1.23</b>  |
| <b>Gaston Shoals (GS)</b>       |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| <u>Public Water Supply</u>      |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| Gaffney Board of Public Works   |        | Victor/Cherokee WTPs | 9.09             | 10.38        | 7.91        | 8.05        | 9.28            | 10.25        | 11.32        | 12.51        | 13.82        | 15.26        | 16.86        |
| <u>Industry</u>                 |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| New Industrial <sup>3,4</sup>   |        |                      | n/a              | n/a          | n/a         | n/a         | 0.02            | 0.03         | 0.05         | 0.07         | 0.11         | 0.16         | 0.24         |
| <u>Power</u>                    |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| None                            |        |                      | n/a              | n/a          | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Agriculture/Irrigation</u>   |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| Sub-Basin Wide Demand           |        |                      |                  | 0.15         | 0.15        | 0.15        | 0.16            | 0.17         | 0.18         | 0.18         | 0.19         | 0.20         | 0.21         |
| <b>TOTAL FLOW –<br/>NODE GS</b> |        |                      | <b>9.09</b>      | <b>10.53</b> | <b>8.06</b> | <b>8.20</b> | <b>9.46</b>     | <b>10.45</b> | <b>11.55</b> | <b>12.77</b> | <b>14.12</b> | <b>15.63</b> | <b>17.32</b> |
| <b>Cherokee Falls (CF)</b>      |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| <u>Public Water Supply</u>      |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| None                            |        |                      | n/a              | n/a          | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Industry</u>                 |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| Milliken Company <sup>1</sup>   |        | Magnolia Plant       | 4.36             | 3.37         | 2.80        | 3.02        | 3.11            | 3.20         | 3.30         | 3.40         | 3.50         | 3.61         | 3.72         |
| New Industrial <sup>3,4</sup>   |        |                      | n/a              | n/a          | n/a         | n/a         | 0.07            | 0.10         | 0.15         | 0.23         | 0.34         | 0.50         | 0.73         |
| <u>Power</u>                    |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| None                            |        |                      | n/a              | n/a          | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Agriculture/Irrigation</u>   |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| Sub-Basin Wide Demand           |        |                      | n/a              | 0.45         | 0.05        | 0.05        | 0.48            | 0.51         | 0.53         | 0.56         | 0.59         | 0.62         | 0.65         |
| <b>TOTAL FLOW –<br/>NODE CF</b> |        |                      | <b>4.36</b>      | <b>3.82</b>  | <b>2.85</b> | <b>3.08</b> | <b>3.66</b>     | <b>3.81</b>  | <b>3.98</b>  | <b>4.19</b>  | <b>4.43</b>  | <b>4.72</b>  | <b>5.10</b>  |
| <b>Node 10</b>                  |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| <u>Public Water Supply</u>      |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| None                            |        |                      | n/a              | n/a          | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Industry</u>                 |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |
| New Industrial <sup>3,4</sup>   |        |                      | n/a              | n/a          | n/a         | n/a         | 0.01            | 0.01         | 0.02         | 0.02         | 0.03         | 0.05         | 0.07         |
| <u>Power</u>                    |        |                      |                  |              |             |             |                 |              |              |              |              |              |              |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                        | Entity                        | Facility            | Historical Flows |             |             |             | Projected Flows |              |              |              |              |              |              |
|----------------------------------|-------------------------------|---------------------|------------------|-------------|-------------|-------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                  |                               |                     | 1995             | 2000        | 2005        | 2006        | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
|                                  | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                  | <u>Agriculture/Irrigation</u> |                     |                  |             |             |             |                 |              |              |              |              |              |              |
|                                  | Sub-Basin Wide Demand         |                     | n/a              | 0.05        | 0.05        | 0.05        | 0.05            | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.07         |
| <b>TOTAL FLOW –<br/>NODE 10</b>  |                               |                     | <b>0.00</b>      | <b>0.05</b> | <b>0.05</b> | <b>0.05</b> | <b>0.06</b>     | <b>0.06</b>  | <b>0.07</b>  | <b>0.08</b>  | <b>0.09</b>  | <b>0.11</b>  | <b>0.14</b>  |
| Ninety-nine Islands Dam (99I)    | <u>Public Water Supply</u>    |                     |                  |             |             |             |                 |              |              |              |              |              |              |
|                                  | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                  | <u>Industry</u>               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
|                                  | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                  | <u>Power</u>                  |                     |                  |             |             |             |                 |              |              |              |              |              |              |
|                                  | Duke Energy <sup>2</sup>      | Lee Nuclear Station | n/a              | 0.00        | 0.00        | 0.00        | 35.50           | 35.50        | 35.50        | 35.50        | 35.50        | 35.50        | 35.50        |
| <u>Agriculture/Irrigation</u>    |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| Sub-Basin Wide Demand            |                               | n/a                 | 0.05             | 0.05        | 0.05        | 0.05        | 0.06            | 0.06         | 0.06         | 0.07         | 0.07         | 0.07         |              |
| <b>TOTAL FLOW –<br/>NODE 99I</b> |                               |                     | <b>0.00</b>      | <b>0.05</b> | <b>0.05</b> | <b>0.05</b> | <b>35.55</b>    | <b>35.56</b> | <b>35.56</b> | <b>35.56</b> | <b>35.57</b> | <b>35.57</b> | <b>35.57</b> |
| <b>Node 11</b>                   |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| <u>Public Water Supply</u>       |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| None                             |                               |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
| <u>Industry</u>                  |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| New Industrial                   |                               |                     | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
| <u>Power</u>                     |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| None                             |                               |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
| <u>Agriculture/Irrigation</u>    |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| Sub-Basin Wide Demand            |                               |                     | n/a              | 0.41        | n/a         | 0.43        | 0.46            | 0.50         | 0.54         | 0.59         | 0.64         | 0.69         | 0.75         |
| <b>TOTAL FLOW –<br/>NODE 11</b>  |                               |                     | <b>0.00</b>      | <b>0.41</b> | <b>0.00</b> | <b>0.43</b> | <b>0.56</b>     | <b>0.64</b>  | <b>0.74</b>  | <b>0.86</b>  | <b>1.02</b>  | <b>1.23</b>  | <b>1.50</b>  |
| <b>Node 12</b>                   |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| <u>Public Water Supply</u>       |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| None                             |                               |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          |              |
| <u>Industry</u>                  |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |
| New Industrial                   |                               |                     | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
| <u>Power</u>                     |                               |                     |                  |             |             |             |                 |              |              |              |              |              |              |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin      | Entity                        | Facility                        | Historical Flows |              |              |              | Projected Flows |              |              |              |              |              |              |
|----------------|-------------------------------|---------------------------------|------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                |                               |                                 | 1995             | 2000         | 2005         | 2006         | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
|                | None                          |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <u>Agriculture/Irrigation</u> |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide Demand         |                                 | n/a              | 0.29         | n/a          | 0.31         | 0.33            | 0.35         | 0.38         | 0.41         | 0.44         | 0.48         | 0.52         |
|                |                               | <b>TOTAL FLOW –<br/>NODE 12</b> | <b>0.00</b>      | <b>0.29</b>  | <b>0.00</b>  | <b>0.31</b>  | <b>0.43</b>     | <b>0.49</b>  | <b>0.58</b>  | <b>0.68</b>  | <b>0.83</b>  | <b>1.01</b>  | <b>1.26</b>  |
| <b>Node 14</b> |                               |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | <u>Public Water Supply</u>    |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                          |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <u>Industry</u>               |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | New Industrial                |                                 | n/a              | n/a          | n/a          | n/a          | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|                | <u>Power</u>                  |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                          |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <u>Agriculture/Irrigation</u> |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide Demand         |                                 | n/a              | 0.79         | n/a          | 0.82         | 0.86            | 0.90         | 0.95         | 0.99         | 1.05         | 1.10         | 1.16         |
|                |                               | <b>TOTAL FLOW –<br/>NODE 14</b> | <b>0.00</b>      | <b>0.79</b>  | <b>0.00</b>  | <b>0.82</b>  | <b>0.96</b>     | <b>1.04</b>  | <b>1.14</b>  | <b>1.27</b>  | <b>1.43</b>  | <b>1.63</b>  | <b>1.90</b>  |
| <b>Node 15</b> |                               |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | <u>Public Water Supply</u>    |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | SWS/SSSD                      | Landrum WTP                     | n/a              | 0.53         | 0.47         | 0.49         | 0.54            | 0.59         | 0.66         | 0.73         | 0.79         | 0.86         | 0.93         |
|                | SWS/SSSD                      | Blalock WTP                     | n/a              | 7.21         | n/a          | 12.99        | 14.02           | 15.43        | 16.97        | 18.67        | 20.26        | 21.99        | 23.86        |
|                | SWS/SSSD                      | Simms WTP                       | 36.03            | 25.69        | 32.18        | 28.42        | 30.97           | 34.07        | 37.49        | 41.24        | 44.75        | 48.56        | 52.69        |
|                | Town of Tryon                 | Tryon WTP                       | 0.70             | 0.72         | 0.46         | 0.55         | 0.80            | 0.93         | 1.09         | 1.20         | 1.30         | 1.41         | 1.53         |
|                | <u>Industry</u>               |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | New Industrial                |                                 | n/a              | n/a          | n/a          | n/a          | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|                | <u>Power</u>                  |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                          |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <u>Agriculture/Irrigation</u> |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide Demand         |                                 | n/a              | 2.73         | n/a          | 2.83         | 2.98            | 3.17         | 3.36         | 3.57         | 3.80         | 4.04         | 4.30         |
|                |                               | <b>TOTAL FLOW –<br/>NODE 15</b> | <b>36.73</b>     | <b>36.88</b> | <b>33.12</b> | <b>45.28</b> | <b>49.41</b>    | <b>54.33</b> | <b>59.76</b> | <b>65.69</b> | <b>71.29</b> | <b>77.39</b> | <b>84.06</b> |
| <b>Node 13</b> |                               |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | <u>Public Water Supply</u>    |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                          |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                       | Entity                        | Facility                     | Historical Flows |             |             |             | Projected Flows |             |              |              |              |              |              |
|---------------------------------|-------------------------------|------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|--------------|--------------|--------------|--------------|--------------|
|                                 |                               |                              | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035         | 2045         | 2055         | 2065         | 2075         |
|                                 | <u>Industry</u>               |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | New Industrial                |                              | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14        | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|                                 | <u>Power</u>                  |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                 | <u>Agriculture/Irrigation</u> |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand         |                              | n/a              | 0.97        | n/a         | 1.03        | 1.12            | 1.23        | 1.36         | 1.50         | 1.65         | 1.81         | 2.00         |
| <b>TOTAL FLOW –<br/>NODE 13</b> |                               |                              | <b>0.00</b>      | <b>0.97</b> | <b>0.00</b> | <b>1.03</b> | <b>1.22</b>     | <b>1.37</b> | <b>1.55</b>  | <b>1.77</b>  | <b>2.03</b>  | <b>2.34</b>  | <b>2.74</b>  |
| <b>Node 16</b>                  |                               |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | <u>Public Water Supply</u>    |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                 | <u>Industry</u>               |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | New Industrial                |                              | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14        | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|                                 | <u>Power</u>                  |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | Duke Energy                   | Future Nuclear Station       | n/a              | n/a         | n/a         | 0.00        | 0.00            | 0.00        | 35.55        | 35.55        | 35.55        | 35.55        | 35.55        |
|                                 | <u>Agriculture/Irrigation</u> |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand         |                              | n/a              | 0.21        | n/a         | 0.22        | 0.23            | 0.25        | 0.27         | 0.28         | 0.30         | 0.32         | 0.35         |
| <b>TOTAL FLOW –<br/>NODE 16</b> |                               |                              | <b>0.00</b>      | <b>0.21</b> | <b>0.00</b> | <b>0.22</b> | <b>0.33</b>     | <b>0.39</b> | <b>36.01</b> | <b>36.10</b> | <b>36.23</b> | <b>36.40</b> | <b>36.64</b> |
| <b>Lockhart Dam (LD)</b>        |                               |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | <u>Public Water Supply</u>    |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                 | <u>Industry</u>               |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                 | <u>Power</u>                  |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
|                                 | <u>Agriculture/Irrigation</u> |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand         |                              | n/a              | 0.05        | n/a         | 0.05        | 0.05            | 0.05        | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         |
| <b>TOTAL FLOW –<br/>NODE LD</b> |                               |                              | <b>0.00</b>      | <b>0.05</b> | <b>0.00</b> | <b>0.05</b> | <b>0.05</b>     | <b>0.05</b> | <b>0.05</b>  | <b>0.05</b>  | <b>0.05</b>  | <b>0.05</b>  | <b>0.05</b>  |
| <b>Node 17</b>                  |                               |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | <u>Public Water Supply</u>    |                              |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | City of York                  | City of York WTP<br>(Turkey) | 0.95             | 1.32        | 1.09        | 1.12        | 1.26            | 0.00        | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                    | Entity                        | Facility                         | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|------------------------------|-------------------------------|----------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                              |                               |                                  | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                              | <u>Industry</u>               |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | New Industrial                |                                  | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14        | 0.20        | 0.27        | 0.38        | 0.53        | 0.74        |
|                              | <u>Power</u>                  |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | None                          |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                              | <u>Agriculture/Irrigation</u> |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | Sub-Basin Wide Demand         |                                  | n/a              | 0.72        | n/a         | 0.74        | 0.77            | 0.81        | 0.85        | 0.90        | 0.94        | 0.99        | 1.04        |
|                              |                               | <b>TOTAL FLOW –<br/>NODE 17</b>  | <b>0.95</b>      | <b>2.04</b> | <b>1.09</b> | <b>1.86</b> | <b>2.14</b>     | <b>0.95</b> | <b>1.05</b> | <b>1.17</b> | <b>1.32</b> | <b>1.52</b> | <b>1.79</b> |
| <b>Node 18</b>               |                               |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | <u>Public Water Supply</u>    |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | City of Union                 | City of Union WTP                | 4.79             | 4.04        | 3.27        | 3.41        | 3.47            | 3.54        | 3.62        | 3.69        | 3.76        | 3.84        | 3.92        |
|                              | <u>Industry</u>               |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | New Industrial                |                                  | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14        | 0.20        | 0.27        | 0.38        | 0.53        | 0.74        |
|                              | <u>Power</u>                  |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | None                          |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                              | <u>Agriculture/Irrigation</u> |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | Sub-Basin Wide Demand         |                                  | n/a              | 0.20        | n/a         | 0.20        | 0.20            | 0.20        | 0.21        | 0.21        | 0.21        | 0.21        | 0.22        |
|                              |                               | <b>TOTAL FLOW –<br/>NODE 18</b>  | <b>4.79</b>      | <b>4.24</b> | <b>3.27</b> | <b>3.61</b> | <b>3.78</b>     | <b>3.89</b> | <b>4.02</b> | <b>4.17</b> | <b>4.36</b> | <b>4.59</b> | <b>4.88</b> |
| <b>Neal Shoals Dam (NSD)</b> |                               |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | <u>Public Water Supply</u>    |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | None                          |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                              | <u>Industry</u>               |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | None                          |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                              | <u>Power</u>                  |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | SCE&G                         | Neal Shoals Hydro &<br>Reservoir | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                              | <u>Agriculture/Irrigation</u> |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | Sub-Basin Wide Demand         |                                  | n/a              | 0.02        | n/a         | 0.02        | 0.02            | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.03        |
|                              |                               | <b>TOTAL FLOW –<br/>NODE NSD</b> | <b>0.00</b>      | <b>0.02</b> | <b>0.00</b> | <b>0.02</b> | <b>0.02</b>     | <b>0.02</b> | <b>0.02</b> | <b>0.02</b> | <b>0.02</b> | <b>0.02</b> | <b>0.03</b> |
| <b>Node 19</b>               |                               |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | <u>Public Water Supply</u>    |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|                              | None                          |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin      | Entity                                | Facility                        | Historical Flows |              |              |              | Projected Flows |              |              |              |              |              |              |
|----------------|---------------------------------------|---------------------------------|------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                |                                       |                                 | 1995             | 2000         | 2005         | 2006         | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
|                | <b><u>Industry</u></b>                |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Cone Mills - Water                    | Carlisle Plant                  | 2.17             | 1.50         | 1.58         | 1.29         | 1.29            | 1.29         | 1.29         | 1.29         | 1.29         | 1.29         | 1.29         |
|                | New Industrial                        |                                 |                  |              |              |              | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|                | <b><u>Power</u></b>                   |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Duke Energy                           | Future Fossil-Fuel Station      | n/a              | n/a          | n/a          | 0.00         | 0.00            | 0.00         | 0.00         | 0.00         | 21.97        | 21.97        | 21.97        |
|                | <b><u>Agriculture/Irrigation</u></b>  |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide Demand                 |                                 | n/a              | 0.09         | n/a          | 0.09         | 0.09            | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.10         |
|                |                                       | <b>TOTAL FLOW –<br/>NODE 19</b> | <b>2.17</b>      | <b>1.59</b>  | <b>1.58</b>  | <b>1.38</b>  | <b>1.48</b>     | <b>1.52</b>  | <b>1.58</b>  | <b>1.66</b>  | <b>23.74</b> | <b>23.89</b> | <b>24.11</b> |
| <b>Node 20</b> |                                       |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | <b><u>Public Water Supply</u></b>     |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                                  |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <b><u>Industry</u></b>                |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | New Industrial                        |                                 | n/a              | n/a          | n/a          | n/a          | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|                | <b><u>Power</u></b>                   |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                                  |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <b><u>Agriculture/Irrigation</u></b>  |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide Demand                 |                                 | n/a              | 0.27         | n/a          | 0.28         | 0.29            | 0.30         | 0.32         | 0.33         | 0.35         | 0.37         | 0.39         |
|                |                                       | <b>TOTAL FLOW –<br/>NODE 20</b> | <b>0.00</b>      | <b>0.27</b>  | <b>0.00</b>  | <b>0.28</b>  | <b>0.39</b>     | <b>0.44</b>  | <b>0.51</b>  | <b>0.61</b>  | <b>0.73</b>  | <b>0.90</b>  | <b>1.13</b>  |
| <b>Node 21</b> |                                       |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | <b><u>Public Water Supply</u></b>     |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | SJWD Water District                   | SJWD WTP                        | 2.88             | 5.95         | 5.81         | 6.44         | 10.13           | 11.52        | 13.59        | 14.74        | 16.00        | 17.36        | 18.83        |
|                | Greer CPW (Commision of Public Works) | City of Greer CPW WTP           | n/a              | 6.64         | 7.18         | 7.96         | 8.67            | 9.54         | 10.49        | 11.55        | 12.53        | 13.59        | 14.75        |
|                | <b><u>Industry</u></b>                |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | New Industrial                        |                                 | n/a              | n/a          | n/a          | n/a          | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|                | <b><u>Power</u></b>                   |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                                  |                                 | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <b><u>Agriculture/Irrigation</u></b>  |                                 |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide Demand                 |                                 | n/a              | 4.49         | n/a          | 4.66         | 4.93            | 5.26         | 5.61         | 6.00         | 6.42         | 6.87         | 7.37         |
|                |                                       | <b>TOTAL FLOW –<br/>NODE 21</b> | <b>2.88</b>      | <b>17.08</b> | <b>12.99</b> | <b>19.06</b> | <b>23.82</b>    | <b>26.46</b> | <b>29.89</b> | <b>32.56</b> | <b>35.32</b> | <b>38.36</b> | <b>41.70</b> |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                       | Entity                | Facility                             | Historical Flows |             |             |             | Projected Flows |             |              |              |              |              |              |
|---------------------------------|-----------------------|--------------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|--------------|--------------|--------------|--------------|--------------|
|                                 |                       |                                      | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035         | 2045         | 2055         | 2065         | 2075         |
| <b>Node 22</b>                  |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
| <u>Public Water Supply</u>      |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | City of Clinton       | City of Clinton WTP                  | n/a              | 2.86        | 2.41        | 2.55        | 2.79            | 3.08        | 3.40         | 3.75         | 4.07         | 4.41         | 4.79         |
|                                 | Town of Whitmire      | Town of Whitmire WTP                 | 0.60             | 0.68        | 0.64        | 0.57        | 0.61            | 0.65        | 0.69         | 0.73         | 0.77         | 0.82         | 0.87         |
| <u>Industry</u>                 |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | New Industrial        |                                      | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14        | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
| <u>Power</u>                    |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                  |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Agriculture/Irrigation</u>   |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand |                                      | n/a              | 4.89        | n/a         | 5.11        | 5.44            | 5.84        | 6.28         | 6.76         | 7.28         | 7.85         | 8.47         |
| <b>TOTAL FLOW –<br/>NODE 22</b> |                       |                                      | <b>0.60</b>      | <b>8.43</b> | <b>3.05</b> | <b>8.23</b> | <b>8.93</b>     | <b>9.71</b> | <b>10.56</b> | <b>11.51</b> | <b>12.51</b> | <b>13.62</b> | <b>14.87</b> |
| <b>Node 23</b>                  |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
| <u>Public Water Supply</u>      |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                  |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Industry</u>                 |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | New Industrial        |                                      | n/a              | n/a         | n/a         | n/a         | 0.10            | 0.14        | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
| <u>Power</u>                    |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                  |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Agriculture/Irrigation</u>   |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand |                                      | n/a              | 0.51        | n/a         | 0.52        | 0.54            | 0.56        | 0.58         | 0.61         | 0.63         | 0.66         | 0.68         |
| <b>TOTAL FLOW –<br/>NODE 23</b> |                       |                                      | <b>0.00</b>      | <b>0.51</b> | <b>0.00</b> | <b>0.52</b> | <b>0.64</b>     | <b>0.70</b> | <b>0.78</b>  | <b>0.88</b>  | <b>1.01</b>  | <b>1.19</b>  | <b>1.43</b>  |
| <b>Parr Shoals Dam (PSD)</b>    |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
| <u>Public Water Supply</u>      |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                  |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Industry</u>                 |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | None                  |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Power</u>                    |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | SCE&G                 | Parr Reservoir (Natural Evaporation) | n/a              | 8.74        | 9.87        | 9.25        | 9.23            | 9.23        | 9.23         | 9.23         | 9.23         | 9.23         | 9.23         |
| <u>Agriculture/Irrigation</u>   |                       |                                      |                  |             |             |             |                 |             |              |              |              |              |              |
|                                 | Sub-Basin Wide Demand |                                      | n/a              | 0.44        | n/a         | 0.46        | 0.48            | 0.50        | 0.53         | 0.55         | 0.58         | 0.61         | 0.64         |



Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                     | Entity                | Facility   | Historical Flows |              |              |              | Projected Flows |              |              |              |              |              |              |
|-------------------------------|-----------------------|--|------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                               |                       |  | 1995             | 2000         | 2005         | 2006         | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
| <b>TOTAL FLOW – NODE PSD</b>  |                       |  | <b>0.00</b>      | <b>9.18</b>  | <b>9.87</b>  | <b>9.71</b>  | <b>9.71</b>     | <b>9.73</b>  | <b>9.76</b>  | <b>9.79</b>  | <b>9.82</b>  | <b>9.84</b>  | <b>9.88</b>  |
| <b>Fairfield Dam (FD)</b>     |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
| <u>Public Water Supply</u>    |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
|                               | None                  |  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Industry</u>               |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
|                               | None                  |  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Power</u>                  |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
| SCE&G                         |                       | Fairfield Pumpstation & Monticello Reservoir (Natural Evaporation) | n/a              | 19.52        | 19.47        | 19.48        | 19.49           | 19.49        | 19.49        | 19.49        | 19.49        | 19.49        | 19.49        |
| SCE&G                         |                       | V C Summer Nuclear Station - Unit 1 (Current)                      | n/a              | n/a          | 17.12        | 15.51        | 15.99           | 15.99        | 15.99        | 15.99        | 15.99        | 15.99        | 15.99        |
| SCE&G                         |                       | V C Summer Nuclear Station - Unit 2 (Future 2016)                  | n/a              | n/a          | n/a          | n/a          | n/a             | 20.43        | 20.43        | 20.43        | 20.43        | 20.43        | 20.43        |
| SCE&G                         |                       | V C Summer Nuclear Station- Unit 3 (Future 2019)                   | n/a              | n/a          | n/a          | n/a          | n/a             | 20.43        | 20.43        | 20.43        | 20.43        | 20.43        | 20.43        |
| <u>Agriculture/Irrigation</u> |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
|                               | Sub-Basin Wide Demand |  | n/a              | 0.06         | n/a          | 0.06         | 0.07            | 0.07         | 0.07         | 0.08         | 0.08         | 0.09         | 0.09         |
| <b>TOTAL FLOW – NODE FD</b>   |                       |  | <b>0.00</b>      | <b>19.58</b> | <b>36.59</b> | <b>35.05</b> | <b>35.54</b>    | <b>76.40</b> | <b>76.40</b> | <b>76.40</b> | <b>76.41</b> | <b>76.41</b> | <b>76.42</b> |
| <b>Node 24</b>                |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
| <u>Public Water Supply</u>    |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
|                               | None                  |  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Industry</u>               |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
|                               | New Industrial        |  | n/a              | n/a          | n/a          | n/a          | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
| <u>Power</u>                  |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
| SCE&G                         |                       | Parr Hydro Station   | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| SCE&G                         |                       | Summer Nuclear Training  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
| <u>Agriculture/Irrigation</u> |                       |  |                  |              |              |              |                 |              |              |              |              |              |              |
|                               | Sub-Basin Wide Demand |  | n/a              | 0.12         | n/a          | 0.13         | 0.13            | 0.14         | 0.15         | 0.16         | 0.16         | 0.17         | 0.18         |
| <b>TOTAL FLOW – NODE 24</b>   |                       |  | <b>0.00</b>      | <b>0.12</b>  | <b>0.00</b>  | <b>0.13</b>  | <b>0.23</b>     | <b>0.28</b>  | <b>0.34</b>  | <b>0.43</b>  | <b>0.54</b>  | <b>0.70</b>  | <b>0.92</b>  |

Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)

| Sub-Basin                                  | Entity                        | Facility                          | Historical Flows |              |              |              | Projected Flows |              |              |              |              |              |              |
|--|-------------------------------|-----------------------------------|------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  |                               |                                   | 1995             | 2000         | 2005         | 2006         | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
| <b>Node 25</b>                             |                               |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | <u>Public Water Supply</u>    |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | Town of Winnsboro             | Winnsboro WTP                     | n/a              | 2.21         | 2.00         | 1.97         | 2.75            | 3.31         | 3.65         | 4.04         | 4.38         | 4.75         | 5.16         |
|  | <u>Industry</u>               |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | New Industrial                |                                   | n/a              | n/a          | n/a          | n/a          | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|  | <u>Power</u>                  |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | None                          |                                   | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|  | <u>Agriculture/Irrigation</u> |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | Sub-Basin Wide Demand         |                                   | n/a              | 0.90         | n/a          | 0.93         | 0.97            | 1.02         | 1.07         | 1.13         | 1.18         | 1.24         | 1.31         |
|  |                               | <b>TOTAL FLOW –<br/>NODE 25</b>   | <b>0.00</b>      | <b>3.11</b>  | <b>2.00</b>  | <b>2.90</b>  | <b>3.82</b>     | <b>4.47</b>  | <b>4.92</b>  | <b>5.43</b>  | <b>5.94</b>  | <b>6.53</b>  | <b>7.21</b>  |
| <b>Node 26</b>                             |                               |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | <u>Public Water Supply</u>    |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | None                          |                                   | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|  | <u>Industry</u>               |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | New Industrial                |                                   | n/a              | n/a          | n/a          | n/a          | 0.10            | 0.14         | 0.20         | 0.27         | 0.38         | 0.53         | 0.74         |
|  | <u>Power</u>                  |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | None                          |                                   | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|  | <u>Agriculture/Irrigation</u> |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | Sub-Basin Wide Demand         |                                   | n/a              | 1.29         | n/a          | 1.34         | 1.41            | 1.50         | 1.59         | 1.69         | 1.80         | 1.91         | 2.03         |
|  |                               | <b>TOTAL FLOW –<br/>NODE 26</b>   | <b>0.00</b>      | <b>1.29</b>  | <b>0.00</b>  | <b>1.34</b>  | <b>1.51</b>     | <b>1.64</b>  | <b>1.79</b>  | <b>1.96</b>  | <b>2.18</b>  | <b>2.44</b>  | <b>2.78</b>  |
| <b>Columbia Canal Diversion Dam (CCDD)</b> |                               |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | <u>Public Water Supply</u>    |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | City of Columbia              | Columbia Canal WTP                | 27.22            | 30.82        | 32.29        | 33.10        | 38.56           | 45.70        | 50.23        | 55.21        | 58.91        | 62.85        | 67.06        |
|  | <u>Industry</u>               |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | None                          |                                   | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|  | <u>Power</u>                  |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | None                          |                                   | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|  | <u>Agriculture/Irrigation</u> |                                   |                  |              |              |              |                 |              |              |              |              |              |              |
|  | Sub-Basin Wide Demand         |                                   | n/a              | 0.89         | n/a          | 0.92         | 0.96            | 1.01         | 1.07         | 1.12         | 1.18         | 1.24         | 1.30         |
|  |                               | <b>TOTAL FLOW –<br/>NODE CCDD</b> | <b>27.22</b>     | <b>31.71</b> | <b>32.29</b> | <b>34.02</b> | <b>39.53</b>    | <b>46.71</b> | <b>51.30</b> | <b>56.33</b> | <b>60.09</b> | <b>64.09</b> | <b>68.36</b> |

**Table C-1. Broad River Basin Withdrawals - Summary Sheet (in mgd)**

| Sub-Basin | Entity | Facility | Historical Flows |      |      |      | Projected Flows |      |      |      |      |      |
|-----------|--------|----------|------------------|------|------|------|-----------------|------|------|------|------|------|
|           |        |          | 1995             | 2000 | 2005 | 2006 | 2015            | 2025 | 2035 | 2045 | 2055 | 2065 |

**NOTE**

**S:**

1. Milliken historical and projected withdrawals assume that Milliken returns are 75% of withdrawals. This estimated was used due to the unreliability of Milliken withdrawal metering.
2. Duke Power Withdrawals are actually net consumptive use or "outflows" from the system. No return projections are given for these facilities since the values reported here are for net outflow.
3. New Industrial Entities are used to anticipate unknown future industries. These values are net outflows, similar to Duke Energy Withdrawals in Note 2 above.
4. New Industrial Entities growth in withdrawals is set at 4.0%, which is the NC Gross State Product (5.25%) less inflation (1.25%) over the years 1997 - 2005.
5. A future Polk County Water System was introduced based on a study conducted for Polk County which desires to create a public water system. Assumes 1.0 mgd in 2015 and increases at a 1.50% AGR.

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                 | Entity                        | Facility                        | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|---------------------------|-------------------------------|---------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                           |                               |                                 | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
| <b>Lake Summit (LS)</b>   |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                           | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | New Industrial <sup>1</sup>   |                                 | n/a              | n/a         | n/a         | n/a         | 0.02            | 0.02        | 0.03        | 0.05        | 0.08        | 0.11        | 0.17        |
|                           | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                           | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                           |                               | <b>TOTAL FLOW –<br/>NODE LS</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.02</b>     | <b>0.02</b> | <b>0.03</b> | <b>0.05</b> | <b>0.08</b> | <b>0.11</b> | <b>0.17</b> |
| <b>Turner Shoals (LA)</b> |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | City of Saluda                | Saluda WWTP                     | 0.06             | 0.06        | 0.06        | 0.05        | 0.05            | 0.06        | 0.07        | 0.07        | 0.08        | 0.09        | 0.10        |
|                           | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | New Industrial <sup>1</sup>   |                                 | n/a              | n/a         | n/a         | n/a         | 0.03            | 0.03        | 0.07        | 0.10        | 0.17        | 0.24        | 0.38        |
|                           | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                           | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                           |                               | <b>TOTAL FLOW –<br/>NODE LA</b> | <b>0.06</b>      | <b>0.06</b> | <b>0.06</b> | <b>0.05</b> | <b>0.09</b>     | <b>0.09</b> | <b>0.13</b> | <b>0.18</b> | <b>0.25</b> | <b>0.33</b> | <b>0.48</b> |
| <b>Node 1</b>             |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                           | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | New Industrial <sup>1</sup>   |                                 | n/a              | n/a         | n/a         | n/a         | 0.00            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.01        |
|                           | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                           | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                           | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                     | Entity                      | Facility                        | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|-------------------------------|-----------------------------|---------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                               |                             |                                 | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                               | None                        |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                               |                             | <b>TOTAL FLOW –<br/>NODE 1</b>  | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.01</b> |
| <b>Lake Lure (LL)</b>         |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
| <u>Public Water Supply</u>    |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | None                        |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <u>Industry</u>               |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | New Industrial <sup>1</sup> |                                 | n/a              | n/a         | n/a         | n/a         | 0.02            | 0.02        | 0.03        | 0.05        | 0.09        | 0.12        | 0.19        |
| <u>Power</u>                  |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | None                        |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <u>Agriculture/Irrigation</u> |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | None                        |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                               |                             | <b>TOTAL FLOW –<br/>NODE LL</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.02</b>     | <b>0.02</b> | <b>0.03</b> | <b>0.05</b> | <b>0.09</b> | <b>0.12</b> | <b>0.19</b> |
| <b>Node 3</b>                 |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
| <u>Public Water Supply</u>    |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | Town of Lake Lure           | Lake Lure WWTP                  | 0.52             | 0.66        | 0.82        | 0.85        | 0.87            | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        |
|                               | Town of Rutherfordton       | Rutherfordton WWTP              | 0.61             | 0.51        | 0.55        | 0.44        | 0.50            | 0.56        | 0.64        | 0.73        | 0.84        | 0.95        | 1.09        |
| <u>Industry</u>               |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | New Industrial <sup>1</sup> |                                 | n/a              | n/a         | n/a         | n/a         | 0.03            | 0.03        | 0.07        | 0.10        | 0.16        | 0.23        | 0.36        |
| <u>Power</u>                  |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | None                        |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <u>Agriculture/Irrigation</u> |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | None                        |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                               |                             | <b>TOTAL FLOW –<br/>NODE 3</b>  | <b>1.13</b>      | <b>1.17</b> | <b>1.37</b> | <b>1.29</b> | <b>1.40</b>     | <b>1.48</b> | <b>1.61</b> | <b>1.75</b> | <b>1.94</b> | <b>2.14</b> | <b>2.43</b> |
| <b>Node 2</b>                 |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
| <u>Public Water Supply</u>    |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | Town of Columbus            | Columbus WWTP                   | 0.18             | 0.20        | 0.17        | 0.16        | 0.20            | 0.23        | 0.27        | 0.31        | 0.36        | 0.42        | 0.49        |
| <u>Industry</u>               |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                               | New Industrial <sup>1</sup> |                                 | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.05        | 0.10        | 0.15        | 0.25        | 0.35        | 0.55        |
| <u>Power</u>                  |                             |                                 |                  |             |             |             |                 |             |             |             |             |             |             |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                  | Entity                        | Facility            | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|----------------------------|-------------------------------|---------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                            |                               |                     | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                            | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | <u>Agriculture/Irrigation</u> |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE 2</b> |                               |                     | <b>0.18</b>      | <b>0.20</b> | <b>0.17</b> | <b>0.16</b> | <b>0.25</b>     | <b>0.28</b> | <b>0.37</b> | <b>0.46</b> | <b>0.61</b> | <b>0.77</b> | <b>1.04</b> |
| Node 4                     | <u>Public Water Supply</u>    |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | <u>Industry</u>               |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | Dan River, Inc.               | Harris Plant        | 0.30             | 0.46        | 0.34        | -           | 0.00            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
|                            | New Industrial <sup>1</sup>   |                     | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.05        | 0.10        | 0.15        | 0.25        | 0.35        | 0.55        |
|                            | <u>Power</u>                  |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | <u>Agriculture/Irrigation</u> |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE 4</b> |                               |                     | <b>0.30</b>      | <b>0.46</b> | <b>0.34</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.05</b> | <b>0.10</b> | <b>0.15</b> | <b>0.25</b> | <b>0.35</b> | <b>0.55</b> |
| Node 5                     | <u>Public Water Supply</u>    |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | Town of Forest City           | Riverside Drive WRF | 3.20             | 3.89        | 3.06        | 2.65        | 3.89            | 4.19        | 4.50        | 4.85        | 5.23        | 5.64        | 6.08        |
|                            | Town of Spindale              | Spindale WWTP       | 3.37             | 1.54        | 1.24        | 1.13        | 1.18            | 1.23        | 1.28        | 1.34        | 1.40        | 1.47        | 1.53        |
|                            | <u>Industry</u>               |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | New Industrial <sup>1</sup>   |                     | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.05        | 0.10        | 0.15        | 0.25        | 0.35        | 0.54        |
|                            | <u>Power</u>                  |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | <u>Agriculture/Irrigation</u> |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE 5</b> |                               |                     | <b>6.57</b>      | <b>5.43</b> | <b>4.30</b> | <b>3.78</b> | <b>5.12</b>     | <b>5.46</b> | <b>5.89</b> | <b>6.34</b> | <b>6.88</b> | <b>7.45</b> | <b>8.16</b> |
| Cliffside (CS)             | <u>Public Water Supply</u>    |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | None                          |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                            | <u>Industry</u>               |                     | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin               | Entity                        | Facility                        | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|-------------------------|-------------------------------|---------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                         |                               |                                 | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                         | New Industrial <sup>1</sup>   |                                 | n/a              | n/a         | n/a         | n/a         | 0.00            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.01        |
|                         | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                         | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                         |                               | <b>TOTAL FLOW –<br/>NODE CS</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.01</b> |
| <b>Node 6</b>           |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                         | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | New Industrial <sup>1</sup>   |                                 | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.05        | 0.10        | 0.15        | 0.25        | 0.35        | 0.55        |
|                         | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                         | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                         |                               | <b>TOTAL FLOW –<br/>NODE 6</b>  | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.05</b> | <b>0.10</b> | <b>0.15</b> | <b>0.25</b> | <b>0.35</b> | <b>0.55</b> |
| <b>Stice Shoals (S)</b> |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | City of Shelby                | First Broad River<br>WWTP       | 4.17             | 2.96        | 2.97        | 2.68        | 2.65            | 2.76        | 2.89        | 3.02        | 3.15        | 3.30        | 3.44        |
|                         | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | PPG Industries, Inc.          | Shelby Plant                    | 0.85             | 0.80        | 0.56        | 0.61        | 0.79            | 1.05        | 1.40        | 1.86        | 2.48        | 3.30        | 4.40        |
|                         | New Industrial <sup>1</sup>   |                                 | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.05        | 0.09        | 0.14        | 0.23        | 0.33        | 0.51        |
|                         | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                         | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                         |                               | <b>TOTAL FLOW –<br/>NODE S</b>  | <b>5.02</b>      | <b>3.75</b> | <b>3.53</b> | <b>3.29</b> | <b>3.48</b>     | <b>3.86</b> | <b>4.38</b> | <b>5.02</b> | <b>5.87</b> | <b>6.92</b> | <b>8.36</b> |
| <b>Node 7</b>           |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                         | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin     | Entity                               | Facility                       | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|---------------|--------------------------------------|--------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|               |                                      |                                | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|               | None                                 |                                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|               | <b><u>Industry</u></b>               |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | New Industrial <sup>1</sup>          |                                | n/a              | n/a         | n/a         | n/a         | 0.00            | 0.00        | 0.01        | 0.01        | 0.02        | 0.02        | 0.04        |
|               | <b><u>Power</u></b>                  |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | None                                 |                                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|               | <b><u>Agriculture/Irrigation</u></b> |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | None                                 |                                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|               |                                      | <b>TOTAL FLOW –<br/>NODE 7</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.01</b> | <b>0.01</b> | <b>0.02</b> | <b>0.02</b> | <b>0.04</b> |
| <b>Node 8</b> |                                      |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | <b><u>Public Water Supply</u></b>    |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | Town of Boiling Springs              | Boiling Springs WWTP           | 0.27             | 0.27        | 0.33        | 0.27        | 0.28            | 0.29        | 0.31        | 0.32        | 0.33        | 0.35        | 0.36        |
|               | <b><u>Industry</u></b>               |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | Cone Mills Corporation               | Cliffside Plant                | 0.82             | 0.59        | 0.15        | 0.03        | 0.00            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
|               | New Industrial <sup>1</sup>          |                                | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.05        | 0.10        | 0.15        | 0.25        | 0.35        | 0.55        |
|               | <b><u>Power</u></b>                  |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | None                                 |                                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|               | <b><u>Agriculture/Irrigation</u></b> |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | None                                 |                                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|               |                                      | <b>TOTAL FLOW –<br/>NODE 8</b> | <b>1.09</b>      | <b>0.85</b> | <b>0.47</b> | <b>0.30</b> | <b>0.33</b>     | <b>0.34</b> | <b>0.41</b> | <b>0.47</b> | <b>0.58</b> | <b>0.70</b> | <b>0.91</b> |
| <b>Node 9</b> |                                      |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | <b><u>Public Water Supply</u></b>    |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | City of Kings Mountain               | Pilot Creek WWTP               | 2.92             | 2.68        | 2.71        | 2.57        | 3.54            | 3.94        | 4.40        | 4.95        | 5.58        | 6.33        | 7.21        |
|               | Town of Grover                       | Grover WWTP                    | 0.05             | 0.06        | 0.06        | 0.06        | 0.10            | 0.10        | 0.10        | 0.10        | 0.10        | 0.10        | 0.10        |
|               | <b><u>Industry</u></b>               |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | Grover Industries, Inc.              | Grover Plant                   | -                | 0.10        | 0.00        | 0.01        | 0.00            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
|               | CNA Holdings, Inc.                   | Shelby Plant                   | 0.57             | 0.41        | 0.31        | 0.36        | 0.46            | 0.62        | 0.82        | 1.10        | 1.46        | 1.94        | 2.59        |
|               | New Industrial <sup>1</sup>          |                                | n/a              | n/a         | n/a         | n/a         | 0.02            | 0.02        | 0.04        | 0.06        | 0.10        | 0.14        | 0.21        |
|               | <b><u>Power</u></b>                  |                                |                  |             |             |             |                 |             |             |             |             |             |             |
|               | None                                 |                                | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|               | <b><u>Agriculture/Irrigation</u></b> |                                |                  |             |             |             |                 |             |             |             |             |             |             |



Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                  | Entity                        | Facility                    | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |              |
|----------------------------|-------------------------------|-----------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|--------------|
|                            |                               |                             | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075         |
|                            | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a          |
|                            |                               | <b>TOTAL FLOW – NODE 9</b>  | <b>3.54</b>      | <b>3.25</b> | <b>3.09</b> | <b>2.99</b> | <b>4.12</b>     | <b>4.67</b> | <b>5.36</b> | <b>6.20</b> | <b>7.24</b> | <b>8.51</b> | <b>10.11</b> |
| <b>Kings Mountain (KM)</b> |                               |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | <u>Public Water Supply</u>    |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a          |
|                            | <u>Industry</u>               |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | New Industrial <sup>1</sup>   |                             | n/a              | n/a         | n/a         | n/a         | 0.03            | 0.03        | 0.06        | 0.09        | 0.15        | 0.21        | 0.34         |
|                            | <u>Power</u>                  |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a          |
|                            | <u>Agriculture/Irrigation</u> |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a          |
|                            |                               | <b>TOTAL FLOW – NODE KM</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.03</b>     | <b>0.03</b> | <b>0.06</b> | <b>0.09</b> | <b>0.15</b> | <b>0.21</b> | <b>0.34</b>  |
| <b>Gaston Shoals (GS)</b>  |                               |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | <u>Public Water Supply</u>    |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a          |
|                            | <u>Industry</u>               |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | New Industrial <sup>1</sup>   |                             | n/a              | n/a         | n/a         | n/a         | 0.01            | 0.01        | 0.02        | 0.03        | 0.06        | 0.08        | 0.13         |
|                            | <u>Power</u>                  |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a          |
|                            | <u>Agriculture/Irrigation</u> |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a          |
|                            |                               | <b>TOTAL FLOW – NODE GS</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.01</b>     | <b>0.01</b> | <b>0.02</b> | <b>0.03</b> | <b>0.06</b> | <b>0.08</b> | <b>0.13</b>  |
| <b>Cherokee Falls (CF)</b> |                               |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | <u>Public Water Supply</u>    |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | Gaffney Board of Public Works | Broad River WWTP            | 1.93             | 2.50        | 1.68        | 1.67        | 2.74            | 2.88        | 3.05        | 3.37        | 3.72        | 4.11        | 4.54         |
|                            | <u>Industry</u>               |                             |                  |             |             |             |                 |             |             |             |             |             |              |
|                            | Milliken Company              | Magnolia Plant              | 3.27             | 2.53        | 2.10        | 2.27        | 2.33            | 2.40        | 2.47        | 2.55        | 2.63        | 2.71        | 2.79         |
|                            | New Industrial <sup>1</sup>   |                             | n/a              | n/a         | n/a         | n/a         | 0.03            | 0.03        | 0.07        | 0.10        | 0.17        | 0.24        | 0.38         |
|                            | <u>Power</u>                  |                             |                  |             |             |             |                 |             |             |             |             |             |              |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                            | Entity                        | Facility                     | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|--------------------------------------|-------------------------------|------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                      |                               |                              | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | <u>Agriculture/Irrigation</u> |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      |                               | <b>TOTAL FLOW – NODE CF</b>  | <b>5.20</b>      | <b>5.03</b> | <b>3.78</b> | <b>3.94</b> | <b>5.10</b>     | <b>5.32</b> | <b>5.59</b> | <b>6.02</b> | <b>6.52</b> | <b>7.06</b> | <b>7.71</b> |
| <b>Node 10</b>                       | <u>Public Water Supply</u>    |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | <u>Industry</u>               |                              | n/a              | n/a         | n/a         | n/a         | 0.00            | 0.00        | 0.01        | 0.01        | 0.02        | 0.02        | 0.04        |
|                                      | New Industrial <sup>1</sup>   |                              | n/a              | n/a         | n/a         | n/a         | 0.00            | 0.00        | 0.01        | 0.01        | 0.02        | 0.02        | 0.04        |
|                                      | <u>Power</u>                  |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | <u>Agriculture/Irrigation</u> |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      |                               | <b>TOTAL FLOW – NODE 10</b>  | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.01</b> | <b>0.01</b> | <b>0.02</b> | <b>0.02</b> | <b>0.04</b> |
| <b>Ninety-nine Islands Dam (99I)</b> | <u>Public Water Supply</u>    |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | <u>Industry</u>               |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | <u>Power</u>                  |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | <u>Agriculture/Irrigation</u> |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      |                               | <b>TOTAL FLOW – NODE 99I</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |
| <b>Node 11</b>                       | <u>Public Water Supply</u>    |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | None                          |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                                      | <u>Industry</u>               |                              | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                                      | New Industrial                |                              | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                                      | <u>Power</u>                  |                              | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin      | Entity                        | Facility                    | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|----------------|-------------------------------|-----------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                |                               |                             | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Agriculture/Irrigation</u> |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | Sub-Basin Wide Demand         |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                |                               | <b>TOTAL FLOW – NODE 11</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.07</b> | <b>0.10</b> | <b>0.14</b> | <b>0.19</b> | <b>0.27</b> | <b>0.37</b> |
| <b>Node 12</b> |                               |                             |                  |             |             |             |                 |             |             |             |             |             |             |
|                | <u>Public Water Supply</u>    |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Industry</u>               |                             | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                | New Industrial                |                             | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                | <u>Power</u>                  |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Agriculture/Irrigation</u> |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | Sub-Basin Wide Demand         |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                |                               | <b>TOTAL FLOW – NODE 12</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.07</b> | <b>0.10</b> | <b>0.14</b> | <b>0.19</b> | <b>0.27</b> | <b>0.37</b> |
| <b>Node 14</b> |                               |                             |                  |             |             |             |                 |             |             |             |             |             |             |
|                | <u>Public Water Supply</u>    |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Industry</u>               |                             | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                | New Industrial                |                             | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                | <u>Power</u>                  |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | None                          |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Agriculture/Irrigation</u> |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | Sub-Basin Wide Demand         |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                |                               | <b>TOTAL FLOW – NODE 14</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.07</b> | <b>0.10</b> | <b>0.14</b> | <b>0.19</b> | <b>0.27</b> | <b>0.37</b> |
| <b>Node 15</b> |                               |                             |                  |             |             |             |                 |             |             |             |             |             |             |
|                | <u>Public Water Supply</u>    |                             |                  |             |             |             |                 |             |             |             |             |             |             |
|                | SWS/SSSD                      | Fairforest Plant            | 12.86            | 10.72       | 9.44        | 9.47        | 10.23           | 11.16       | 12.16       | 13.26       | 14.39       | 15.61       | 16.94       |
|                | SWS/SSSD                      | Fingerville                 | n/a              | 0.00        | 0.00        | 0.00        | 0.00            | 0.00        | 0.00        | 0.01        | 0.01        | 0.01        | 0.01        |
|                | SWS/SSSD                      | Chesnee                     | 0.22             | 0.15        | 0.16        | 0.16        | 0.18            | 0.19        | 0.21        | 0.23        | 0.25        | 0.27        | 0.29        |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin      | Entity                                     | Facility                         | Historical Flows |              |              |              | Projected Flows |              |              |              |              |              |              |
|----------------|--|----------------------------------|------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                |  |                                  | 1995             | 2000         | 2005         | 2006         | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
|                | SWS/SSSD                                   | Clifton Converse                 | 0.11             | 0.16         | 0.15         | 0.13         | 0.15            | 0.16         | 0.17         | 0.19         | 0.20         | 0.22         | 0.24         |
|                | SWS/SSSD                                   | Cowpens                          | 0.27             | 0.20         | 0.20         | 0.18         | 0.20            | 0.21         | 0.23         | 0.26         | 0.28         | 0.30         | 0.33         |
|                | SWS/SSSD                                   | Idlewood                         | 0.03             | 0.03         | 0.03         | 0.02         | 0.03            | 0.03         | 0.03         | 0.03         | 0.04         | 0.04         | 0.04         |
|                | SWS/SSSD                                   | Pacolet Mills                    | 0.08             | 0.06         | 0.10         | 0.14         | 0.15            | 0.16         | 0.18         | 0.19         | 0.21         | 0.23         | 0.25         |
|                | SWS/SSSD                                   | Landrum-Page Creek               | 0.00             | 0.29         | 0.39         | 0.35         | 0.37            | 0.41         | 0.44         | 0.48         | 0.53         | 0.57         | 0.62         |
|                | SWS/SSSD                                   | Spartanburg Water System / Simms | 0.00             | 0.00         | 0.00         | 0.00         | 0.00            | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
|                | Town of Tryon                              | Tryon WWTP                       | 0.72             | 0.44         | 0.42         | 0.33         | 0.38            | 0.42         | 0.47         | 0.51         | 0.56         | 0.60         | 0.66         |
|                | City of Inman (Inman Mills Water District) | Inman Wastewater Laboratories    | 0.35             | 0.36         | 0.41         | 0.37         | 0.40            | 0.44         | 0.48         | 0.52         | 0.57         | 0.62         | 0.67         |
|                | City of Inman (Inman Mills Water District) | Lawson Fork Creek WWTP           | 0.15             | 0.11         | 0.06         | 0.04         | 0.04            | 0.05         | 0.05         | 0.06         | 0.06         | 0.07         | 0.07         |
|                | <b><u>Industry</u></b>                     |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Milliken                                   | Dewey                            | 0.19             | 0.19         | 0.21         | 0.19         | 0.19            | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         |
|                | Invista Sartl                              | Invista S.A.R.L./Spartanburg     | 0.71             | 0.75         | 0.70         | 0.72         | 0.72            | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         |
|                | New Industrial                             |                                  | n/a              | n/a          | n/a          | n/a          | 0.05            | 0.07         | 0.10         | 0.14         | 0.19         | 0.27         | 0.37         |
|                | <b><u>Power</u></b>                        |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                                       |                                  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <b><u>Agriculture/Irrigation</u></b>       |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide Demand                      |                                  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <b>TOTAL FLOW – NODE 15</b>                |                                  | <b>15.69</b>     | <b>13.47</b> | <b>12.28</b> | <b>12.12</b> | <b>13.10</b>    | <b>14.22</b> | <b>15.44</b> | <b>16.79</b> | <b>18.18</b> | <b>19.71</b> | <b>21.40</b> |
| <b>Node 13</b> |  |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | <b><u>Public Water Supply</u></b>          |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Gaffney Board of Public Works              | Clary WWTF                       | 2.71             | 2.71         | 2.77         | 2.43         | 4.71            | 5.50         | 6.08         | 6.71         | 7.41         | 8.19         | 9.05         |
|                | <b><u>Industry</u></b>                     |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | New Industrial                             |                                  | n/a              | n/a          | n/a          | n/a          | 0.05            | 0.07         | 0.10         | 0.14         | 0.19         | 0.27         | 0.37         |
|                | <b><u>Power</u></b>                        |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | None                                       |                                  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                | <b><u>Agriculture/Irrigation</u></b>       |                                  |                  |              |              |              |                 |              |              |              |              |              |              |
|                | Sub-Basin Wide                             |                                  | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                | Entity                        | Facility                        | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|--------------------------|-------------------------------|---------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                          |                               |                                 | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                          | Demand                        |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          |                               | <b>TOTAL FLOW –<br/>NODE 13</b> | <b>2.71</b>      | <b>2.71</b> | <b>2.77</b> | <b>2.43</b> | <b>4.76</b>     | <b>5.57</b> | <b>6.17</b> | <b>6.85</b> | <b>7.60</b> | <b>8.45</b> | <b>9.42</b> |
| <b>Node 16</b>           |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | New Industrial                |                                 | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                          | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | Sub-Basin Wide Demand         |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          |                               | <b>TOTAL FLOW –<br/>NODE 16</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.07</b> | <b>0.10</b> | <b>0.14</b> | <b>0.19</b> | <b>0.27</b> | <b>0.37</b> |
| <b>Lockhart Dam (LD)</b> |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          | <u>Agriculture/Irrigation</u> |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | Sub-Basin Wide Demand         |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          |                               | <b>TOTAL FLOW –<br/>NODE LD</b> | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |
| <b>Node 17</b>           |                               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | <u>Public Water Supply</u>    |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                          | <u>Industry</u>               |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | New Industrial                |                                 | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                          | <u>Power</u>                  |                                 |                  |             |             |             |                 |             |             |             |             |             |             |
|                          | None                          |                                 | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin   | Entity | Facility                    | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|---|--------|-----------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|   |        |                             | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
| <b><u>Agriculture/Irrigation</u></b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| Sub-Basin Wide Demand   |        |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE 17</b>   |        |                             | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.07</b> | <b>0.10</b> | <b>0.14</b> | <b>0.19</b> | <b>0.27</b> | <b>0.37</b> |
| <b>Node 18</b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| <b><u>Public Water Supply</u></b>   |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| City of Union   |        | Meng Creek WWTP             | 0.36             | 0.28        | 0.26        | 0.25        | 0.25            | 0.26        | 0.26        | 0.27        | 0.27        | 0.28        | 0.28        |
| (Lockhart WTF) Total Environmental Solutions, Inc. (Contractor: Kace Environmental) |        | Lockhart Treatment Facility | 0.17             | 0.09        | 0.09        | 0.29        | 0.29            | 0.30        | 0.30        | 0.31        | 0.32        | 0.32        | 0.33        |
| <b><u>Industry</u></b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| New Industrial  |        |                             | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
| <b><u>Power</u></b>   |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| None  |        |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b><u>Agriculture/Irrigation</u></b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| Sub-Basin Wide Demand   |        |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE 18</b>   |        |                             | <b>0.54</b>      | <b>0.37</b> | <b>0.35</b> | <b>0.53</b> | <b>0.59</b>     | <b>0.62</b> | <b>0.66</b> | <b>0.71</b> | <b>0.78</b> | <b>0.86</b> | <b>0.98</b> |
| <b>Neal Shoals Dam (NSD)</b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| <b><u>Public Water Supply</u></b>   |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| None  |        |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b><u>Industry</u></b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| None  |        |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b><u>Power</u></b>   |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| None  |        |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b><u>Agriculture/Irrigation</u></b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |
| Sub-Basin Wide Demand   |        |                             | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE NSD</b>  |        |                             | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |
| <b>Node 19</b>  |        |                             |                  |             |             |             |                 |             |             |             |             |             |             |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                            | Entity                 | Facility              | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|--------------------------------------|------------------------|-----------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                      |                        |                       | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
| <b><u>Public Water Supply</u></b>    |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | None                   |                       | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b><u>Industry</u></b>               |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | Cone Mills Corp        | Carlisle Plant        | 1.61             | 2.56        | 1.50        | 1.21        | 1.21            | 1.21        | 1.21        | 1.21        | 1.21        | 1.21        | 1.21        |
|                                      | New Industrial         |                       | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
| <b><u>Power</u></b>                  |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | None                   |                       | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b><u>Agriculture/Irrigation</u></b> |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | Sub-Basin Wide Demand  |                       | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE 19</b>          |                        |                       | <b>1.61</b>      | <b>2.56</b> | <b>1.50</b> | <b>1.21</b> | <b>1.26</b>     | <b>1.28</b> | <b>1.31</b> | <b>1.35</b> | <b>1.40</b> | <b>1.48</b> | <b>1.58</b> |
| <b>Node 20</b>                       |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
| <b><u>Public Water Supply</u></b>    |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | Chester Sewer District | Sandy River WWTF      | 1.04             | 1.18        | 0.87        | 0.87        | 0.91            | 0.95        | 0.99        | 1.04        | 1.08        | 1.13        | 1.18        |
| <b><u>Industry</u></b>               |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | New Industrial         |                       | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
| <b><u>Power</u></b>                  |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | None                   |                       | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b><u>Agriculture/Irrigation</u></b> |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | Sub-Basin Wide Demand  |                       | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW – NODE 20</b>          |                        |                       | <b>1.04</b>      | <b>1.18</b> | <b>0.87</b> | <b>0.87</b> | <b>0.96</b>     | <b>1.02</b> | <b>1.09</b> | <b>1.17</b> | <b>1.27</b> | <b>1.40</b> | <b>1.55</b> |
| <b>Node 21</b>                       |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
| <b><u>Public Water Supply</u></b>    |                        |                       |                  |             |             |             |                 |             |             |             |             |             |             |
|                                      | SWS/SSSD               | Carolina Country Club | 0.03             | 0.04        | 0.03        | 0.03        | 0.03            | 0.04        | 0.04        | 0.04        | 0.05        | 0.05        | 0.06        |
|                                      | SWS/SSSD               | Lower North Tyger     | 0.02             | 0.02        | 0.94        | 0.96        | 1.04            | 1.13        | 1.24        | 1.35        | 1.46        | 1.59        | 1.72        |
|                                      | SWS/SSSD               | South Tyger River     | 0.02             | 0.00        | 0.04        | 0.05        | 0.05            | 0.06        | 0.06        | 0.07        | 0.07        | 0.08        | 0.08        |
|                                      | City of Union          | Bellline WWTP         | 0.13             | 0.12        | 0.09        | 0.09        | 0.09            | 0.09        | 0.09        | 0.09        | 0.09        | 0.10        | 0.10        |
|                                      | City of Union          | Tosch Creek WWTP      | 1.85             | 1.20        | 1.19        | 0.99        | 1.01            | 1.03        | 1.05        | 1.08        | 1.10        | 1.12        | 1.14        |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin      | Entity                                | Facility  | Historical Flows |             |             |             | Projected Flows |             |             |             |             |              |              |
|----------------|---------------------------------------|---|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|--------------|--------------|
|                |                                       |   | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065         | 2075         |
|                | Greer CPW (Commision of Public Works) | Maple Creek WWTP (Include Historical South Tyger) | 2.16             | 1.89        | 2.06        | 1.91        | 2.08            | 2.29        | 2.52        | 2.77        | 3.00        | 3.26         | 3.54         |
|                | Town of Lyman                         | Lyman WWTP  | 2.22             | 1.73        | 1.43        | 1.52        | 1.64            | 1.79        | 1.95        | 2.12        | 2.30        | 2.50         | 2.71         |
|                | SC Department of Corrections          | Tyger River Correction                            | 0.21             | 0.15        | 0.18        | 0.16        | 0.20            | 0.20        | 0.22        | 0.24        | 0.26        | 0.28         | 0.30         |
|                | <b><u>Industry</u></b>                |   |                  |             |             |             |                 |             |             |             |             |              |              |
|                | Spartan Mills Startext                | Spartan Mills/Startext Mill                       | 0.36             | 0.07        | 0.17        | 0.14        | 0.18            | 0.25        | 0.33        | 0.45        | 0.60        | 0.81         | 1.08         |
|                | SC-DHEC                               | I-85 Distribution Site                            | n/a              | 0.11        | 0.13        | 0.09        | 0.13            | 0.13        | 0.13        | 0.13        | 0.13        | 0.13         | 0.13         |
|                | New Industrial                        |   | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27         | 0.37         |
|                | <b><u>Power</u></b>                   |   |                  |             |             |             |                 |             |             |             |             |              |              |
|                | None                                  |   | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a          | n/a          |
|                | <b><u>Agriculture/Irrigation</u></b>  |   |                  |             |             |             |                 |             |             |             |             |              |              |
|                | Sub-Basin Wide Demand                 |   | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a          | n/a          |
|                | <b>TOTAL FLOW – NODE 21</b>           |   | <b>6.99</b>      | <b>5.33</b> | <b>6.27</b> | <b>5.94</b> | <b>6.50</b>     | <b>7.06</b> | <b>7.72</b> | <b>8.46</b> | <b>9.25</b> | <b>10.17</b> | <b>11.24</b> |
| <b>Node 22</b> |                                       |   |                  |             |             |             |                 |             |             |             |             |              |              |
|                | <b><u>Public Water Supply</u></b>     |   |                  |             |             |             |                 |             |             |             |             |              |              |
|                | WCRSA                                 | Taylor's WWTP                                     | 2.81             | 3.36        | 3.57        | 3.25        | 4.01            | 4.30        | 4.61        | 4.94        | 5.30        | 5.68         | 6.09         |
|                | WCRSA                                 | Pelham WWTP                                       | 5.36             | 5.45        | 6.02        | 5.68        | 7.00            | 7.51        | 8.05        | 8.63        | 9.26        | 9.92         | 10.64        |
|                | WCRSA                                 | Gilder Creek WWTP                                 | 2.57             | 3.25        | 3.79        | 3.71        | 4.58            | 4.91        | 5.26        | 5.64        | 6.05        | 6.49         | 6.95         |
|                | WCRSA                                 | Durbin Creek WWTP                                 | 1.39             | 1.38        | 1.58        | 1.42        | 1.75            | 1.87        | 2.01        | 2.15        | 2.31        | 2.48         | 2.66         |
|                | Town of Woodruff                      | Woodruff/Enoree River                             | 0.45             | 0.34        | 0.33        | 0.31        | 0.34            | 0.37        | 0.40        | 0.44        | 0.47        | 0.51         | 0.56         |
|                | <b><u>Industry</u></b>                |   |                  |             |             |             |                 |             |             |             |             |              |              |
|                | General Electric Gas Turbines         | GE/Gas Turbine MFG Operation                      | 0.25             | 0.26        | 0.13        | 0.12        | 0.15            | 0.21        | 0.28        | 0.38        | 0.52        | 0.70         | 0.95         |



Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin                    | Entity                                    | Facility           | Historical Flows |              |              |              | Projected Flows |              |              |              |              |              |              |
|------------------------------|---|--------------------|------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                              |   |                    | 1995             | 2000         | 2005         | 2006         | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
|                              | New Industrial                            |                    | n/a              | n/a          | n/a          | n/a          | 0.05            | 0.07         | 0.10         | 0.14         | 0.19         | 0.27         | 0.37         |
|                              | <u>Power</u>                              |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | None                                      |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <u>Agriculture/Irrigation</u>             |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | Sub-Basin Wide Demand                     |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <b>TOTAL FLOW – NODE 22</b>               |                    | <b>12.83</b>     | <b>14.05</b> | <b>15.41</b> | <b>14.48</b> | <b>17.88</b>    | <b>19.23</b> | <b>20.71</b> | <b>22.33</b> | <b>24.10</b> | <b>26.05</b> | <b>28.23</b> |
| <b>Node 23</b>               |   |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | <u>Public Water Supply</u>                |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | None                                      |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <u>Industry</u>                           |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | New Industrial                            |                    | n/a              | n/a          | n/a          | n/a          | 0.05            | 0.07         | 0.10         | 0.14         | 0.19         | 0.27         | 0.37         |
|                              | <u>Power</u>                              |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | None                                      |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <u>Agriculture/Irrigation</u>             |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | Sub-Basin Wide Demand                     |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <b>TOTAL FLOW – NODE 23</b>               |                    | <b>0.00</b>      | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.05</b>     | <b>0.07</b>  | <b>0.10</b>  | <b>0.14</b>  | <b>0.19</b>  | <b>0.27</b>  | <b>0.37</b>  |
| <b>Parr Shoals Dam (PSD)</b> |   |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | <u>Public Water Supply</u>                |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | Newberry County Water and Sewer Authority | Cannon's Creek WTP | n/a              | 0.15         | 0.23         | 0.26         | 0.31            | 0.38         | 0.40         | 0.42         | 0.45         | 0.47         | 0.49         |
|                              | <u>Industry</u>                           |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | None                                      |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <u>Power</u>                              |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | None                                      |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <u>Agriculture/Irrigation</u>             |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | Sub-Basin Wide Demand                     |                    | n/a              | n/a          | n/a          | n/a          | n/a             | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          |
|                              | <b>TOTAL FLOW – NODE PSD</b>              |                    | <b>0.00</b>      | <b>0.15</b>  | <b>0.23</b>  | <b>0.26</b>  | <b>0.31</b>     | <b>0.38</b>  | <b>0.40</b>  | <b>0.42</b>  | <b>0.45</b>  | <b>0.47</b>  | <b>0.49</b>  |
| <b>Fairfield Dam (FD)</b>    |   |                    |                  |              |              |              |                 |              |              |              |              |              |              |
|                              | <u>Public Water Supply</u>                |                    |                  |              |              |              |                 |              |              |              |              |              |              |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin      | Entity                        | Facility                             | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|----------------|-------------------------------|--------------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                |                               |                                      | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
|                | None                          |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Industry</u>               |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | None                          |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Power</u>                  |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | None                          |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Agriculture/Irrigation</u> |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | Sub-Basin Wide Demand         |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                |                               | <b>TOTAL FLOW – NODE FD</b>          | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |
| <b>Node 24</b> | <u>Public Water Supply</u>    |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | None                          |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Industry</u>               |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | New Industrial                |                                      | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                | <u>Power</u>                  |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | None                          |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Agriculture/Irrigation</u> |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | Sub-Basin Wide Demand         |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                |                               | <b>TOTAL FLOW – NODE 24</b>          | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b>     | <b>0.07</b> | <b>0.10</b> | <b>0.14</b> | <b>0.19</b> | <b>0.27</b> | <b>0.37</b> |
| <b>Node 25</b> | <u>Public Water Supply</u>    |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | Town of Winnsboro             | Winnsboro/Jackson Creek Plant (WWTP) | 0.71             | 0.83        | 0.77        | 0.79        | 0.87            | 0.98        | 1.04        | 1.10        | 1.16        | 1.23        | 1.30        |
|                | <u>Industry</u>               |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | New Industrial                |                                      | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
|                | <u>Power</u>                  |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | None                          |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
|                | <u>Agriculture/Irrigation</u> |                                      |                  |             |             |             |                 |             |             |             |             |             |             |
|                | Sub-Basin Wide Demand         |                                      | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |

Table C-2. Broad River Basin Returns - Summary Sheet (in mgd)

| Sub-Basin   | Entity                | Facility                         | Historical Flows |             |             |             | Projected Flows |             |             |             |             |             |             |
|---|-----------------------|----------------------------------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|   |                       |                                  | 1995             | 2000        | 2005        | 2006        | 2015            | 2025        | 2035        | 2045        | 2055        | 2065        | 2075        |
| <b>TOTAL FLOW –<br/>NODE 25</b>   |                       |                                  | <b>0.71</b>      | <b>0.83</b> | <b>0.77</b> | <b>0.79</b> | <b>0.92</b>     | <b>1.05</b> | <b>1.13</b> | <b>1.23</b> | <b>1.35</b> | <b>1.49</b> | <b>1.67</b> |
| <b>Node 26</b>  |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
| <u><b>Public Water Supply</b></u>                                       |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | Town of Chapin        | Chapin Sewage System             | 0.15             | 0.23        | 0.42        | 0.42        | 0.48            | 0.55        | 0.63        | 0.72        | 0.78        | 0.85        | 0.92        |
|   | Richland County       | Richland County Broad River WWTF | 0.00             | 1.08        | 1.42        | 1.49        | 1.58            | 1.74        | 1.93        | 2.13        | 2.31        | 2.51        | 2.72        |
| <u><b>Industry</b></u>  |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | New Industrial        |                                  | n/a              | n/a         | n/a         | n/a         | 0.05            | 0.07        | 0.10        | 0.14        | 0.19        | 0.27        | 0.37        |
| <u><b>Power</b></u>   |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | None                  |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <u><b>Agriculture/Irrigation</b></u>                                    |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | Sub-Basin Wide Demand |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW –<br/>NODE 26</b>   |                       |                                  | <b>0.15</b>      | <b>1.32</b> | <b>1.85</b> | <b>1.91</b> | <b>2.10</b>     | <b>2.36</b> | <b>2.65</b> | <b>2.99</b> | <b>3.28</b> | <b>3.62</b> | <b>4.01</b> |
| <b>Columbia Canal Diversion Dam (CCDD)</b>                              |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
| <u><b>Public Water Supply</b></u>                                       |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | None                  |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <u><b>Industry</b></u>  |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | None                  |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <u><b>Power</b></u>   |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | None                  |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <u><b>Agriculture/Irrigation</b></u>                                    |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
|   | Sub-Basin Wide Demand |                                  | n/a              | n/a         | n/a         | n/a         | n/a             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| <b>TOTAL FLOW –<br/>NODE CCDD</b>                                       |                       |                                  | <b>0.00</b>      | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>     | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |
| <b>NOTE</b>   |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
| <b>S:</b>   |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |
| 1. New industrial returns are set at 50% of new industrial withdrawals. |                       |                                  |                  |             |             |             |                 |             |             |             |             |             |             |



**APPENDIX D:**

**PUBLIC WATER SUPPLY AND INDUSTRY  
WITHDRAWAL AND RETURN DETAIL SHEETS**

## WATER USER INDEX

| Beginning Page No. | Public Water System Users                          | Facilities  | ID No.    |
|--------------------|--|---|-----------|
| 122                | Broad River Water Authority                        | BRWA WTP  | 42-W      |
| 71                 | Chester Sewer District                             | Sandy River WWTF                                  | 12-R      |
| 51                 | City of Clinton                                    | City of Clinton WTP                               | 8-W       |
| 86                 | City of Columbia                                   | Columbia Canal WTP                                | 18-W      |
| 97                 | City of Inman (Inman Mills Water District)         | Inman Wastewater Laboratories                     | 29(IWL)-R |
| 99                 | City of Inman (Inman Mills Water District)         | Lawson Fork Creek WWTP                            | 29(LFC)-R |
| 146                | City of Saluda                                     | Saluda WWTP                                       | 52-R      |
| 126                | City of Shelby                                     | First Broad River WWTP                            | 43-R      |
| 124                | City of Shelby                                     | Shelby WTP  | 43-W      |
| 67                 | City of Union                                      | Beltline WWTP                                     | 11(B)-R   |
| 63                 | City of Union                                      | City of Union WTP                                 | 11-W      |
| 65                 | City of Union                                      | Meng Creek WWTP                                   | 11(M)-R   |
| 69                 | City of Union                                      | Tosch Creek WWTP                                  | 11(T)-R   |
| 5                  | City of York                                       | City of York WTP (Turkey)                         | 3-W       |
| 132                | Cleveland County Sanitary District                 | Cleveland County SD WTP                           | 45-W      |
| 116                | Gaffney Board of Public Works                      | Broad River WWTP                                  | 15(BR)-R  |
| 81                 | Gaffney Board of Public Works                      | Clary WWTF  | 15-R      |
| 114                | Gaffney Board of Public Works                      | Cherokee/Victor Gaffney WTPs                      | 15-W      |
| 77                 | Greer Commission of Public Works                   | City of Greer CPW WTP                             | 14-W      |
| 79                 | Greer Commission of Public Works                   | Maple Creek WWTP (Include Historical South Tyger) | 14-R      |
| 120                | Kings Mountain                                     | Pilot Creek WWTP                                  | 41-R      |
| 118                | Kings Mountain                                     | TJ Ellison WTP                                    | 41-W      |
| 88                 | Lockhart WTF (Total Environmental Solutions, Inc.) | Lockhart Treatment Facility                       | 19-R      |
| 1                  | Newberry County Water and Sewer Authority          | Cannon's Creek WTP                                | 1-R       |
| 148                | Polk County - Future Water System                  | Polk County - Future Water System                 | 53-W      |
| 53                 | Richland County                                    | Richland County Broad River WWTF                  | 9-R       |
| 101                | SC Department of Corrections                       | Tyger River Correction                            | 32-R      |
| 49                 | SJWD Water District                                | SJWD WTP  | 7-W       |
| 13                 | Spartanburg Water System / Sanitary Sewer District | Blalock WTP                                       | 6(B)-W    |
| 29                 | Spartanburg Water System / Sanitary Sewer District | Carolina Country Club                             | 6(CL)-R   |
| 31                 | Spartanburg Water System / Sanitary Sewer District | Chesnee   | 6(CHS)-R  |
| 33                 | Spartanburg Water System / Sanitary Sewer District | Clifton Converse                                  | 6(CV)-R   |
| 35                 | Spartanburg Water System / Sanitary Sewer District | Cowpens   | 6(CW)-R   |
| 17                 | Spartanburg Water System / Sanitary Sewer District | Fairforest Plant                                  | 6(FF)-R   |
| 21                 | Spartanburg Water System / Sanitary Sewer District | Fingerville                                       | 6(FV)-R   |
| 23                 | Spartanburg Water System / Sanitary Sewer District | Highway 101                                       | 6(101)-Ro |
| 37                 | Spartanburg Water System / Sanitary Sewer District | Idlewood  | 6(IW)-R   |
| 11                 | Spartanburg Water System / Sanitary Sewer District | Landrum WTP                                       | 6(L)-W    |
| 43                 | Spartanburg Water System / Sanitary Sewer District | Landrum-Page Creek                                | 6(L-PC)-R |
| 19                 | Spartanburg Water System / Sanitary Sewer District | Lawson Fork Plant                                 | 6(LF)-Ro  |
| 39                 | Spartanburg Water System / Sanitary Sewer District | Lower North Tyger                                 | 6(LNT)-R  |
| 25                 | Spartanburg Water System / Sanitary Sewer District | Marilyndale                                       | 6(MD)-Ro  |
| 41                 | Spartanburg Water System / Sanitary Sewer District | Pacolet Mills                                     | 6(PM)-R   |
| 15                 | Spartanburg Water System / Sanitary Sewer District | Simms WTP   | 6(S)-W    |
| 45                 | Spartanburg Water System / Sanitary Sewer District | South Tyger River                                 | 6(STR)-R  |
| 47                 | Spartanburg Water System / Sanitary Sewer District | Spartanburg Water System / Simms                  | 6(SWS)-   |

|     |  |                                      |                   |
|-----|--|--------------------------------------|-------------------|
| 27  | Spartanburg Water System / Sanitary Sewer District | Tim's Creek                          | R<br>6(TC)-<br>Ro |
| 142 | Town of Boiling Springs                            | Boiling Springs WWTP                 | 50-R              |
| 3   | Town of Chapin                                     | Chapin Sewage System                 | 2-R               |
| 140 | Town of Columbus                                   | Columbus WWTP                        | 49-R              |
| 128 | Town of Forest City                                | Forest City WTP                      | 44-W              |
| 130 | Town of Forest City                                | Riverside Drive WRF                  | 44-R              |
| 144 | Town of Grover                                     | Grover WWTP                          | 51-R              |
| 138 | Town of Lake Lure                                  | Lake Lure WWTP                       | 48-R              |
| 95  | Town of Lyman                                      | Lyman WWTP                           | 28-R              |
| 136 | Town of Rutherfordton                              | Rutherfordton WWTP                   | 47-R              |
| 134 | Town of Spindale                                   | Spindale WWTP                        | 46-R              |
| 73  | Town of Tryon                                      | Tryon WTP                            | 13-W              |
| 75  | Town of Tryon                                      | Tryon WWTP                           | 13-R              |
| 90  | Town of Whitmire                                   | Town of Whitmire WTP                 | 23-W              |
| 7   | Town of Winnsboro                                  | Winnsboro WTP                        | 4-W               |
| 9   | Town of Winnsboro                                  | Winnsboro/Jackson Creek Plant (WWTP) | 4-R               |
| 103 | Town of Woodruff                                   | Woodruff/Enoree River                | 33-R              |
| 61  | Western Carolina Regional Sewer Authority          | Durbin Creek WWTP                    | 10(DC)-<br>R      |
| 59  | Western Carolina Regional Sewer Authority          | Gilder Creek WWTP                    | 10(GC)-<br>R      |
| 57  | Western Carolina Regional Sewer Authority          | Pelham WWTP                          | 10(P)-R           |
| 55  | Western Carolina Regional Sewer Authority          | Taylors WWTP                         | 10(T)-R           |

| Beginning<br>Page No. | Industrial Users              | Facilities                   | ID No. |
|-----------------------|-------------------------------|------------------------------|--------|
| 109                   | CNA Holdings                  | Shelby Plant                 | 37-W   |
| 110                   | CNA Holdings                  | Shelby Plant                 | 37-R   |
| 85                    | Cone Mills - Water            | Carlisle Plant               | 17-W   |
| 84                    | Cone Mills Corp               | Carlisle Plant               | 17-R   |
| 112                   | Cone Mills, Inc.              | Cliffside Plant              | 39-R   |
| 111                   | Dan River Inc.                | Harris Plant                 | 38-R   |
| 94                    | General Electric Gas Turbines | GE/Gas Turbine MFG Operation | 27-R   |
| 106                   | Grover Industries             | Grover Plant                 | 35-R   |
| 93                    | Invista Sarl                  | Invista S.A.R.L./Spartanburg | 26-R   |
| 83                    | Milliken                      | Dewey                        | 16-R   |
| 107                   | Milliken                      | Magnolia Plant               | 36-W   |
| 108                   | Milliken                      | Magnolia Plant               | 36-R   |
| 113                   | PPG Industries                | Cliffside Plant              | 40-R   |
| 105                   | SC-DHEC                       | I-85 Distribution Site       | 34-R   |
| 92                    | Spartan Mills Startext        | Spartan Mills/Startext Mill  | 25-R   |

ID No. 1-R Category Public Water Supply  
 Entity Newberry County Water and Sewer Authority Type Return  
 Facility Cannon's Creek WTP  
 Contact Brent Richardson

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | n/a        |
| 2001                | 0.15       |
| 2005                | 0.23       |
| 2006                | 0.26       |

| Month | Monthly Average Flow (mgd) |       |       |       |
|-------|----------------------------|-------|-------|-------|
|       | Flow (mgd)                 |       |       |       |
|       | 2001                       | 2005  | 2006  | 2007  |
| Jan   | 0.158                      | 0.243 | 0.231 | 0.323 |
| Feb   | 0.147                      | 0.314 | 0.245 | 0.226 |
| Mar   | 0.224                      | 0.266 | 0.247 | 0.246 |
| Apr   | 0.153                      | 0.252 | 0.226 | 0.21  |
| May   | 0.133                      | 0.213 | 0.196 | 0.216 |
| Jun   | 0.166                      | 0.261 | 0.266 | 0.256 |
| Jul   | 0.15                       | 0.197 | 0.217 | 0.213 |
| Aug   | 0.132                      | 0.183 | 0.277 | n/a   |
| Sep   | 0.142                      | 0.149 | 0.294 | n/a   |
| Oct   | 0.139                      | 0.19  | 0.252 | n/a   |
| Nov   | 0.137                      | 0.179 | 0.297 | n/a   |
| Dec   | 0.131                      | 0.265 | 0.344 | n/a   |

**Data Sources**  
 1. Obtained from entity.

\*See Analysis Notes regarding use of Saluda River Basin flows.

| Residential Customers Served |               |            |           |            |
|------------------------------|---------------|------------|-----------|------------|
| Year-->                      | 2006          |            | Year?     |            |
| Grouping                     | Customers     | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  | 400           |            |           |            |
| Commercial                   | 50            |            |           |            |
| Industrial                   | w/ Commercial |            |           |            |
| Institutional                |               |            |           |            |
| Wholesale                    |               |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 2.00% | 2007-2025. See Analysis Notes. |
| Residential        | 0.62% | 2026-2045. See Analysis Notes. |
| Residential        | 0.50% | 2046-2075. See Analysis Notes. |
| Institutional      |       |                                |
| Wholesale          |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |             |            |               |           |           |
|---------------------------|-------------|-------------|------------|---------------|-----------|-----------|
| Year                      | Category    |             |            |               |           |           |
|                           | Residential | Commercial  | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |             |            |               |           |           |
| 2025                      |             |             |            |               |           |           |
| 2035                      |             |             |            |               |           |           |
| 2045                      |             |             |            |               |           |           |
| 2055                      |             |             |            |               |           |           |
| 2065                      |             |             |            |               |           |           |
| 2075                      |             |             |            |               |           |           |
| AGR                       | 0.02        | 0.006152258 | 0.005      | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.31       |
| 2025                | 0.38       |
| 2035                | 0.40       |
| 2045                | 0.42       |
| 2055                | 0.45       |
| 2065                | 0.47       |
| 2075                | 0.49       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.01        |
| Feb                  | 1.10        |
| Mar                  | 1.21        |
| Apr                  | 1.00        |
| May                  | 0.86        |
| Jun                  | 1.10        |
| Jul                  | 0.90        |
| Aug                  | 0.92        |
| Sep                  | 0.91        |
| Oct                  | 0.91        |
| Nov                  | 0.95        |
| Dec                  | 1.13        |

| Analysis Notes  |
|---|
| 1. January 2001 through January 2006 discharges were to the Saluda River Basin (SRB) . Flows to SRB were discontinued and diverted to Broad River Basin. Historical SRB are used here for projecting purposes as they represent the base flow for current discharges from the NCWSA.  |
| 2. NCWSA serves Newberry County areas outside of the City of Newberry. Water supply source is Lake Murray. Discharge location is Cannon Creek in Broad River Basin.   |
| 3. Current WWTP capacity is 950,000 gpd. Future plan is for 2.5 MGD with buildout anticipated within approximately 15 years (2022).   |
| 4 . The county AGR of 0.62 percent generated from the South Carolina Budget and Control Board, Office of Research and Statistics data is lower than the 2 to 3 percent suggested by NCWSA staff. For this analysis analysis 2 percent is used through 2025, the Newberry County rate of 0.62 percent is used from 2026-2035, and a rate of 0.5 percent is used for 2036 through 2075. |
| 5. Base year is 2006  |
|   |
|   |
|   |

|                 |                              |                 |                     |
|-----------------|------------------------------|-----------------|---------------------|
| <b>ID No.</b>   | 2-R                          | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | Town of Chapin               | <b>Type</b>     | Return              |
| <b>Facility</b> | Chapin Sewage System         |                 |                     |
| <b>Contact</b>  | E.A. Services (Keith Murphy) |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.15       |
| 2000                | 0.23       |
| 2005                | 0.42       |
| 2006                | 0.42       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.18       | 0.27 | 0.39 | 0.44 |
| Feb                        | 0.23       | 0.24 | 0.46 | 0.45 |
| Mar                        | 0.15       | 0.24 | 0.47 | 0.41 |
| Apr                        | 0.11       | 0.20 | 0.43 | 0.37 |
| May                        | 0.13       | 0.20 | 0.39 | 0.36 |
| Jun                        | 0.15       | 0.19 | 0.41 | 0.42 |
| Jul                        | 0.10       | 0.25 | 0.38 | 0.39 |
| Aug                        | 0.15       | 0.22 | 0.42 | 0.43 |
| Sep                        | 0.13       | 0.31 | 0.36 | 0.44 |
| Oct                        | 0.15       | 0.20 | 0.51 | 0.40 |
| Nov                        | 0.15       | 0.25 | 0.39 | 0.51 |
| Dec                        | 0.14       | 0.23 | 0.46 | 0.48 |

| Data Sources                   |
|--------------------------------|
| 1. E.A. Services.              |
| 2. Town of Chapin (Marge Lowe) |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | 2007      |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  | 2,417     |            |           |            |
| Commercial                   | 119       |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |  |
|--------------------|-------|--|
| Category           | AGR   | Remarks  |
| Residential        | 1.36% | 2007-2045 Based on Lexington County population data. |
| Residential        | 0.82% | 2046-2075. See analysis notes                        |
| Industrial         |       |  |
| Institutional      |       |  |
| Wholesale          |       |  |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.013560153 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.48       |
| 2025                | 0.55       |
| 2035                | 0.63       |
| 2045                | 0.72       |
| 2055                | 0.78       |
| 2065                | 0.85       |
| 2075                | 0.92       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.08        |
| Feb                  | 1.19        |
| Mar                  | 1.04        |
| Apr                  | 0.88        |
| May                  | 0.88        |
| Jun                  | 0.94        |
| Jul                  | 0.89        |
| Aug                  | 0.99        |
| Sep                  | 1.02        |
| Oct                  | 1.01        |
| Nov                  | 1.06        |
| Dec                  | 1.04        |

| Analysis Notes   |
|--|
| 1. Base year is 2006.  |
| 2. The AGR applied for 2015-2045 is based on county population growth. Subsequent years AGR is reduced to 1%.  |
| 4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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ID No. 3-W Category Public Water Supply  
 Entity City of York Type Withdrawal  
 Facility City of York WTP (Turkey)  
 Contact Terry Montgomery

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.95       |
| 2000                | 1.32       |
| 2005                | 1.09       |
| 2006                | 1.12       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | Flow (mgd)                 |      |      |      |
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.79                       | 0.89 | 1.04 | 1.19 |
| Feb   | 0.82                       | 1.35 | 1.01 | 1.32 |
| Mar   | 0.83                       | 1.43 | 0.84 | 0.91 |
| Apr   | 0.89                       | 1.37 | 0.94 | 0.83 |
| May   | 0.98                       | 1.63 | 1.02 | 1.16 |
| Jun   | 0.97                       | 1.82 | 1.07 | 1.28 |
| Jul   | 0.96                       | 1.70 | 1.07 | 1.34 |
| Aug   | 1.10                       | 1.67 | 1.35 | 1.28 |
| Sep   | 1.00                       | 1.08 | 1.40 | 1.18 |
| Oct   | 0.94                       | 0.96 | 1.29 | 1.05 |
| Nov   | 1.01                       | 0.92 | 1.04 | 0.84 |
| Dec   | 1.10                       | 1.01 | 1.05 | 1.02 |

**Data Sources**  
 1. Obtained from entity.

| Residential Customers Served |                 |            |           |            |
|------------------------------|-----------------|------------|-----------|------------|
| Year-->                      | Year?           |            | Year?     |            |
| Grouping                     | Customers       | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  | 2515            |            |           |            |
| Commercial                   | 401             |            |           |            |
| Industrial                   | (w/ commercial) |            |           |            |
| Institutional                |                 |            |           |            |
| Wholesale                    |                 |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                      |
|--------------------|-------|--------------------------------------|
| Category           | AGR   | Remarks                              |
| Residential        | 1.39% | Based on York County Population Data |
| Commercial         |       |                                      |
| Industrial         |       |                                      |
| Institutional      |       |                                      |
| Wholesale          |       |                                      |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      | --          | --         | --         | --            | --        | --        |
| 2035                      | --          | --         | --         | --            | --        | --        |
| 2045                      | --          | --         | --         | --            | --        | --        |
| 2055                      | --          | --         | --         | --            | --        | --        |
| 2065                      | --          | --         | --         | --            | --        | --        |
| 2075                      | --          | --         | --         | --            | --        | --        |
| AGR                       | 0.01        | --         | --         | --            | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.26       |
| 2025                | --         |
| 2035                | --         |
| 2045                | --         |
| 2055                | --         |
| 2065                | --         |
| 2075                | --         |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.88        |
| Feb                  | 1.00        |
| Mar                  | 0.89        |
| Apr                  | 0.90        |
| May                  | 1.06        |
| Jun                  | 1.13        |
| Jul                  | 1.12        |
| Aug                  | 1.20        |
| Sep                  | 1.05        |
| Oct                  | 0.96        |
| Nov                  | 0.87        |
| Dec                  | 0.95        |

| Analysis Notes |   |
|----------------|---|
| 1.             | City of York is anticipating converting from supplying their own water to purchasing water from the City of Rock Hill within 5 to 10 years. The City of Rock Hill withdraws its water from the Catawba River Basin. Therefore, City of York withdrawals from the Broad River Basin within 5 to 10 years are anticipated to be zero. |
| 2.             | For modeling purposes flows after 2015 are assumed to be zero.  |
|                |   |
|                |   |
|                |   |
|                |   |
|                |   |
|                |   |
|                |   |

**ID No.** 4-W **Category** Public Water Supply  
**Entity** Town of Winnsboro **Type** Withdrawal  
**Facility** Winnsboro WTP  
**Contact** Beth D. Bonds (Town of Winnsboro [winn1@infoave.net])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | n/a        |
| 2000                | 2.21       |
| 2005                | 2.00       |
| 2006                | 1.97       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | Flow (mgd)                 |      |      |      |
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   |                            | 2.20 | 1.96 | 1.69 |
| Feb   |                            | 1.89 | 1.89 | 1.64 |
| Mar   |                            | 1.90 | 1.81 | 1.76 |
| Apr   |                            | 1.82 | 1.89 | 1.97 |
| May   |                            | 2.86 | 1.95 | 2.10 |
| Jun   |                            | 3.06 | 2.02 | 2.30 |
| Jul   |                            | 2.49 | 2.11 | 2.29 |
| Aug   |                            | 2.15 | 2.18 | 2.26 |
| Sep   |                            | 2.12 | 2.35 | 2.03 |
| Oct   |                            | 2.08 | 2.09 | 2.02 |
| Nov   |                            | 1.98 | 1.96 | 1.91 |
| Dec   |                            | 2.04 | 1.79 | 1.69 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Year=>        | Residential Customers Served |            |           |            |
|---------------|------------------------------|------------|-----------|------------|
|               | 2003                         |            | 2004      |            |
| Grouping      | Customers                    | Flow (MGD) | Customers | Flow (MGD) |
| Residential   | 4,169                        | 1.00       | 7,500     | 1.94       |
| Commercial    |                              |            |           |            |
| Industrial    | 27                           | 0.31       | 45        | 0.49       |
| Institutional |                              |            |           |            |
| Wholesale     | 2                            | 0.52       | 2         | 0.65       |

| Unaccounted Flow |            |                  |
|------------------|------------|------------------|
| Years            | Flow (MGD) | Percent of Total |
| 2003             | 25.07      | 12%              |
| 2004             | 16.17      | 5%               |

**PROJECTIONS ANALYSIS**

| AGR Determinations |                |            |  |
|--------------------|----------------|------------|--|
| Category           | AGR (customer) | AGR (Flow) | Remarks  |
| Residential        | 2.84%          | 3.19%      | 2007-2025. See Analysis Notes.                       |
| Commercial         |                |            |  |
| Industrial         | 2.46%          | 2.10%      | 2007-2025. See Analysis Notes.                       |
| Institutional      |                |            |  |
| Wholesale          | 0.00%          | 1.02%      | 2007-2025. See Analysis Notes.                       |
| All                |                | 1.00%      | 2026-2045. See Analysis Notes. Fairfield County AGR. |
| All                |                | 0.82%      | 2046-2075. See Analysis Notes.                       |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      | 1.46        |            | 0.40       |               | 0.59      | 0.29      |
| 2025                      | 2.00        |            | 0.50       |               | 0.65      | 0.16      |
| 2035                      | 2.21        |            | 0.55       |               | 0.72      | 0.17      |
| 2045                      | 2.44        |            | 0.60       |               | 0.80      | 0.19      |
| 2055                      | 2.65        |            | 0.66       |               | 0.86      | 0.21      |
| 2065                      | 2.88        |            | 0.71       |               | 0.94      | 0.23      |
| 2075                      | 3.12        |            | 0.77       |               | 1.02      | 0.25      |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 2.75       |
| 2025                | 3.31       |
| 2035                | 3.65       |
| 2045                | 4.04       |
| 2055                | 4.38       |
| 2065                | 4.75       |
| 2075                | 5.16       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.94        |
| Feb                  | 0.88        |
| Mar                  | 0.89        |
| Apr                  | 0.92        |
| May                  | 1.11        |
| Jun                  | 1.19        |
| Jul                  | 1.11        |
| Aug                  | 1.07        |
| Sep                  | 1.05        |
| Oct                  | 1.00        |
| Nov                  | 0.95        |
| Dec                  | 0.89        |

| Analysis Notes  |
|---|
| 1. Town of Winnsboro is currently in the process of developing a water system plan.   |
| 2. Town of Winnsboro also serves the City of Blywood, which is below Columbia and discharges outside of the Broad River Basin.  |
| 3. Monthly flow represent treated water for both the Sand Creek WTP and Reservoir WTP.  |
| 4. Customer base information extracted from the 2003 Interbasin Transfer form submitted to SC-DHEC.   |
| 5. The AGR applied through 2025 is based on the Town of Winnsboro growth reported on their SC DHEC Interbasin Transfer.   |
| The AGR for future years is reduced to 1% for 2026-2045 and 0.8% for 2046-2075. Although the Fairfield County projected population AGR is low (0.57%) it is forecasted that the area served will grow at a faster rate. |
| 6. Unaccounted for water is assumed to be 12 % through 2023, then is 5%.  |
| 7. Base year is 2003.   |

**ID No.** 4-R **Category** Public Water Supply  
**Entity** Town of Winnsboro **Type** Return  
**Facility** Winnsboro/Jackson Creek Plant (WWTP)  
**Contact** Beth D. Bonds {Town of Winnsboro [winn1@infoave.net]}

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.71       |
| 2000                | 0.83       |
| 2005                | 0.77       |
| 2006                | 0.79       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.81                       | 0.98 | 0.78 | 0.88 |
| Feb   | 0.96                       | 0.81 | 0.89 | 0.80 |
| Mar   | 0.66                       | 0.82 | 0.85 | 0.67 |
| Apr   | 0.55                       | 0.80 | 0.80 | 0.65 |
| May   | 0.57                       | 0.80 | 0.75 | 0.62 |
| Jun   | 0.73                       | 0.86 | 0.84 | 0.87 |
| Jul   | 0.67                       | 0.90 | 0.75 | 0.72 |
| Aug   | 0.78                       | 0.98 | 0.74 | 0.82 |
| Sep   | 0.71                       | 0.92 | 0.76 | 0.82 |
| Oct   | 0.69                       | 0.66 | 0.52 | 0.77 |
| Nov   | 0.71                       | 0.72 | 0.71 | 0.95 |
| Dec   | 0.63                       | 0.71 | 0.82 | 0.85 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | 2024      |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (MGD) |
| All                          |           |            |           | 0.97       |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |     |            |   |
|--------------------|-----|------------|---|
| Category           | AGR | AGR (Flow) | Remarks   |
| All                | n/a | 1.16%      | Based on projected 2024 wastewater flow from interbasin transfer. |
| All                |     | 0.57%      | 2026-2045. See Analysis Notes. Fairfield County AGR.              |
| All                |     | 0.57%      | 2046-2075. See Analysis Notes. Fairfield County AGR.              |
| Residential        |     |            |   |
| Institutional      |     |            |   |
| Wholesale          |     |            |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0           |            | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.87       |
| 2025                | 0.98       |
| 2035                | 1.04       |
| 2045                | 1.10       |
| 2055                | 1.16       |
| 2065                | 1.23       |
| 2075                | 1.30       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.12        |
| Feb                  | 1.13        |
| Mar                  | 0.97        |
| Apr                  | 0.90        |
| May                  | 0.88        |
| Jun                  | 1.07        |
| Jul                  | 0.98        |
| Aug                  | 1.07        |
| Sep                  | 1.04        |
| Oct                  | 0.86        |
| Nov                  | 1.00        |
| Dec                  | 0.97        |

| Analysis Notes  |
|---|
| 1. Projection is based on low AGR (Flow) percentage estimated from 2024 flow projections from the Interbasin Transfer.<br>This value is significantly lower than the AGRs used from water supply. This may partly be a result of interbasin transfers, which reduces volume of treated water. |
| 2. The AGR for future years is reduced to match the Fairfield County projected AGR.   |
| 3. Base year is 2006.   |
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ID No. 6(L)-W Category Public Water Supply  
 Entity SWS/SSSD Type Withdrawal  
 Facility Landrum WTP  
 Contact Rebecca West (Email from Joel Jones)

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1996                | 0.41       |
| 2000                | 0.53       |
| 2005                | 0.47       |
| 2006                | 0.49       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1996                       | 2000 | 2005 | 2006 |
| Jan   | 0.36                       | 0.46 | 0.48 | 0.42 |
| Feb   | 0.36                       | 0.47 | 0.42 | 0.44 |
| Mar   | 0.35                       | 0.47 | 0.40 | 0.47 |
| Apr   | 0.38                       | 0.37 | 0.40 | 0.50 |
| May   | 0.41                       | 0.31 | 0.48 | 0.56 |
| Jun   | 0.46                       | 0.62 | 0.50 | 0.60 |
| Jul   | 0.47                       | 0.65 | 0.48 | 0.53 |
| Aug   | 0.44                       | 0.66 | 0.47 | 0.53 |
| Sep   | 0.42                       | 0.62 | 0.58 | 0.44 |
| Oct   | 0.43                       | 0.61 | 0.55 | 0.55 |
| Nov   | 0.42                       | 0.56 | 0.44 | 0.42 |
| Dec   | 0.43                       | 0.51 | 0.44 | 0.42 |

**Data Sources**  
 1. Obtained from entity.

| Residential Customers Served |                  |            |           |            |
|------------------------------|------------------|------------|-----------|------------|
| Year-->                      | 2000             |            | Year?     |            |
| Grouping                     | Taps             | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  | 1432             |            |           |            |
| Commercial                   | 248              |            |           |            |
| Industrial                   |                  |            |           |            |
| Institutional                |                  |            |           |            |
| Wholesale                    | 7 (All 3 Plants) |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |  |
|--------------------|-------|--|
| Category           | AGR   | Remarks                                    |
| Residential        | 1.02% | Based on Greenville County Population Data |
| Residential        | 0.82% | See analysis notes.                        |
| Comm./Indust.      |       |  |
| Institutional      |       |  |
| Wholesale          |       |  |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.01        | 0.01       | --         | --            | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.54       |
| 2025                | 0.59       |
| 2035                | 0.66       |
| 2045                | 0.73       |
| 2055                | 0.79       |
| 2065                | 0.86       |
| 2075                | 0.93       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.90        |
| Feb                  | 0.89        |
| Mar                  | 0.89        |
| Apr                  | 0.87        |
| May                  | 0.94        |
| Jun                  | 1.15        |
| Jul                  | 1.12        |
| Aug                  | 1.10        |
| Sep                  | 1.09        |
| Oct                  | 1.13        |
| Nov                  | 0.97        |
| Dec                  | 0.95        |

| Analysis Notes   |
|--|
| 1. The Landrum WTP predominately serves the Town of Landrum, located in Greenville County.   |
| 2. This facility was previously owned and operated by the Town of Landrum. The town WWTP was sold in 1997 and the WTP was sold in 2004.  |
| 3. SWS/SSSD does not have any data for 1995 for the Landrum Water Treatment Plant. The earliest data we have is 1996.  |
| 4. AGR applied for 2007-2045 based on Greenville county projected population. Subsequent years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
| 5. Base year is 2006.  |
| 6. Raw data was provided as million gallons per month.   |
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**ID No.** 6(B)-W **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Withdrawal  
**Facility** Blalock WTP  
**Contact** Rebecca West (Email from Jeffrey Phillips [jphillips@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2000                | 7.21       |
| 2002                | 11.44      |
| 2006                | 11.76      |
| 2007                | 12.99      |
| 2007                | 14.49      |

Partial Year  
 9/06-8/07  
 Partial Year

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Month | Monthly Average Flow (mgd) |       |         |       |
|-------|----------------------------|-------|---------|-------|
|       | 2000                       | 2002  | 2006    | 2007  |
| Jan   | 3.48                       | 9.57  | offline | 7.74  |
| Feb   | 5.83                       | 9.39  | offline | 14.18 |
| Mar   | 5.26                       | 9.82  | offline | 13.99 |
| Apr   | 5.48                       | 11.31 | offline | 14.00 |
| May   | 8.39                       | 11.05 | offline | 14.12 |
| Jun   | 4.38                       | 11.96 | offline | 13.77 |
| Jul   | 9.70                       | 11.53 | offline | 13.95 |
| Aug   | 7.18                       | 11.16 | 14.69   | 19.99 |
| Sep   | 7.92                       | 12.65 | 14.42   | 18.71 |
| Oct   | 9.59                       | 12.96 | 14.73   | n/a   |
| Nov   | 8.79                       | 12.99 | 7.49    | n/a   |
| Dec   | 10.48                      | 12.92 | 7.49    | n/a   |

\*See Notes

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 0.96% | 2007-2045. See analysis notes. |
| Residential        | 0.82% | 2046-2075. See analysis notes. |
| Comm./Indust.      |       |                                |
| Institutional      |       |                                |
| Wholesale          |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.01        | 0.01       | --         | --            | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 14.02      |
| 2025                | 15.43      |
| 2035                | 16.97      |
| 2045                | 18.67      |
| 2055                | 20.26      |
| 2065                | 21.99      |
| 2075                | 23.86      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.64        |
| Feb                  | 0.91        |
| Mar                  | 0.89        |
| Apr                  | 0.94        |
| May                  | 1.07        |
| Jun                  | 0.90        |
| Jul                  | 1.14        |
| Aug                  | 1.19        |
| Sep                  | 1.22        |
| Oct                  | 1.24        |
| Nov                  | 1.00        |
| Dec                  | 1.07        |

- Analysis Notes**
- The Lake Blalock and Simms WTP predominantly serve customers located within Spartanburg County, although some water is delivered to Cherokee County.
  - The Blalock Water Treatment Plant did not go on line until 1999 and was off line from September 9th 2004 until August 8th 2006. There was no withdrawal from Lake Blalock during that period.
  - Monthly Coefficients are based on 2000 data.
  - Base year used is the September 2006 through August 2007 average of 12.99 MGD. This value was used as it begins one month after the WTP was brought back online and represents a 12-month period. For comparison purposes the 2002 average was 11.44 MGD, which if grown to 2007 based on the county AGR results in a value of 11.95 MGD. Thus, this average, which is slightly higher, represents a conservative starting point.
  - SWS AGR is anticipated to grow faster than County as a whole, thus rate through 2045 is set at the combined Greenville County and Spartanburg County projected population AGR. Subsequent years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average.
  - AGRs for water use are anticipated to be higher for water withdrawal than returns (Communication with D. DePratter).

|                 |                                      |                 |                     |
|-----------------|--------------------------------------|-----------------|---------------------|
| <b>ID No.</b>   | 6(S)-W                               | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | SWS/SSSD                             | <b>Type</b>     | Withdrawal          |
| <b>Facility</b> | Simms WTP                            |                 |                     |
| <b>Contact</b>  | Rebecca West (Email from Joel Jones) |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 36.03      |
| 2000                | 25.69      |
| 2005                | 32.18      |
| 2006                | 28.42      |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Month | Monthly Average Flow (mgd) |       |       |       |
|-------|----------------------------|-------|-------|-------|
|       | 1995                       | 2000  | 2005  | 2006  |
| Jan   | 32.36                      | 27.72 | 28.62 | 28.75 |
| Feb   | 32.45                      | 22.43 | 28.13 | 27.84 |
| Mar   | 33.36                      | 23.55 | 28.34 | 30.08 |
| Apr   | 37.55                      | 26.78 | 29.79 | 32.54 |
| May   | 38.89                      | 26.63 | 33.08 | 34.71 |
| Jun   | 37.49                      | 29.76 | 30.49 | 38.18 |
| Jul   | 41.59                      | 28.16 | 35.02 | 38.71 |
| Aug   | 41.63                      | 30.35 | 36.17 | 26.51 |
| Sep   | 37.11                      | 25.59 | 40.16 | 19.71 |
| Oct   | 35.03                      | 26.61 | 35.12 | 18.38 |
| Nov   | 32.59                      | 21.65 | 32.30 | 23.58 |
| Dec   | 32.36                      | 19.00 | 28.98 | 22.01 |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 0.96% | 2007-2045. See analysis notes. |
| Residential        | 0.82% | 2046-2075. See analysis notes. |
| Comm./Indust.      |       |                                |
| Institutional      |       |                                |
| Wholesale          |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.01        | 0.01       | --         | --            | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 30.97      |
| 2025                | 34.07      |
| 2035                | 37.49      |
| 2045                | 41.24      |
| 2055                | 44.75      |
| 2065                | 48.56      |
| 2075                | 52.69      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.97        |
| Feb                  | 0.91        |
| Mar                  | 0.95        |
| Apr                  | 1.04        |
| May                  | 1.09        |
| Jun                  | 1.12        |
| Jul                  | 1.18        |
| Aug                  | 1.10        |
| Sep                  | 0.99        |
| Oct                  | 0.94        |
| Nov                  | 0.90        |
| Dec                  | 0.83        |

| Analysis Notes  |
|---|
| 1. The Lake Blalock and Simms WTP predominantly serve customers located within Spartanburg County, although some water is delivered to Cherokee County.   |
| 2. Base year is 2006.   |
| 3. SWS AGR is anticipated to grow faster than County as a whole, thus rate through 2045 is set the combined Greenville County and Spartanburg County projected population AGR. Subsequent years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
| 4. AGRs for water use are anticipated to be higher for water withdrawal than returns (Communication with D. DePratter).   |
|   |
|   |
|   |

**ID No.** 6(FF)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return  
**Facility** Fairforest Plant (+Lawson Fork Plant +Highway 101 +Marilyndale)  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 12.86      |
| 2000                | 10.72      |
| 2005                | 9.44       |
| 2006                | 9.47       |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Month | Monthly Average Flow (mgd) |       |       |       |
|-------|----------------------------|-------|-------|-------|
|       | 1995                       | 2000  | 2005  | 2006  |
| Jan   | 14.61                      | 10.89 | 9.79  | 10.94 |
| Feb   | 14.85                      | 12.10 | 8.96  | 9.02  |
| Mar   | 13.66                      | 13.24 | 10.41 | 8.38  |
| Apr   | 11.04                      | 11.55 | 9.57  | 8.69  |
| May   | 11.16                      | 10.62 | 8.41  | 8.30  |
| Jun   | 12.38                      | 10.12 | 10.51 | 8.67  |
| Jul   | 11.70                      | 10.08 | 10.57 | 8.84  |
| Aug   | 13.36                      | 10.13 | 9.43  | 8.97  |
| Sep   | 12.45                      | 10.86 | 7.96  | 10.57 |
| Oct   | 12.98                      | 9.21  | 9.43  | 9.31  |
| Nov   | 14.39                      | 9.95  | 8.24  | 10.14 |
| Dec   | 11.74                      | 9.87  | 10.01 | 11.81 |

\*SEE ANALYSIS NOTES: FLOWS INCLUDE OTHER WWTF FLOWS.

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 10.23      |
| 2025                | 11.16      |
| 2035                | 12.16      |
| 2045                | 13.26      |
| 2055                | 14.39      |
| 2065                | 15.61      |
| 2075                | 16.94      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.09        |
| Feb                  | 1.05        |
| Mar                  | 1.07        |
| Apr                  | 0.97        |
| May                  | 0.91        |
| Jun                  | 0.98        |
| Jul                  | 0.98        |
| Aug                  | 0.98        |
| Sep                  | 0.99        |
| Oct                  | 0.96        |
| Nov                  | 1.00        |
| Dec                  | 1.04        |

| Analysis Notes  |
|---|
| 1. Based on Spartanburg County population data unless specific customer base data was available.  |
| 2. Flows for Lawson Fork, Highway 101, and Marilyndale WWTPs have been diverted to the Fairforest WWTP.<br>All historical flows for these facilities were added to Fairforest WWTP flows for projection purposes. |
| 3. Base year is 2006.   |
| 4. AGR through 2045 is based on Spartanburg County projected population.<br>2040 and 2050.  |
| 5. Note that the Fairforest Facility is located in Node 21, but discharges to Node 15. Some NPDES permits are shown in Node 21.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average.  |

**ID No.** 6(LF)-Ro **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return - Added to Other Facility  
**Facility** Lawson Fork Plant  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 6.00       |
| 2000                | 4.81       |
| 2005                | 4.96       |
| 2006                | 3.73       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 7.19                       | 4.78 | 4.88 | 5.14 |
| Feb   | 7.12                       | 5.50 | 4.94 | 4.67 |
| Mar   | 6.48                       | 6.16 | 5.85 | 4.51 |
| Apr   | 5.39                       | 5.18 | 5.32 | 4.46 |
| May   | 5.24                       | 4.73 | 4.58 | 4.26 |
| Jun   | 5.65                       | 4.42 | 5.51 | 4.26 |
| Jul   | 5.23                       | 4.49 | 4.96 | 4.28 |
| Aug   | 6.20                       | 4.45 | 4.59 | 4.24 |
| Sep   | 5.61                       | 5.03 | 4.19 | 4.61 |
| Oct   | 6.03                       | 4.21 | 5.08 | 4.34 |
| Nov   | 6.58                       | 4.42 | 4.51 | 0.00 |
| Dec   | 5.29                       | 4.36 | 5.10 | 0.00 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                |            |
| 2025                |            |
| 2035                |            |
| 2045                |            |
| 2055                |            |
| 2065                |            |
| 2075                |            |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.14        |
| Feb                  | 1.14        |
| Mar                  | 1.19        |
| Apr                  | 1.06        |
| May                  | 0.98        |
| Jun                  | 1.03        |
| Jul                  | 0.99        |
| Aug                  | 1.00        |
| Sep                  | 1.02        |
| Oct                  | 1.02        |
| Nov                  | 0.97        |
| Dec                  | 0.94        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Starting in November 2006 pumped to Fairforest Plant  |
| 3. Historical flows added to Fairforest Plant flows for projection purposes. No projections are made here.   |
| 4. Base year is 2006.  |
| 5. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
|  |
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|  |

**ID No.** 6(FV)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return  
**Facility** Fingerville  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | n/a        |
| 2000                | 0.005      |
| 2005                | 0.004      |
| 2006                | 0.004      |

**Data Sources**  
1. Obtained from entity.

| Month | Monthly Average Flow (mgd) |       |       |       |
|-------|----------------------------|-------|-------|-------|
|       | 1995                       | 2000  | 2005  | 2006  |
| Jan   |                            | 0.005 | 0.004 | 0.005 |
| Feb   |                            | 0.004 | 0.004 | 0.003 |
| Mar   |                            | 0.006 | 0.005 | 0.003 |
| Apr   |                            | 0.007 | 0.003 | 0.004 |
| May   |                            | 0.005 | 0.003 | 0.003 |
| Jun   |                            | 0.005 | 0.004 | 0.004 |
| Jul   |                            | 0.004 | 0.007 | 0.002 |
| Aug   |                            | 0.004 | 0.005 | 0.003 |
| Sep   |                            | 0.005 | 0.002 | 0.004 |
| Oct   |                            | 0.004 | 0.005 | 0.004 |
| Nov   |                            | 0.005 | 0.004 | 0.004 |
| Dec   |                            | 0.004 | 0.007 | 0.004 |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.004      |
| 2025                | 0.004      |
| 2035                | 0.005      |
| 2045                | 0.005      |
| 2055                | 0.006      |
| 2065                | 0.006      |
| 2075                | 0.007      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.09        |
| Feb                  | 0.88        |
| Mar                  | 1.06        |
| Apr                  | 1.07        |
| May                  | 0.84        |
| Jun                  | 0.96        |
| Jul                  | 1.03        |
| Aug                  | 0.94        |
| Sep                  | 0.89        |
| Oct                  | 0.93        |
| Nov                  | 1.05        |
| Dec                  | 1.27        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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|  |

**ID No.** 6(101)-Ro **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return - Added to Other Facility  
**Facility** Highway 101  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.02       |
| 2000                | --         |
| 2005                | --         |
| 2006                | --         |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.01       | 0.00 | 0.00 | 0.00 |
| Feb                        | 0.01       | 0.00 | 0.00 | 0.00 |
| Mar                        | 0.02       | 0.00 | 0.00 | 0.00 |
| Apr                        | 0.02       | 0.00 | 0.00 | 0.00 |
| May                        | 0.02       | 0.00 | 0.00 | 0.00 |
| Jun                        | 0.01       | 0.00 | 0.00 | 0.00 |
| Jul                        | 0.01       | 0.00 | 0.00 | 0.00 |
| Aug                        | 0.02       | 0.00 | 0.00 | 0.00 |
| Sep                        | 0.01       | 0.00 | 0.00 | 0.00 |
| Oct                        | 0.02       | 0.00 | 0.00 | 0.00 |
| Nov                        | 0.02       | 0.00 | 0.00 | 0.00 |
| Dec                        | 0.02       | 0.00 | 0.00 | 0.00 |

| Data Sources             |
|--------------------------|
| I. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                |            |
| 2025                |            |
| 2035                |            |
| 2045                |            |
| 2055                |            |
| 2065                |            |
| 2075                |            |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.89        |
| Feb                  | 0.80        |
| Mar                  | 1.02        |
| Apr                  | 1.05        |
| May                  | 0.94        |
| Jun                  | 0.88        |
| Jul                  | 0.67        |
| Aug                  | 1.09        |
| Sep                  | 0.80        |
| Oct                  | 1.02        |
| Nov                  | 1.43        |
| Dec                  | 1.42        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. 2000, 2005, and 2006 was pumped & hauled to the Fairforest Plant  |
| 3. Historical flows added to Fairforest Plant flows for projection purposes. No projections are made here.   |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
|  |
|  |
|  |

**ID No.** 6(MD)-Ro **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return - Added to Other Facility  
**Facility** Marilynale  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | --         |
| 2000                | --         |
| 2005                | 0.01       |
| 2006                | --         |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.00       | 0.00 | 0.01 | 0.00 |
| Feb                        | 0.00       | 0.00 | 0.01 | 0.00 |
| Mar                        | 0.00       | 0.00 | 0.01 | 0.00 |
| Apr                        | 0.00       | 0.00 | 0.01 | 0.00 |
| May                        | 0.00       | 0.00 | 0.00 | 0.00 |
| Jun                        | 0.00       | 0.00 | 0.01 | 0.00 |
| Jul                        | 0.00       | 0.00 | 0.01 | 0.00 |
| Aug                        | 0.00       | 0.00 | 0.01 | 0.00 |
| Sep                        | 0.00       | 0.00 | 0.00 | 0.00 |
| Oct                        | 0.00       | 0.00 | 0.02 | 0.00 |
| Nov                        | 0.00       | 0.00 | 0.02 | 0.00 |
| Dec                        | 0.00       | 0.00 | 0.00 | 0.00 |

**Data Sources**  
1. Obtained from entity.

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                |            |
| 2025                |            |
| 2035                |            |
| 2045                |            |
| 2055                |            |
| 2065                |            |
| 2075                |            |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.94        |
| Feb                  | 0.83        |
| Mar                  | 1.27        |
| Apr                  | 1.15        |
| May                  | 0.44        |
| Jun                  | 0.87        |
| Jul                  | 0.86        |
| Aug                  | 1.28        |
| Sep                  | 0.37        |
| Oct                  | 2.15        |
| Nov                  | 1.85        |
| Dec                  | --          |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. 2006 was pumped & hauled to the Fairforest Plant.   |
| 3. Historical flows added to Fairforest Plant flows for projection purposes. No projections are made here.   |
| 4. 1995 and 2000 No Data   |
| 5. Base year is 2006.  |
| 6. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
|  |
|  |

**ID No.** 6(TC)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return - Added to Other Facility  
**Facility** Tim's Creek  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.02       |
| 2000                | 0.02       |
| 2005                | --         |
| 2006                | --         |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.01                       | 0.02 | 0.00 | 0.00 |
| Feb   | 0.01                       | 0.02 | 0.00 | 0.00 |
| Mar   | 0.02                       | 0.01 | 0.00 | 0.00 |
| Apr   | 0.02                       | 0.01 | 0.00 | 0.00 |
| May   | 0.02                       | 0.01 | 0.00 | 0.00 |
| Jun   | 0.01                       | 0.01 | 0.00 | 0.00 |
| Jul   | 0.01                       | 0.01 | 0.00 | 0.00 |
| Aug   | 0.02                       | 0.01 | 0.00 | 0.00 |
| Sep   | 0.01                       | 0.02 | 0.00 | 0.00 |
| Oct   | 0.02                       | 0.02 | 0.00 | 0.00 |
| Nov   | 0.02                       | 0.02 | 0.00 | 0.00 |
| Dec   | 0.02                       | 0.02 | 0.00 | 0.00 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Year-->       | Residential Customers Served |            |           |            |
|---------------|------------------------------|------------|-----------|------------|
|               | Year?                        |            | Year?     |            |
| Grouping      | Customers                    | Flow (gpd) | Customers | Flow (gpd) |
| Residential   |                              |            |           |            |
| Commercial    |                              |            |           |            |
| Industrial    |                              |            |           |            |
| Institutional |                              |            |           |            |
| Wholesale     |                              |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                |            |
| 2025                |            |
| 2035                |            |
| 2045                |            |
| 2055                |            |
| 2065                |            |
| 2075                |            |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.95        |
| Feb                  | 0.99        |
| Mar                  | 0.94        |
| Apr                  | 0.88        |
| May                  | 0.87        |
| Jun                  | 0.90        |
| Jul                  | 0.77        |
| Aug                  | 0.99        |
| Sep                  | 1.06        |
| Oct                  | 1.08        |
| Nov                  | 1.24        |
| Dec                  | 1.33        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. 2005 and 2006 was pumped to L. North Tyger.   |
| 3. Historical flows added to Lower North Tyger Plant flows for projection purposes. No projections are made here.  |
| 4. Base year is 2006.  |
| 5. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
|  |
|  |
|  |

ID No. 6(CL)-R Category Public Water Supply  
 Entity SWS/SSSD Type Return  
 Facility Carolina Country Club  
 Contact Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.03       |
| 2000                | 0.04       |
| 2005                | 0.03       |
| 2006                | 0.03       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.04       | 0.04 | 0.03 | 0.03 |
| Feb                        | 0.04       | 0.04 | 0.03 | 0.03 |
| Mar                        | 0.03       | 0.05 | 0.03 | 0.03 |
| Apr                        | 0.03       | 0.06 | 0.03 | 0.03 |
| May                        | 0.03       | 0.04 | 0.03 | 0.03 |
| Jun                        | 0.03       | 0.03 | 0.03 | 0.03 |
| Jul                        | 0.03       | 0.04 | 0.03 | 0.03 |
| Aug                        | 0.04       | 0.05 | 0.03 | 0.03 |
| Sep                        | 0.03       | 0.05 | 0.03 | 0.03 |
| Oct                        | 0.03       | 0.03 | 0.04 | 0.03 |
| Nov                        | 0.04       | 0.03 | 0.03 | 0.03 |
| Dec                        | 0.04       | 0.03 | 0.04 | 0.03 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.03       |
| 2025                | 0.04       |
| 2035                | 0.04       |
| 2045                | 0.04       |
| 2055                | 0.05       |
| 2065                | 0.05       |
| 2075                | 0.06       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.05        |
| Feb                  | 0.99        |
| Mar                  | 0.99        |
| Apr                  | 0.93        |
| May                  | 0.97        |
| Jun                  | 1.00        |
| Jul                  | 0.93        |
| Aug                  | 1.04        |
| Sep                  | 0.91        |
| Oct                  | 1.04        |
| Nov                  | 1.05        |
| Dec                  | 1.10        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 4. Year 2000 excluded from Monthly Coefficients calculation due to change in pumping pattern late in the year that causes a skew in values.                |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
|  |
|  |
|  |

**ID No.** 6(CHS)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return  
**Facility** Chesnee  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.22       |
| 2000                | 0.15       |
| 2005                | 0.16       |
| 2006                | 0.16       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.25                       | 0.18 | 0.17 | 0.20 |
| Feb   | 0.30                       | 0.19 | 0.16 | 0.16 |
| Mar   | 0.24                       | 0.19 | 0.20 | 0.15 |
| Apr   | 0.17                       | 0.22 | 0.19 | 0.13 |
| May   | 0.19                       | 0.15 | 0.14 | 0.12 |
| Jun   | 0.21                       | 0.12 | 0.15 | 0.13 |
| Jul   | 0.18                       | 0.12 | 0.16 | 0.12 |
| Aug   | 0.20                       | 0.11 | 0.14 | 0.15 |
| Sep   | 0.21                       | 0.13 | 0.12 | 0.17 |
| Oct   | 0.23                       | 0.11 | 0.17 | 0.19 |
| Nov   | 0.25                       | 0.12 | 0.15 | 0.21 |
| Dec   | 0.20                       | 0.14 | 0.18 | 0.21 |

**Data Sources**  
 1. Obtained from entity.  
 1. Obtained from South Carolina Department of Health and Environmental Control

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.18       |
| 2025                | 0.19       |
| 2035                | 0.21       |
| 2045                | 0.23       |
| 2055                | 0.25       |
| 2065                | 0.27       |
| 2075                | 0.29       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.16        |
| Feb                  | 1.15        |
| Mar                  | 1.14        |
| Apr                  | 1.07        |
| May                  | 0.88        |
| Jun                  | 0.86        |
| Jul                  | 0.84        |
| Aug                  | 0.87        |
| Sep                  | 0.92        |
| Oct                  | 1.01        |
| Nov                  | 1.03        |
| Dec                  | 1.06        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 4. 1995 and 2000 Monthly Average is from SC-DHEC. 2005 and 2006 Monthly Average is from SWS and matches SC-DHEC.   |
| SC-DHEC Data   |
| 1. Modified December 2000 value from 137 to 0.137. Appears to be data entry error.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |

ID No. 6(CV)-R Category Public Water Supply  
 Entity SWS/SSSD Type Return  
 Facility Clifton Converse  
 Contact Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.11       |
| 2000                | 0.16       |
| 2005                | 0.15       |
| 2006                | 0.13       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.23                       | 0.11 | 0.13 | 0.17 |
| Feb   | 0.13                       | 0.15 | 0.15 | 0.14 |
| Mar   | 0.09                       | 0.24 | 0.19 | 0.12 |
| Apr   | 0.08                       | 0.24 | 0.16 | 0.13 |
| May   | 0.08                       | 0.16 | 0.13 | 0.12 |
| Jun   | 0.08                       | 0.13 | 0.17 | 0.11 |
| Jul   | 0.06                       | 0.15 | 0.11 | 0.13 |
| Aug   | 0.14                       | 0.11 | 0.13 | 0.13 |
| Sep   | 0.09                       | 0.15 | 0.11 | 0.14 |
| Oct   | 0.10                       | 0.13 | 0.19 | 0.14 |
| Nov   | 0.15                       | 0.16 | 0.14 | 0.14 |
| Dec   | 0.08                       | 0.16 | 0.18 | 0.15 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.15       |
| 2025                | 0.16       |
| 2035                | 0.17       |
| 2045                | 0.19       |
| 2055                | 0.20       |
| 2065                | 0.22       |
| 2075                | 0.24       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.25        |
| Feb                  | 1.04        |
| Mar                  | 1.12        |
| Apr                  | 1.06        |
| May                  | 0.87        |
| Jun                  | 0.88        |
| Jul                  | 0.81        |
| Aug                  | 0.95        |
| Sep                  | 0.87        |
| Oct                  | 1.03        |
| Nov                  | 1.09        |
| Dec                  | 1.02        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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|  |

**ID No.** 6(CW)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return  
**Facility** Cowpens  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.27       |
| 2000                | 0.20       |
| 2005                | 0.20       |
| 2006                | 0.18       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.33                       | 0.23 | 0.19 | 0.22 |
| Feb   | 0.32                       | 0.23 | 0.21 | 0.16 |
| Mar   | 0.27                       | 0.26 | 0.25 | 0.16 |
| Apr   | 0.27                       | 0.21 | 0.21 | 0.17 |
| May   | 0.22                       | 0.19 | 0.19 | 0.17 |
| Jun   | 0.24                       | 0.18 | 0.21 | 0.16 |
| Jul   | 0.20                       | 0.18 | 0.17 | 0.16 |
| Aug   | 0.29                       | 0.18 | 0.16 | 0.18 |
| Sep   | 0.25                       | 0.19 | 0.15 | 0.20 |
| Oct   | 0.29                       | 0.17 | 0.28 | 0.19 |
| Nov   | 0.32                       | 0.20 | 0.19 | 0.23 |
| Dec   | 0.25                       | 0.21 | 0.25 | 0.20 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |          |
|---------------------------|-------------|------------|------------|---------------|-----------|----------|
| Year                      | Category    |            |            |               |           |          |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ed |
| 2015                      |             |            |            |               |           |          |
| 2025                      |             |            |            |               |           |          |
| 2035                      |             |            |            |               |           |          |
| 2045                      |             |            |            |               |           |          |
| 2055                      |             |            |            |               |           |          |
| 2065                      |             |            |            |               |           |          |
| 2075                      |             |            |            |               |           |          |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA       |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.20       |
| 2025                | 0.21       |
| 2035                | 0.23       |
| 2045                | 0.26       |
| 2055                | 0.28       |
| 2065                | 0.30       |
| 2075                | 0.33       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.12        |
| Feb                  | 1.04        |
| Mar                  | 1.10        |
| Apr                  | 0.99        |
| May                  | 0.90        |
| Jun                  | 0.93        |
| Jul                  | 0.82        |
| Aug                  | 0.93        |
| Sep                  | 0.93        |
| Oct                  | 1.07        |
| Nov                  | 1.09        |
| Dec                  | 1.07        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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**ID No.** 6(IW)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return  
**Facility** Idlewood  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.03       |
| 2000                | 0.03       |
| 2005                | 0.03       |
| 2006                | 0.02       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.02                       | 0.03 | 0.04 | 0.02 |
| Feb   | 0.03                       | 0.03 | 0.04 | 0.02 |
| Mar   | 0.03                       | 0.03 | 0.05 | 0.03 |
| Apr   | 0.03                       | 0.03 | 0.04 | 0.03 |
| May   | 0.03                       | 0.03 | 0.04 | 0.02 |
| Jun   | 0.02                       | 0.03 | 0.03 | 0.02 |
| Jul   | 0.02                       | 0.03 | 0.02 | 0.02 |
| Aug   | 0.03                       | 0.03 | 0.03 | 0.02 |
| Sep   | 0.03                       | 0.03 | 0.03 | 0.03 |
| Oct   | 0.03                       | 0.03 | 0.03 | 0.03 |
| Nov   | 0.04                       | 0.03 | 0.02 | 0.03 |
| Dec   | 0.04                       | 0.03 | 0.03 | 0.03 |

**Data Sources**  
1. Obtained from entity.

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.03       |
| 2025                | 0.03       |
| 2035                | 0.03       |
| 2045                | 0.03       |
| 2055                | 0.04       |
| 2065                | 0.04       |
| 2075                | 0.04       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.96        |
| Feb                  | 1.05        |
| Mar                  | 1.19        |
| Apr                  | 1.07        |
| May                  | 1.00        |
| Jun                  | 0.89        |
| Jul                  | 0.82        |
| Aug                  | 0.93        |
| Sep                  | 0.98        |
| Oct                  | 0.97        |
| Nov                  | 1.06        |
| Dec                  | 1.08        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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ID No. 6(LNT)-R Category Public Water Supply  
 Entity SWS/SSSD Type Return  
 Facility Lower North Tyger (+Tim's Creek)  
 Contact Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.02       |
| 2000                | 0.02       |
| 2005                | 0.94       |
| 2006                | 0.96       |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.01                       | 0.02 | 0.93 | 0.96 |
| Feb   | 0.01                       | 0.02 | 0.90 | 1.00 |
| Mar   | 0.02                       | 0.01 | 1.00 | 0.91 |
| Apr   | 0.02                       | 0.01 | 0.96 | 0.91 |
| May   | 0.02                       | 0.01 | 0.90 | 0.95 |
| Jun   | 0.01                       | 0.01 | 1.02 | 0.96 |
| Jul   | 0.01                       | 0.01 | 1.02 | 0.97 |
| Aug   | 0.02                       | 0.01 | 0.94 | 0.91 |
| Sep   | 0.01                       | 0.02 | 0.88 | 0.94 |
| Oct   | 0.02                       | 0.02 | 0.89 | 0.94 |
| Nov   | 0.02                       | 0.02 | 0.82 | 1.01 |
| Dec   | 0.02                       | 0.02 | 0.98 | 1.08 |

\*SEE ANALYSIS NOTES: FLOWS INCLUDE OTHER WWTF FLOWS.

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.04       |
| 2025                | 1.13       |
| 2035                | 1.24       |
| 2045                | 1.35       |
| 2055                | 1.46       |
| 2065                | 1.59       |
| 2075                | 1.72       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.97        |
| Feb                  | 0.99        |
| Mar                  | 0.97        |
| Apr                  | 0.93        |
| May                  | 0.92        |
| Jun                  | 0.97        |
| Jul                  | 0.91        |
| Aug                  | 0.98        |
| Sep                  | 1.01        |
| Oct                  | 1.02        |
| Nov                  | 1.10        |
| Dec                  | 1.20        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.   |
| 2. Between 2000 and 2005 Tim's Creek WWTP flows began being diverted to the Lower North Tyger WWTP.<br>All historical flows for Tim's Creek WWTP were added to Lower North Tyger WWTP flows for projection purposes. |
| 3. Base year is 2006.  |
| 4. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average.   |
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**ID No.** 6(PM)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return  
**Facility** Pacolet Mills  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.08       |
| 2000                | 0.06       |
| 2005                | 0.10       |
| 2006                | 0.14       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.09                       | 0.08 | 0.08 | 0.15 |
| Feb   | 0.10                       | 0.07 | 0.09 | 0.12 |
| Mar   | 0.08                       | 0.08 | 0.12 | 0.13 |
| Apr   | 0.06                       | 0.05 | 0.08 | 0.14 |
| May   | 0.06                       | 0.04 | 0.08 | 0.13 |
| Jun   | 0.09                       | 0.05 | 0.11 | 0.14 |
| Jul   | 0.05                       | 0.05 | 0.10 | 0.14 |
| Aug   | 0.09                       | 0.05 | 0.11 | 0.12 |
| Sep   | 0.07                       | 0.07 | 0.09 | 0.14 |
| Oct   | 0.10                       | 0.05 | 0.10 | 0.14 |
| Nov   | 0.12                       | 0.06 | 0.11 | 0.16 |
| Dec   | 0.05                       | 0.08 | 0.17 | 0.14 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.15       |
| 2025                | 0.16       |
| 2035                | 0.18       |
| 2045                | 0.19       |
| 2055                | 0.21       |
| 2065                | 0.23       |
| 2075                | 0.25       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.08        |
| Feb                  | 1.05        |
| Mar                  | 1.10        |
| Apr                  | 0.84        |
| May                  | 0.77        |
| Jun                  | 1.01        |
| Jul                  | 0.85        |
| Aug                  | 0.98        |
| Sep                  | 0.95        |
| Oct                  | 1.00        |
| Nov                  | 1.19        |
| Dec                  | 1.17        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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**ID No.** 6(L-PC)-R **Category** Public Water Supply  
**Entity** SWS/SSSD **Type** Return  
**Facility** Landrum-Page Creek  
**Contact** Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                |            |
| 2000                | 0.29       |
| 2005                | 0.39       |
| 2006                | 0.35       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   |                            | 0.30 | 0.37 | 0.42 |
| Feb   |                            | 0.33 | 0.34 | 0.34 |
| Mar   |                            | 0.38 | 0.41 | 0.32 |
| Apr   |                            | 0.34 | 0.40 | 0.28 |
| May   |                            | 0.24 | 0.34 | 0.32 |
| Jun   |                            | 0.27 | 0.48 | 0.33 |
| Jul   |                            | 0.25 | 0.45 | 0.33 |
| Aug   |                            | 0.27 | 0.39 | 0.39 |
| Sep   |                            | 0.29 | 0.36 | 0.35 |
| Oct   |                            | 0.27 | 0.43 | 0.33 |
| Nov   |                            | 0.29 | 0.33 | 0.33 |
| Dec   |                            | 0.31 | 0.43 | 0.40 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.37       |
| 2025                | 0.41       |
| 2035                | 0.44       |
| 2045                | 0.48       |
| 2055                | 0.53       |
| 2065                | 0.57       |
| 2075                | 0.62       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.05        |
| Feb                  | 0.99        |
| Mar                  | 1.09        |
| Apr                  | 0.99        |
| May                  | 0.87        |
| Jun                  | 1.03        |
| Jul                  | 0.98        |
| Aug                  | 1.01        |
| Sep                  | 0.97        |
| Oct                  | 0.99        |
| Nov                  | 0.94        |
| Dec                  | 1.09        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. This facility was previously owned and operated by the Town of Landrum. The town WWTP was sold in 1997 and the WTP was sold in 2004.                    |
| 3. SWS/SSSD does not have any data for 1995 for the Landrum Water Treatment Plant. The earliest data we have is 1996.                                      |
| 4. Base year is 2006.  |
| 5. AGR through 2045 is based on Spartanburg County projected population.   |
| 6. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |

ID No. 6(STR)-R Category Public Water Supply  
 Entity SWS/SSSD Type Return  
 Facility South Tyger River  
 Contact Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.02       |
| 2000                | 0.00       |
| 2005                | 0.04       |
| 2006                | 0.05       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.01                       | 0.00 | 0.04 | 0.05 |
| Feb   | 0.01                       | 0.00 | 0.04 | 0.04 |
| Mar   | 0.02                       | 0.00 | 0.04 | 0.05 |
| Apr   | 0.02                       | 0.00 | 0.04 | 0.04 |
| May   | 0.02                       | 0.00 | 0.04 | 0.04 |
| Jun   | 0.01                       | 0.00 | 0.04 | 0.04 |
| Jul   | 0.01                       | 0.00 | 0.04 | 0.05 |
| Aug   | 0.02                       | 0.00 | 0.03 | 0.05 |
| Sep   | 0.01                       | 0.00 | 0.04 | 0.04 |
| Oct   | 0.02                       | 0.00 | 0.04 | 0.05 |
| Nov   | 0.02                       | 0.00 | 0.05 | 0.06 |
| Dec   | 0.02                       | 0.03 | 0.05 | 0.05 |

**Data Sources**  
 1. Obtained from entity.

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.05       |
| 2025                | 0.06       |
| 2035                | 0.06       |
| 2045                | 0.07       |
| 2055                | 0.07       |
| 2065                | 0.08       |
| 2075                | 0.08       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.97        |
| Feb                  | 0.90        |
| Mar                  | 1.01        |
| Apr                  | 0.96        |
| May                  | 0.95        |
| Jun                  | 0.89        |
| Jul                  | 0.86        |
| Aug                  | 0.98        |
| Sep                  | 0.86        |
| Oct                  | 1.04        |
| Nov                  | 1.30        |
| Dec                  | 1.27        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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ID No. 6(SWS)-R Category Public Water Supply  
 Entity SWS/SSSD Type Return  
 Facility Spartanburg Water System / Simms  
 Contact Rebecca West (Email from Joel Jones [joeljones@sws-sssd.org])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | --         |
| 2000                | 0.0017     |
| 2005                | 0.0006     |
| 2006                | 0.0005     |

| Month | Monthly Average Flow (mgd) |        |        |        |
|-------|----------------------------|--------|--------|--------|
|       | 1995                       | 2000   | 2005   | 2006   |
| Jan   | 0.0000                     | 0.0012 | 0.0010 | 0.0008 |
| Feb   | 0.0000                     | 0.0013 | 0.0006 | 0.0005 |
| Mar   | 0.0000                     | 0.0017 | 0.0009 | 0.0004 |
| Apr   | 0.0000                     | 0.0019 | 0.0006 | 0.0004 |
| May   | 0.0000                     | 0.0010 | 0.0004 | 0.0002 |
| Jun   | 0.0000                     | 0.0010 | 0.0003 | 0.0005 |
| Jul   | 0.0000                     | 0.0011 | 0.0010 | 0.0005 |
| Aug   | 0.0000                     | 0.0029 | 0.0003 | 0.0005 |
| Sep   | 0.0000                     | 0.0033 | 0.0002 | 0.0003 |
| Oct   | 0.0000                     | 0.0016 | 0.0006 | 0.0002 |
| Nov   | 0.0000                     | 0.0014 | 0.0005 | 0.0011 |
| Dec   | 0.0000                     | 0.0022 | 0.0006 | 0.0011 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                     |
| Residential        | 0.87% | Based on Spartanburg County Population Data |
| Residential        | 0.82% | 2046-2075. See analysis notes.              |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.001      |
| 2025                | 0.001      |
| 2035                | 0.001      |
| 2045                | 0.001      |
| 2055                | 0.001      |
| 2065                | 0.001      |
| 2075                | 0.001      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.30        |
| Feb                  | 0.91        |
| Mar                  | 1.12        |
| Apr                  | 0.94        |
| May                  | 0.56        |
| Jun                  | 0.68        |
| Jul                  | 1.08        |
| Aug                  | 1.02        |
| Sep                  | 0.96        |
| Oct                  | 0.77        |
| Nov                  | 1.22        |
| Dec                  | 1.44        |

| Analysis Notes   |
|--|
| 1. All SWS/SSSD AGRs are based on Spartanburg County population data unless specific customer base data was available.                                     |
| 2. Base year is 2006.  |
| 3. AGR through 2045 is based on Spartanburg County projected population.   |
| 4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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|-----------------|----------------------------------|-----------------|---------------------|
| <b>ID No.</b>   | 7-W                              | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | SJWD Water District              | <b>Type</b>     | Withdrawal          |
| <b>Facility</b> | SJWD WTP                         |                 |                     |
| <b>Contact</b>  | Doug Waldrop [dwaldrop@sjwd.com] |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 2.88       |
| 2000                | 5.95       |
| 2005                | 5.81       |
| 2006                | 6.44       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 3.10                       | 5.23 | 5.74 | 4.86 |
| Feb   | 3.03                       | 5.62 | 5.65 | 5.39 |
| Mar   | 2.70                       | 4.46 | 4.97 | 5.84 |
| Apr   | 2.79                       | 1.80 | 5.34 | 6.17 |
| May   | 3.10                       | 7.15 | 5.93 | 7.03 |
| Jun   | 2.84                       | 7.90 | 6.19 | 7.99 |
| Jul   | 2.60                       | 6.98 | 5.99 | 7.32 |
| Aug   | 3.08                       | 7.28 | 5.94 | 7.79 |
| Sep   | 2.84                       | 6.62 | 6.82 | 7.11 |
| Oct   | 2.96                       | 6.88 | 6.17 | 6.44 |
| Nov   | 3.16                       | 5.97 | 5.73 | 5.94 |
| Dec   | 2.37                       | 5.54 | 5.22 | 5.41 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | 2006      |            | Year?     |            |
| Grouping                     | Customers | Flow (MGD) | Customers | Flow (MGD) |
| Residential                  | 17,335    |            |           |            |
| Non-Residenti                | 1,084     |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations           |       |                                |
|------------------------------|-------|--------------------------------|
| Category                     | AGR   | Remarks                        |
| Residential                  | 3.11% | 2007-2025. See analysis notes. |
| Residential                  | 1.66% | 2026-2035. See analysis notes. |
| Residential                  | 0.82% | 2036-2045. See analysis notes. |
| Residential                  | 0.82% | 2046-2075. See analysis notes. |
| Comm./Ind./Instit./Wholesale |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.02        | 0.01       | 0.01       | #REF!         | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 10.13      |
| 2025                | 11.52      |
| 2035                | 13.59      |
| 2045                | 14.74      |
| 2055                | 16.00      |
| 2065                | 17.36      |
| 2075                | 18.83      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.92        |
| Feb                  | 0.95        |
| Mar                  | 0.86        |
| Apr                  | 0.79        |
| May                  | 1.10        |
| Jun                  | 1.16        |
| Jul                  | 1.06        |
| Aug                  | 1.13        |
| Sep                  | 1.09        |
| Oct                  | 1.06        |
| Nov                  | 1.00        |
| Dec                  | 0.87        |

| Analysis Notes   |
|--|
| 1. Projected flows are based on the forecasted SJWD peak month projections and historical data provided. Historical average and peak month flows were used to develop peaking factors (1.20). Peaking factors were used to estimate average month flows from forecasted peak months flows. Estimated future average month flows for 2015 and 2025 were directly used in the analysis (AGR = 3.11%). Projections for 2026 through 2035 were estimated using an AGR estimated from the projected peak month data from 2025 to 2030 (1.66%). Subsequent years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
| 2. For comparison purposes the Spartanburg County population growth rate is 0.87%.   |
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|                 |   |                 |                     |
|-----------------|---|-----------------|---------------------|
| <b>ID No.</b>   | 8-W                                     | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | City of Clinton                         | <b>Type</b>     | Withdrawal          |
| <b>Facility</b> | City of Clinton WTP                     |                 |                     |
| <b>Contact</b>  | Jimmy Miller [JMiller@ci.clinton.sc.us] |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | n/a        |
| 2000                | 2.86       |
| 2005                | 2.41       |
| 2006                | 2.55       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   |                            | 2.39 | 2.08 | 2.23 |
| Feb   |                            | 2.53 | 2.20 | 2.28 |
| Mar   |                            | 2.52 | 2.11 | 2.28 |
| Apr   |                            | 2.51 | 2.20 | 2.53 |
| May   |                            | 3.16 | 2.50 | 2.71 |
| Jun   |                            | 3.50 | 2.43 | 3.06 |
| Jul   |                            | 3.15 | 2.64 | 2.97 |
| Aug   |                            | 3.37 | 2.68 | 2.73 |
| Sep   |                            | 3.01 | 3.02 | 2.53 |
| Oct   |                            | 3.13 | 2.49 | 2.52 |
| Nov   |                            | 2.64 | 2.42 | 2.42 |
| Dec   |                            | 2.42 | 2.17 | 2.33 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | 2006      |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  | 3,790     |            |           |            |
| Commercial                   | 581       |            |           |            |
| Industrial                   | 3         |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    | 3         |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 1.00% | 2007-2045. Based on Laurens County population data. |
| Residential        | 0.82% | 2046-2075. See Analysis Notes.                      |
| Comm./Ind.         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.01        |            | --         | --            | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 2.79       |
| 2025                | 3.08       |
| 2035                | 3.40       |
| 2045                | 3.75       |
| 2055                | 4.07       |
| 2065                | 4.41       |
| 2075                | 4.79       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.86        |
| Feb                  | 0.90        |
| Mar                  | 0.88        |
| Apr                  | 0.93        |
| May                  | 1.07        |
| Jun                  | 1.14        |
| Jul                  | 1.12        |
| Aug                  | 1.12        |
| Sep                  | 1.10        |
| Oct                  | 1.04        |
| Nov                  | 0.96        |
| Dec                  | 0.89        |

| Analysis Notes   |
|--|
| 1. Base year is 2006.  |
| 2. AGR for 2046-2075 years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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**ID No.** 9-R **Category** Public Water Supply  
**Entity** Richland County **Type** Return  
**Facility** Richland County Broad River WWTF  
**Contact** Joseph Rivers [RIVERSJ@rcgov.us]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | --         |
| 2000                | 1.08       |
| 2005                | 1.42       |
| 2006                | 1.49       |

**Data Sources**  
 1. Obtained from entity.

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.00                       | 1.22 | 1.55 | 1.55 |
| Feb   | 0.00                       | 1.34 | 1.82 | 1.62 |
| Mar   | 0.00                       | 1.17 | 1.32 | 1.54 |
| Apr   | 0.00                       | 1.11 | 1.49 | 1.42 |
| May   | 0.00                       | 0.97 | 1.43 | 1.44 |
| Jun   | 0.00                       | 1.07 | 1.37 | 1.36 |
| Jul   | 0.00                       | 0.92 | 1.47 | 1.40 |
| Aug   | 0.00                       | 0.88 | 1.78 | 1.57 |
| Sep   | 0.00                       | 1.21 | 1.50 | 1.75 |
| Oct   | 0.00                       | 0.97 | 1.33 | 1.48 |
| Nov   | 0.00                       | 1.08 | 1.25 | 1.51 |
| Dec   | 0.00                       | 1.05 | 0.78 | 1.21 |

estimated  
 estimated  
 estimated  
 estimated

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                               |
|--------------------|-------|-------------------------------|
| Category           | AGR   | Remarks                       |
| Residential        | 1.01% | See Analysis Notes.           |
| Residential        | 0.82% | 2046-2075. See analysis notes |
| Comm./Ind.         |       |                               |
| Institutional      |       |                               |
| Wholesale          |       |                               |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 1.01%       | 0.0082     | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.58       |
| 2025                | 1.74       |
| 2035                | 1.93       |
| 2045                | 2.13       |
| 2055                | 2.31       |
| 2065                | 2.51       |
| 2075                | 2.72       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.09        |
| Feb                  | 1.20        |
| Mar                  | 1.01        |
| Apr                  | 1.01        |
| May                  | 0.96        |
| Jun                  | 0.96        |
| Jul                  | 0.94        |
| Aug                  | 1.04        |
| Sep                  | 1.12        |
| Oct                  | 0.94        |
| Nov                  | 0.96        |
| Dec                  | 0.78        |

- Analysis Notes**
1. Facility is currently being expanded from 2.5 MGD to 6.0 MGD. Completion expected by Spring of 2008.
  2. Currently sold 5.0 MGD of future capacity (e.g. to developers).
  3. Due to closeness to Lexington County, expansion of plant, and sold capacity an AGR based on both Richland County and Lexington County population data was developed. Richland County has an AGR of 0.76% while Lexington County has an AGR of 1.36%. Richland County may have a lower AGR due to being more densely developed prior to historical period used, with new growth occurring outside Columbia urban area in Richland County. Thus areas of Richland County north of Columbia may see similar growth as Lexington.
  4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average.
  5. Base year is 2005.
  6. September 2006 through December 2006 estimated using the monthly percent change for 2000 and 2005.

ID No. 10(T)-R Category Public Water Supply  
 Entity WCRSA Type Return  
 Facility Taylors WWTP  
 Contact Ryan Danner [Eng Coop [engcoop@wcrsa.com]]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 2.81       |
| 2000                | 3.36       |
| 2005                | 3.57       |
| 2006                | 3.25       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 3.40       | 3.46 | 3.30 | 3.70 |
| Feb                        | 3.20       | 3.60 | 3.50 | 3.20 |
| Mar                        | 3.10       | 3.70 | 3.90 | 3.10 |
| Apr                        | 2.40       | 3.60 | 4.10 | 3.10 |
| May                        | 2.50       | 3.40 | 3.50 | 3.00 |
| Jun                        | 2.70       | 3.20 | 4.10 | 3.20 |
| Jul                        | 2.00       | 3.10 | 4.10 | 3.20 |
| Aug                        | 3.50       | 3.30 | 3.30 | 3.20 |
| Sep                        | 2.50       | 3.20 | 3.00 | 3.30 |
| Oct                        | 3.00       | 3.20 | 3.20 | 3.20 |
| Nov                        | 3.10       | 3.30 | 3.10 | 3.40 |
| Dec                        | 2.30       | 3.30 | 3.70 | 3.40 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 2.36% | 2007-2015. See Analysis Notes  |
| Residential        | 0.70% | 2016-2045. See Analysis Notes. |
| Residential        | 0.70% | 2046-2075. See Analysis Notes  |
| Comm./Ind./Inst.   |       |                                |
| Wholesale          |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.023629657 |            |            | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 4.01       |
| 2025                | 4.30       |
| 2035                | 4.61       |
| 2045                | 4.94       |
| 2055                | 5.30       |
| 2065                | 5.68       |
| 2075                | 6.09       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.08        |
| Feb                  | 1.04        |
| Mar                  | 1.06        |
| Apr                  | 1.01        |
| May                  | 0.95        |
| Jun                  | 1.01        |
| Jul                  | 0.94        |
| Aug                  | 1.03        |
| Sep                  | 0.92        |
| Oct                  | 0.98        |
| Nov                  | 1.00        |
| Dec                  | 0.97        |

| Analysis Notes  |
|---|
| 1. WCRSA anticipates that in the next ten years some of the discharge from the wastewater treatment plants will be reused as drinking water.  |
| 2. Taylors Plant to be discontinued on August 2008. Flows will be directed to the Pelham WWTP.  |
| 3. 2007-2015 AGR represents WCRSA-wide growth rate from 2000 to 2006 calculated from number of customers.<br>- 2016-2075 AGR based on a rate slightly higher than the Greenville County population AGR for 2015-2035 (0.64%) as the WCRSA serves higher growth areas within the county. |
| 4. WCRSA = Western Carolina Regional Sewer Authority.   |
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|          |  |          |                     |
|----------|--|----------|---------------------|
| ID No.   | 10(P)-R                                    | Category | Public Water Supply |
| Entity   | WCRSA                                      | Type     | Return              |
| Facility | Pelham WWTP                                |          |                     |
| Contact  | Ryan Danner {Eng Coop [engcoop@wcrsa.com]} |          |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 5.36       |
| 2000                | 5.45       |
| 2005                | 6.02       |
| 2006                | 5.68       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 6.40       | 5.60 | 5.40 | 6.50 |
| Feb                        | 6.30       | 5.50 | 5.60 | 5.60 |
| Mar                        | 5.50       | 6.10 | 6.60 | 5.90 |
| Apr                        | 4.90       | 5.90 | 6.40 | 5.70 |
| May                        | 4.70       | 5.30 | 5.70 | 5.50 |
| Jun                        | 5.30       | 4.90 | 6.70 | 5.70 |
| Jul                        | 4.70       | 4.90 | 7.00 | 5.20 |
| Aug                        | 4.70       | 5.30 | 5.70 | 5.60 |
| Sep                        | 5.20       | 5.30 | 5.10 | 5.80 |
| Oct                        | 5.50       | 5.00 | 5.90 | 5.50 |
| Nov                        | 5.90       | 5.50 | 5.40 | 5.50 |
| Dec                        | 5.20       | 6.10 | 6.70 | 5.60 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

|                     |
|---------------------|
| Unaccounted<br>Flow |
|---------------------|

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 2.36% | 2007-2015. See Analysis Notes  |
| Residential        | 0.70% | 2016-2045. See Analysis Notes. |
| Residential        | 0.70% | 2046-2075. See Analysis Notes  |
| Comm./Ind./Inst.   |       |                                |
| Wholesale          |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.023629657 | 0.007      | 0.007      | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 7.00       |
| 2025                | 7.51       |
| 2035                | 8.05       |
| 2045                | 8.63       |
| 2055                | 9.26       |
| 2065                | 9.92       |
| 2075                | 10.64      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.07        |
| Feb                  | 1.03        |
| Mar                  | 1.07        |
| Apr                  | 1.02        |
| May                  | 0.94        |
| Jun                  | 1.00        |
| Jul                  | 0.96        |
| Aug                  | 0.95        |
| Sep                  | 0.95        |
| Oct                  | 0.97        |
| Nov                  | 0.99        |
| Dec                  | 1.05        |

| Analysis Notes  |
|---|
| 1. WCRSA anticipates that in the next ten years some of the discharge from the wastewater treatment plants will be reused as drinking water.  |
| 2. Taylors Plant to be discontinued on August 2008. Flows will be directed to the Pelham WWTP. Not shown here. See Taylor Plant projection.   |
| 3. Pelham being expanded from 7.5 MGD to 22.5 MGD (nearly complete).  |
| 4. 2007-2015 AGR represents WCRSA-wide growth rate from 2000 to 2006 calculated from number of customers.<br>2016-2075 AGR based on a rate slightly higher than the Greenville County population AGR for 2015-2035 (0.64%) as the WCRSA serves higher growth areas within the county. |
| 5. WCRSA = Western Carolina Regional Sewer Authority.   |
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**ID No.** 10(GC)-R **Category** Public Water Supply  
**Entity** WCRSA **Type** Return  
**Facility** Gilder Creek WWTP  
**Contact** Ryan Danner [Eng Coop [engcoop@wcrsa.com]]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 2.57       |
| 2000                | 3.25       |
| 2005                | 3.79       |
| 2006                | 3.71       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 3.20       | 3.40 | 3.80 | 4.20 |
| Feb                        | 3.00       | 3.30 | 4.00 | 3.90 |
| Mar                        | 2.90       | 3.70 | 3.90 | 3.70 |
| Apr                        | 2.20       | 3.60 | 4.20 | 3.60 |
| May                        | 2.30       | 3.30 | 3.60 | 3.50 |
| Jun                        | 2.40       | 3.10 | 3.70 | 3.30 |
| Jul                        | 2.20       | 3.00 | 3.80 | 3.40 |
| Aug                        | 2.20       | 3.10 | 3.70 | 3.60 |
| Sep                        | 2.40       | 3.10 | 3.40 | 3.60 |
| Oct                        | 2.60       | 3.00 | 3.50 | 3.60 |
| Nov                        | 2.90       | 3.20 | 3.60 | 4.00 |
| Dec                        | 2.50       | 3.20 | 4.30 | 4.10 |

**Data Sources**  
1. Obtained from entity.

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 2.36% | 2007-2015. See Analysis Notes  |
| Residential        | 0.70% | 2016-2045. See Analysis Notes. |
| Residential        | 0.70% | 2046-2075. See Analysis Notes  |
| Comm./Ind./Inst.   |       |                                |
| Wholesale          |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.023629657 | 0.007      | 0.007      | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 4.58       |
| 2025                | 4.91       |
| 2035                | 5.26       |
| 2045                | 5.64       |
| 2055                | 6.05       |
| 2065                | 6.49       |
| 2075                | 6.95       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.11        |
| Feb                  | 1.07        |
| Mar                  | 1.07        |
| Apr                  | 1.01        |
| May                  | 0.95        |
| Jun                  | 0.94        |
| Jul                  | 0.92        |
| Aug                  | 0.94        |
| Sep                  | 0.94        |
| Oct                  | 0.96        |
| Nov                  | 1.04        |
| Dec                  | 1.05        |

| Analysis Notes  |
|---|
| 1. WCRSA anticipates that in the next ten years some of the discharge from the wastewater treatment plants will be reused as drinking water.  |
| 2. Recently expanded to 8 MGD.  |
| 3. 2007-2015 AGR represents WCRSA-wide growth rate from 2000 to 2006 calculated from number of customers.<br>2016-2075 AGR based on a rate slightly higher than the Greenville County population AGR for 2015-2035 (0.64%) as the WCRSA serves higher growth areas within the county. |
| 4. WCRSA = Western Carolina Regional Sewer Authority.   |
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ID No. 10(DC)-R Category Public Water Supply  
 Entity WCRSA Type Return  
 Facility Durbin Creek WWTP  
 Contact Ryan Danner [Eng Coop [engcoop@wcrsa.com]]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 1.39       |
| 2000                | 1.38       |
| 2005                | 1.58       |
| 2006                | 1.42       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 1.70       | 1.50 | 1.50 | 1.80 |
| Feb                        | 1.70       | 1.50 | 1.70 | 1.30 |
| Mar                        | 1.40       | 1.70 | 1.90 | 1.20 |
| Apr                        | 1.40       | 1.50 | 1.70 | 1.20 |
| May                        | 1.40       | 1.20 | 1.50 | 1.20 |
| Jun                        | 1.10       | 1.20 | 1.90 | 1.20 |
| Jul                        | 1.10       | 1.20 | 1.60 | 1.20 |
| Aug                        | 1.40       | 1.30 | 1.30 | 1.50 |
| Sep                        | 1.20       | 1.40 | 1.30 | 1.50 |
| Oct                        | 1.30       | 1.20 | 1.40 | 1.40 |
| Nov                        | 1.60       | 1.50 | 1.30 | 1.60 |
| Dec                        | 1.40       | 1.40 | 1.90 | 1.90 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 2.36% | 2007-2015. See Analysis Notes  |
| Residential        | 0.70% | 2016-2045. See Analysis Notes. |
| Residential        | 0.70% | 2046-2075. See Analysis Notes  |
| Comm./Ind./Inst.   |       |                                |
| Wholesale          |       |                                |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.023629657 | 0.007      | 0.007      | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.75       |
| 2025                | 1.87       |
| 2035                | 2.01       |
| 2045                | 2.15       |
| 2055                | 2.31       |
| 2065                | 2.48       |
| 2075                | 2.66       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.13        |
| Feb                  | 1.07        |
| Mar                  | 1.07        |
| Apr                  | 1.00        |
| May                  | 0.92        |
| Jun                  | 0.93        |
| Jul                  | 0.88        |
| Aug                  | 0.96        |
| Sep                  | 0.94        |
| Oct                  | 0.92        |
| Nov                  | 1.05        |
| Dec                  | 1.14        |

| Analysis Notes  |
|---|
| 1. WCRSA anticipates that in the next ten years some of the discharge from the wastewater treatment plants will be reused as drinking water.  |
| 2. Currently being expanded to 5.2 MGD. 18 month completion date from 8/2007.   |
| 3. 2007-2015 AGR represents WCRSA-wide growth rate from 2000 to 2006 calculated from number of customers.<br>2016-2075 AGR based on a rate slightly higher than the Greenville County population AGR for 2015-2035 (0.64%) as the WCRSA serves higher growth areas within the county. |
| 4. WCRSA = Western Carolina Regional Sewer Authority.   |
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ID No. 11-W Category Public Water Supply  
 Entity City of Union Type Withdrawal  
 Facility City of Union WTP  
 Contact Mary Jo Sanders [msanders@cityofunion.org]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 4.79       |
| 2000                | 4.04       |
| 2005                | 3.27       |
| 2006                | 3.41       |

| Monthly Average Flow (mgd) |                |      |      |      |
|----------------------------|----------------|------|------|------|
| Month                      | Flow (mgd) (1) |      |      |      |
|                            | 1995           | 2000 | 2005 | 2006 |
| Jan                        | 4.50           | 3.96 | 2.72 | 3.03 |
| Feb                        | 4.46           | 3.92 | 2.76 | 2.98 |
| Mar                        | 4.48           | 3.76 | 2.85 | 3.01 |
| Apr                        | 4.82           | 3.71 | 3.01 | 3.11 |
| May                        | 5.04           | 4.29 | 3.25 | 3.68 |
| Jun                        | 4.85           | 4.55 | 3.41 | 4.14 |
| Jul                        | 5.44           | 4.36 | 3.68 | 4.17 |
| Aug                        | 5.22           | 4.50 | 3.75 | 3.89 |
| Sep                        | 4.70           | 4.03 | 3.78 | 3.22 |
| Oct                        | 4.68           | 3.84 | 3.55 | 3.38 |
| Nov                        | 4.51           | 3.87 | 3.38 | 3.14 |
| Dec                        | 4.75           | 3.68 | 3.15 | 3.21 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |            |
|------------------------------|-----------|------------|------------|
| Year-->                      | 2006      |            |            |
| Grouping                     | Customers | Flow (MGD) | % of Total |
| Residential                  |           | 0.79       | 28%        |
| Commercial                   |           | 0.21       | 7%         |
| Industrial                   |           | 0.51       | 18%        |
| Institutional                |           | 0.13       | 5%         |
| Wholesale                    |           | 1.20       | 42%        |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                     |
|--------------------|-------|---------------------|
| Category           | AGR   | Remarks             |
| Residential        | 0.20% | See analysis notes. |
| Commercial         |       |                     |
| Industrial         |       |                     |
| Institutional      |       |                     |
| Wholesale          |       |                     |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      | 0.96        | 0.26       | 0.62       | 0.16          | 1.47      |           |
| 2025                      | 0.98        | 0.26       | 0.63       | 0.17          | 1.50      |           |
| 2035                      | 1.00        | 0.27       | 0.65       | 0.17          | 1.53      |           |
| 2045                      | 1.02        | 0.27       | 0.66       | 0.17          | 1.56      |           |
| 2055                      | 1.04        | 0.28       | 0.67       | 0.18          | 1.59      |           |
| 2065                      | 1.07        | 0.28       | 0.69       | 0.18          | 1.63      |           |
| 2075                      | 1.09        | 0.29       | 0.70       | 0.18          | 1.66      |           |
| AGR                       | 0.00        | --         | --         | --            | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 3.47       |
| 2025                | 3.54       |
| 2035                | 3.62       |
| 2045                | 3.69       |
| 2055                | 3.76       |
| 2065                | 3.84       |
| 2075                | 3.92       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.91        |
| Feb                  | 0.90        |
| Mar                  | 0.90        |
| Apr                  | 0.94        |
| May                  | 1.05        |
| Jun                  | 1.10        |
| Jul                  | 1.14        |
| Aug                  | 1.12        |
| Sep                  | 1.02        |
| Oct                  | 1.00        |
| Nov                  | 0.96        |
| Dec                  | 0.95        |

| Analysis Notes  |
|---|
| 1. 1995 withdrawals are based on converting Finished Water Processed to an Estimated Raw Water. Finished Water values were increased by 2%. The average of 2000, 2005, and 2006 Finished to Raw ratio is 2.1%.  |
| 2. Communications with staff indicated that drop off may continue to occur. The area was dependent on textiles which has been declining. Historical flows between 1995 and 2005 have declined 3.7% annually, however there was a 4 percent increase in 2006. The projected population for Union County is anticipated to continue declining by 0.2% between 2005 and 2035. For the purposes of this analysis it is assumed that the county will eventually grow during the next 69 years. Thus a rate of 0.2% is utilized over the entire period. |
| 3. Base year is 2006.   |
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|   |

**ID No.** 11(M)-R **Category** Public Water Supply  
**Entity** City of Union **Type** Return  
**Facility** Meng Creek WWTP  
**Contact** Donnie Johnson and Mary Jo Sanders [msanders@cityofunion.org]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.36       |
| 2000                | 0.28       |
| 2005                | 0.26       |
| 2006                | 0.25       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.33       | 0.32 | 0.28 | 0.26 |
| Feb                        | 0.36       | 0.30 | 0.30 | 0.26 |
| Mar                        | 0.30       | 0.27 | 0.28 | 0.25 |
| Apr                        | 0.30       | 0.27 | 0.24 | 0.25 |
| May                        | 0.28       | 0.26 | 0.24 | 0.25 |
| Jun                        | 0.51       | 0.25 | 0.26 | 0.25 |
| Jul                        | 0.35       | 0.25 | 0.23 | 0.24 |
| Aug                        | 0.43       | 0.29 | 0.27 | 0.25 |
| Sep                        | 0.36       | 0.31 | 0.24 | 0.23 |
| Oct                        | 0.37       | 0.28 | 0.25 | 0.22 |
| Nov                        | 0.39       | 0.30 | 0.25 | 0.25 |
| Dec                        | 0.38       | 0.28 | 0.26 | 0.22 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                     |
|--------------------|-------|---------------------|
| Category           | AGR   | Remarks             |
| Residential        | 0.20% | See analysis notes. |
| Commercial         |       |                     |
| Industrial         |       |                     |
| Institutional      |       |                     |
| Wholesale          |       |                     |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.002       | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.25       |
| 2025                | 0.26       |
| 2035                | 0.26       |
| 2045                | 0.27       |
| 2055                | 0.27       |
| 2065                | 0.28       |
| 2075                | 0.28       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.05        |
| Feb                  | 1.07        |
| Mar                  | 0.98        |
| Apr                  | 0.93        |
| May                  | 0.91        |
| Jun                  | 1.08        |
| Jul                  | 0.93        |
| Aug                  | 1.07        |
| Sep                  | 0.99        |
| Oct                  | 0.97        |
| Nov                  | 1.03        |
| Dec                  | 0.99        |

| Analysis Notes |   |
|----------------|---|
| 1.             | Communications with staff indicated that drop off may continue to occur. The area was dependent on textiles which has been declining. Historical flows between 1995 and 2006 have declined 3.5% annually. |
|                | The projected population for Union County is anticipated to continue declining by 0.2% between 2005 and 2035.   |
|                | For the purposes of this study a conservative AGR of 0.2% is applied, assuming there will be some growth in the long-term.  |
| 2.             | Base year is 2006.  |
|                |   |
|                |   |
|                |   |
|                |   |
|                |   |

**ID No.** 11(B)-R **Category** Public Water Supply  
**Entity** City of Union **Type** Return  
**Facility** Beltline WWTP  
**Contact** Donnie Johnson and Mary Jo Sanders [msanders@cityofunion.org]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.13       |
| 2000                | 0.12       |
| 2005                | 0.09       |
| 2006                | 0.09       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.17                       | 0.14 | 0.09 | 0.10 |
| Feb   | 0.17                       | 0.14 | 0.10 | 0.09 |
| Mar   | 0.14                       | 0.13 | 0.12 | 0.10 |
| Apr   | 0.12                       | 0.12 | 0.10 | 0.08 |
| May   | 0.11                       | 0.13 | 0.08 | 0.07 |
| Jun   | 0.15                       | 0.13 | 0.15 | 0.07 |
| Jul   | 0.11                       | 0.14 | 0.08 | 0.07 |
| Aug   | 0.14                       | 0.11 | 0.07 | 0.08 |
| Sep   | 0.11                       | 0.11 | 0.07 | 0.08 |
| Oct   | 0.12                       | 0.09 | 0.08 | 0.08 |
| Nov   | 0.14                       | 0.10 | 0.07 | 0.11 |
| Dec   | 0.13                       | 0.09 | 0.10 | 0.09 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                     |
|--------------------|-------|---------------------|
| Category           | AGR   | Remarks             |
| Residential        | 0.20% | See analysis notes. |
| Commercial         |       |                     |
| Industrial         |       |                     |
| Institutional      |       |                     |
| Wholesale          |       |                     |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.002       | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.09       |
| 2025                | 0.09       |
| 2035                | 0.09       |
| 2045                | 0.09       |
| 2055                | 0.09       |
| 2065                | 0.10       |
| 2075                | 0.10       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.13        |
| Feb                  | 1.13        |
| Mar                  | 1.12        |
| Apr                  | 0.99        |
| May                  | 0.91        |
| Jun                  | 1.17        |
| Jul                  | 0.93        |
| Aug                  | 0.91        |
| Sep                  | 0.88        |
| Oct                  | 0.86        |
| Nov                  | 0.98        |
| Dec                  | 0.98        |

| Analysis Notes   |
|--|
| 1. Communications with staff indicated that drop off may continue to occur. The area was dependent on textiles which has been declining. Historical flows between 1995 and 2006 have declined 4.1% annually. |
| The projected population for Union County is anticipated to continue declining by 0.2% between 2005 and 2035.  |
| For the purposes of this study a conservative AGR of 0.2% is applied, assuming there will be some growth in the long-term.   |
| 2. Base year is 2006.  |
| 3. This facility is not excluded as it is one of several operated by the City of Union. To maintain water balance between withdrawals and returns this facility is included.                                 |
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**ID No.** 11(T)-R **Category** Public Water Supply  
**Entity** City of Union **Type** Return  
**Facility** Tosch Creek WWTP  
**Contact** Donnie Johnson and Mary Jo Sanders [msanders@cityofunion.org]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 1.85       |
| 2000                | 1.20       |
| 2005                | 1.19       |
| 2006                | 0.99       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 1.87                       | 1.44 | 1.05 | 1.19 |
| Feb   | 2.19                       | 1.57 | 1.25 | 1.13 |
| Mar   | 1.95                       | 1.38 | 1.55 | 1.02 |
| Apr   | 1.62                       | 1.28 | 1.36 | 0.96 |
| May   | 1.64                       | 1.12 | 1.13 | 1.04 |
| Jun   | 2.46                       | 1.28 | 1.34 | 1.15 |
| Jul   | 1.72                       | 1.12 | 1.18 | 1.00 |
| Aug   | 2.07                       | 1.28 | 1.18 | 0.89 |
| Sep   | 1.52                       | 0.94 | 1.07 | 0.97 |
| Oct   | 1.52                       | 1.07 | 1.06 | 0.73 |
| Nov   | 1.96                       | 1.03 | 1.04 | 0.95 |
| Dec   | 1.67                       | 0.89 | 1.13 | 0.91 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                     |
|--------------------|-------|---------------------|
| Category           | AGR   | Remarks             |
| Residential        | 0.20% | See analysis notes. |
| Commercial         |       |                     |
| Industrial         |       |                     |
| Institutional      |       |                     |
| Wholesale          |       |                     |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.002       | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.01       |
| 2025                | 1.03       |
| 2035                | 1.05       |
| 2045                | 1.08       |
| 2055                | 1.10       |
| 2065                | 1.12       |
| 2075                | 1.14       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.07        |
| Feb                  | 1.17        |
| Mar                  | 1.13        |
| Apr                  | 1.01        |
| May                  | 0.95        |
| Jun                  | 1.17        |
| Jul                  | 0.96        |
| Aug                  | 1.02        |
| Sep                  | 0.87        |
| Oct                  | 0.83        |
| Nov                  | 0.93        |
| Dec                  | 0.88        |

| Analysis Notes   |
|--|
| 1. Communications with staff indicated that drop off may continue to occur. The area was dependent on textiles which has been declining. |
| Historical flows between 1995 and 2006 have declined 5.5% annually.  |
| The projected population for Union County is anticipated to continue declining by 0.2% between 2005 and 2035.                            |
| For the purposes of this study a conservative AGR of 0.2% is applied, assuming there will be some growth in the long-term..              |
| 2. Base year is 2006.  |
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**ID No.** 12-R **Category** Public Water Supply  
**Entity** Chester Sewer District **Type** Return  
**Facility** Sandy River WWTF  
**Contact** Phillip Thompson-King [csd1@truvista.net]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 1.04       |
| 2000                | 1.18       |
| 2005                | 0.87       |
| 2006                | 0.87       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 1.21       | 1.49 | 0.81 | 1.50 |
| Feb                        | 1.54       | 1.40 | 1.08 | 1.00 |
| Mar                        | 1.20       | 1.27 | 1.33 | 0.88 |
| Apr                        | 0.84       | 1.15 | 0.91 | 0.76 |
| May                        | 0.85       | 1.00 | 0.79 | 0.72 |
| Jun                        | 1.19       | 1.02 | 1.00 | 0.77 |
| Jul                        | 0.81       | 1.05 | 0.69 | 0.63 |
| Aug                        | 0.97       | 1.12 | 0.80 | 0.73 |
| Sep                        | 0.84       | 1.55 | 0.56 | 0.82 |
| Oct                        | 1.02       | 1.06 | 0.65 | 0.71 |
| Nov                        | 1.18       | 0.93 | 0.71 | 1.03 |
| Dec                        | 0.87       | 1.06 | 1.09 | 0.95 |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |  |
|--------------------|-------|--|
| Category           | AGR   | Remarks                                  |
| Residential        | 0.44% | Based on Chester County population data. |
| Commercial         |       |  |
| Industrial         |       |  |
| Institutional      |       |  |
| Wholesale          |       |  |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.004365369 | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.91       |
| 2025                | 0.95       |
| 2035                | 0.99       |
| 2045                | 1.04       |
| 2055                | 1.08       |
| 2065                | 1.13       |
| 2075                | 1.18       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.27        |
| Feb                  | 1.26        |
| Mar                  | 1.19        |
| Apr                  | 0.93        |
| May                  | 0.85        |
| Jun                  | 1.01        |
| Jul                  | 0.80        |
| Aug                  | 0.91        |
| Sep                  | 0.93        |
| Oct                  | 0.86        |
| Nov                  | 0.98        |
| Dec                  | 1.02        |

| Analysis Notes   |
|--|
| 1. Staff indicated that this WWTP serves an area considered a very low growth area. This is consistent with the Chester County population AGR. |
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|          |                                      |          |                     |
|----------|--------------------------------------|----------|---------------------|
| ID No.   | 13-W                                 | Category | Public Water Supply |
| Entity   | Town of Tryon                        | Type     | Withdrawal          |
| Facility | Tryon WTP                            |          |                     |
| Contact  | Betty Jones [bettyhones@hotmail.com] |          |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.70       |
| 2000                | 0.72       |
| 2005                | 0.46       |
| 2006                | 0.55       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.83                       | 0.67 | 0.44 | 0.46 |
| Feb   | 0.69                       | 0.68 | 0.46 | 0.48 |
| Mar   | 0.70                       | 0.66 | 0.45 | 0.51 |
| Apr   | 0.74                       | 0.73 | 0.45 | 0.59 |
| May   | 0.68                       | 0.79 | 0.45 | 0.54 |
| Jun   | 0.70                       | 0.92 | 0.53 | 0.65 |
| Jul   | 0.66                       | 0.79 | 0.45 | 0.54 |
| Aug   | 0.80                       | 0.75 | 0.50 | 0.57 |
| Sep   | 0.66                       | 0.65 | 0.50 | 0.59 |
| Oct   | 0.65                       | 0.70 | 0.45 | 0.59 |
| Nov   | 0.63                       | 0.66 | 0.45 | 0.52 |
| Dec   | 0.64                       | 0.70 | 0.44 | 0.53 |

| Data Sources                |
|-----------------------------|
| 1. Obtained from entity.    |
| 2. NC-DWR Water Supply Plan |

| Residential Customers Served |             |              |             |            |
|------------------------------|-------------|--------------|-------------|------------|
| Year-->                      | 2002        |              | 2007        |            |
| Grouping                     | Customers   | Flow (MGD)   | Customers   | Flow (gpd) |
| Residential                  | 1892        | 0.309        | 2236        |            |
| Commercial                   | 0           | 0            | 0           |            |
| Industrial                   | 2           | 0.069        | 2           |            |
| Institutional                | 0           | 0            | 0           |            |
| Unaccounted                  | 0           | 0.276        | 0           |            |
| <b>Total</b>                 | <b>1894</b> | <b>0.654</b> | <b>2238</b> |            |

|                             |
|-----------------------------|
| <b>Unaccounted<br/>Flow</b> |
|-----------------------------|

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 1.56% | 2007-2035. AGR based on NC-DWR Water Supply Planning data for 2002 to 2030. |
| Industrial         |       | Same as residential   |
| System Processes   |       | Same as residential   |
| Unaccounted        |       | Same as residential   |
| Residential        | 0.99% | 2036-2045. Based on Polk County projected population.                       |
| Residential        | 0.82% | 2046-2075. See analysis notes.  |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |        |           |
|---------------------------|-------------|------------|------------|---------------|--------|-----------|
| Year                      | Category    |            |            |               |        |           |
|                           | Residential | Commercial | Industrial | Institutional | System | Unacc'ted |
| 2015                      | 0.38        |            | 0.08       |               | 0.02   | 0.31      |
| 2025                      | 0.44        |            | 0.10       |               | 0.03   | 0.37      |
| 2035                      | 0.51        |            | 0.11       |               | 0.03   | 0.43      |
| 2045                      | 0.57        |            | 0.13       |               | 0.04   | 0.47      |
| 2055                      | 0.62        |            | 0.14       |               | 0.04   | 0.51      |
| 2065                      | 0.67        |            | 0.15       |               | 0.04   | 0.56      |
| 2075                      | 0.72        |            | 0.16       |               | 0.05   | 0.60      |
| AGR                       | 0.02        | --         | --         | --            | 0.01   | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.80       |
| 2025                | 0.93       |
| 2035                | 1.09       |
| 2045                | 1.20       |
| 2055                | 1.30       |
| 2065                | 1.41       |
| 2075                | 1.53       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.97        |
| Feb                  | 0.95        |
| Mar                  | 0.95        |
| Apr                  | 1.03        |
| May                  | 1.00        |
| Jun                  | 1.14        |
| Jul                  | 1.00        |
| Aug                  | 1.08        |
| Sep                  | 1.00        |
| Oct                  | 0.99        |
| Nov                  | 0.93        |
| Dec                  | 0.95        |

| Analysis Notes   |
|--|
| 1. No class break downs for customer served. 1 industrial customer with sewer.   |
| 2. AGR is staggered over time. See AGR remarks. See Note 6.  |
| 3. Projected flow rates by customer category are back calculated from the Annual Average Flow rate using NC-DWR Water Supply Planning data.                      |
| 4. Annual average flow is based on a base year of 2002.  |
| 5. Very little room for growth.  |
| 6. AGR for 2046-2075 years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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ID No. 13-R Category Public Water Supply  
 Entity Town of Tryon Type Return  
 Facility Tryon WWTP  
 Contact Debra Bradely

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.72       |
| 2000                | 0.44       |
| 2005                | 0.42       |
| 2006                | 0.33       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.68       | 0.46 | 0.43 | 0.39 |
| Feb                        | 0.76       | 0.47 | 0.44 | 0.34 |
| Mar                        | 0.79       | 0.54 | 0.48 | 0.35 |
| Apr                        | 0.69       | 0.47 | 0.48 | 0.32 |
| May                        | 0.74       | 0.46 | 0.40 | 0.34 |
| Jun                        | 0.79       | 0.43 | 0.50 | 0.34 |
| Jul                        | 0.51       | 0.40 | 0.50 | 0.30 |
| Aug                        | 0.79       | 0.46 | 0.40 | 0.31 |
| Sep                        | 0.72       | 0.39 | 0.36 | 0.32 |
| Oct                        | 0.78       | 0.41 | 0.34 | 0.32 |
| Nov                        | 0.74       | 0.43 | 0.34 | 0.32 |
| Dec                        | 0.65       | 0.38 | 0.35 | 0.34 |

| Data Sources |                          |
|--------------|--------------------------|
| 1.           | Obtained from entity.    |
| 2.           | NC-DWR Water Supply Plan |

| Residential Customers Served |           |           |           |
|------------------------------|-----------|-----------|-----------|
| Year=>                       | 2002      | 2005      | 2006      |
| Grouping                     | Customers | Customers | Customers |
| Residential                  | 929       | 1,066     | 1,083     |
| Commercial                   |           |           |           |
| Industrial                   | 1         | 1         | 1         |
| Institutional                |           |           |           |
| Wholesale                    |           |           |           |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 1.59% | 2007-2015. Based on change in residential connection from 2005 to 2006. |
| Residential        | 0.99% | 2016-2045. Based on Polk County projected population.                   |
| Residential        | 0.82% | 2046-2075. See analysis notes   |
| Institutional      |       |   |
| Wholesale          |       |   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |             |
|---------------------------|-------------|------------|------------|---------------|-----------|-------------|
| Year                      | Category    |            |            |               |           |             |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unaccounted |
| 2015                      |             |            |            |               |           |             |
| 2025                      |             |            |            |               |           |             |
| 2035                      |             |            |            |               |           |             |
| 2045                      |             |            |            |               |           |             |
| 2055                      |             |            |            |               |           |             |
| 2065                      |             |            |            |               |           |             |
| 2075                      |             |            |            |               |           |             |
| AGR                       | 0.015947467 |            |            | 0             | 0         | NA          |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.38       |
| 2025                | 0.42       |
| 2035                | 0.47       |
| 2045                | 0.51       |
| 2055                | 0.56       |
| 2065                | 0.60       |
| 2075                | 0.66       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.05        |
| Feb                  | 1.05        |
| Mar                  | 1.13        |
| Apr                  | 1.03        |
| May                  | 1.01        |
| Jun                  | 1.07        |
| Jul                  | 0.93        |
| Aug                  | 1.01        |
| Sep                  | 0.93        |
| Oct                  | 0.95        |
| Nov                  | 0.95        |
| Dec                  | 0.90        |

| Analysis Notes   |
|--|
| 1. Very little room for growth.  |
| 2. AGR is staggered downward over time. See AGR remarks.   |
| 3. Base year is 2006.  |
| 4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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**ID No.** 14-W **Category** Public Water Supply  
**Entity** Greer CPW (Commision of Public Works) **Type** Withdrawal  
**Facility** City of Greer CPW WTP  
**Contact** Wendell Woodward (Jerry Balding [jerry.balding@greercpw.com])

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1998                | 6.74       |
| 2000                | 6.64       |
| 2005                | 7.18       |
| 2006                | 7.96       |

| Month | Monthly Average Flow (mgd) |      |      |       |
|-------|----------------------------|------|------|-------|
|       | 1998                       | 2000 | 2005 | 2006  |
| Jan   | 5.31                       | 5.30 | 6.14 | 6.02  |
| Feb   | 5.31                       | 5.44 | 6.10 | 6.15  |
| Mar   | 5.48                       | 5.54 | 5.80 | 6.95  |
| Apr   | 5.79                       | 5.78 | 6.53 | 8.10  |
| May   | 7.34                       | 7.30 | 7.37 | 7.82  |
| Jun   | 7.83                       | 8.53 | 7.28 | 10.40 |
| Jul   | 8.90                       | 8.77 | 8.15 | 9.74  |
| Aug   | 8.15                       | 7.76 | 8.19 | 9.81  |
| Sep   | 7.78                       | 6.57 | 9.32 | 8.37  |
| Oct   | 6.85                       | 7.06 | 7.81 | 8.00  |
| Nov   | 6.30                       | 6.00 | 7.16 | 7.32  |
| Dec   | 5.84                       | 5.68 | 6.28 | 6.78  |

| Data Sources             |
|--------------------------|
| 1. Obtained from entity. |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 0.96% | Based on combined Greenville County and Spartanburg County population data. |
| Commercial         |       |   |
| Industrial         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |
| Residential        | 0.82% | 2046-2075. See analysis notes   |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.01        | --         | --         | --            | --        | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 8.67       |
| 2025                | 9.54       |
| 2035                | 10.49      |
| 2045                | 11.55      |
| 2055                | 12.53      |
| 2065                | 13.59      |
| 2075                | 14.75      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.80        |
| Feb                  | 0.81        |
| Mar                  | 0.83        |
| Apr                  | 0.91        |
| May                  | 1.05        |
| Jun                  | 1.19        |
| Jul                  | 1.25        |
| Aug                  | 1.19        |
| Sep                  | 1.12        |
| Oct                  | 1.04        |
| Nov                  | 0.94        |
| Dec                  | 0.86        |

| Analysis Notes   |
|--|
| 1. 2007-2035 AGR is based on combined Greenville County and Spartanburg County population data. See note 5.  |
| 2. Base year is 2006.  |
| 3. Current permitted   |
| 4. Greer supplies water to the Blue Ridge Water District, which has no treatment facilities.   |
| 5. AGR for 2046-2075 years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
|  |
|  |
|  |

**ID No.** 14-R **Category** Public Water Supply  
**Entity** Greer CPW (Comission of Public Works) **Type** Return  
**Facility** Maple Creek WWTP (Include Historical South Tyger)  
**Contact** Mike Watson [mike.watson@greercpw.com]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 2.16       |
| 2000                | 1.89       |
| 2005                | 2.06       |
| 2006                | 1.91       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 2.47                       | 2.01 | 2.08 | 1.92 |
| Feb   | 2.54                       | 2.14 | 2.13 | 1.89 |
| Mar   | 2.34                       | 2.32 | 2.40 | 1.85 |
| Apr   | 1.99                       | 2.04 | 2.31 | 1.88 |
| May   | 1.95                       | 1.87 | 2.08 | 1.91 |
| Jun   | 1.88                       | 1.81 | 2.27 | 1.91 |
| Jul   | 1.74                       | 1.71 | 2.34 | 1.81 |
| Aug   | 2.07                       | 1.76 | 1.92 | 1.97 |
| Sep   | 1.91                       | 1.77 | 1.74 | 1.93 |
| Oct   | 2.42                       | 1.73 | 1.87 | 1.88 |
| Nov   | 2.50                       | 1.75 | 1.69 | 1.96 |
| Dec   | 2.05                       | 1.82 | 1.94 | 1.97 |

\*SEE ANALYSIS NOTES: FLOWS INCLUDE OTHER WWTF FLOWS.

**Data Sources**  
1. Obtained from entity.

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 0.96% | Based on combined Greenville County and Spartanburg County population data. |
| Commercial         |       |   |
| Industrial         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |
| Residential        | 0.82% | 2046-2075. See analysis notes.  |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.009598447 | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 2.08       |
| 2025                | 2.29       |
| 2035                | 2.52       |
| 2045                | 2.77       |
| 2055                | 3.00       |
| 2065                | 3.26       |
| 2075                | 3.54       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.06        |
| Feb                  | 1.08        |
| Mar                  | 1.11        |
| Apr                  | 1.03        |
| May                  | 0.98        |
| Jun                  | 0.98        |
| Jul                  | 0.95        |
| Aug                  | 0.96        |
| Sep                  | 0.92        |
| Oct                  | 0.98        |
| Nov                  | 0.98        |
| Dec                  | 0.97        |

| Analysis Notes   |
|--|
| 1. South Tyger WWTP was discontinued in April 2000. Flows were redirected to the Maple Creek WWTP. Historic South Tyger flows are included in the Maple Creek flows shown above. |
| 2. Industrial comprises 10% to 12% of the customer base.   |
| 3. Current permitted capacity is 4.5 MGD. Anticipate updating to 5.0 MGD. Future expansion to 7.5 MGD then 10.0 MGD.   |
| 4. 2007-2035 AGR is based on combined Greenville County and Spartanburg County population data.  |
| 5. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average.                       |
|  |
|  |
|  |

ID No. 15-R Category Public Water Supply  
 Entity Gaffney Board of Public Works Type Return  
 Facility Clary WWTF  
 Contact Kim

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 2.71       |
| 2000                | 2.71       |
| 2005                | 2.77       |
| 2006                | 2.43       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 3.24                       |      |      |      |
| Feb   | 2.98                       |      |      |      |
| Mar   | 2.95                       |      |      |      |
| Apr   | 2.55                       |      |      |      |
| May   | 2.61                       |      |      |      |
| Jun   | 3.04                       |      |      |      |
| Jul   | 2.21                       |      |      |      |
| Aug   | 2.87                       |      |      |      |
| Sep   | 2.67                       |      |      |      |
| Oct   | 2.80                       |      |      |      |
| Nov   | 3.05                       |      |      |      |
| Dec   | 2.55                       |      |      |      |

**Data Sources**  
 1. Obtained from entity.

| Percent of Water Demand Treated at a WWTP - Both WWTPs |             |            |            |           |           |            |
|--|-------------|------------|------------|-----------|-----------|------------|
| Year   | Residential | Commercial | Industrial | Wholesale | Sprinkler | Inter-dept |
| 2005   | 70%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2015   | 75%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2025   | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2035   | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2045   | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2055   | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2065   | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2075   | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |

**I & I  
 Flow %  
 32%**

Source: Gaffney Board of Public Works, Long Range Planning Study 2005. Table 3-1.

| Percent of Total Wastewater Treated at Clary WWTP |     |      |     |           |           |            |
|---|-----|------|-----|-----------|-----------|------------|
| Year  | Res | Comm | Ind | Wholesale | Sprinkler | Inter-dept |
| 2005  | 45% | 55%  | 70% | 0%        | 0%        | 55%        |
| 2015  | 50% | 62%  | 70% | 0%        | 0%        | 62%        |
| 2025  | 55% | 70%  | 70% | 0%        | 0%        | 70%        |
| 2035  | 55% | 70%  | 70% | 0%        | 0%        | 70%        |
| 2045  | 55% | 70%  | 70% | 0%        | 0%        | 70%        |
| 2055  | 55% | 70%  | 70% | 0%        | 0%        | 70%        |
| 2065  | 55% | 70%  | 70% | 0%        | 0%        | 70%        |
| 2075  | 55% | 70%  | 70% | 0%        | 0%        | 70%        |

Source: Gaffney Board of Public Works, Long Range Planning Study 2005. Table 3-2



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |           |           |            |      |
|---------------------------|-------------|------------|------------|-----------|-----------|------------|------|
| Year                      | Category    |            |            |           |           |            |      |
|                           | Residential | Commercial | Industrial | Wholesale | Sprinkler | Inter-dept | I/I  |
| 2015                      | 0.63        | 0.43       | 2.00       | --        | --        | 0.16       | 1.48 |
| 2025                      | 0.82        | 0.54       | 2.21       | --        | --        | 0.20       | 1.73 |
| 2035                      | 0.90        | 0.59       | 2.44       | --        | --        | 0.23       | 1.91 |
| 2045                      | 1.00        | 0.66       | 2.69       | --        | --        | 0.25       | 2.12 |
| 2055                      | 1.10        | 0.72       | 2.98       | --        | --        | 0.27       | 2.34 |
| 2065                      | 1.22        | 0.80       | 3.29       | --        | --        | 0.30       | 2.58 |
| 2075                      | 1.34        | 0.88       | 3.63       | --        | --        | 0.34       | 2.85 |
| AGR                       | NA          | NA         | NA         | NA        | NA        | NA         | NA   |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 4.71       |
| 2025                | 5.50       |
| 2035                | 6.08       |
| 2045                | 6.71       |
| 2055                | 7.41       |
| 2065                | 8.19       |
| 2075                | 9.05       |
| *See Note 1         |            |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.20        |
| Feb                  | 1.10        |
| Mar                  | 1.09        |
| Apr                  | 0.94        |
| May                  | 0.96        |
| Jun                  | 1.12        |
| Jul                  | 0.82        |
| Aug                  | 1.06        |
| Sep                  | 0.99        |
| Oct                  | 1.03        |
| Nov                  | 1.13        |
| Dec                  | 0.94        |

| Analysis Notes   |      |                |                |            |
|--|------|----------------|----------------|------------|
| 1. Method for Flowrates: Multiplied Total Water Withdrawn times Percent Treated at a WWTP times Percent of WW Flow Treated at Clary.   |      |                |                |            |
| I and I was estimated using 32% of total wastewater flow generated. This method is consistent with the method used in Phase I, but results for 2015 and 2025 are significantly higher than the projected wastewater flow in Gaffney Board of Public Work's Long Range Planning Study, 2007.  |      |                |                |            |
| 2. Comparison of Difference  |      |                |                |            |
|  | Year | Planning Study | Estimated Here | Difference |
|  | 2015 | 3.05           | 4.71           | 1.66       |
|  | 2025 | 3.43           | 5.50           | 2.07       |
| 3. Note that the resultant higher return flows are a result a higher projections for withdrawals from Phase I. In Phase I the method used to calculate water withdrawals differed slightly from the Gaffney Planning Study resulting in higher Withdrawals. As Returns are based on a percentage of withdrawals the returns are also higher in Phase I and II, despite the methodology for returns being consistent with the Gaffney Planning Study. |      |                |                |            |

ID No. 16-R Category Industrial  
 Entity Milliken Type Return  
 Facility Dewey  
 Contact Lee Slusher [Lee.Slusher@milliken.com]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.19       |
| 2000                | 0.19       |
| 2005                | 0.21       |
| 2006                | 0.19       |

**Data Sources:**  
 1. Obtained from South Carolina Department of Health and Environmental Control  
 2. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.26       | 0.21 | 0.21 | 0.22 |
| Feb                        | 0.22       | 0.18 | 0.16 | 0.20 |
| Mar                        | 0.23       | 0.24 | 0.18 | 0.21 |
| Apr                        | 0.17       | 0.24 | 0.18 | 0.14 |
| May                        | 0.16       | 0.19 | 0.20 | 0.20 |
| Jun                        | 0.25       | 0.21 | 0.21 | 0.24 |
| Jul                        | 0.11       | 0.17 | 0.29 | 0.24 |
| Aug                        | 0.19       | 0.19 | 0.21 | 0.23 |
| Sep                        | 0.17       | 0.23 | 0.18 | 0.19 |
| Oct                        | 0.21       | 0.15 | 0.23 | 0.11 |
| Nov                        | 0.18       | 0.18 | 0.22 | 0.18 |
| Dec                        | 0.11       | 0.13 | 0.21 | 0.15 |

**PROJECTION SUMMARY**

AGR 0.00%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.19       |
| 2025                | 0.19       |
| 2035                | 0.19       |
| 2045                | 0.19       |
| 2055                | 0.19       |
| 2065                | 0.19       |
| 2075                | 0.19       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.16        | Jul   | 1.03        |
| Feb                  | 0.98        | Aug   | 1.06        |
| Mar                  | 1.09        | Sep   | 0.98        |
| Apr                  | 0.93        | Oct   | 0.90        |
| May                  | 0.96        | Nov   | 0.97        |
| Jun                  | 1.16        | Dec   | 0.78        |

**PROJECTIONS ANALYSIS**

Industry Sector: Chemical SC GSP AGR: -9.15% Inflation AGR:

- Analysis Notes**
1. The Whitestone Packaging Plant never discharges into river system. Evaporates from pond.
  2. the New Prospect Facility discharges within Phase II area, but is currently closed.
  3. Lockhart Dam is a net zero situation.
  4. Dewey Facility discharges into Lawson Fork Creek. Data provided above.
  5. The current SC GSP AGR shows a significant decline in this sector, however historical discharges for this entity have remained constant. Therefore, the growth rate is set to zero percent change.
  6. Their SIC code is 2869 = INDUST. ORGANIC CHEMICALS NEC. This corresponds to an NAICS code of 325.

ID No. 17-R Category Industrial  
 Entity Cone Mills Corp Type Return  
 Facility Carlisle Plant  
 Contact Erica A. Johnson [JOHNSOEA@dhec.sc.gov]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 1.61       |
| 2000                | 2.56       |
| 2005                | 1.50       |
| 2006                | 1.21       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 1.88       | 1.85 | 1.28 | 1.53 |
| Feb                        | 1.70       | 2.52 | 1.58 | 1.33 |
| Mar                        | 1.57       | 2.91 | 1.72 | 1.21 |
| Apr                        | 1.89       | 3.49 | 2.05 | 0.98 |
| May                        | 1.39       | 2.82 | 1.77 | 1.07 |
| Jun                        | 1.49       | 3.53 | 1.26 | 1.13 |
| Jul                        | 1.35       | 1.89 | 1.13 | 1.07 |
| Aug                        | 1.81       | 2.33 | 1.51 | 1.43 |
| Sep                        | 1.37       | 2.14 | 1.44 | 1.23 |
| Oct                        | 1.76       | 2.11 | 1.21 | 1.09 |
| Nov                        | 1.49       | 2.40 | 1.59 | 1.12 |
| Dec                        | 1.66       | 2.74 | 1.50 | 1.33 |

**Data Sources:**  
 1. Obtained from South Carolina Department of Health and Environmental Control  
 2. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

**PROJECTION SUMMARY**

AGR 0.00%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.21       |
| 2025                | 1.21       |
| 2035                | 1.21       |
| 2045                | 1.21       |
| 2055                | 1.21       |
| 2065                | 1.21       |
| 2075                | 1.21       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.00        | Jul   | 0.80        |
| Feb                  | 1.05        | Aug   | 1.05        |
| Mar                  | 1.06        | Sep   | 0.92        |
| Apr                  | 1.18        | Oct   | 0.91        |
| May                  | 1.01        | Nov   | 0.96        |
| Jun                  | 1.02        | Dec   | 1.05        |

**PROJECTIONS ANALYSIS**

Industry Sector: Textile

SC GSP AGR: -5.67%

Inflation AGR:

**Analysis Notes**  
 1. Monthly flows for January 1995 through June 1997 and December 2002 through December 2006 are actuals.  
 2. Monthly flows for all other months is estimated from peak flows and monthly peaking factors estimated from data.  
 3. SIC CODE : 2261 = FINISH OF BRD WOV FAB OF COTTN . Converts to NAICS of 313311 Broadwoven Fabric Finishing Mills (pt) . Therefore, NAICS code 313 is used from GSP table.  
 4. For this analysis it is assumed flows will not continue to decline.

|                 |   |                 |            |
|-----------------|---|-----------------|------------|
| <b>ID No.</b>   | 17-W                                    | <b>Category</b> | Industrial |
| <b>Entity</b>   | Cone Mills - Water                      | <b>Type</b>     | Withdrawal |
| <b>Facility</b> | Carlisle Plant                          |                 |            |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov] |                 |            |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 2.17       |
| 2000                | 1.50       |
| 2005                | 1.58       |
| 2006                | 1.29       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 2.88       | --   | 1.68 | 1.40 |
| Feb                        | 2.50       | 2.57 | 1.74 | 1.56 |
| Mar                        | 1.36       | 3.07 | 1.77 | 1.51 |
| Apr                        | 2.25       | 2.50 | 1.73 | 1.19 |
| May                        | 2.02       | --   | 1.62 | 1.35 |
| Jun                        | 2.43       | --   | 1.69 | 1.56 |
| Jul                        | 1.87       | 2.07 | 1.28 | 1.11 |
| Aug                        | 2.64       | --   | 1.89 | 1.52 |
| Sep                        | 2.26       | 2.51 | 1.40 | 0.92 |
| Oct                        | 1.75       | 2.47 | 1.51 | 1.22 |
| Nov                        | 2.31       | 2.85 | 1.56 | 1.31 |
| Dec                        | 1.76       | --   | 1.12 | 0.85 |

**Data Sources:**

- Obtained from South Carolina Department of Health and Environmental Control
- Source: Bureau of Economic Analysis, U.S. Department of Commerce.

**PROJECTION SUMMARY**

**AGR** 0.00%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.29       |
| 2025                | 1.29       |
| 2035                | 1.29       |
| 2045                | 1.29       |
| 2055                | 1.29       |
| 2065                | 1.29       |
| 2075                | 1.29       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.16        | Jul   | 0.84        |
| Feb                  | 1.15        | Aug   | 1.19        |
| Mar                  | 0.97        | Sep   | 0.88        |
| Apr                  | 1.02        | Oct   | 0.90        |
| May                  | 1.00        | Nov   | 1.02        |
| Jun                  | 1.13        | Dec   | 0.73        |

**PROJECTIONS ANALYSIS**

**Industry Sector:** Textile

**SC GSP AGR:** -5.67%

**Inflation AGR:**

**Analysis Notes**

- Combined water flows for the Carlisle Plant (SC-DHEC water and industrial designation).
- SIC CODE : 2261 = FINISH OF BRD WOV FAB OF COTTN . Converts to NAICS of 313311 Broadwoven Fabric Finishing Mills (pt) . Therefore, NAICS code 313 is used from GSP table.
- For this analysis it is assumed flows will not continue to decline.

|                 |   |                 |                     |
|-----------------|---|-----------------|---------------------|
| <b>ID No.</b>   | 18-W                                    | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | City of Columbia                        | <b>Type</b>     | Withdrawal          |
| <b>Facility</b> | Columbia Canal WTP                      |                 |                     |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov] |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 27.22      |
| 2000                | 30.82      |
| 2005                | 32.29      |
| 2006                | 33.10      |

| Month | Monthly Average Flow (mgd) |       |       |       |
|-------|----------------------------|-------|-------|-------|
|       | 1995                       | 2000  | 2005  | 2006  |
| Jan   | 21.74                      | 24.22 | 28.76 | 27.72 |
| Feb   | 20.57                      | 24.86 | 27.34 | 26.58 |
| Mar   | 23.79                      | 24.36 | 25.27 | 27.48 |
| Apr   | 30.78                      | 27.85 | 30.05 | 34.21 |
| May   | 35.92                      | 40.61 | 31.05 | 36.42 |
| Jun   | 28.06                      | 40.07 | 32.24 | 41.79 |
| Jul   | 31.41                      | 40.44 | 37.32 | 43.89 |
| Aug   | 31.97                      | 38.97 | 31.47 | 36.56 |
| Sep   | 27.78                      | 28.91 | 44.64 | 29.64 |
| Oct   | 25.31                      | 29.57 | 35.14 | 36.28 |
| Nov   | 22.44                      | 25.76 | 34.77 | 30.24 |
| Dec   | 26.85                      | 24.17 | 29.41 | 26.34 |

| Data Sources              |
|---------------------------|
| 1. Obtained from SC-DHEC. |

| Residential Customers Served |            |            |         |
|------------------------------|------------|------------|---------|
| Year-->                      | 2006       |            |         |
| Grouping                     | Population | Flow (gpd) | Taps    |
| Residential                  | 292,677    |            | 117,071 |
| Non-Residential              |            |            | 10,712  |
| Commercial/ Industrial       |            |            |         |
| Institutional                |            |            |         |
| Wholesale                    |            |            |         |

|                     |
|---------------------|
| Unaccounted<br>Flow |
|---------------------|

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                                |
|--------------------|-------|--------------------------------|
| Category           | AGR   | Remarks                        |
| Residential        | 1.71% | 2007-2025. See analysis notes. |
| Residential        | 0.95% | 2026-2045. See analysis notes. |
| Industrial         |       |                                |
| Institutional      |       |                                |
| Wholesale          |       |                                |
| Residential        | 0.65% | 2046-2075. See analysis notes. |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.02        | 0.01       | --         | --            | --        | NA        |

| Annual Average Flow |            |       | Monthly Coefficients |             |
|---------------------|------------|-------|----------------------|-------------|
| Year                | Flow (mgd) |       | Month                | Coefficient |
| 2015                | 38.56      | 1.71% | Jan                  | 0.83        |
| 2025                | 45.70      | 1.71% | Feb                  | 0.80        |
| 2035                | 50.23      | 1.45% | Mar                  | 0.82        |
| 2045                | 55.21      | 1.32% | Apr                  | 1.00        |
| 2055                | 58.91      | 1.18% | May                  | 1.17        |
| 2065                | 62.85      | 1.09% | Jun                  | 1.15        |
| 2075                | 67.06      | 1.03% | Jul                  | 1.24        |
|                     |            |       | Aug                  | 1.13        |
|                     |            |       | Sep                  | 1.06        |
|                     |            |       | Oct                  | 1.02        |
|                     |            |       | Nov                  | 0.91        |
|                     |            |       | Dec                  | 0.87        |

| Analysis Notes  |
|---|
| 1. The growth rate of actual withdrawals from 1995 to 2006 was 1.94% and 2000 to 2006 was 2.45%.  |
| 2. The 2007-2025 AGR is based on the projections provided by the City of Columbia (1.7%). The 2026-2075 AGR is based professional judgement and the combined Lexington County and Richland County population AGR of 1.01%.  |
| 3. Base year is 2006.   |
| 4. The City of Columbia operates the Columbia Canal WTP which is withdrawals water from the Broad River Diversion Canal. The City also treats water at the Columbia Metro WWTP, however this facility is located approximately 6 miles downstream of the Broad River Diversion Canal on the Congaree River, thus is outside of the study basin. Therefore the Metro WWTP is excluded from this study. |
| 5. AGR for 2046-2075 years reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average.  |

|                 |  |                 |                     |
|-----------------|--|-----------------|---------------------|
| <b>ID No.</b>   | 19-R   | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | (Lockhart WTF) Total Environmental Solutions, Inc. | <b>Type</b>     | Return              |
| <b>Facility</b> | Lockhart Treatment Facility                        |                 |                     |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov]            |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.17       |
| 2000                | 0.09       |
| 2005                | 0.09       |
| 2006                | 0.29       |

| Data Sources   |
|--|
| 1. Obtained from South Carolina Department of Health and Environmental Control |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.19                       | 0.12 | 0.08 | 0.09 |
| Feb   | 0.17                       | 0.11 | 0.10 | 0.09 |
| Mar   | 0.14                       | 0.10 | 0.13 | 0.07 |
| Apr   | 0.12                       | 0.10 | 0.11 | 0.07 |
| May   | 0.19                       | 0.07 | 0.09 | 0.08 |
| Jun   | 0.28                       | 0.07 | 0.11 | 0.08 |
| Jul   | 0.18                       | 0.07 | 0.09 | 0.08 |
| Aug   | 0.19                       | 0.08 | 0.09 | 0.07 |
| Sep   | 0.14                       | 0.13 | 0.07 | 0.09 |
| Oct   | 0.16                       | 0.07 | 0.08 | 0.07 |
| Nov   | 0.18                       | 0.07 | 0.08 | 1.22 |
| Dec   | 0.15                       | 0.07 | 0.11 | 1.42 |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |                     |
|--------------------|-------|---------------------|
| Category           | AGR   | Remarks             |
| Residential        | 0.20% | See analysis notes. |
| Commercial         |       |                     |
| Industrial         |       |                     |
| Institutional      |       |                     |
| Wholesale          |       |                     |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.002       | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.29       |
| 2025                | 0.30       |
| 2035                | 0.30       |
| 2045                | 0.31       |
| 2055                | 0.32       |
| 2065                | 0.32       |
| 2075                | 0.33       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.10        |
| Feb                  | 1.12        |
| Mar                  | 1.09        |
| Apr                  | 0.99        |
| May                  | 0.92        |
| Jun                  | 1.18        |
| Jul                  | 0.94        |
| Aug                  | 0.97        |
| Sep                  | 0.98        |
| Oct                  | 0.86        |
| Nov                  | 0.89        |
| Dec                  | 0.95        |

| Analysis Notes  |
|---|
| 1. The Union County population is anticipated to decline between 2005 and 2035 (i.e. -0.20%). For this study a conservative AGR of 0.2% is applied for the entire 69 year period. |
| 2. Year 2006 is excluded from Monthly coefficient calculations due to apparent increase in pumping at end of 2006. This skews November and December coefficients if included.     |
|   |
|   |
|   |
|   |
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|   |
|   |



ID No. 23-W Category Public Water Supply  
 Entity Town of Whitmire Type Withdrawal  
 Facility Town of Whitmire WTP  
 Contact Erica A. Johnson [JOHNSOEA@dhec.sc.gov]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.60       |
| 2000                | 0.68       |
| 2005                | 0.64       |
| 2006                | 0.57       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.62       | 0.70 | 0.61 | 0.54 |
| Feb                        | 0.61       | 0.80 | 0.63 | 0.54 |
| Mar                        | 0.60       | 0.83 | 0.61 | 0.56 |
| Apr                        | 0.56       | 0.81 | 0.63 | 0.56 |
| May                        | 0.64       | 0.00 | 0.74 | 0.62 |
| Jun                        | 0.66       | 0.94 | 0.73 | 0.68 |
| Jul                        | 0.65       | 0.88 | 0.72 | 0.66 |
| Aug                        | 0.68       | 0.87 | 0.67 | 0.63 |
| Sep                        | 0.63       | 0.80 | 0.61 | 0.54 |
| Oct                        | 0.56       | 0.77 | 0.59 | 0.56 |
| Nov                        | 0.49       | 0.76 | 0.57 | 0.53 |
| Dec                        | 0.47       | 0.00 | 0.53 | 0.48 |

| Data Sources              |
|---------------------------|
| 1. Obtained from SC-DHEC. |

| Residential Customers Served |            |            |       |
|------------------------------|------------|------------|-------|
| Year-->                      | 2006       |            |       |
| Grouping                     | Population | Flow (gpd) | Taps  |
| Residential                  | 2,755      |            | 1,102 |
| Non-Residential              |            |            | 79    |
| Commercial/ Industrial       |            |            |       |
| Institutional                |            |            |       |
| Wholesale                    |            |            |       |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks                                   |
| Residential        | 0.62% | Based on Newberry County population data. |
| Commercial         |       |   |
| Industrial         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |
| Residential        | 0.59% | 2046-2075. Anticipated reduced AGR.       |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |                 |                       |               |           |             |
|---------------------------|-------------|-----------------|-----------------------|---------------|-----------|-------------|
| Year                      | Category    |                 |                       |               |           |             |
|                           | Residential | Non-Residential | Industrial/Commercial | Institutional | Wholesale | Unaccounted |
| 2015                      |             |                 |                       |               |           |             |
| 2025                      |             |                 |                       |               |           |             |
| 2035                      |             |                 |                       |               |           |             |
| 2045                      |             |                 |                       |               |           |             |
| 2055                      |             |                 |                       |               |           |             |
| 2065                      |             |                 |                       |               |           |             |
| 2075                      |             |                 |                       |               |           |             |
| <i>AGR</i>                | <i>0.01</i> | --              | --                    | --            | --        | <i>NA</i>   |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.61       |
| 2025                | 0.65       |
| 2035                | 0.69       |
| 2045                | 0.73       |
| 2055                | 0.77       |
| 2065                | 0.82       |
| 2075                | 0.87       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.99        |
| Feb                  | 1.03        |
| Mar                  | 1.04        |
| Apr                  | 1.02        |
| May                  | 0.82        |
| Jun                  | 1.20        |
| Jul                  | 1.16        |
| Aug                  | 1.14        |
| Sep                  | 1.03        |
| Oct                  | 0.99        |
| Nov                  | 0.94        |
| Dec                  | 0.62        |

**Analysis Notes**

1. AGR is staggered slightly downward in 2046 to better reflect U.S. declines in AGR.  
 2. Base year is 2006.

**ID No.** 25-R **Category** Industrial  
**Entity** Spartan Mills Startext **Type** Return  
**Facility** Spartan Mills/Startex Mill  
**Contact** Erica A. Johnson [JOHNSOEA@dhec.sc.gov]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.36       |
| 2000                | 0.07       |
| 2005                | 0.17       |
| 2006                | 0.14       |

**Data Sources:**

- Obtained from South Carolina Department of Health and Environmental Control
- Source: Bureau of Economic Analysis, U.S. Department of Commerce.

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.40       | 0.06 | 0.20 | 0.15 |
| Feb                        | 0.35       | 0.09 | 0.11 | 0.21 |
| Mar                        | 0.41       | 0.07 | 0.18 | 0.10 |
| Apr                        | 0.38       | 0.08 | 0.19 | 0.07 |
| May                        | 0.38       | 0.09 | 0.10 | 0.14 |
| Jun                        | 0.44       | 0.09 | 0.17 | 0.14 |
| Jul                        | 0.44       | 0.06 | 0.07 | 0.13 |
| Aug                        | 0.42       | 0.02 | 0.17 | 0.11 |
| Sep                        | 0.34       | 0.08 | 0.24 | 0.14 |
| Oct                        | 0.28       | 0.07 | 0.18 | 0.16 |
| Nov                        | 0.26       | 0.07 | 0.22 | 0.20 |
| Dec                        | 0.27       | 0.07 | 0.20 | 0.15 |

**PROJECTION SUMMARY**

**AGR** 3.00%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.18       |
| 2025                | 0.25       |
| 2035                | 0.33       |
| 2045                | 0.45       |
| 2055                | 0.60       |
| 2065                | 0.81       |
| 2075                | 1.08       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.06        | Jul   | 0.86        |
| Feb                  | 1.08        | Aug   | 0.80        |
| Mar                  | 0.99        | Sep   | 1.10        |
| Apr                  | 0.92        | Oct   | 0.97        |
| May                  | 0.98        | Nov   | 1.11        |
| Jun                  | 1.12        | Dec   | 1.02        |

**PROJECTIONS ANALYSIS**

**Industry Sector:** Warehousing

**SC GSP AGR:** 6.17%

**Inflation AGR:**

**Analysis Notes**

- Their SIC Code is 4226 = SPECIAL WAREHOUSING & STORAGE. This corresponds to an NAICS code of 493.
- Upon reviewing the historical usage of this facility it was determined that a 6% growth rate was too aggressive, especially considering the recent trends in water use. Therefore a rate of 3% was used for the entire period.

|                 |   |                 |            |
|-----------------|---|-----------------|------------|
| <b>ID No.</b>   | 26-R                                    | <b>Category</b> | Industrial |
| <b>Entity</b>   | Invista Sarl                            | <b>Type</b>     | Return     |
| <b>Facility</b> | Invista S.A.R.L./Spartanburg            |                 |            |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov] |                 |            |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.71       |
| 2000                | 0.75       |
| 2005                | 0.70       |
| 2006                | 0.72       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.74       | 0.78 | 0.59 | 0.68 |
| Feb                        | 0.73       | 0.77 | 0.61 | 0.65 |
| Mar                        | 0.76       | 0.70 | 0.68 | 0.79 |
| Apr                        | 0.67       | 0.72 | 0.67 | 0.77 |
| May                        | 0.70       | 0.67 | 0.68 | 0.70 |
| Jun                        | 0.65       | 0.72 | 0.71 | 0.74 |
| Jul                        | 0.71       | 0.79 | 0.74 | 0.78 |
| Aug                        | 0.76       | 0.79 | 0.78 | 0.78 |
| Sep                        | 0.69       | 0.77 | 0.73 | 0.75 |
| Oct                        |            | 0.75 | 0.75 | 0.66 |
| Nov                        | 0.74       | 0.76 | 0.71 | 0.68 |
| Dec                        | 0.67       | 0.81 | 0.71 | 0.64 |

| Data Sources:  |
|--|
| 1. Obtained from South Carolina Department of Health and Environmental Control |
| 2. Source: Bureau of Economic Analysis, U.S. Department of Commerce.           |

**PROJECTION SUMMARY**

|            |       |
|------------|-------|
| <b>AGR</b> | 0.00% |
|------------|-------|

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.72       |
| 2025                | 0.72       |
| 2035                | 0.72       |
| 2045                | 0.72       |
| 2055                | 0.72       |
| 2065                | 0.72       |
| 2075                | 0.72       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 0.94        | Jul   | 1.07        |
| Feb                  | 0.94        | Aug   | 1.08        |
| Mar                  | 1.00        | Sep   | 1.04        |
| Apr                  | 1.00        | Oct   | 0.99        |
| May                  | 0.95        | Nov   | 0.99        |
| Jun                  | 1.01        | Dec   | 1.00        |

**PROJECTIONS ANALYSIS**

|                         |          |
|-------------------------|----------|
| <b>Industry Sector:</b> | Chemical |
|-------------------------|----------|

|                    |        |
|--------------------|--------|
| <b>SC GSP AGR:</b> | -9.15% |
|--------------------|--------|

|                       |  |
|-----------------------|--|
| <b>Inflation AGR:</b> |  |
|-----------------------|--|

| Analysis Notes   |
|--|
| 1. Their SIC Code is 2821 = PLSTC MAT./SYN RESINS/NV ELAST. This corresponds to an NAICS code of 325211 Plastics Material and Resin Manufacturing. Thus NAICS code 325 is used in the GSP table. |
| 2. Historical trend since 1995 shows a realtive stable withdrawal. Therefore an AGR of 0% is used in place of the -9.15% sector AGR as a conservative estimate.                                  |
| 3. Raw data from SC-DHEC was changed for 6/2005 from 7.12 to 0.712. Assumed data entry error.  |
|  |
|  |

**ID No.** 27-R **Category** Industrial  
**Entity** General Electric Gas Turbines **Type** Return  
**Facility** GE/Gas Turbine MFG Operation  
**Contact** Erica A. Johnson [JOHNSOEA@dhec.sc.gov]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.25       |
| 2000                | 0.26       |
| 2005                | 0.13       |
| 2006                | 0.12       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.23       | 0.23 | 0.09 | 0.15 |
| Feb                        | 0.25       | 0.26 | 0.11 | 0.14 |
| Mar                        | 0.25       | 0.27 | 0.14 | 0.14 |
| Apr                        | 0.33       | 0.44 | 0.16 | 0.12 |
| May                        | 0.30       | 0.31 | 0.13 | 0.09 |
| Jun                        | 0.21       | 0.27 | 0.17 | 0.09 |
| Jul                        | 0.28       | 0.21 | 0.12 | 0.12 |
| Aug                        | 0.28       | 0.26 | 0.11 | 0.08 |
| Sep                        | 0.24       | 0.25 | 0.10 | 0.11 |
| Oct                        | 0.23       | 0.26 | 0.10 | 0.11 |
| Nov                        | 0.23       | 0.19 | 0.10 | 0.10 |
| Dec                        | 0.21       | 0.21 | 0.18 | 0.13 |

**Data Sources:**

- Obtained from South Carolina Department of Health and Environmental Control
- Source: Bureau of Economic Analysis, U.S. Department of Commerce.

**PROJECTION SUMMARY**

**AGR** 3.10%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.15       |
| 2025                | 0.21       |
| 2035                | 0.28       |
| 2045                | 0.38       |
| 2055                | 0.52       |
| 2065                | 0.70       |
| 2075                | 0.95       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 0.96        | Jul   | 0.98        |
| Feb                  | 1.02        | Aug   | 0.91        |
| Mar                  | 1.08        | Sep   | 0.92        |
| Apr                  | 1.32        | Oct   | 0.91        |
| May                  | 1.04        | Nov   | 0.83        |
| Jun                  | 0.99        | Dec   | 1.04        |

**PROJECTIONS ANALYSIS**

**Industry Sector:** Turbines

**SC GSP AGR:** 3.10%

**Inflation AGR:**

**Analysis Notes**

- Their SIC Code is 3511 = TURBINES & TURBINE GENERATOR. This corresponds to an NAICS code of 333611 Turbine and Turbine Generator Set Unit Manufacturing. Thus a NAICS code of 333 is used in the GSP Table.

|                 |   |                 |                     |
|-----------------|---|-----------------|---------------------|
| <b>ID No.</b>   | 28-R                                    | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | Town of Lyman                           | <b>Type</b>     | Return              |
| <b>Facility</b> | Lyman WWTP                              |                 |                     |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov] |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 2.22       |
| 2000                | 1.73       |
| 2005                | 1.43       |
| 2006                | 1.52       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 2.44                       | 1.43 | 1.50 | 1.40 |
| Feb   | 2.24                       | 1.36 | 1.60 | 1.50 |
| Mar   | 1.71                       | 1.76 | 1.80 | 1.50 |
| Apr   | 1.97                       | 1.57 | 1.70 | 1.20 |
| May   | 2.34                       | 1.67 | 1.50 | 1.60 |
| Jun   | 2.19                       | 1.60 | 1.80 | 1.60 |
| Jul   | 1.60                       | 1.60 | 1.40 | 1.60 |
| Aug   | 2.92                       | 2.00 | 1.10 | 1.50 |
| Sep   | 2.55                       | 2.20 | 1.10 | 1.50 |
| Oct   | 2.43                       | 1.90 | 1.20 | 1.70 |
| Nov   | 2.36                       | 1.70 | 1.10 | 1.50 |
| Dec   | 1.87                       | 2.00 | 1.40 | 1.60 |

| Data Sources   |
|--|
| 1. Obtained from South Carolina Department of Health and Environmental Control |

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

|                     |
|---------------------|
| Unaccounted<br>Flow |
|---------------------|

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 0.87% | 2007-2045. Based on Spartanburg County population data. |
| Commercial         |       |   |
| Industrial         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |
| Residential        | 0.82% | 2046-2075. See analysis notes.                          |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.64       |
| 2025                | 1.79       |
| 2035                | 1.95       |
| 2045                | 2.12       |
| 2055                | 2.30       |
| 2065                | 2.50       |
| 2075                | 2.71       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.97        |
| Feb                  | 0.98        |
| Mar                  | 1.01        |
| Apr                  | 0.94        |
| May                  | 1.03        |
| Jun                  | 1.06        |
| Jul                  | 0.92        |
| Aug                  | 1.06        |
| Sep                  | 1.04        |
| Oct                  | 1.04        |
| Nov                  | 0.95        |
| Dec                  | 1.01        |

| Analysis Notes   |
|--|
| 1. AGR is staggered downward to follow national trend.   |
| 2. Base year is 2006.  |
| 3. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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|-----------------|--|-----------------|---------------------|
| <b>ID No.</b>   | 29(IWL)-R                                  | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | City of Inman (Inman Mills Water District) | <b>Type</b>     | Return              |
| <b>Facility</b> | Inman Wastewater Laboratories              |                 |                     |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov]    |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.35       |
| 2000                | 0.36       |
| 2005                | 0.41       |
| 2006                | 0.37       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.37       | 0.35 | 0.39 | 0.42 |
| Feb                        | 0.43       | 0.41 | 0.42 | 0.37 |
| Mar                        | 0.41       | 0.47 | 0.47 | 0.37 |
| Apr                        | 0.35       | 0.42 | 0.43 | 0.37 |
| May                        | 0.36       | 0.36 | 0.42 | 0.35 |
| Jun                        | 0.42       | 0.32 | 0.47 | 0.39 |
| Jul                        | 0.31       | 0.31 | 0.49 | 0.37 |
| Aug                        | 0.30       | 0.35 | 0.36 | 0.36 |
| Sep                        | 0.27       | 0.37 | 0.34 | 0.35 |
| Oct                        | 0.35       | 0.29 | 0.39 | 0.33 |
| Nov                        | 0.33       | 0.32 | 0.37 | 0.40 |
| Dec                        | 0.27       | 0.35 | 0.42 | 0.43 |

| Data Sources   |
|--|
| 1. Obtained from South Carolina Department of Health and Environmental Control |

| Residential Customers Served |            |            |      |             |
|------------------------------|------------|------------|------|-------------|
| Year-->                      | 2006       |            |      |             |
| Grouping                     | Population | Flow (gpd) | Taps | Description |
| Residential                  | 771        |            | 294  | All WWTPs   |
| Non-Residential              |            |            | 1    | All WWTPs   |
| Industrial/Commercial        |            |            |      |             |
| Institutional                |            |            |      |             |
| Wholesale                    |            |            |      |             |

|                     |
|---------------------|
| Unaccounted<br>Flow |
|---------------------|

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 0.87% | 2007-2045. Based on Spartanburg County population data. |
| Commercial         |       |   |
| Industrial         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |
| Residential        | 0.82% | 2046-2075. See analysis notes.                          |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |



**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0          | 0          | 0             | 0         | NA        |

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| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.40       |
| 2025                | 0.44       |
| 2035                | 0.48       |
| 2045                | 0.52       |
| 2055                | 0.57       |
| 2065                | 0.62       |
| 2075                | 0.67       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.03        |
| Feb                  | 1.09        |
| Mar                  | 1.15        |
| Apr                  | 1.05        |
| May                  | 0.99        |
| Jun                  | 1.06        |
| Jul                  | 0.99        |
| Aug                  | 0.92        |
| Sep                  | 0.88        |
| Oct                  | 0.91        |
| Nov                  | 0.94        |
| Dec                  | 0.98        |

| Analysis Notes   |
|--|
| 1. Modified the September 1995 data point from 270.5 to 0.2705. Appears to be data entry error.  |
| 2. AGR is staggered downward to follow national trend.   |
| 3. Base year is 2006.  |
| 4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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|-----------------|--|-----------------|---------------------|
| <b>ID No.</b>   | 29(LFC)-R                                  | <b>Category</b> | Public Water Supply |
| <b>Entity</b>   | City of Inman (Inman Mills Water District) | <b>Type</b>     | Return              |
| <b>Facility</b> | Lawson Fork Creek WWTP                     |                 |                     |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov]    |                 |                     |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.15       |
| 2000                | 0.11       |
| 2005                | 0.06       |
| 2006                | 0.04       |

| Month | Monthly Average Flow (mgd) |      |      |      |
|-------|----------------------------|------|------|------|
|       | 1995                       | 2000 | 2005 | 2006 |
| Jan   | 0.15                       | 0.16 | 0.06 | 0.05 |
| Feb   | 0.13                       | 0.13 | 0.06 | 0.04 |
| Mar   | 0.16                       | 0.14 | 0.12 | 0.04 |
| Apr   | 0.14                       | 0.13 | 0.06 | 0.04 |
| May   | 0.14                       | 0.10 | 0.05 | 0.03 |
| Jun   | 0.18                       | 0.08 | 0.06 | 0.05 |
| Jul   | 0.13                       | 0.06 | 0.07 | 0.04 |
| Aug   | 0.18                       | 0.08 | 0.04 | 0.03 |
| Sep   | 0.16                       | 0.12 | 0.03 | 0.03 |
| Oct   | 0.17                       | 0.12 | 0.05 | 0.04 |
| Nov   | 0.22                       | 0.12 | 0.04 | 0.05 |
| Dec   | 0.11                       | 0.10 | 0.06 | 0.05 |

| Data Sources   |
|--|
| 1. Obtained from South Carolina Department of Health and Environmental Control |

| Residential Customers Served |            |            |      |             |
|------------------------------|------------|------------|------|-------------|
| Year-->                      | 2006       |            |      |             |
| Grouping                     | Population | Flow (gpd) | Taps | Description |
| Residential                  | 771        |            | 294  | All WWTPs   |
| Non-Residential              |            |            | 1    | All WWTPs   |
| Industrial/Commercial        |            |            |      |             |
| Institutional                |            |            |      |             |
| Wholesale                    |            |            |      |             |

| Unaccounted Flow |
|------------------|
|                  |

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 0.87% | 2007-2045. Based on Spartanburg County population data. |
| Commercial         |       |   |
| Industrial         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |
| Residential        | 0.82% | 2046-2075. See analysis notes.                          |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.04       |
| 2025                | 0.05       |
| 2035                | 0.05       |
| 2045                | 0.06       |
| 2055                | 0.06       |
| 2065                | 0.07       |
| 2075                | 0.07       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.17        |
| Feb                  | 0.99        |
| Mar                  | 1.32        |
| Apr                  | 0.98        |
| May                  | 0.85        |
| Jun                  | 1.03        |
| Jul                  | 0.88        |
| Aug                  | 0.83        |
| Sep                  | 0.86        |
| Oct                  | 1.00        |
| Nov                  | 1.10        |
| Dec                  | 0.99        |

| Analysis Notes   |
|--|
| 1. AGR is staggered downward to follow national trend.   |
| 2. Base year is 2006.  |
| 3. Included in analysis despite being less than 0.1 MGD threshold because in combination with other facility it meets the criteria.<br>In addition, historical flows have exceeded theshold. |
| 4. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to contine<br>growing faster than U.S. average.                                 |
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|                 |   |                 |                             |
|-----------------|---|-----------------|-----------------------------|
| <b>ID No.</b>   | 32-R                                    | <b>Category</b> | Public Water Supply (Other) |
| <b>Entity</b>   | SC Department of Corrections            | <b>Type</b>     | Return                      |
| <b>Facility</b> | Tyger River Correction                  |                 |                             |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov] |                 |                             |

### HISTORICAL DATA SUMMARY

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.21       |
| 2000                | 0.15       |
| 2005                | 0.18       |
| 2006                | 0.16       |

| Data Sources: |   |
|---------------|---|
| 1.            | Obtained from South Carolina Department of Health and Environmental Control |
| 2.            | Source: Bureau of Economic Analysis, U.S. Department of Commerce.           |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.22       | 0.12 | 0.18 | 0.16 |
| Feb                        | 0.23       | 0.14 | 0.18 | 0.16 |
| Mar                        | 0.26       | 0.16 | 0.18 | 0.16 |
| Apr                        | 0.28       | 0.16 | 0.18 | 0.16 |
| May                        | 0.22       | 0.16 | 0.18 | 0.16 |
| Jun                        | 0.23       | 0.15 | 0.18 | 0.17 |
| Jul                        | 0.18       | 0.16 | 0.16 | 0.17 |
| Aug                        | 0.19       | 0.16 | 0.18 | 0.18 |
| Sep                        | 0.18       | 0.16 | 0.18 | 0.17 |
| Oct                        | 0.19       | 0.17 | 0.19 | 0.18 |
| Nov                        | 0.16       | 0.15 | 0.19 | 0.16 |
| Dec                        | 0.16       | 0.14 | 0.17 | 0.15 |

Estimated  
Estimated  
Estimated

### PROJECTION SUMMARY

|            |       |       |
|------------|-------|-------|
| <b>AGR</b> | 0.94% | 0.82% |
|------------|-------|-------|

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.20       |
| 2025                | 0.20       |
| 2035                | 0.22       |
| 2045                | 0.24       |
| 2055                | 0.26       |
| 2065                | 0.28       |
| 2075                | 0.30       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 0.94        | Jul   | 0.95        |
| Feb                  | 1.00        | Aug   | 1.01        |
| Mar                  | 1.07        | Sep   | 0.99        |
| Apr                  | 1.09        | Oct   | 1.06        |
| May                  | 1.02        | Nov   | 0.96        |
| Jun                  | 1.03        | Dec   | 0.88        |

### PROJECTIONS ANALYSIS

|                         |            |                    |       |                       |  |
|-------------------------|------------|--------------------|-------|-----------------------|--|
| <b>Industry Sector:</b> | Government | <b>SC GSP AGR:</b> | 5.85% | <b>Inflation AGR:</b> |  |
|-------------------------|------------|--------------------|-------|-----------------------|--|

| Analysis Notes |  |
|----------------|--|
| 1.             | AGR is based on SIC code of 9223 = CORRECTIONAL INSTITUTIONS. This corresponds to an NAICS code of 92214 Correctional Institutions. NAICS code "92, State and Local" was used for GSP table. This rate of growth appears to be to aggressive considering historic data shows a slight decline in water returns. Therefore a lower rate of 0.94% is used for 2007-2045 (based on South Carolina state population growth between 2005-2035) and 0.82% is used for 2046 - 2075 (based on a combination of U.S. growth and anticipated South Carolina growth). |

e Data---->

| Coefficients |      |      |      |      |
|--------------|------|------|------|------|
| Month        | 1995 | 2000 | 2005 | 2006 |
| Jan          | 1.06 | 0.76 | 0.98 | 0.96 |
| Feb          | 1.12 | 0.94 | 1.00 | 0.94 |
| Mar          | 1.26 | 1.03 | 1.03 | 0.97 |
| Apr          | 1.33 | 1.08 | 0.99 | 0.97 |
| May          | 1.08 | 1.04 | 1.00 | 0.97 |
| Jun          | 1.09 | 1.01 | 1.00 | 1.01 |
| Jul          | 0.85 | 1.03 | 0.89 | 1.03 |
| Aug          | 0.90 | 1.04 | 0.99 | 1.09 |
| Sep          | 0.87 | 1.03 | 1.02 | 1.03 |
| Oct          | 0.90 | 1.14 | 1.08 | 1.10 |
| Nov          | 0.78 | 1.01 | 1.04 | 1.00 |
| Dec          | 0.75 | 0.89 | 0.95 | 0.91 |

| Flow Projections - Tabular Form (DO) |       |      |      |      |      |      |      |
|--------------------------------------|-------|------|------|------|------|------|------|
| Year                                 | Month |      |      |      |      |      |      |
|                                      | Jan   | Feb  | Mar  | Apr  | May  | Jun  | Jul  |
| 2005                                 | 0.18  | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.16 |
| 2006                                 | 0.16  | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 |
| 2015                                 | 0.18  | 0.20 | 0.21 | 0.21 | 0.20 | 0.20 | 0.19 |
| 2025                                 | 0.19  | 0.20 | 0.21 | 0.22 | 0.20 | 0.20 | 0.19 |
| 2035                                 | 0.20  | 0.22 | 0.23 | 0.24 | 0.22 | 0.22 | 0.21 |
| 2045                                 | 0.22  | 0.24 | 0.25 | 0.26 | 0.24 | 0.24 | 0.23 |
| 2055                                 | 0.24  | 0.26 | 0.28 | 0.28 | 0.26 | 0.27 | 0.25 |
| 2065                                 | 0.26  | 0.28 | 0.30 | 0.31 | 0.29 | 0.29 | 0.27 |
| 2075                                 | 0.29  | 0.30 | 0.33 | 0.33 | 0.31 | 0.31 | 0.29 |

ID No. 33-R Category Public Water Supply  
 Entity Town of Woodruff Type Return  
 Facility Woodruff/Enoree River  
 Contact Erica A. Johnson [JOHNSOEA@dhec.sc.gov]

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.45       |
| 2000                | 0.34       |
| 2005                | 0.33       |
| 2006                | 0.31       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        | 0.45       | 0.36 | 0.31 | 0.31 |
| Feb                        | 0.57       | 0.39 | 0.38 | 0.27 |
| Mar                        | 0.39       | 0.35 | 0.36 | 0.28 |
| Apr                        | 0.33       | 0.36 | 0.32 | 0.28 |
| May                        | 0.39       | 0.33 | 0.30 | 0.26 |
| Jun                        | 0.49       | 0.28 | 0.37 | 0.28 |
| Jul                        | 0.46       | 0.31 | 0.31 | 0.27 |
| Aug                        | 0.54       | 0.31 | 0.33 | 0.35 |
| Sep                        | 0.44       | 0.38 | 0.28 | 0.42 |
| Oct                        | 0.48       | 0.39 | 0.34 | 0.33 |
| Nov                        | 0.53       | 0.31 | 0.28 | 0.37 |
| Dec                        | 0.32       | 0.31 | 0.34 | 0.32 |

**Data Sources**  
 1. Obtained from South Carolina Department of Health and Environmental Control

| Residential Customers Served |           |            |           |            |
|------------------------------|-----------|------------|-----------|------------|
| Year-->                      | Year?     |            | Year?     |            |
| Grouping                     | Customers | Flow (gpd) | Customers | Flow (gpd) |
| Residential                  |           |            |           |            |
| Commercial                   |           |            |           |            |
| Industrial                   |           |            |           |            |
| Institutional                |           |            |           |            |
| Wholesale                    |           |            |           |            |

**Unaccounted Flow**

**PROJECTIONS ANALYSIS**

| AGR Determinations |       |   |
|--------------------|-------|---|
| Category           | AGR   | Remarks   |
| Residential        | 0.87% | 2007-2045. Based on Spartanburg County population data. |
| Commercial         |       |   |
| Industrial         |       |   |
| Institutional      |       |   |
| Wholesale          |       |   |
| Residential        | 0.82% | 2046-2075. See analysis notes.                          |

| Percentage of Flow |       |
|--------------------|-------|
| Category           | Value |
| Res/Comm           |       |
| Ind/Inst           |       |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |           |
|---------------------------|-------------|------------|------------|---------------|-----------|-----------|
| Year                      | Category    |            |            |               |           |           |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Unacc'ted |
| 2015                      |             |            |            |               |           |           |
| 2025                      |             |            |            |               |           |           |
| 2035                      |             |            |            |               |           |           |
| 2045                      |             |            |            |               |           |           |
| 2055                      |             |            |            |               |           |           |
| 2065                      |             |            |            |               |           |           |
| 2075                      |             |            |            |               |           |           |
| AGR                       | 0.008673456 | 0          | 0          | 0             | 0         | NA        |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.34       |
| 2025                | 0.37       |
| 2035                | 0.40       |
| 2045                | 0.44       |
| 2055                | 0.47       |
| 2065                | 0.51       |
| 2075                | 0.56       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.00        |
| Feb                  | 1.11        |
| Mar                  | 0.98        |
| Apr                  | 0.92        |
| May                  | 0.89        |
| Jun                  | 0.99        |
| Jul                  | 0.94        |
| Aug                  | 1.06        |
| Sep                  | 1.07        |
| Oct                  | 1.07        |
| Nov                  | 1.03        |
| Dec                  | 0.93        |

| Analysis Notes   |
|--|
| 1. AGR is staggered downward to follow national trend.   |
| 2. Base year is 2006.  |
| 3. AGR for 2046-2075 reduced to reflect a general slower U.S. growth rate, but South Carolina is anticipated to continue growing faster than U.S. average. |
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|                 |   |                 |            |
|-----------------|---|-----------------|------------|
| <b>ID No.</b>   | 34-R                                    | <b>Category</b> | Industrial |
| <b>Entity</b>   | SC-DHEC                                 | <b>Type</b>     | Return     |
| <b>Facility</b> | I-85 Distribution Site                  |                 |            |
| <b>Contact</b>  | Erica A. Johnson [JOHNSOEA@dhec.sc.gov] |                 |            |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | n/a        |
| 2000                | 0.11       |
| 2005                | 0.13       |
| 2006                | 0.09       |

| Monthly Average Flow (mgd) |            |      |      |      |
|----------------------------|------------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |
|                            | 1995       | 2000 | 2005 | 2006 |
| Jan                        |            |      | 0.08 | 0.13 |
| Feb                        |            | 0.07 | 0.13 | 0.06 |
| Mar                        |            | 0.07 | 0.18 | 0.06 |
| Apr                        |            | 0.08 | 0.12 | 0.08 |
| May                        |            | 0.05 | 0.09 | 0.05 |
| Jun                        |            | 0.18 | 0.17 | 0.07 |
| Jul                        |            | 0.11 | 0.12 | 0.09 |
| Aug                        |            | 0.10 | 0.13 | 0.06 |
| Sep                        |            | 0.24 |      | 0.13 |
| Oct                        |            | 0.07 | 0.13 | 0.11 |
| Nov                        |            | 0.09 | 0.14 | 0.11 |
| Dec                        |            | 0.13 | 0.13 | 0.16 |

**Data Sources:**

- Obtained from South Carolina Department of Health and Environmental Control
- Source: Bureau of Economic Analysis, U.S. Department of Commerce.

**PROJECTION SUMMARY**

**AGR** 0.00%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.13       |
| 2025                | 0.13       |
| 2035                | 0.13       |
| 2045                | 0.13       |
| 2055                | 0.13       |
| 2065                | 0.13       |
| 2075                | 0.13       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.03        | Jul   | 0.98        |
| Feb                  | 0.77        | Aug   | 0.86        |
| Mar                  | 0.88        | Sep   | 1.77        |
| Apr                  | 0.84        | Oct   | 0.94        |
| May                  | 0.58        | Nov   | 1.05        |
| Jun                  | 1.25        | Dec   | 1.32        |

**PROJECTIONS ANALYSIS**

**Industry Sector:** Government      **SC GSP AGR:** 5.85%      **Inflation AGR:**

**Analysis Notes**

- This site is a state owned superfund site. It was assumed flows would remain constant (or more likely decline in the future).
- SIC code from NPDES permit is 9999 = NONCLASSIFIABLE ESTABLISHMENTS.
- State owned facility.
- Base year is 2005. As this represents the highest recent volume used.



ID No. 35-R  
 Entity Grover Industries  
 Facility Grover Plant  
 Contact Sara Logan (828.859.9125.125)

Category Industrial  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | -          |
| 2000                | 0.10       |
| 2002                | 0.01       |
| 2005                | 0.00       |
| 2006                | 0.01       |

| Month | Monthly Average Flow (mgd) |      |       |      |      |
|-------|----------------------------|------|-------|------|------|
|       | 1995                       | 2000 | 2002  | 2005 | 2006 |
| Jan   | -                          | 0.13 | 0.01  | 0.01 | 0.00 |
| Feb   | -                          | 0.13 | 0.01  | 0.01 | 0.00 |
| Mar   | -                          | 0.13 | 0.01  | 0.01 | 0.00 |
| Apr   | -                          | 0.11 | 0.01  | 0.01 | 0.00 |
| May   | -                          | 0.11 | 0.01  | 0.00 | 0.00 |
| Jun   | -                          | 0.11 | 0.01  | 0.00 | 0.00 |
| Jul   | -                          | 0.09 | 0.01  | 0.00 | 0.00 |
| Aug   | -                          | 0.11 | 0.01  | 0.00 | 0.01 |
| Sep   | -                          | 0.08 | 0.01  | 0.00 | 0.01 |
| Oct   | -                          | 0.09 | 0.01  | 0.00 | 0.01 |
| Nov   | -                          | 0.10 | 0.01  | 0.00 | 0.01 |
| Dec   | -                          | 0.07 | 0.007 | 0.00 | 0.01 |

Data Sources:  
 DMR Data

**PROJECTION SUMMARY**

AGR -

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.00       |
| 2025                | 0.00       |
| 2035                | 0.00       |
| 2045                | 0.00       |
| 2055                | 0.00       |
| 2065                | 0.00       |
| 2075                | 0.00       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.31        | Jul   | 0.73        |
| Feb                  | 0.95        | Aug   | 0.92        |
| Mar                  | 1.17        | Sep   | 1.03        |
| Apr                  | 1.10        | Oct   | 1.00        |
| May                  | 0.79        | Nov   | 1.10        |
| Jun                  | 0.89        | Dec   | 1.02        |

**PROJECTIONS ANALYSIS**

Industry Sector: Textiles

NC GSP AGR: -

Inflation AGR: -

Analysis Notes:  
 - Downsized since 2000  
 - Plant only being used as a warehouse now  
 - Plant is likely to be closed entirely.

ID No. 36-W  
 Entity Milliken  
 Facility Magnolia Plant  
 Contact Lee Slusher

Category Industrial  
 Type Withdrawal

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 4.36       |
| 2000                | 3.37       |
| 2002                | 2.89       |
| 2005                | 2.80       |
| 2006                | 3.02       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | -          | -    | -    | -    | -    |
| Feb                        | -          | -    | -    | -    | -    |
| Mar                        | -          | -    | -    | -    | -    |
| Apr                        | -          | -    | -    | -    | -    |
| May                        | -          | -    | -    | -    | -    |
| Jun                        | -          | -    | -    | -    | -    |
| Jul                        | -          | -    | -    | -    | -    |
| Aug                        | -          | -    | -    | -    | -    |
| Sep                        | -          | -    | -    | -    | -    |
| Oct                        | -          | -    | -    | -    | -    |
| Nov                        | -          | -    | -    | -    | -    |
| Dec                        | -          | -    | -    | -    | -    |

Data Sources:  
 Plant Data

**PROJECTION SUMMARY**

AGR -

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 3.11       |
| 2025                | 3.20       |
| 2035                | 3.30       |
| 2045                | 3.40       |
| 2055                | 3.50       |
| 2065                | 3.61       |
| 2075                | 3.72       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 0.99        | Jul   | 1.03        |
| Feb                  | 0.98        | Aug   | 1.06        |
| Mar                  | 0.99        | Sep   | 1.03        |
| Apr                  | 0.97        | Oct   | 1.05        |
| May                  | 1.00        | Nov   | 1.00        |
| Jun                  | 1.04        | Dec   | 0.87        |

**PROJECTIONS ANALYSIS**

Industry Sector: Textile & Chemical

NC GSP AGR: -6.60, 2.91

Inflation AGR: -

**Analysis Notes:**  
 - Plant involved with both textiles and chemical manufacturing. Both NC GSP AGRs are provided above.  
 - Contact says withdrawal meter is not reliable, but they calculate that the return is approximately 75% of the withdrawal.  
 - Withdrawal projections based on the provided percentage relationship.  
 - This assumes that the monthly variation for withdrawals is the same as for the returns.  
 - Historical flow rates based on provided percentage relationship between returns and withdrawals.

ID No. 36-R  
 Entity Milliken  
 Facility Magnolia Plant  
 Contact Lee Slusher

Category Industrial  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 3.27       |
| 2000                | 2.53       |
| 2002                | 2.17       |
| 2005                | 2.10       |
| 2006                | 2.27       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 3.50       | 2.59 | 2.15 | 1.93 | 2.13 |
| Feb                        | 3.06       | 2.35 | 2.04 | 2.30 | 2.23 |
| Mar                        | 3.15       | 2.30 | 2.15 | 2.27 | 2.25 |
| Apr                        | 3.19       | 2.36 | 2.27 | 2.13 | 2.02 |
| May                        | 3.15       | 2.36 | 2.48 | 2.04 | 2.24 |
| Jun                        | 3.19       | 2.38 | 2.46 | 2.38 | 2.35 |
| Jul                        | 3.20       | 2.62 | 2.16 | 2.24 | 2.41 |
| Aug                        | 3.65       | 2.70 | 2.17 | 2.18 | 2.42 |
| Sep                        | 3.52       | 2.90 | 2.22 | 1.83 | 2.32 |
| Oct                        | 3.34       | 2.75 | 2.32 | 2.09 | 2.48 |
| Nov                        | 3.43       | 2.58 | 2.04 | 1.93 | 2.41 |
| Dec                        | 2.88       | 2.45 | 1.57 | 1.88 | 1.96 |

Data Sources:  
 Plant Data

**PROJECTION SUMMARY**

AGR 0.30%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 2.33       |
| 2025                | 2.40       |
| 2035                | 2.47       |
| 2045                | 2.55       |
| 2055                | 2.63       |
| 2065                | 2.71       |
| 2075                | 2.79       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 0.99        | Jul   | 1.03        |
| Feb                  | 0.98        | Aug   | 1.06        |
| Mar                  | 0.99        | Sep   | 1.03        |
| Apr                  | 0.97        | Oct   | 1.05        |
| May                  | 1.00        | Nov   | 1.00        |
| Jun                  | 1.04        | Dec   | 0.87        |

**PROJECTIONS ANALYSIS**

Industry Sector: Textile & Chemical

NC GSP AGR: -6.60, 2.91

Inflation AGR: -

Analysis Notes:  
 - Plant involved with both textiles and chemical manufacturing. Both NC GSP AGRs are provided above.  
 - Historical decline in returns due to water use reduction projects.  
 - Maximum Capacity of Plant is 3.5 MGD  
 - Water use is approximately 90% textiles and 10% chemicals.  
 - Both textiles and chemicals are expected to increase overtime at the plant, the chemicals will increase more.  
 - AGR used for projections assumes textiles don't increase water use and chemicals grow in demand according to its AGR.

|                 |   |                 |            |
|-----------------|---|-----------------|------------|
| <b>ID No.</b>   | 37-W  | <b>Category</b> | Industrial |
| <b>Entity</b>   | CNA Holdings  | <b>Type</b>     | Withdrawal |
| <b>Facility</b> | Shelby Plant  |                 |            |
| <b>Contact</b>  | Pem Carter (704.480.4900) and Richard Marella (904.942.9500.3004) |                 |            |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | -          |
| 2000                | -          |
| 2004                | 0.40       |
| 2005                | -          |
| 2006                | 0.42       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2004 | 2005 | 2006 |
| Jan                        | -          | -    | 0.33 | -    | -    |
| Feb                        | -          | -    | 0.31 | -    | -    |
| Mar                        | -          | -    | 0.58 | -    | -    |
| Apr                        | -          | -    | 0.48 | -    | -    |
| May                        | -          | -    | 0.56 | -    | -    |
| Jun                        | -          | -    | 0.43 | -    | -    |
| Jul                        | -          | -    | 0.45 | -    | -    |
| Aug                        | -          | -    | 0.39 | -    | -    |
| Sep                        | -          | -    | 0.35 | -    | -    |
| Oct                        | -          | -    | 0.36 | -    | -    |
| Nov                        | -          | -    | 0.36 | -    | -    |
| Dec                        | -          | -    | 0.2  | -    | -    |

**Data Sources:**  
 USGS Data  
 Phone Interviews  
 NC DENR DWR Data

**PROJECTION SUMMARY**

**AGR**                      2.91

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.54       |
| 2025                | 0.72       |
| 2035                | 0.96       |
| 2045                | 1.28       |
| 2055                | 1.70       |
| 2065                | 2.26       |
| 2075                | 3.02       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 0.83        | Jul   | 1.13        |
| Feb                  | 0.78        | Aug   | 0.98        |
| Mar                  | 1.45        | Sep   | 0.88        |
| Apr                  | 1.20        | Oct   | 0.90        |
| May                  | 1.40        | Nov   | 0.90        |
| Jun                  | 1.08        | Dec   | 0.50        |

**PROJECTIONS ANALYSIS**

**Industry Sector:**      Resin Manufacturer

**NC GSP AGR:**        2.91

**Inflation AGR:**      -

**Analysis Notes:**  
 - Company didn't have historical flow records.  
 - 2004 return was reported to DWQ as 0.34 MGD (Avg. Daily Flow), which is 85.9% of the 2004 reported withdrawal  
 - Projections were calculated by dividing the CAN Holdings Return projections by the 85.9% relationship from 2004.

**ID No.** 37-R **Category** Industrial  
**Entity** CNA Holdings **Type** Return  
**Facility** Shelby Plant  
**Contact** Pem Carter (704.480.4900) and Richard Marella (904.942.9500.3004)

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.57       |
| 2000                | 0.41       |
| 2002                | 0.34       |
| 2005                | 0.31       |
| 2006                | 0.36       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 0.60       | 0.37 | 0.54 | 0.29 | 0.38 |
| Feb                        | 0.54       | 0.39 | 0.43 | 0.32 | 0.33 |
| Mar                        | 0.51       | 0.35 | 0.42 | 0.28 | 0.29 |
| Apr                        | 0.48       | 0.38 | 0.25 | 0.25 | 0.27 |
| May                        | 0.56       | 0.34 | 0.27 | 0.26 | 0.35 |
| Jun                        | 0.65       | 0.33 | 0.25 | 0.30 | 0.36 |
| Jul                        | 0.60       | 0.44 | 0.32 | 0.29 | 0.31 |
| Aug                        | 0.64       | 0.41 | 0.29 | 0.35 | 0.23 |
| Sep                        | 0.55       | 0.55 | 0.30 | 0.22 | 0.35 |
| Oct                        | 0.56       | 0.45 | 0.27 | 0.40 | 0.44 |
| Nov                        | 0.60       | 0.48 | 0.35 | 0.39 | 0.52 |
| Dec                        | 0.60       | 0.46 | 0.40 | 0.38 | 0.47 |

**Data Sources:**  
 DMR Data

**PROJECTION SUMMARY**

**AGR** 2.91

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.46       |
| 2025                | 0.62       |
| 2035                | 0.82       |
| 2045                | 1.10       |
| 2055                | 1.46       |
| 2065                | 1.94       |
| 2075                | 2.59       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.10        | Jul   | 0.97        |
| Feb                  | 1.02        | Aug   | 0.94        |
| Mar                  | 0.93        | Sep   | 0.97        |
| Apr                  | 0.81        | Oct   | 1.08        |
| May                  | 0.88        | Nov   | 1.19        |
| Jun                  | 0.92        | Dec   | 1.17        |

**PROJECTIONS ANALYSIS**

**Industry Sector:** Resin Manufacturer

**NC GSP AGR:** 2.91

**Inflation AGR:** -

**Analysis Notes:**  
 - Historical flows have declined largely due to introduction of a water recycling program.  
 - The plant is expanding and expects to grow although they didn't quantify the growth rate.  
 - Projections use the NC GSP AGR for chemical manufacturing.

ID No. 38-R  
 Entity Dan River Inc.  
 Facility Harris Plant  
 Contact

Category Industrial  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.30       |
| 2000                | 0.46       |
| 2002                | 0.44       |
| 2005                | 0.34       |
| 2006                | -          |

| Month | Monthly Average Flow (mgd) |      |       |      |      |
|-------|----------------------------|------|-------|------|------|
|       | 1995                       | 2000 | 2002  | 2005 | 2006 |
| Jan   | 0.30                       | 0.47 | 0.39  | 0.41 | -    |
| Feb   | 0.32                       | 0.46 | 0.39  | 0.37 | -    |
| Mar   | 0.33                       | 0.44 | 0.47  | 0.31 | -    |
| Apr   | 0.35                       | 0.42 | 0.46  | 0.37 | -    |
| May   | 0.37                       | 0.47 | 0.47  | 0.37 | -    |
| Jun   | 0.39                       | 0.51 | 0.48  | 0.40 | -    |
| Jul   | 0.26                       | 0.45 | 0.36  | 0.32 | -    |
| Aug   | 0.30                       | 0.49 | 0.45  | 0.48 | -    |
| Sep   | 0.29                       | 0.48 | 0.45  | 0.29 | -    |
| Oct   | 0.24                       | 0.46 | 0.53  | 0.31 | -    |
| Nov   | 0.24                       | 0.45 | 0.45  | 0.33 | -    |
| Dec   | 0.15                       | 0.38 | 0.403 | 0.16 | -    |

Data Sources:  
 DMR Data

**PROJECTION SUMMARY**

AGR 0.00%

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.00       |
| 2025                | 0.00       |
| 2035                | 0.00       |
| 2045                | 0.00       |
| 2055                | 0.00       |
| 2065                | 0.00       |
| 2075                | 0.00       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.02        | Jul   | 0.90        |
| Feb                  | 1.02        | Aug   | 1.13        |
| Mar                  | 1.01        | Sep   | 0.98        |
| Apr                  | 1.06        | Oct   | 0.98        |
| May                  | 1.11        | Nov   | 0.94        |
| Jun                  | 1.18        | Dec   | 0.68        |

**PROJECTIONS ANALYSIS**

Industry Sector: Textiles

NC GSP AGR: -

Inflation AGR: -

Analysis Notes:  
 - Contact was attempted with the facility and corporate headquarters, but was unsuccessful.  
 - EPA Envirofacts Warehouse indicates this facility is inactive.  
 - Projections assume that the plant is permanently inactive.

ID No. 39-R  
 Entity Cone Mills, Inc.  
 Facility Cliffside Plant  
 Contact

Category Industrial  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.82       |
| 2000                | 0.59       |
| 2002                | 0.46       |
| 2005                | 0.15       |
| 2006                | 0.03       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2003 | 2004 |
| Jan                        | 0.74       | 0.48 | 0.34 | 0.14 | 0.06 |
| Feb                        | 0.79       | 0.47 | 0.46 | 0.18 | 0.02 |
| Mar                        | 0.85       | 0.56 | 0.49 | 0.20 | 0.02 |
| Apr                        | 0.74       | 0.53 | 0.41 | 0.23 | 0.02 |
| May                        | 0.80       | 0.57 | 0.50 | 0.19 | 0.03 |
| Jun                        | 0.97       | 0.67 | 0.49 | 0.23 | 0.03 |
| Jul                        | 0.87       | 0.65 | 0.53 | 0.17 | 0.03 |
| Aug                        | 0.98       | 0.67 | 0.50 | 0.09 | 0.04 |
| Sep                        | 0.91       | 0.63 | 0.46 | 0.11 | 0.04 |
| Oct                        | 0.77       | 0.61 | 0.47 | 0.16 | 0.03 |
| Nov                        | 0.70       | 0.66 | 0.42 | 0.05 | 0.04 |
| Dec                        | 0.70       | 0.55 | 0.46 | 0.03 | 0.03 |

Data Sources:  
 DMR Data

**PROJECTION SUMMARY**

AGR -

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.00       |
| 2025                | 0.00       |
| 2035                | 0.00       |
| 2045                | 0.00       |
| 2055                | 0.00       |
| 2065                | 0.00       |
| 2075                | 0.00       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 1.05        | Jul   | 1.10        |
| Feb                  | 0.90        | Aug   | 1.04        |
| Mar                  | 0.99        | Sep   | 1.06        |
| Apr                  | 0.98        | Oct   | 1.02        |
| May                  | 1.05        | Nov   | 0.87        |
| Jun                  | 1.17        | Dec   | 0.78        |

**PROJECTIONS ANALYSIS**

Industry Sector: Textiles

NC GSP AGR: -6.60

Inflation AGR: -

Analysis Notes:  
 - Contact was attempted with the facility, but was unsuccessful.  
 - Data suggests plant has declined in production since 1995.  
 - 2006 flow rate suggests the plant was largely offline for the year.  
 - This apparent decline is expected given that it is a textile production facility.  
 - Projections assume the plant is permanently offline

**ID No.** 40-R  
**Entity** PPG Industries  
**Facility** Cliffside Plant  
**Contact** Richard Young (704.434.2261.359)

**Category** Industrial  
**Type** Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.85       |
| 2000                | 0.80       |
| 2002                | 0.67       |
| 2005                | 0.56       |
| 2006                | 0.61       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2003 | 2004 |
| Jan                        | 0.95       | 0.82 | 0.66 | 0.55 | 0.52 |
| Feb                        | 0.75       | 0.76 | 0.69 | 0.53 | 0.57 |
| Mar                        | 0.77       | 0.78 | 0.68 | 0.53 | 0.60 |
| Apr                        | 0.84       | 0.77 | 0.61 | 0.47 | 0.55 |
| May                        | 0.79       | 0.75 | 0.76 | 0.56 | 0.53 |
| Jun                        | 0.86       | 0.82 | 0.85 | 0.68 | 0.58 |
| Jul                        | 0.88       | 0.83 | 0.91 | 0.63 | 0.58 |
| Aug                        | 0.95       | 0.90 | 0.63 | 0.55 | 0.64 |
| Sep                        | 0.85       | 0.90 | 0.57 | 0.59 | 0.69 |
| Oct                        | 0.83       | 0.71 | 0.56 | 0.56 | 0.70 |
| Nov                        | 0.83       | 0.76 | 0.51 | 0.54 | 0.69 |
| Dec                        | 0.88       | 0.79 | 0.56 | 0.49 | 0.65 |

**Data Sources:**  
DMR Data

**PROJECTION SUMMARY**

**AGR** 2.91

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.79       |
| 2025                | 1.05       |
| 2035                | 1.40       |
| 2045                | 1.86       |
| 2055                | 2.48       |
| 2065                | 3.30       |
| 2075                | 4.40       |

| Monthly Coefficients |             |       |             |
|----------------------|-------------|-------|-------------|
| Month                | Coefficient | Month | Coefficient |
| Jan                  | 0.99        | Jul   | 1.10        |
| Feb                  | 0.95        | Aug   | 1.04        |
| Mar                  | 0.97        | Sep   | 1.03        |
| Apr                  | 0.93        | Oct   | 0.98        |
| May                  | 0.98        | Nov   | 0.96        |
| Jun                  | 1.10        | Dec   | 0.96        |

**PROJECTIONS ANALYSIS**

**Industry Sector:** Chemicals

**NC GSP AGR:** 2.91

**Inflation AGR:** -

**Analysis Notes:**  
- Assumed growth in demand commensurate with NC GSP AGR, less inflation.  
- Water is purchased from Shelby normally.  
- Emergency water supply is provided from Cleveland County Sanitary District.  
- Projections assume the returns will increase according to the NC GSP AGR from chemical manufacturing.



ID No. 15-W  
 Entity Gaffney Board of Public Works  
 Facility Cherokee/Victor Gaffney WTPs  
 Contact Kim Fortner (864.488.8801)

Category PWS  
 Type Withdrawal

**HISTORICAL DATA SUMMARY**

**Annual Average Flow**

| Year | Flow (mgd) |
|------|------------|
| 1995 | 9.09       |
| 2000 | 10.38      |
| 2002 | 7.50       |
| 2005 | 7.91       |
| 2006 | 8.05       |

Estimated  
 Estimated

**Monthly Average Flow (mgd)**

| Month | Flow (mgd) |      |      |      |      |
|-------|------------|------|------|------|------|
|       | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan   | -          | -    | -    | -    | -    |
| Feb   | -          | -    | -    | -    | -    |
| Mar   | -          | -    | -    | -    | -    |
| Apr   | -          | -    | -    | -    | -    |
| May   | -          | -    | -    | -    | -    |
| Jun   | -          | -    | -    | -    | -    |
| Jul   | -          | -    | -    | -    | -    |
| Aug   | -          | -    | -    | -    | -    |
| Sep   | -          | -    | -    | -    | -    |
| Oct   | -          | -    | -    | -    | -    |
| Nov   | -          | -    | -    | -    | -    |
| Dec   | -          | -    | -    | -    | -    |

**Data Sources:**  
 UTEC/BPB Study

**2002 Customer Data**

| Customer    | Number | Flow          | Total |
|-------------|--------|---------------|-------|
| Residential | 8,553  | 173           | 1.48  |
| Commercial  | 964    | 666           | 0.64  |
| Industrial  | 53     | 59,185        | 3.14  |
| Wholesale   | 1      | 1,302,215     | 1.30  |
| Sprinkler   | 38     | 753           | 0.03  |
| Inter-dept  | 16     | 15,253        | 0.24  |
| Loss        | 1      | 669,315       | 0.67  |
| Avg. Loss   | 16.24% | (1994 - 2003) |       |

**Historical Customer Data**

| Year | Res   | Comm  |
|------|-------|-------|
| 1994 | 8,020 | 934   |
| 1995 | 8,082 | 849   |
| 1996 | 8,144 | 865   |
| 1997 | 8,209 | 880   |
| 1998 | 8,274 | 896   |
| 1999 | 8,342 | 913   |
| 2000 | 8,410 | 929   |
| 2001 | 8,481 | 946   |
| 2002 | 8,553 | 964   |
| 2003 | 8,626 | 982   |
| 2004 | 8,701 | 1,000 |

**PROJECTION ANALYSIS**

**AGR Determinations**

| Category    | AGR  | Remarks                              |
|-------------|------|--------------------------------------|
| Residential | 1.00 | See Analysis Notes                   |
| Commercial  | 1.00 | Based on Commercial Customer History |
| Industrial  | 1.00 | See Analysis Notes                   |
| Wholesale   | 1.00 | Assumed same as Residential          |
| Sprinkler   | 1.00 | Assumed same as Residential          |
| Inter-dept  | 1.00 | Assumed same as Residential          |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |           |           |            |      |
|------|---------------------------|------------|------------|-----------|-----------|------------|------|
|      | Residential               | Commercial | Industrial | Wholesale | Sprinkler | Inter-dept | Loss |
| 2015 | 1.68                      | 0.73       | 3.57       | 1.48      | 0.03      | 0.28       | 1.51 |
| 2025 | 1.86                      | 0.81       | 3.94       | 1.64      | 0.04      | 0.31       | 1.66 |
| 2035 | 2.05                      | 0.89       | 4.36       | 1.81      | 0.04      | 0.34       | 1.84 |
| 2045 | 2.27                      | 0.99       | 4.81       | 2.00      | 0.04      | 0.37       | 2.03 |
| 2055 | 2.50                      | 1.09       | 5.32       | 2.21      | 0.05      | 0.41       | 2.24 |
| 2065 | 2.76                      | 1.20       | 5.87       | 2.44      | 0.05      | 0.46       | 2.48 |
| 2075 | 3.05                      | 1.33       | 6.49       | 2.69      | 0.06      | 0.50       | 2.74 |
| AGR  | 1                         | 1          | 1          | 1         | 1         | 1          | N/A  |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 9.28       |
| 2025                | 10.25      |
| 2035                | 11.32      |
| 2045                | 12.51      |
| 2055                | 13.82      |
| 2065                | 15.26      |
| 2075                | 16.86      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.00        |
| Feb                  | 1.00        |
| Mar                  | 1.00        |
| Apr                  | 1.00        |
| May                  | 1.00        |
| Jun                  | 1.00        |
| Jul                  | 1.00        |
| Aug                  | 1.00        |
| Sep                  | 1.00        |
| Oct                  | 1.00        |
| Nov                  | 1.00        |
| Dec                  | 1.00        |

| Base Year |
|-----------|
| 2002      |

| Analysis Notes   |
|--|
| - Both Cherokee and Victor WTPs utilize the same water intake structure.   |
| - New industrial customers have typically had smaller water demands. Many large industrial water users have been lost. The net effect has been more industrial customers, but less water demand. |
| - Industrial AGR used is 1.00 to account for new, unforeseen industrial customers.   |
| - Residential customer history indicates an AGR of 0.82. The AGR used is 1.00 to account for service area expansion.   |
| - UTEC/BPB Study predicted total water production in 2025 to be nearly 8 mgd.  |
| Overall AGR is 1.00, which is slightly greater than the Cherokee County predicted population AGR of 0.93. This accounts for service area growth.   |
| - Monthly coefficients set to 1.00 due to lack of monthly flow data.   |

**ID No.** 15(BR)-R  
**Entity** Gaffney Board of Public Works  
**Facility** Broad River WWTP  
**Contact** Kim Fortner (864.488.8801)

**Category** PWS  
**Type** Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 1.93       |
| 2000                | 2.50       |
| 2002                | -          |
| 2005                | 1.68       |
| 2006                | 1.67       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 2.32       | 2.67 | --   | 1.63 | 1.95 |
| Feb                        | 2.42       | 2.78 | -    | 1.66 | 1.73 |
| Mar                        | 2.42       | 2.90 | -    | 1.77 | 1.64 |
| Apr                        | 1.81       | 2.81 | -    | 1.81 | 1.60 |
| May                        | 2.21       | 2.63 | -    | 1.57 | 1.60 |
| Jun                        | 2.40       | 2.74 | -    | 1.75 | 1.50 |
| Jul                        | 1.06       | 2.34 | -    | 1.72 | 1.60 |
| Aug                        | 1.70       | 2.37 | -    | 1.65 | 1.72 |
| Sep                        | 1.70       | 2.52 | -    | 1.56 | 1.60 |
| Oct                        | 1.72       | 2.30 | -    | 1.68 | 1.70 |
| Nov                        | 1.83       | 2.19 | -    | 1.54 | 1.80 |
| Dec                        | 1.55       | 1.72 | -    | 1.80 | 1.60 |

| Data Sources:   |  |
|-----------------|--|
| Phone Interview |  |
| Plant Data      |  |

| Percent of Water Demand Treated at a WWTP |             |            |            |           |           |            |
|---|-------------|------------|------------|-----------|-----------|------------|
| Year                                      | Residential | Commercial | Industrial | Wholesale | Sprinkler | Inter-dept |
| 2005                                      | 70%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2015                                      | 75%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2025                                      | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2035                                      | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2045                                      | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2055                                      | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2065                                      | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |
| 2075                                      | 80%         | 95%        | 80%        | 0%        | 0%        | 95%        |

| I/I Pct |
|---------|
| 30%     |

| Percent of Total Wastewater Treated at Broad River WWTP |     |      |     |      |     |      |     |
|---|-----|------|-----|------|-----|------|-----|
| Year  | Res | Comm | Ind | Year | Res | Comm | Ind |
| 2005  | 55% | 45%  | 30% | 2045 | 45% | 30%  | 30% |
| 2015  | 50% | 38%  | 30% | 2055 | 45% | 30%  | 30% |
| 2025  | 45% | 30%  | 30% | 2065 | 45% | 30%  | 30% |
| 2035  | 45% | 30%  | 30% | 2075 | 45% | 30%  | 30% |

**PROJECTIONS ANALYSIS**

| AGR Determinations |     |                    |
|--------------------|-----|--------------------|
| Category           | AGR | Remarks            |
| Residential        | -   | See Analysis Notes |
| Commercial         | -   | See Analysis Notes |
| Industrial         | -   | See Analysis Notes |
| Institutional      | -   | See Analysis Notes |
| Wholesale          | -   | See Analysis Notes |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |           |           |            |      |
|------|---------------------------|------------|------------|-----------|-----------|------------|------|
|      | Residential               | Commercial | Industrial | Wholesale | Sprinkler | Inter-dept | I/I  |
| 2015 | 0.63                      | 0.31       | 0.86       | 0.00      | 0.00      | 0.12       | 0.82 |
| 2025 | 0.67                      | 0.29       | 0.95       | 0.00      | 0.00      | 0.11       | 0.86 |
| 2035 | 0.74                      | 0.25       | 1.05       | 0.00      | 0.00      | 0.10       | 0.91 |
| 2045 | 0.82                      | 0.28       | 1.15       | 0.00      | 0.00      | 0.11       | 1.01 |
| 2055 | 0.90                      | 0.31       | 1.28       | 0.00      | 0.00      | 0.12       | 1.12 |
| 2065 | 1.00                      | 0.34       | 1.41       | 0.00      | 0.00      | 0.13       | 1.23 |
| 2075 | 1.10                      | 0.38       | 1.56       | 0.00      | 0.00      | 0.14       | 1.36 |
| AGR  | NA                        | NA         | NA         | NA        | NA        | NA         | NA   |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 2.74       |
| 2025                | 2.88       |
| 2035                | 3.05       |
| 2045                | 3.37       |
| 2055                | 3.72       |
| 2065                | 4.11       |
| 2075                | 4.54       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.10        |
| Feb                  | 1.10        |
| Mar                  | 1.11        |
| Apr                  | 1.03        |
| May                  | 1.02        |
| Jun                  | 1.07        |
| Jul                  | 0.87        |
| Aug                  | 0.96        |
| Sep                  | 0.94        |
| Oct                  | 0.96        |
| Nov                  | 0.96        |
| Dec                  | 0.88        |

| Base Year |
|-----------|
| 2005      |

| Analysis Notes  |
|---|
| - GBPW treats wastewater at two WWTPs. Only the Broad River WWTP is in the Phase I area.  |
| - Projections area based on a BPB Study, which provide some information on how much potable water is returned as wastewater and what percentage of that wastewater is treated at the Broad River WWTP.  |
| - Example: In 2015, the projected residential water demand is 1.68 mgd (see _____). It is estimated that 75% of that demand will be returned as wastewater, or 1.26 mgd. Further, 50% of that 1.26 mgd will be treated at the Broad River WWTP. Therefore, the residential wastewater treated in 2015 is projected to be 0.63 mgd. The 75% and 50% values can be found in the tables provided on the previous page. |
| - The BPB Study predicted lower flows to this WWTP, (1.73 mgd, avg month, in 2025).   |
| - This is one of two WWTP for Gaffney.  |
| - This collects flow from customers in Providence Creek and Peoples Creek Basins  |
| - BPB Study provided information on Pct Returns based on water demand and Pct flow to either WWTP.  |
| - Projections based on Percent Returns and Pct flows of water demand.   |
| - BPB Study predicted less flow to this WWTP, but the increase overtime is consistent.  |

|                 |                             |                 |            |
|-----------------|-----------------------------|-----------------|------------|
| <b>ID No.</b>   | 41-W                        | <b>Category</b> | PWS        |
| <b>Entity</b>   | Kings Mountain              | <b>Type</b>     | Withdrawal |
| <b>Facility</b> | TJ Ellison WTP              | TJ Ellison WTP  |            |
| <b>Contact</b>  | Dennis Wells (704.734.4525) |                 |            |

### HISTORICAL DATA SUMMARY

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 4.92       |
| 2000                | 4.96       |
| 2002                | 4.60       |
| 2005                | 3.18       |
| 2006                | 3.13       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 4.91       | 4.61 | 4.17 | 2.60 | 3.16 |
| Feb                        | 5.22       | 5.04 | 4.59 | 2.88 | 3.08 |
| Mar                        | 5.23       | 5.15 | 4.23 | 2.82 | 3.11 |
| Apr                        | 4.83       | 4.46 | 4.64 | 2.73 | 3.12 |
| May                        | 5.06       | 5.42 | 4.91 | 3.00 | 3.22 |
| Jun                        | 5.24       | 5.85 | 5.09 | 3.24 | 3.52 |
| Jul                        | 4.90       | 4.33 | 5.09 | 3.03 | 3.24 |
| Aug                        | 5.69       | 5.29 | 5.39 | 3.53 | 3.82 |
| Sep                        | 5.01       | 5.42 | 4.67 | 4.09 | 3.08 |
| Oct                        | 4.81       | 5.34 | 4.90 | 3.72 | 2.92 |
| Nov                        | 4.42       | 4.72 | 4.10 | 3.43 | 2.79 |
| Dec                        | 3.74       | 3.91 | 3.38 | 3.06 | 2.45 |

| Data Sources:   |
|-----------------|
| User Data       |
| 2002 LWSP       |
| Phone Interview |

| 2002 LWSP Data |        |            |
|----------------|--------|------------|
| Customer       | Number | Flow (gpd) |
| Residential    | 4909   | 246        |
| Commercial     | 0      | 246        |
| Industrial     | 60     | 45,267     |
| Institutional  | 24     | 2,500      |
| Wholesale      | 1      | 178,000    |
| Other          | 1      | 322,000    |

| 2005 User Data |        |
|----------------|--------|
| Customer       | Number |
| Residential    | 5176   |
| Commercial     | 79     |
| Industrial     | 39     |
| Institutional  | 6      |
| Wholesale      | 1      |
| Other          | 1      |

| System Losses |      |
|---------------|------|
| 2002          | 6.0% |
| 2006          | -    |

### PROJECTIONS ANALYSIS

| AGR Determinations |      |  |
|--------------------|------|--|
| Category           | AGR  | Remarks  |
| Residential        | 1.76 | Based on Residential Customer Increases              |
| Commercial         | 1.76 | Assumed same as Residential                          |
| Industrial         | 0.37 | Weighted average of industrial sectors in Kings Mtn. |
| Institution        | 1.76 | Assumed same as Residential                          |
| Wholesale          | 1.76 | Assumed same as Residential                          |
| Other              | 1.76 | Assumed same as Residential                          |

| Analysis Notes (Part 1 of 2)   |
|--|
| - Decline in flows resulted from loss of two industrial customers in 2005, summing 1.85 MGD.       |
| - 2002 LWSP contained 0 commercial because they were considered industrial at the time.            |
| - 2005 customer data provided by contact in phone interview.                                       |
| - Known future growth activities include 971-home development (estimated 0.364 MGD), and 1,100 new |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (MGD) |            |            |               |           |       |        |
|------|---------------------------|------------|------------|---------------|-----------|-------|--------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | Other | Losses |
| 2015 | 1.52                      | 0.02       | 1.83       | 0.02          | 0.21      | 0.38  | -      |
| 2025 | 1.81                      | 0.03       | 1.90       | 0.02          | 0.25      | 0.46  | -      |
| 2035 | 2.16                      | 0.03       | 1.97       | 0.03          | 0.30      | 0.54  | -      |
| 2045 | 2.57                      | 0.04       | 2.05       | 0.03          | 0.36      | 0.65  | -      |
| 2055 | 3.06                      | 0.05       | 2.12       | 0.04          | 0.43      | 0.77  | -      |
| 2065 | 3.64                      | 0.06       | 2.20       | 0.04          | 0.51      | 0.92  | -      |
| 2075 | 4.34                      | 0.07       | 2.29       | 0.05          | 0.60      | 1.09  | -      |
| AGR  | 1.76                      | 1.76       | 0.37       | 1.76          | 1.76      | 1.76  | -      |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 3.99       |
| 2025                | 4.47       |
| 2035                | 5.03       |
| 2045                | 5.69       |
| 2055                | 6.46       |
| 2065                | 7.37       |
| 2075                | 8.44       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.01        |
| Feb                  | 0.98        |
| Mar                  | 0.99        |
| Apr                  | 1.00        |
| May                  | 1.03        |
| Jun                  | 1.12        |
| Jul                  | 1.04        |
| Aug                  | 1.22        |
| Sep                  | 0.98        |
| Oct                  | 0.93        |
| Nov                  | 0.89        |
| Dec                  | 0.78        |

| Base Year |
|-----------|
| 2005      |

| Analysis Notes (Part 2 of 2)   |
|--|
| jobs (0.055 MGD). Both are near-term.  |
| - Industrial customers involved in chemicals, textiles, and motor vehicle manufacturing.   |
| - An HDR Study conducted for Kings Mountain predicted the 2050 water demand to be 9.7 mgd.   |
| - The HDR Study utilized a more conservative projections method than this study.   |
| - Kings Mountain provides water to Shelby, CCSD, Grover, and Bessemer City. These demands are largely accounted for in other water user projections in this study. |
| - Overall AGR is 1.40, which accounts for population increase (0.44 AGR in Cleveland County) and service area expansion.   |
| - System Losses are included in 2005 base year water demand, and thus not broken out in projections.   |
| - 2005 customer data came from phone conversation with contact.  |
| - Near term: 971 house development - estimated 0.364 MGD demand  |
| - Near term: 1,100 jobs - estimated 0.055 MGD demand   |
| - Industries include chemical, textiles, manufacturing.  |
| - Overall AGR of 1.45 much larger than 0.44 AGR for Cleveland County   |
| - Projections less than HDR study conducted for Kings Mountain.  |

ID No. 41-R  
 Entity Kings Mountain  
 Facility Pilot Creek WWTP  
 Contact Dennis Wells (704.734.4525)

Category PWS  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow:(mgd) |
| 1995                | 2.92       |
| 2000                | 2.68       |
| 2002                | 2.66       |
| 2005                | 2.71       |
| 2006                | 2.57       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 3.07       | 2.66 | 3.22 | 2.89 | 3.10 |
| Feb                        | 3.30       | 2.84 | 2.70 | 3.32 | 2.84 |
| Mar                        | 3.16       | 2.95 | 2.80 | 2.94 | 2.74 |
| Apr                        | 2.80       | 2.60 | 2.63 | 2.62 | 2.54 |
| May                        | 2.80       | 2.67 | 2.55 | 2.39 | 2.54 |
| Jun                        | 3.33       | 3.06 | 2.31 | 2.84 | 2.57 |
| Jul                        | 2.75       | 2.00 | 2.17 | 2.94 | 2.57 |
| Aug                        | 2.93       | 2.98 | 2.31 | 3.13 | 2.35 |
| Sep                        | 2.69       | 2.94 | 2.79 | 2.35 | 2.03 |
| Oct                        | 2.81       | 2.89 | 3.12 | 2.18 | 2.62 |
| Nov                        | 3.16       | 2.54 | 2.90 | 2.21 | 2.62 |
| Dec                        | 2.25       | 1.99 | 2.45 | 2.76 | 2.34 |

| Data Sources:   |
|-----------------|
| Phone Interview |
| Plant Data      |

| 2005 Potable Water Use Data |        |            |            |       |
|-----------------------------|--------|------------|------------|-------|
| Customer                    | Number | Flow (gpd) | Flow (mgd) | Pct   |
| Residential                 | 5,176  | 246        | 1.28       | 39.2% |
| Commercial                  | 79     | 246        | 0.02       | 0.6%  |
| Industrial                  | 39     | 45,267     | 1.77       | 54.3% |
| Institutional               | 6      | 2,500      | 0.02       | 0.5%  |
| Wholesale                   | 1      | 178,000    | 0.18       | 5.5%  |
| Total                       | 5,301  | -          | 3.25       | 100%  |

| Water/Wastewater Comparison |                    |
|-----------------------------|--------------------|
| Year                        | Wastewater/Water Q |
| 2005                        | 85%                |
| 2006                        | 82%                |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |   |
|--------------------|------|---|
| Category           | AGR  | Remarks   |
| Residential        | 1.76 | Based on Residential Customer Increases         |
| Commercial         | 1.76 | Assumed same as Residential                     |
| Industrial         | 0.37 | Industry Sector: , NC GSP AGR: , Inflation AGR: |
| Institutional      | 1.76 | Assumed same as Industrial                      |
| Wholesale          | 1.76 | Assumed same as Residential                     |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |      | Category |
|------|---------------------------|------------|------------|---------------|-----------|------|----------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I  |          |
| 2015 | 1.27                      | 0.02       | 1.53       | 0.01          | 0.18      | 0.53 |          |
| 2025 | 1.51                      | 0.02       | 1.59       | 0.02          | 0.21      | 0.59 |          |
| 2035 | 1.80                      | 0.03       | 1.64       | 0.02          | 0.25      | 0.66 |          |
| 2045 | 2.14                      | 0.03       | 1.71       | 0.03          | 0.30      | 0.74 |          |
| 2055 | 2.55                      | 0.04       | 1.77       | 0.03          | 0.36      | 0.84 |          |
| 2065 | 3.04                      | 0.05       | 1.84       | 0.04          | 0.42      | 0.95 |          |
| 2075 | 3.62                      | 0.06       | 1.91       | 0.04          | 0.50      | 1.08 |          |
| AGR  | 1.76                      | 1.76       | 0.37       | 1.76          | 1.76      | NA   |          |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 3.54       |
| 2025                | 3.94       |
| 2035                | 4.40       |
| 2045                | 4.95       |
| 2055                | 5.58       |
| 2065                | 6.33       |
| 2075                | 7.21       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.06        |
| Feb                  | 1.23        |
| Mar                  | 1.08        |
| Apr                  | 0.96        |
| May                  | 0.88        |
| Jun                  | 1.05        |
| Jul                  | 1.08        |
| Aug                  | 1.15        |
| Sep                  | 0.86        |
| Oct                  | 0.80        |
| Nov                  | 0.81        |
| Dec                  | 1.02        |

| Base Year |
|-----------|
| 2005      |

**Analysis Notes**

- Overall AGR is 1.41, which accounts for population increase (0.44 AGR in Cleveland County) and service area expansion.
- Projections based on AGR and Potable water use by customer category.
- Example: In 2005, there were 5,176 customers, and their per capita potable water demand was estimated at 246 gallons per day (gpd). Total residential demand was 1.28 MGD. This corresponds to 39.2% of the total potable water demand. Therefore, it was assumed that 39.2% of the total wastewater treated was from residential customers. Future wastewater flow from residential customers was assumed to be 1.76, which is the same as the potable water demand AGR. Using 2005 wastewater flow of 2.71 MGD as the base, the residential wastewater projection for 2015 is calculated as  $2.71 \text{ MGD} \times 0.392 \times (1 + 1.76/100)^{(2015-2005)} = 1.26 \text{ MGD}$ .
- I/I flow was assumed to be 15% of the total flow.
- Wastewater/Water ratios for projections range between 86 - 89%, which is slightly higher than seen in the past.



ID No. 42-W  
 Entity Broad River Water Authority  
 Facility BRWA WTP  
 Contact Maria Hunnicutt (828) 286-0640

Category PWS  
 Type Withdrawal

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 6.07       |
| 2000                | 5.40       |
| 2002                | 4.58       |
| 2005                | 3.57       |
| 2006                | 3.01       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 5.65       | 5.33 | 4.60 | 3.60 | 2.86 |
| Feb                        | 5.78       | 5.21 | 4.56 | 3.50 | 2.86 |
| Mar                        | 5.99       | 4.83 | 4.40 | 3.60 | 3.00 |
| Apr                        | 5.81       | 4.78 | 4.62 | 3.52 | 2.85 |
| May                        | 6.21       | 6.02 | 5.01 | 3.63 | 3.12 |
| Jun                        | 6.40       | 6.01 | 5.33 | 3.78 | 3.62 |
| Jul                        | 6.02       | 5.33 | 5.27 | 3.45 | 2.98 |
| Aug                        | 7.00       | 5.91 | 5.40 | 3.70 | 3.32 |
| Sep                        | 6.81       | 5.38 | 4.98 | 3.70 | 2.80 |
| Oct                        | 6.10       | 5.81 | 4.56 | 3.70 | 2.94 |
| Nov                        | 5.57       | 5.35 | 4.15 | 3.55 | 2.83 |
| Dec                        | 5.52       | 4.84 | 3.94 | 3.06 | 2.98 |

| Data Sources:   |
|-----------------|
| Facility Data   |
| 2002 LWSP       |
| Phone Interview |

| 2002 LWSP Data |        |            |
|----------------|--------|------------|
| Customer       | Number | Flow (gpd) |
| Residential    | 5199   | 140        |
| Commercial     | 328    | 384        |
| Industry       | 42     | 56,833     |
| Institutional  | 227    | 1,004      |
| Wholesale      | 1      | 775,000    |
| Other          | 1      | 140,000    |

| 2005 User Data |        |         |
|----------------|--------|---------|
| Customer       | Number | Flow    |
| Residential    | 5468   | 141     |
| Commercial     | 416    | 442     |
| Lrg Ind.       | 3      | 130,418 |
| Sm Ind.        | 35     | 27,403  |
| Institutional  | 101    | 1,484   |
| Wholesale      | 1      | 775,000 |
| Other          | 1      | 64,545  |

| System Losses |
|---------------|
| 2002          |
| 5.0%          |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |  |
|--------------------|------|--|
| Category           | AGR  | Remarks  |
| Residential        | 1.68 | Based on Residential Customer Increases            |
| Commercial         | 1.68 | Assumed same as Residential                        |
| Industrial         | 0.50 | See Analysis Notes                                 |
| Institution        | 1.68 | Assumed same as Residential                        |
| Wholesale          | 1.68 | Assumed same as Residential after 2018 (see notes) |
| Other              | 1.68 | Assumed same as Residential                        |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (MGD) |            |            |               |           |       |        |
|------|---------------------------|------------|------------|---------------|-----------|-------|--------|
|      | Category                  |            |            |               |           |       |        |
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | Other | Losses |
| 2015 | 0.91                      | 0.22       | 1.40       | 0.18          | 2.42      | 0.08  | 0.27   |
| 2025 | 1.08                      | 0.26       | 1.45       | 0.21          | 6.58      | 0.09  | 0.51   |
| 2035 | 1.27                      | 0.30       | 1.51       | 0.25          | 6.78      | 0.11  | 0.54   |
| 2045 | 1.50                      | 0.36       | 1.56       | 0.29          | 7.01      | 0.13  | 0.57   |
| 2055 | 1.77                      | 0.42       | 1.62       | 0.34          | 7.28      | 0.15  | 0.61   |
| 2065 | 2.09                      | 0.50       | 1.68       | 0.41          | 7.60      | 0.18  | 0.66   |
| 2075 | 2.47                      | 0.59       | 1.75       | 0.48          | 7.99      | 0.21  | 0.71   |
| AGR  | 1.68                      | 1.68       | 0.50       | 1.68          | 1.68      | 1.68  | -      |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 5.47       |
| 2025                | 10.17      |
| 2035                | 10.75      |
| 2045                | 11.42      |
| 2055                | 12.20      |
| 2065                | 13.12      |
| 2075                | 14.20      |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.97        |
| Feb                  | 0.96        |
| Mar                  | 0.96        |
| Apr                  | 0.95        |
| May                  | 1.05        |
| Jun                  | 1.11        |
| Jul                  | 1.01        |
| Aug                  | 1.11        |
| Sep                  | 1.03        |
| Oct                  | 1.01        |
| Nov                  | 0.94        |
| Dec                  | 0.90        |

| Base Year |
|-----------|
| 2005      |

| Analysis Notes  |
|---|
| - Anticipated New Wholesale Flows; 2009 - 1.5 MGD to SWS for Liberty Chesnee Fingerville District, and 2017 - 4.0 MGD to SWS for Boiling Springs area.  |
| - 80% of industrial demand is exerted by three customers. One plant is likely to close before 2015 and the other two are textiles and aren't expected to increase their demand.   |
| - The large industrial customers were separated from the small industrial customers which account for the remaining 20% of industrial demand. The large customers were assumed to not change in demand. The small customers were assigned a 0.50 AGR to account for unforeseen industrial growth. |
| Multi-family customers were considered residential customers where 1 multi-family customer equates to 7.5 residential customers. This ratio came from 2005 data.  |
| - Projections performed by BRWA predicts customer growth at an AGR of 2.10.   |
| - These projections show an overall AGR of 2.03, which is much greater than Rutherford County's population AGR of 0.82. However, this is consistent with the large wholesale expected and future service area expansion. Excluding wholesales, the overall projections AGR is 1.32.               |

ID No. 43-W  
 Entity City of Shelby  
 Facility Shelby WTP  
 Contact Duane Sando (704.484.6474)

Category PWS  
 Type Withdrawal

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | -          |
| 2000                | -          |
| 2002                | 4.85       |
| 2005                | -          |
| 2006                | 5.02       |

| Month | Monthly Average Flow (mgd) |      |      |      |      |
|-------|----------------------------|------|------|------|------|
|       | 1995                       | 2000 | 2002 | 2005 | 2006 |
| Jan   | -                          | -    | 4.82 | -    | 4.47 |
| Feb   | -                          | -    | 4.78 | -    | 4.75 |
| Mar   | -                          | -    | 4.75 | -    | 4.92 |
| Apr   | -                          | -    | 5.21 | -    | 5.21 |
| May   | -                          | -    | 5.76 | -    | 5.41 |
| Jun   | -                          | -    | 6.53 | 5.10 | 5.54 |
| Jul   | -                          | -    | 6.10 | 5.39 | 5.50 |
| Aug   | -                          | -    | 3.91 | 5.34 | 5.11 |
| Sep   | -                          | -    | 4.15 | 6.01 | 4.87 |
| Oct   | -                          | -    | 4.11 | 5.12 | 5.11 |
| Nov   | -                          | -    | 4.06 | 4.98 | 4.69 |
| Dec   | -                          | -    | 4.41 | 4.47 | 4.60 |

| Data Sources:   |
|-----------------|
| 2002 LWSP       |
| Phone Interview |

| 2002 LWSP Data |        |            |
|----------------|--------|------------|
| Customer       | Number | Flow (gpd) |
| Residential    | 7,099  | 338        |
| Commercial     | -      | -          |
| Industrial     | 300    | 6,000      |
| Institutional  | -      | -          |
| Wholesale      | 1      | 350,000    |
| Other          | 1      | 74,000     |

| 2007 Customer Data |        |
|--------------------|--------|
| Customer           | Number |
| Inside             | 9,696  |
| Outside            | 383    |

**PROJECTIONS ANALYSIS**

*AGR Determinations*

| AGR Determinations |      |                                 |
|--------------------|------|---------------------------------|
| Category           | AGR  | Remarks                         |
| Residential        | 0.44 | Based on County Population Data |
| Commercial         | -    | See analysis notes              |
| Industrial         | -    | See analysis notes              |
| Institution        | -    | See analysis notes              |
| Wholesale          | -    | See analysis notes              |
| Other              | -    | See analysis notes              |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (MGD) |            |            |               |           |       |        |
|------|---------------------------|------------|------------|---------------|-----------|-------|--------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | Other | Losses |
| 2015 | -                         | -          | -          | -             | -         | -     | -      |
| 2025 | -                         | -          | -          | -             | -         | -     | -      |
| 2035 | -                         | -          | -          | -             | -         | -     | -      |
| 2045 | -                         | -          | -          | -             | -         | -     | -      |
| 2055 | -                         | -          | -          | -             | -         | -     | -      |
| 2065 | -                         | -          | -          | -             | -         | -     | -      |
| 2075 | -                         | -          | -          | -             | -         | -     | -      |
| AGR  | -                         | -          | -          | -             | -         | -     | -      |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 5.22       |
| 2025                | 5.45       |
| 2035                | 5.70       |
| 2045                | 5.95       |
| 2055                | 6.22       |
| 2065                | 6.50       |
| 2075                | 6.79       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.94        |
| Feb                  | 0.96        |
| Mar                  | 0.98        |
| Apr                  | 1.05        |
| May                  | 1.13        |
| Jun                  | 1.22        |
| Jul                  | 1.17        |
| Aug                  | 0.91        |
| Sep                  | 0.91        |
| Oct                  | 0.93        |
| Nov                  | 0.88        |
| Dec                  | 0.91        |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes   |
|--|
| - Shelby currently sells to Boiling Springs approximately 350,000 gpd.   |
| - No customer type information is available.   |
| - Contact indicates that the current flow is around 4.9 mgd  |
| - Shelby would like to serve new customers, but they are surrounded by the CCSD system.  |
| - They desire to serve industrial customers, but none are expected to locate to the area.  |
| - Assumed growth in customers based on AGR of Cleveland County population of 0.44 %.   |
| - Although system expansion may occur, the AGR did not account for this because the projections for CCSD and Kings Mountain over aggressive. In other words, these projections assume that CCSD and Kings Mountain will expand their service areas to include those locations which would otherwise be served by Shelby. |
| - System losses are included in flow rates reported in 2006 base flow.   |

ID No. 43-R  
 Entity City of Shelby  
 Facility First Broad River WWTP  
 Contact Duane Sando (704.484.6474)

Category PWS  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 4.17       |
| 2000                | 2.96       |
| 2002                | 2.46       |
| 2005                | 2.97       |
| 2006                | 2.68       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 4.62       | 2.96 | 2.90 | 2.74 | 3.50 |
| Feb                        | 5.19       | 3.14 | 2.80 | 2.78 | 2.69 |
| Mar                        | 5.18       | 3.57 | 3.25 | 3.62 | 2.52 |
| Apr                        | 3.72       | 3.61 | 2.90 | 3.69 | 2.71 |
| May                        | 3.78       | 3.06 | 2.82 | 2.97 | 2.57 |
| Jun                        | 3.72       | 2.75 | 2.70 | 3.01 | 2.31 |
| Jul                        | 3.66       | 2.67 | 2.54 | 2.94 | 2.39 |
| Aug                        | 3.89       | 2.77 | 1.61 | 2.98 | 2.63 |
| Sep                        | 3.63       | 2.90 | 1.72 | 2.63 | 2.53 |
| Oct                        | 4.11       | 2.73 | 1.78 | 2.73 | 2.63 |
| Nov                        | 4.79       | 2.75 | 2.01 | 2.62 | 2.82 |
| Dec                        | 3.76       | 2.55 | 2.48 | 2.95 | 2.86 |

| Data Sources:   |
|-----------------|
| 2002 LWSP       |
| Phone Interview |

| 2005 Plant Data |        |            |            |     |
|-----------------|--------|------------|------------|-----|
| Customer        | Number | Flow (gpd) | Flow (mgd) | Pct |
| Inside          | 8,223  | -          | -          | -   |
| Outside         | 129    | -          | -          | -   |
| Total           | 8,352  | -          | -          | -   |

| Water/Wastewater Comparison |                    |
|-----------------------------|--------------------|
| Year                        | Wastewater/Water Q |
| 2002                        | 51%                |
| 2006                        | -                  |

**PROJECTIONS ANALYSIS**

*AGR Determinations*

| AGR Determinations |     |                    |
|--------------------|-----|--------------------|
| Category           | AGR | Remarks            |
| Residential        | -   | See Analysis Notes |
| Commercial         | -   | See Analysis Notes |
| Industrial         | -   | See Analysis Notes |
| Institutional      | -   | See Analysis Notes |
| Wholesale          | -   | See Analysis Notes |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |     | Category |
|------|---------------------------|------------|------------|---------------|-----------|-----|----------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I |          |
| 2015 | -                         | -          | -          | -             | -         | -   |          |
| 2025 | -                         | -          | -          | -             | -         | -   |          |
| 2035 | -                         | -          | -          | -             | -         | -   |          |
| 2045 | -                         | -          | -          | -             | -         | -   |          |
| 2055 | -                         | -          | -          | -             | -         | -   |          |
| 2065 | -                         | -          | -          | -             | -         | -   |          |
| 2075 | -                         | -          | -          | -             | -         | -   |          |
| AGR  | -                         | -          | -          | -             | -         | -   | NA       |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 2.65       |
| 2025                | 2.76       |
| 2035                | 2.89       |
| 2045                | 3.02       |
| 2055                | 3.15       |
| 2065                | 3.30       |
| 2075                | 3.44       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.92        |
| Feb                  | 0.93        |
| Mar                  | 1.22        |
| Apr                  | 1.24        |
| May                  | 1.00        |
| Jun                  | 1.01        |
| Jul                  | 0.99        |
| Aug                  | 1.00        |
| Sep                  | 0.88        |
| Oct                  | 0.92        |
| Nov                  | 0.88        |
| Dec                  | 0.99        |

| Base Year |
|-----------|
| 2005      |

| Analysis Notes   |
|--|
| - Historical flow decrease is solely a result of industrial losses (textiles and dyeing)   |
| - Remaining customers are nearly all residential customers   |
| - Contact indicates about half of water sold is treated at wastewater plant, which is consistent with the 51% Wastewater to Water ratio listed in the 2002 LWSP. |
| - Projections were calculated by assuming future wastewater flows would be 51% of the projected potable water demand.  |

ID No. 44-W  
 Entity Town of Forest City  
 Facility Forest City WTP  
 Contact Scott Hoyle (828.248.5203)

Category PWS  
 Type Withdrawal

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 4.58       |
| 2000                | 5.30       |
| 2002                | 5.10       |
| 2005                | 4.49       |
| 2006                | 4.36       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 4.69       | 5.32 | 4.93 | 4.73 | 4.25 |
| Feb                        | 4.54       | 5.38 | 5.05 | 4.63 | 4.26 |
| Mar                        | 4.64       | 5.35 | 5.00 | 4.43 | 4.25 |
| Apr                        | 4.73       | 5.11 | 5.22 | 4.37 | 4.39 |
| May                        | 5.05       | 5.24 | 5.22 | 4.50 | 4.41 |
| Jun                        | 4.66       | 5.66 | 5.65 | 4.45 | 4.46 |
| Jul                        | 4.49       | 4.97 | 5.19 | 4.42 | 4.50 |
| Aug                        | 4.58       | 5.64 | 5.26 | 4.56 | 4.35 |
| Sep                        | 4.26       | 5.28 | 4.98 | 4.74 | 4.38 |
| Oct                        | 4.49       | 5.44 | 5.03 | 4.45 | 4.29 |
| Nov                        | 4.77       | 5.24 | 5.02 | 4.40 | 4.38 |
| Dec                        | 4.01       | 4.97 | 4.70 | 4.25 | 4.42 |

**Data Sources:**  
 2002 LWSP

| 2002 LWSP Data |        |            |
|----------------|--------|------------|
| Customer       | Number | Flow (gpd) |
| Residential    | 5737   | 174        |
| Commercial     | 840    | 1,488      |
| Industrial     | 19     | 110,000    |
| Institutional  | 0      | 0          |
| Wholesale      | 1      | 207,000    |
| Other          | 0      | 0          |

| 2005 User Data |        |
|----------------|--------|
| Customer       | Number |
| Residential    | 5907   |
| Commercial     | 881    |
| Industrial     | 0      |
| Institutional  | 0      |
| Wholesale      | 1      |
| Other          | 0      |

| System Losses |        |
|---------------|--------|
| Year          | Losses |
| 2002          | 12.0%  |
| 2006          |        |

**PROJECTIONS ANALYSIS**

AGR Determinations

| AGR Determinations |      |   |
|--------------------|------|---|
| Category           | AGR  | Remarks                                 |
| Residential        | 0.98 | Based on Residential Customer Increases |
| Commercial         | 0.98 | Assumed same as Residential             |
| Industrial         | 0.50 | See analysis notes                      |
| Institution        | 0.00 | Not expected to change                  |
| Wholesale          | 0.00 | Not expected to change                  |
| Other              | 0.00 | Not expected to change                  |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |       |        |
|---------------------------|-------------|------------|------------|---------------|-----------|-------|--------|
| Year                      | Category    |            |            |               |           |       |        |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Other | Losses |
| 2015                      | 1.14        | 1.42       | 2.23       | 0.00          | 0.21      | 0.00  | 0.68   |
| 2025                      | 1.25        | 1.56       | 2.34       | 0.00          | 0.21      | 0.00  | 0.73   |
| 2035                      | 1.38        | 1.72       | 2.46       | 0.00          | 0.21      | 0.00  | 0.79   |
| 2045                      | 1.52        | 1.90       | 2.59       | 0.00          | 0.21      | 0.00  | 0.85   |
| 2055                      | 1.68        | 2.10       | 2.72       | 0.00          | 0.21      | 0.00  | 0.91   |
| 2065                      | 1.85        | 2.31       | 2.86       | 0.00          | 0.21      | 0.00  | 0.99   |
| 2075                      | 2.04        | 2.55       | 3.01       | 0.00          | 0.21      | 0.00  | 1.06   |
| AGR                       | 0.98        | 0.98       | 0.50       | 0.00          | 0.00      | 0.00  | -      |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 5.67       |
| 2025                | 6.10       |
| 2035                | 6.56       |
| 2045                | 7.07       |
| 2055                | 7.62       |
| 2065                | 8.21       |
| 2075                | 8.86       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.00        |
| Feb                  | 1.00        |
| Mar                  | 0.99        |
| Apr                  | 1.00        |
| May                  | 1.03        |
| Jun                  | 1.04        |
| Jul                  | 0.99        |
| Aug                  | 1.02        |
| Sep                  | 0.99        |
| Oct                  | 0.99        |
| Nov                  | 1.00        |
| Dec                  | 0.94        |

| Base Year |
|-----------|
| 2002      |

| Analysis Notes  |
|---|
| - Wholesale to Bostic (0.045 mgd), Ellenboro (0.100 mgd), and Concord Comm. WS (0.062 mgd)  |
| - Contact doesn't expect wholesales quantities to change in the future.   |
| - Contact indicates customer increases amount to approximately 50 per year.   |
| - Overall AGR is 0.76, which is larger than Rutherford County's population AGR of 0.34. This accounts for service area expansion. |
|   |
|   |
|   |



**ID No.** 44-R  
**Entity** Town of Forest City  
**Facility** Riverside Drive WRF  
**Contact** Scott Hoyle (828.248.5203)

**Category** PWS  
**Type** Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 3.20       |
| 2000                | 3.89       |
| 2002                | 3.62       |
| 2005                | 3.06       |
| 2006                | 2.65       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 4.01       | 3.99 | 3.86 | 3.49 | 2.76 |
| Feb                        | 4.06       | 4.03 | 3.83 | 3.54 | 2.68 |
| Mar                        | 2.26       | 4.01 | 3.82 | 3.38 | 2.62 |
| Apr                        | 3.41       | 3.82 | 3.73 | 3.25 | 2.65 |
| May                        | 3.69       | 3.54 | 3.56 | 2.70 | 2.55 |
| Jun                        | 3.37       | 3.88 | 3.55 | 3.06 | 2.55 |
| Jul                        | 2.67       | 3.36 | 3.26 | 3.29 | 2.44 |
| Aug                        | 2.96       | 4.11 | 3.62 | 3.09 | 2.88 |
| Sep                        | 2.71       | 3.97 | 3.54 | 2.90 | 2.74 |
| Oct                        | 3.17       | 4.02 | 3.36 | 3.01 | 2.71 |
| Nov                        | 3.39       | 4.03 | 3.61 | 2.47 | 2.66 |
| Dec                        | 2.71       | 3.97 | 3.73 | 2.55 | 2.53 |

**Data Sources:**  
DMR Data

| 2005 Plant Data |        |
|-----------------|--------|
| Customer        | Number |
| Inside          | 3,509  |
| Outside         | 44     |
| Total           | 3,553  |

| Water/Wastewater Comparison |                    |
|-----------------------------|--------------------|
| Year                        | Wastewater/Water Q |
| 1995                        | 70%                |
| 2000                        | 73%                |
| 2002                        | 71%                |
| 2005                        | 68%                |
| 2006                        | 61%                |
| Average                     | 69%                |

**PROJECTIONS ANALYSIS**

| AGR Determinations |     |   |
|--------------------|-----|---|
| Category           | AGR | Remarks   |
| Residential        | -   | Based on Residential Customer Increases         |
| Commercial         | -   | Assumed same as Residential                     |
| Industrial         | -   | Industry Sector: , NC GSP AGR: , Inflation AGR: |
| Institutional      | -   | Assumed same as Industrial                      |
| Wholesale          | -   | Assumed same as Residential                     |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |     | Category |
|------|---------------------------|------------|------------|---------------|-----------|-----|----------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I |          |
| 2015 | -                         | -          | -          | -             | -         | -   |          |
| 2025 | -                         | -          | -          | -             | -         | -   |          |
| 2035 | -                         | -          | -          | -             | -         | -   |          |
| 2045 | -                         | -          | -          | -             | -         | -   |          |
| 2055 | -                         | -          | -          | -             | -         | -   |          |
| 2065 | -                         | -          | -          | -             | -         | -   |          |
| 2075 | -                         | -          | -          | -             | -         | -   |          |
| AGR  | -                         | -          | -          | -             | -         | -   | NA       |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 3.89       |
| 2025                | 4.19       |
| 2035                | 4.50       |
| 2045                | 4.85       |
| 2055                | 5.23       |
| 2065                | 5.64       |
| 2075                | 6.08       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.14        |
| Feb                  | 1.16        |
| Mar                  | 1.11        |
| Apr                  | 1.06        |
| May                  | 0.88        |
| Jun                  | 1.00        |
| Jul                  | 1.08        |
| Aug                  | 1.01        |
| Sep                  | 0.95        |
| Oct                  | 0.98        |
| Nov                  | 0.81        |
| Dec                  | 0.83        |

| Base Year |
|-----------|
| 2005      |

| Analysis Notes   |
|--|
| - Decline in treated flow resulted from loss of industrial customers.  |
| - 2.0 mgd of total flow in 2006 comes from one industry - National Textiles.   |
| - National Textiles is also a potable water customer of Forest City.   |
| - Contact indicates growth has been nonexistent for several years, and no change is expected.  |
| - Customer types are not available.  |
| - Projections assumed that future return flows are equal to 66% of the projected water demand, based on the average of the 2002 and 2006 wastewater to water ratios. Overall AGR of 0.99 is higher than that for Forest City withdrawal because of different base years. |

**ID No.** 45-W  
**Entity** Cleveland County Sanitary District  
**Facility** Cleveland County SD WTP  
**Contact** Butch Smith (704.538.9033)

**Category** PWS  
**Type** Withdrawal

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2002                | 3.44       |
| 2003                | 3.39       |
| 2004                | 3.69       |
| 2005                | 3.43       |
| 2006                | 3.56       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 2002       | 2003 | 2004 | 2005 | 2006 |
| Jan                        | 3.26       | 3.16 | 3.33 | 3.28 | 3.01 |
| Feb                        | 3.21       | 3.10 | 3.34 | 3.20 | 2.98 |
| Mar                        | 3.06       | 3.21 | 3.23 | 3.26 | 3.25 |
| Apr                        | 3.48       | 3.29 | 3.55 | 3.42 | 3.47 |
| May                        | 3.68       | 3.30 | 3.82 | 3.64 | 3.74 |
| Jun                        | 4.24       | 3.64 | 3.96 | 3.52 | 4.05 |
| Jul                        | 3.91       | 3.66 | 4.01 | 3.62 | 4.06 |
| Aug                        | 3.37       | 3.35 | 3.98 | 3.76 | 4.10 |
| Sep                        | 3.26       | 3.62 | 4.11 | 3.89 | 3.75 |
| Oct                        | 3.14       | 3.37 | 3.94 | 3.25 | 3.62 |
| Nov                        | 3.39       | 3.49 | 3.61 | 3.23 | 3.36 |
| Dec                        | 3.33       | 3.52 | 3.43 | 3.13 | 3.28 |

| Data Sources:      |
|--------------------|
| 2002 LWSP          |
| User Provided Data |

| Customer Data |           |          |
|---------------|-----------|----------|
| Year          | Customers | Increase |
| 1995          | 12,399    | -        |
| 1996          | 13,011    | 613      |
| 1997          | 13,248    | 237      |
| 1998          | 13,632    | 384      |
| 1999          | 14,122    | 490      |
| 2000          | 14,806    | 684      |
| 2001          | 15,512    | 706      |
| 2002          | 16,219    | 707      |
| 2003          | 16,820    | 601      |
| 2004          | 17,182    | 362      |
| 2005          | 17,544    | 362      |
| 2006          | 17,993    | 449      |
| Average       | -         | 509      |

| Customer Data |                   |
|---------------|-------------------|
| Year          | Flow Per Customer |
| 1995          | 157               |
| 1996          | 158               |
| 1997          | 161               |
| 1998          | 164               |
| 1999          | 169               |
| 2000          | 168               |
| 2001          | 169               |
| 2002          | 212               |
| 2003          | 202               |
| 2004          | 215               |
| 2005          | 196               |
| 2006          | 198               |
| Average       | 181               |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |                    |
|--------------------|------|--------------------|
| Category           | AGR  | Remarks            |
| Residential        | 1.44 | See Analysis Notes |
| Commercial         | -    | See Analysis Notes |
| Industrial         | -    | See Analysis Notes |
| Institutional      | -    | See Analysis Notes |
| Wholesale          | -    | See Analysis Notes |

| Analysis Notes (Part 1 of 2)  |
|---|
| - CCSD serves virtually entirely residential customers  |
| - Although 2002 LWSP showed some industry, contact says that is mostly gone or leaving          |
| - Strong growth in customer base over last 10 - 12 years, despite slow county population growth |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (MGD) |            |            |               |           |       |        |
|------|---------------------------|------------|------------|---------------|-----------|-------|--------|
|      | Category                  |            |            |               |           |       |        |
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | Other | Losses |
| 2015 | 4.04                      | -          | -          | -             | -         | -     | -      |
| 2025 | 4.67                      | -          | -          | -             | -         | -     | -      |
| 2035 | 5.38                      | -          | -          | -             | -         | -     | -      |
| 2045 | 6.21                      | -          | -          | -             | -         | -     | -      |
| 2055 | 7.16                      | -          | -          | -             | -         | -     | -      |
| 2065 | 8.27                      | -          | -          | -             | -         | -     | -      |
| 2075 | 9.54                      | -          | -          | -             | -         | -     | -      |
| AGR  | 1.44                      | -          | -          | -             | -         | -     | -      |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 4.04       |
| 2025                | 4.67       |
| 2035                | 5.38       |
| 2045                | 6.21       |
| 2055                | 7.16       |
| 2065                | 8.27       |
| 2075                | 9.54       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.92        |
| Feb                  | 0.90        |
| Mar                  | 0.91        |
| Apr                  | 0.98        |
| May                  | 1.04        |
| Jun                  | 1.11        |
| Jul                  | 1.10        |
| Aug                  | 1.06        |
| Sep                  | 1.06        |
| Oct                  | 0.99        |
| Nov                  | 0.98        |
| Dec                  | 0.95        |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes (Part 2 of 2)  |
|---|
| - CCSD desires to expand into surrounding counties because of poor quality private wells.   |
| - Strong growth expected to continue as long as new reservoir is constructed as planned.  |
| An AGR of 1.44 is used for projections - 0.44 is from normal Cleveland County population growth and 1.00 is to account for strong service area expansion. Through 2075, this equates to approximately 500 new customers per year at 181 gpd/c, which agrees well with the historical customer data. |
| - CCSD serves virtually entirely residential customers  |
| - Although 2002 LWSP showed some industry, contact says that is mostly gone or leaving  |
| - Strong growth in customer base over last 10 - 12 years, despite slow county population growth   |
| - CCSD is going aggressively after customers in surrounding counties because of poor quality wells.   |
| - Strong growth expected to continue as long as new reservoir is constructed as planned.  |
| - Since growth is based not on community growth but on health needs, and because historical growth has been linear for the last 15 years, the projections are not based on an AGR, but a linear increase in customers.  |
| - The average increase per customers is 508 per year. This is used in the projections along with the average per customer water usage rate.   |
| - System losses are included in historical flow values  |
| - Overall AGR of 1.45 larger than the Cleveland County AGR of 0.44, which is consistent with their plans to move beyond the County lines to serve new customers.  |

ID No. 46-R  
 Entity Town of Spindale  
 Facility Spindale WWTP  
 Contact Bill Hodge (828.286.3407)

Category PWS  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 3.37       |
| 2000                | 1.54       |
| 2002                | 1.04       |
| 2005                | 1.24       |
| 2006                | 1.13       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 3.67       | 0.96 | 1.36 | 0.96 | 1.22 |
| Feb                        | 3.33       | 0.74 | 1.27 | 1.08 | 0.99 |
| Mar                        | 2.95       | 0.82 | 1.04 | 1.33 | 1.13 |
| Apr                        | 2.78       | 0.68 | 1.07 | 1.28 | 0.90 |
| May                        | 3.27       | 0.80 | 1.07 | 1.09 | 1.03 |
| Jun                        | 3.52       | 1.33 | 1.11 | 1.38 | 1.71 |
| Jul                        | 3.05       | 2.15 | 0.88 | 1.34 | 0.93 |
| Aug                        | 4.40       | 2.14 | 1.05 | 1.42 | 1.27 |
| Sep                        | 4.00       | 2.33 | 1.09 | 1.28 | 1.09 |
| Oct                        | 4.01       | 2.37 | 0.89 | 1.33 | 1.13 |
| Nov                        | 3.07       | 2.14 | 0.82 | 1.20 | 1.19 |
| Dec                        | 2.41       | 1.97 | 0.86 | 1.22 | 0.97 |

| Data Sources:       |
|---------------------|
| DMR Data            |
| Telephone Interview |

*2006 Data from Plant Sources*

| Customer      | Number | Flow (gpd) | Total Flow | Flow Pct |
|---------------|--------|------------|------------|----------|
| Residential   | 2,500  | 160        | 0.40       | 35.4%    |
| Commercial    | 30     | 160        | 0.00       | 0.4%     |
| Industrial    | 4      | 181,100    | 0.72       | 64.2%    |
| Institutional | 0      | 0          | 0.00       | 0.0%     |
| Wholesale     | 0      | 0          | 0.00       | 0.0%     |
| Total         | 2,534  | -          | 1.13       | 100.0%   |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |                                   |
|--------------------|------|-----------------------------------|
| Category           | AGR  | Remarks                           |
| Residential        | 0.34 | Based on County population growth |
| Commercial         | 0.34 | Assumed same as Residential       |
| Industrial         | 0.50 | See Analysis Notes                |
| Institutional      | -    | See Analysis Notes                |
| Wholesale          | -    | See Analysis Notes                |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |     | Category |
|------|---------------------------|------------|------------|---------------|-----------|-----|----------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I |          |
| 2015 | 0.41                      | 0.00       | 0.76       | -             | -         | -   |          |
| 2025 | 0.43                      | 0.01       | 0.80       | -             | -         | -   |          |
| 2035 | 0.44                      | 0.01       | 0.84       | -             | -         | -   |          |
| 2045 | 0.46                      | 0.01       | 0.88       | -             | -         | -   |          |
| 2055 | 0.47                      | 0.01       | 0.92       | -             | -         | -   |          |
| 2065 | 0.49                      | 0.01       | 0.97       | -             | -         | -   |          |
| 2075 | 0.51                      | 0.01       | 1.02       | -             | -         | -   |          |
| AGR  | 0.34                      | 0.34       | 0.50       | -             | -         | NA  |          |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.18       |
| 2025                | 1.23       |
| 2035                | 1.28       |
| 2045                | 1.34       |
| 2055                | 1.40       |
| 2065                | 1.47       |
| 2075                | 1.53       |

0.444614566

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.77        |
| Feb                  | 0.87        |
| Mar                  | 1.07        |
| Apr                  | 1.03        |
| May                  | 0.88        |
| Jun                  | 1.11        |
| Jul                  | 1.08        |
| Aug                  | 1.14        |
| Sep                  | 1.03        |
| Oct                  | 1.07        |
| Nov                  | 0.97        |
| Dec                  | 0.98        |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes   |
|--|
| - Water service to Town provided by Broad River Water Authority.                                 |
| - Residential and Commercial customer numbers are approximations from contact.                   |
| - About 1/2 to 2/3 of flow comes from the industrial customers                                   |
| - On weekends, when industrial customers don't operate, plant flows range 0.3 - 0.4 gpd          |
| - Major industrial customers are textiles (dyeing), other small ones are metal finishing plants  |
| - No pending industrial losses in the near future, but this is unpredictable                     |
| - 0.50 AGR used for industrial customers to account for unexpected new industrial customers.     |
| - System only provides service within city limits, but would go into County if there was a need. |
| - Contact indicates residential customer base hasn't changed much in the past seven years.       |
| - Overall AGR of 0.44 is larger than Rutherford County AGR of 0.44.                              |

|                 |  |                 |        |
|-----------------|--|-----------------|--------|
| <b>ID No.</b>   | 47-R   | <b>Category</b> | PWS    |
| <b>Entity</b>   | Town of Rutherfordton  | <b>Type</b>     | Return |
| <b>Facility</b> | Rutherfordton WWTP   |                 |        |
| <b>Contact</b>  | Karen Andrews (828.287.3520) and Nadine Blackwell (336.766.0270) |                 |        |

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.61       |
| 2000                | 0.51       |
| 2002                | 0.48       |
| 2005                | 0.55       |
| 2006                | 0.44       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 0.74       | 0.53 | 0.50 | 0.56 | 0.50 |
| Feb                        | 0.68       | 0.51 | 0.46 | 0.57 | 0.44 |
| Mar                        | 0.66       | 0.60 | 0.49 | 0.65 | 0.44 |
| Apr                        | 0.54       | 0.57 | 0.43 | 0.57 | 0.40 |
| May                        | 0.52       | 0.48 | 0.44 | 0.48 | 0.42 |
| Jun                        | 0.65       | 0.46 | 0.41 | 0.59 | 0.42 |
| Jul                        | 0.49       | 0.49 | 0.43 | 0.68 | 0.51 |
| Aug                        | 0.62       | 0.47 | 0.43 | 0.54 | 0.49 |
| Sep                        | 0.58       | 0.53 | 0.47 | 0.46 | 0.40 |
| Oct                        | 0.64       | 0.43 | 0.53 | 0.49 | 0.39 |
| Nov                        | 0.62       | 0.50 | 0.52 | 0.45 | 0.38 |
| Dec                        | 0.52       | 0.57 | 0.68 | 0.54 | 0.48 |

| Data Sources:   |
|-----------------|
| Phone Interview |
| Plant Data      |

| 2006 Plant Data |              |
|-----------------|--------------|
| Customer        | Number       |
| Residential     | 1,603        |
| Commercial      | 12           |
| Industrial      | 0            |
| Institutional   | 0            |
| Wholesale       | 0            |
| <b>Total</b>    | <b>1,615</b> |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |                    |
|--------------------|------|--------------------|
| Category           | AGR  | Remarks            |
| Residential        | 1.32 | See analysis notes |
| Commercial         | -    | See analysis notes |
| Industrial         | -    | See analysis notes |
| Institutional      | -    | See analysis notes |
| Wholesale          | -    | See analysis notes |

**PROJECTION SUMMARY**

| Projected Flowrates (GPD) |             |            |            |               |           |     |    |
|---------------------------|-------------|------------|------------|---------------|-----------|-----|----|
| Year                      | Category    |            |            |               |           |     |    |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | I/I |    |
| 2015                      | -           | -          | -          | -             | -         | -   |    |
| 2025                      | -           | -          | -          | -             | -         | -   |    |
| 2035                      | -           | -          | -          | -             | -         | -   |    |
| 2045                      | -           | -          | -          | -             | -         | -   |    |
| 2055                      | -           | -          | -          | -             | -         | -   |    |
| 2065                      | -           | -          | -          | -             | -         | -   |    |
| 2075                      | -           | -          | -          | -             | -         | -   |    |
| AGR                       | -           | -          | -          | -             | -         | -   | NA |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.50       |
| 2025                | 0.56       |
| 2035                | 0.64       |
| 2045                | 0.73       |
| 2055                | 0.84       |
| 2065                | 0.95       |
| 2075                | 1.09       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.03        |
| Feb                  | 1.04        |
| Mar                  | 1.18        |
| Apr                  | 1.05        |
| May                  | 0.87        |
| Jun                  | 1.07        |
| Jul                  | 1.24        |
| Aug                  | 0.98        |
| Sep                  | 0.85        |
| Oct                  | 0.89        |
| Nov                  | 0.82        |
| Dec                  | 0.98        |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes  |
|---|
| - Water for the Town is provided by the Broad River Water Authority.  |
| - Contact sees significant growth in the County, and wants to serve it around their city.   |
| - 110 home subdivision being constructed now  |
| - Seeks to serve a golf course/gated community just inside Polk County once constructed   |
| - In 90s, plant upgraded from 1 mgd capacity to 3 mgd for textile industry that never materialized.   |
| - No industry is on this sytem currently.   |
| - Flow losses in past 10 years due mostly to I/I rehabilitation and loss of industry.   |
| - Assumed that I/I reduction has bottomed out in 2006.  |
| - Projections based on the the BRWA AGR (wholesales excluded) of 1.32. This is aggressive compared to Rutherford County's AGR of 0.34, but in line with the Town's expansion interests. |
|   |
|   |



**ID No.** 48-R  
**Entity** Town of Lake Lure  
**Facility** Lake Lure WWTP  
**Contact** William Grimes (828.625.9983)

**Category** PWS  
**Type** Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.52       |
| 2000                | 0.66       |
| 2002                | 0.66       |
| 2005                | 0.82       |
| 2006                | 0.85       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 0.38       | 0.49 | 0.58 | 0.79 | 0.78 |
| Feb                        | 0.44       | 0.49 | 0.49 | 0.76 | 0.68 |
| Mar                        | 0.42       | 0.53 | 0.48 | 0.75 | 0.64 |
| Apr                        | 0.41       | 0.59 | 0.50 | 0.67 | 0.65 |
| May                        | 0.43       | 0.64 | 0.56 | 0.62 | 0.71 |
| Jun                        | 0.54       | 0.72 | 0.69 | 0.73 | 0.88 |
| Jul                        | 0.69       | 0.82 | 0.76 | 0.88 | 0.95 |
| Aug                        | 0.67       | 0.78 | 0.73 | 0.92 | 0.96 |
| Sep                        | 0.61       | 0.71 | 0.85 | 0.95 | 0.99 |
| Oct                        | 0.59       | 0.79 | 0.83 | 0.97 | 1.05 |
| Nov                        | 0.60       | 0.74 | 0.72 | 0.94 | 1.04 |
| Dec                        | 0.48       | 0.63 | 0.69 | 0.89 | 0.91 |

| Data Sources:   |
|-----------------|
| Phone Interview |
| Plant Data      |

| 2005 Plant Data |        |            |            |       |
|-----------------|--------|------------|------------|-------|
| Customer        | Number | Flow (gpd) | Flow (mgd) | Pct   |
| Residential     | 859    | 200        | 0.17       | 20.1% |
| Sm Com          | 88     | 500        | 0.04       | 5.1%  |
| Med Com         | 25     | 750        | 0.02       | 2.2%  |
| Lg Com          | 12     | 1,000      | 0.01       | 1.4%  |
| I/I             | 1      | -          | 0.61       | 71.2% |
| Total           | -      | -          | 0.85       | 100%  |

| Lake Lure Population Growth |            |      |
|-----------------------------|------------|------|
| Year                        | Population | AGR  |
| 1995                        | 691        | -    |
| 2000                        | 1,027      | 8.25 |
| 2005                        | 1,023      | 4.00 |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |                    |
|--------------------|------|--------------------|
| Category           | AGR  | Remarks            |
| Residential        | 0.60 | See Analysis Notes |
| Commercial         | -    | See Analysis Notes |
| Industrial         | -    | See Analysis Notes |
| Institutional      | -    | See Analysis Notes |
| Wholesale          | -    | See Analysis Notes |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |     | AGR |
|------|---------------------------|------------|------------|---------------|-----------|-----|-----|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I |     |
| 2015 | -                         | -          | -          | -             | -         | -   | -   |
| 2025 | -                         | -          | -          | -             | -         | -   | -   |
| 2035 | -                         | -          | -          | -             | -         | -   | -   |
| 2045 | -                         | -          | -          | -             | -         | -   | -   |
| 2055 | -                         | -          | -          | -             | -         | -   | -   |
| 2065 | -                         | -          | -          | -             | -         | -   | -   |
| 2075 | -                         | -          | -          | -             | -         | -   | -   |
| AGR  | -                         | -          | -          | -             | -         | -   | -   |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.87       |
| 2025                | 0.88       |
| 2035                | 0.90       |
| 2045                | 0.92       |
| 2055                | 0.94       |
| 2065                | 0.96       |
| 2075                | 0.98       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.84        |
| Feb                  | 0.81        |
| Mar                  | 0.80        |
| Apr                  | 0.81        |
| May                  | 0.85        |
| Jun                  | 1.02        |
| Jul                  | 1.18        |
| Aug                  | 1.16        |
| Sep                  | 1.17        |
| Oct                  | 1.20        |
| Nov                  | 1.15        |
| Dec                  | 1.01        |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes  |
|---|
| - Sewer Line is under Lake Lure - severe I/I flows and erratic flow readings!   |
| - No industry, mostly residential with some commercial  |
| - Historical flow readings impacted by changing meters in 90s and starting weekend meter readings   |
| - Serves Lake Lure and Chimney Rock incorporated areas, although many residents on septic tanks   |
| - Would like to serve these incorporated areas further, but most solve some I/I issues first  |
| - Assumed per customer flow rates to estimate I/I flow. Assumed I/I flow would remain constant.   |
| - Assumed growth in flow would occur at Rutherford County AGR of 0.60. This includes 0.34 for normal Rutherford County population growth and 0.26 for service area expansion. |
| - Lake level drops every three years  |
| - Overall AGR is 0.21, which is low because of the large I/I contribution to plant flow.  |

**ID No.** 49-R  
**Entity** Town of Columbus  
**Facility** Columbus WWTP  
**Contact** Robert Rosseter (828.894.8236)

**Category** PWS  
**Type** Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.18       |
| 2000                | 0.20       |
| 2002                | 0.18       |
| 2005                | 0.17       |
| 2006                | 0.16       |

| Data Sources: |
|---------------|
| 2002 LWSP     |
| DMR Data      |

| Month | Monthly Average Flow (mgd) |      |      |      |      |
|-------|----------------------------|------|------|------|------|
|       | 1995                       | 2000 | 2002 | 2005 | 2006 |
| Jan   | 0.19                       | 0.20 | 0.20 | 0.15 | 0.16 |
| Feb   | 0.17                       | 0.20 | 0.18 | 0.17 | 0.15 |
| Mar   | 0.16                       | 0.21 | 0.17 | 0.17 | 0.15 |
| Apr   | 0.14                       | 0.22 | 0.17 | 0.16 | 0.13 |
| May   | 0.16                       | 0.23 | 0.18 | 0.15 | 0.14 |
| Jun   | 0.19                       | 0.20 | 0.16 | 0.20 | 0.16 |
| Jul   | 0.18                       | 0.20 | 0.21 | 0.22 | 0.15 |
| Aug   | 0.22                       | 0.21 | 0.17 | 0.17 | 0.16 |
| Sep   | 0.19                       | 0.19 | 0.17 | 0.15 | 0.18 |
| Oct   | 0.21                       | 0.20 | 0.19 | 0.17 | 0.17 |
| Nov   | 0.19                       | 0.21 | 0.18 | 0.17 | 0.17 |
| Dec   | 0.16                       | 0.20 | 0.20 | 0.18 | 0.19 |

| Polk County Population Data |            |      |
|-----------------------------|------------|------|
| Year                        | Population | AGR  |
| 1990                        | 14,416     | -    |
| 2000                        | 18,324     | 2.43 |
| 2005                        | 19,134     | 1.91 |

**PROJECTIONS ANALYSIS**

| AGR Determinations |     |                    |
|--------------------|-----|--------------------|
| Category           | AGR | Remarks            |
| Residential        | -   | See Analysis Notes |
| Commercial         | -   | See Analysis Notes |
| Industrial         | -   | See Analysis Notes |
| Institutional      | -   | See Analysis Notes |
| Wholesale          | -   | See Analysis Notes |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |     | Category |
|------|---------------------------|------------|------------|---------------|-----------|-----|----------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I |          |
| 2015 | -                         | -          | -          | -             | -         | -   |          |
| 2025 | -                         | -          | -          | -             | -         | -   |          |
| 2035 | -                         | -          | -          | -             | -         | -   |          |
| 2045 | -                         | -          | -          | -             | -         | -   |          |
| 2055 | -                         | -          | -          | -             | -         | -   |          |
| 2065 | -                         | -          | -          | -             | -         | -   |          |
| 2075 | -                         | -          | -          | -             | -         | -   |          |
| AGR  | -                         | -          | -          | -             | -         | -   |          |

| Annual Average Flow |      |       |
|---------------------|------|-------|
| Year                | Flow | (mgd) |
| 2015                | 0.20 |       |
| 2025                | 0.23 |       |
| 2035                | 0.27 |       |
| 2045                | 0.31 |       |
| 2055                | 0.36 |       |
| 2065                | 0.42 |       |
| 2075                | 0.49 |       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.00        |
| Feb                  | 0.97        |
| Mar                  | 0.96        |
| Apr                  | 0.91        |
| May                  | 0.94        |
| Jun                  | 1.02        |
| Jul                  | 1.06        |
| Aug                  | 1.03        |
| Sep                  | 0.98        |
| Oct                  | 1.05        |
| Nov                  | 1.03        |
| Dec                  | 1.04        |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes  |
|---|
| - Town's public water supply provided from public groundwater wells.  |
| - Flow has declined over past 15 years largely due to loss of industry and I/I improvements   |
| - Remaining industries don't use much water   |
| - I/I improvements will not yield much more benefit.  |
| - Current 1,050 customers are nearly all residential and within the city limits.  |
| - Town is not actively pursuing customers outside of city limits, but may expand in the future.   |
| - Not enough customer data available to disaggregate customer categories and make separate AGRs   |
| - A withdrawal was created to account for a possible future Polk County water system, starting with 1.0 mgd in 2015 and increasing at an AGR of 1.50. It is assumed that Columbus will return 20% of that withdrawal. |
| - The Polk County future withdrawals is large enough to incorporate any growth expected in the Town of Columbus.  |

**ID No.** 50-R  
**Entity** Town of Boiling Springs  
**Facility** Boiling Springs WWTP  
**Contact** Mike Gibert (704.434.2357)

**Category** PWS  
**Type** Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.27       |
| 2000                | 0.27       |
| 2002                | 0.24       |
| 2005                | 0.33       |
| 2006                | 0.27       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 0.27       | 0.29 | 0.31 | 0.30 | 0.38 |
| Feb                        | 0.32       | 0.31 | 0.26 | 0.32 | 0.31 |
| Mar                        | 0.27       | 0.33 | 0.28 | 0.37 | 0.25 |
| Apr                        | 0.23       | 0.34 | 0.25 | 0.39 | 0.25 |
| May                        | 0.22       | 0.24 | 0.21 | 0.29 | 0.23 |
| Jun                        | 0.21       | 0.22 | 0.17 | 0.28 | 0.20 |
| Jul                        | 0.22       | 0.23 | 0.18 | 0.33 | 0.23 |
| Aug                        | 0.27       | 0.24 | 0.18 | 0.29 | 0.25 |
| Sep                        | 0.31       | 0.29 | 0.22 | 0.29 | 0.29 |
| Oct                        | 0.37       | 0.24 | 0.24 | 0.34 | 0.27 |
| Nov                        | 0.31       | 0.25 | 0.26 | 0.34 | 0.30 |
| Dec                        | 0.26       | 0.22 | 0.34 | 0.37 | 0.27 |

| Data Sources:   |
|-----------------|
| Phone Interview |
| Plant Data      |

| 2005 Plant Data |        |            |            |         |
|-----------------|--------|------------|------------|---------|
| Customer        | Number | Flow (gpd) | Flow (mgd) | Pct     |
| Residential     |        |            | 0.00       | #DIV/0! |
| Commercial      |        |            | 0.00       | #DIV/0! |
| Industrial      |        |            | 0.00       | #DIV/0! |
| Institutional   |        |            | 0.00       | #DIV/0! |
| Wholesale       |        |            | 0.00       | #DIV/0! |
| Total           |        |            | 0.00       | #DIV/0! |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |                    |
|--------------------|------|--------------------|
| Category           | AGR  | Remarks            |
| Residential        | 0.44 | See Analysis Notes |
| Commercial         | -    | See Analysis Notes |
| Industrial         | -    | See Analysis Notes |
| Institutional      | -    | See Analysis Notes |
| Wholesale          | -    | See Analysis Notes |

**PROJECTION SUMMARY**

| Projected Flowrates (GPD) |             |            |            |               |           |     |  |
|---------------------------|-------------|------------|------------|---------------|-----------|-----|--|
| Year                      | Category    |            |            |               |           |     |  |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | I/I |  |
| 2015                      | -           | -          | -          | -             | -         | -   |  |
| 2025                      | -           | -          | -          | -             | -         | -   |  |
| 2035                      | -           | -          | -          | -             | -         | -   |  |
| 2045                      | -           | -          | -          | -             | -         | -   |  |
| 2055                      | -           | -          | -          | -             | -         | -   |  |
| 2065                      | -           | -          | -          | -             | -         | -   |  |
| 2075                      | -           | -          | -          | -             | -         | -   |  |
| AGR                       | -           | -          | -          | -             | -         | -   |  |

| Annual Average Flow |      |       |
|---------------------|------|-------|
| Year                | Flow | (mgd) |
| 2015                | 0.28 |       |
| 2025                | 0.29 |       |
| 2035                | 0.31 |       |
| 2045                | 0.32 |       |
| 2055                | 0.33 |       |
| 2065                | 0.35 |       |
| 2075                | 0.36 |       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.94        |
| Feb                  | 0.99        |
| Mar                  | 1.15        |
| Apr                  | 1.18        |
| May                  | 0.89        |
| Jun                  | 0.86        |
| Jul                  | 1.02        |
| Aug                  | 0.89        |
| Sep                  | 0.88        |
| Oct                  | 1.03        |
| Nov                  | 1.03        |
| Dec                  | 1.13        |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes   |
|--|
| - Contact with Town was attempted, but unsuccessful.   |
| - Boiling Springs customers receive water from Shelby, 350,000 gpd, according to Shelby 2002 LWSP. |
| - No customer data available.  |
| - Projections assumed AGR of 0.44, to be consistent with Shelby's withdrawal AGR.                  |
| - The 0.44 AGR also matches the Cleveland County population AGR.                                   |
|  |
|  |
|  |

ID No. 51-R  
 Entity Town of Grover  
 Facility Grover WWTP  
 Contact Mike Church (704.937.9986)

Category PWS  
 Type Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.05       |
| 2000                | 0.06       |
| 2002                | 0.06       |
| 2005                | 0.06       |
| 2006                | 0.06       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 0.06       | 0.06 | 0.07 | 0.06 | 0.07 |
| Feb                        | 0.06       | 0.06 | 0.06 | 0.06 | 0.06 |
| Mar                        | 0.05       | 0.07 | 0.06 | 0.06 | 0.05 |
| Apr                        | 0.04       | 0.06 | 0.05 | 0.06 | 0.05 |
| May                        | 0.04       | 0.05 | 0.05 | 0.08 | 0.05 |
| Jun                        | 0.04       | 0.05 | 0.05 | 0.08 | 0.05 |
| Jul                        | 0.04       | 0.05 | 0.04 | 0.07 | 0.05 |
| Aug                        | 0.05       | 0.05 | 0.05 | 0.05 | 0.05 |
| Sep                        | 0.04       | 0.06 | 0.05 | 0.05 | 0.05 |
| Oct                        | 0.05       | 0.05 | 0.05 | 0.06 | 0.05 |
| Nov                        | 0.06       | 0.05 | 0.10 | 0.06 | 0.06 |
| Dec                        | 0.05       | 0.06 | 0.08 | 0.07 | 0.06 |

| Data Sources:   |
|-----------------|
| DMR Data        |
| Phone Interview |

| 2005 Plant Data |        |            |            |     |
|-----------------|--------|------------|------------|-----|
| Customer        | Number | Flow (gpd) | Flow (mgd) | Pct |
| Residential     | -      | -          | -          | -   |
| Commercial      | -      | -          | -          | -   |
| Industrial      | -      | -          | -          | -   |
| Institutional   | -      | -          | -          | -   |
| Wholesale       | -      | -          | -          | -   |
| Total           | -      | -          | -          | -   |

| Water/Wastewater Comparison |                    |
|-----------------------------|--------------------|
| Year                        | Wastewater/Water Q |
| 2005                        | N/A                |
| 2006                        | N/A                |

**PROJECTIONS ANALYSIS**

| AGR Determinations |     |   |
|--------------------|-----|---|
| Category           | AGR | Remarks   |
| Residential        | -   | Based on Residential Customer Increases         |
| Commercial         | -   | Assumed same as Residential                     |
| Industrial         | -   | Industry Sector: , NC GSP AGR: , Inflation AGR: |
| Institutional      | -   | Assumed same as Industrial                      |
| Wholesale          | -   | Assumed same as Residential                     |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |     | Category |
|------|---------------------------|------------|------------|---------------|-----------|-----|----------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I |          |
| 2015 | -                         | -          | -          | -             | -         | -   |          |
| 2025 | -                         | -          | -          | -             | -         | -   |          |
| 2035 | -                         | -          | -          | -             | -         | -   |          |
| 2045 | -                         | -          | -          | -             | -         | -   |          |
| 2055 | -                         | -          | -          | -             | -         | -   |          |
| 2065 | -                         | -          | -          | -             | -         | -   |          |
| 2075 | -                         | -          | -          | -             | -         | -   |          |
| AGR  | -                         | -          | -          | -             | -         | -   |          |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.10       |
| 2025                | 0.10       |
| 2035                | 0.10       |
| 2045                | 0.10       |
| 2055                | 0.10       |
| 2065                | 0.10       |
| 2075                | 0.10       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 0.91        |
| Feb                  | 0.96        |
| Mar                  | 1.02        |
| Apr                  | 0.99        |
| May                  | 1.19        |
| Jun                  | 1.22        |
| Jul                  | 1.10        |
| Aug                  | 0.83        |
| Sep                  | 0.82        |
| Oct                  | 0.92        |
| Nov                  | 0.90        |
| Dec                  | 1.12        |

| Base Year |
|-----------|
| -         |

| Analysis Notes   |
|--|
| - Contact says their system does not anticipate much growth in the future.     |
| - Customers are virtually all residential.                                     |
| - Any future growth will likely be treated by other surrounding sewer systems. |
| - No plans to increase the treatment facility's capacity.                      |
| - Will assume 0.1 MGD as build-out discharge                                   |
|  |
|  |
|  |



**ID No.** 52-R  
**Entity** City of Saluda  
**Facility** Saluda WWTP  
**Contact** Erny Williams (828.749.2581)

**Category** PWS  
**Type** Return

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.06       |
| 2000                | 0.06       |
| 2002                | 0.06       |
| 2005                | 0.06       |
| 2006                | 0.05       |

| Monthly Average Flow (mgd) |            |      |      |      |        |
|----------------------------|------------|------|------|------|--------|
| Month                      | Flow (mgd) |      |      |      |        |
|                            | 1995       | 2000 | 2002 | 2005 | 2006   |
| Jan                        | 0.10       | 0.04 | 0.06 | 0.08 | 0.0511 |
| Feb                        | 0.07       | 0.05 | 0.06 | 0.05 | 0.0491 |
| Mar                        | 0.06       | 0.05 | 0.06 | 0.06 | 0.0466 |
| Apr                        | 0.04       | 0.05 | 0.06 | 0.08 | 0.0489 |
| May                        | 0.04       | 0.05 | 0.05 | 0.05 | 0.0516 |
| Jun                        | 0.05       | 0.05 | 0.05 | 0.07 | 0.0457 |
| Jul                        | 0.04       | 0.06 | 0.05 | 0.06 | 0.0506 |
| Aug                        | 0.05       | 0.05 | 0.05 | 0.06 | 0.0446 |
| Sep                        | 0.07       | 0.06 | 0.06 | 0.05 | 0.0470 |
| Oct                        | 0.07       | 0.06 | 0.06 | 0.05 | 0.0405 |
| Nov                        | 0.07       | 0.09 | 0.09 | 0.05 | 0.0496 |
| Dec                        | 0.06       | 0.08 | 0.08 | 0.04 | 0.0551 |

| Data Sources:   |
|-----------------|
| 2002 LWSP       |
| DMR Data        |
| Phone Interview |
| Census Data     |

| 2005 Plant Data |        |            |            |      |
|-----------------|--------|------------|------------|------|
| Customer        | Number | Flow (gpd) | Flow (mgd) | Pct. |
| Residential     | -      | -          | -          | -    |
| Commercial      | -      | -          | -          | -    |
| Industrial      | -      | -          | -          | -    |
| Institutional   | -      | -          | -          | -    |
| Wholesale       | -      | -          | -          | -    |
| Total           | -      | -          | -          | -    |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |                    |
|--------------------|------|--------------------|
| Category           | AGR  | Remarks            |
| Residential        | 1.05 | See Analysis Notes |
| Commercial         | -    | See Analysis Notes |
| Industrial         | -    | See Analysis Notes |
| Institutional      | -    | See Analysis Notes |
| Wholesale          | -    | See Analysis Notes |

**PROJECTION SUMMARY**

| Year | Projected Flowrates (GPD) |            |            |               |           |     | Category |
|------|---------------------------|------------|------------|---------------|-----------|-----|----------|
|      | Residential               | Commercial | Industrial | Institutional | Wholesale | I/I |          |
| 2015 | -                         | -          | -          | -             | -         | -   |          |
| 2025 | -                         | -          | -          | -             | -         | -   |          |
| 2035 | -                         | -          | -          | -             | -         | -   |          |
| 2045 | -                         | -          | -          | -             | -         | -   |          |
| 2055 | -                         | -          | -          | -             | -         | -   |          |
| 2065 | -                         | -          | -          | -             | -         | -   |          |
| 2075 | -                         | -          | -          | -             | -         | -   |          |
| AGR  | -                         | -          | -          | -             | -         | -   |          |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 0.0531     |
| 2025                | 0.0590     |
| 2035                | 0.0655     |
| 2045                | 0.0727     |
| 2055                | 0.0807     |
| 2065                | 0.0896     |
| 2075                | 0.0994     |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.1829      |
| Feb                  | 0.9611      |
| Mar                  | 0.9815      |
| Apr                  | 0.9745      |
| May                  | 0.8740      |
| Jun                  | 0.9313      |
| Jul                  | 0.9270      |
| Aug                  | 0.9125      |
| Sep                  | 0.9821      |
| Oct                  | 0.9744      |
| Nov                  | 1.1902      |
| Dec                  | 1.1085      |

| Base Year |
|-----------|
| 2006      |

| Analysis Notes   |
|--|
| - Flows steady because of little growth over 15 years.   |
| - No industrial customers, and never had any. Only a few commercial customers                        |
| - Plant max capacity is 0.1 mgd, and their discharge creek cannot handle more than that.             |
| - They are looking at sending additional flow to Tryon along with Columbus in the future.            |
| - Service area is predominantly within the city limits. No intentions of moving outside city limits. |
| - AGR based on growth in County AGR of 1.05  |

ID No. 53-W  
 Entity Polk County - Future Water System  
 Facility Polk County - Future Water System  
 Contact Polk County

Category PWS  
 Type Withdrawal

**HISTORICAL DATA SUMMARY**

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 1995                | 0.00       |
| 2000                | 0.00       |
| 2002                | 0.00       |
| 2005                | 0.00       |
| 2006                | 0.00       |

| Monthly Average Flow (mgd) |            |      |      |      |      |
|----------------------------|------------|------|------|------|------|
| Month                      | Flow (mgd) |      |      |      |      |
|                            | 1995       | 2000 | 2002 | 2005 | 2006 |
| Jan                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Feb                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Mar                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Apr                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| May                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Jun                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Jul                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Aug                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Sep                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Oct                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Nov                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |
| Dec                        | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 |

Data Sources:

| Customer Data |           |          |
|---------------|-----------|----------|
| Year          | Customers | Increase |
| 1995          | 0         | -        |
| 2000          | 0         | 0        |
| 2005          | 0         | 0        |
| 2006          | 0         | 0        |

| Customer Data |                   |
|---------------|-------------------|
| Year          | Flow Per Customer |
| 1995          | 0                 |
| 2000          | 0                 |
| 2005          | 0                 |
| 2006          | 0                 |

**PROJECTIONS ANALYSIS**

| AGR Determinations |      |                    |
|--------------------|------|--------------------|
| Category           | AGR  | Remarks            |
| Residential        | 1.50 | See Analysis Notes |
| Commercial         | -    | See Analysis Notes |
| Industrial         | -    | See Analysis Notes |
| Institutional      | -    | See Analysis Notes |
| Wholesale          | -    | See Analysis Notes |

**PROJECTION SUMMARY**

| Projected Flowrates (MGD) |             |            |            |               |           |       |        |
|---------------------------|-------------|------------|------------|---------------|-----------|-------|--------|
| Year                      | Category    |            |            |               |           |       |        |
|                           | Residential | Commercial | Industrial | Institutional | Wholesale | Other | Losses |
| 2015                      | 1.00        | -          | -          | -             | -         | -     | -      |
| 2025                      | 1.16        | -          | -          | -             | -         | -     | -      |
| 2035                      | 1.35        | -          | -          | -             | -         | -     | -      |
| 2045                      | 1.56        | -          | -          | -             | -         | -     | -      |
| 2055                      | 1.81        | -          | -          | -             | -         | -     | -      |
| 2065                      | 2.11        | -          | -          | -             | -         | -     | -      |
| 2075                      | 2.44        | -          | -          | -             | -         | -     | -      |
| AGR                       | 1.50        | -          | -          | -             | -         | -     | -      |

| Annual Average Flow |            |
|---------------------|------------|
| Year                | Flow (mgd) |
| 2015                | 1.00       |
| 2025                | 1.16       |
| 2035                | 1.35       |
| 2045                | 1.56       |
| 2055                | 1.81       |
| 2065                | 2.11       |
| 2075                | 2.44       |

| Monthly Coefficients |             |
|----------------------|-------------|
| Month                | Coefficient |
| Jan                  | 1.00        |
| Feb                  | 1.00        |
| Mar                  | 1.00        |
| Apr                  | 1.00        |
| May                  | 1.00        |
| Jun                  | 1.00        |
| Jul                  | 1.00        |
| Aug                  | 1.00        |
| Sep                  | 1.00        |
| Oct                  | 1.00        |
| Nov                  | 1.00        |
| Dec                  | 1.00        |

| Base Year |
|-----------|
| n/a       |

| Analysis Notes  |
|---|
| 1. A future Polk County Water System was introduced based on a study conducted for Polk County which desires to create a public water system. |
| 2. Projections assume 1.0 mgd in 2015 and increases at a 1.50% AGR to 2075.   |
|   |
|   |
|   |
|   |

## APPENDIX E:

### AGRICULTURE AND IRRIGATION WITHDRAWAL DETAIL SHEETS

| Beginning<br>Page No.                      | County        | State | Beginning<br>Page No.                        | County      | State |
|--|---------------|-------|--|-------------|-------|
| 1  | Summary Table |       | <b>Downstream of Ninety-Nine Islands Dam</b> |             |       |
| <b>Upstream of Ninety-Nine Islands Dam</b> |               |       | 21   | Cherokee    | SC    |
| 5  | Buncombe      | NC    | 22   | Chester     | SC    |
| 13   | Cherokee      | SC    | 15   | Cleveland   | NC    |
| 6  | Cleveland     | NC    | 22   | Fairfield   | SC    |
| 7  | Gaston        | NC    | 16   | Gaston      | NC    |
| 8  | Henderson     | NC    | 23   | Greenville  | SC    |
| 9  | Lincoln       | NC    | 17   | Henderson   | NC    |
| 10   | McDowell      | NC    | 24   | Laurens     | SC    |
| 11   | Polk          | NC    | 25   | Lexington   | SC    |
| 12   | Rutherford    | NC    | 26   | Newberry    | SC    |
| 14   | Spartanburg   | SC    | 18   | Polk        | NC    |
|  |               |       | 27   | Richland    | SC    |
|  |               |       | 21   | Rutherford  | NC    |
|  |               |       | 28   | Spartanburg | SC    |
|  |               |       | 29   | Union       | SC    |
|  |               |       | 30   | York        | SC    |

| Agriculture/Irrigation Rollup Summary |      |                   |                   |                 |      |      |      |      |      |      |
|---------------------------------------|------|-------------------|-------------------|-----------------|------|------|------|------|------|------|
| Sub-Basin / County                    | 2000 | Estimated<br>2005 | Estimated<br>2006 | Projected Flows |      |      |      |      |      |      |
|                                       |      |                   |                   | 2015            | 2025 | 2035 | 2045 | 2055 | 2065 | 2075 |
| <b>Sub-Basin No. LS</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Henderson                             | 0.59 | 0.60              | 0.61              | 0.63            | 0.67 | 0.70 | 0.73 | 0.77 | 0.81 | 0.85 |
| Total                                 | 0.59 | 0.60              | 0.61              | 0.63            | 0.67 | 0.70 | 0.73 | 0.77 | 0.81 | 0.85 |
| <b>Sub-Basin No. LA</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Henderson                             | 0.51 | 0.52              | 0.53              | 0.55            | 0.58 | 0.60 | 0.63 | 0.67 | 0.70 | 0.73 |
| Polk                                  | 0.15 | 0.16              | 0.16              | 0.17            | 0.17 | 0.18 | 0.19 | 0.20 | 0.21 | 0.22 |
| Total                                 | 0.67 | 0.68              | 0.69              | 0.72            | 0.75 | 0.79 | 0.83 | 0.87 | 0.91 | 0.96 |
| <b>Sub-Basin No. 1</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Polk                                  | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| Total                                 | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| <b>Sub-Basin No. LL</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Buncombe                              | 0.19 | 0.19              | 0.19              | 0.20            | 0.21 | 0.21 | 0.22 | 0.23 | 0.24 | 0.25 |
| Henderson                             | 0.34 | 0.35              | 0.35              | 0.37            | 0.39 | 0.41 | 0.43 | 0.45 | 0.47 | 0.49 |
| Rutherford                            | 0.12 | 0.13              | 0.13              | 0.13            | 0.14 | 0.15 | 0.15 | 0.16 | 0.17 | 0.18 |
| Total                                 | 0.65 | 0.67              | 0.67              | 0.70            | 0.73 | 0.77 | 0.80 | 0.84 | 0.89 | 0.93 |
| <b>Sub-Basin No. 2</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| McDowell                              | 0.08 | 0.09              | 0.09              | 0.09            | 0.09 | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 |
| Rutherford                            | 0.59 | 0.61              | 0.61              | 0.64            | 0.67 | 0.71 | 0.75 | 0.79 | 0.83 | 0.87 |
| Buncombe                              | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Total                                 | 0.69 | 0.71              | 0.71              | 0.74            | 0.78 | 0.82 | 0.87 | 0.91 | 0.96 | 1.01 |
| <b>Sub-Basin No. 3</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Polk                                  | 0.28 | 0.29              | 0.29              | 0.31            | 0.32 | 0.34 | 0.36 | 0.37 | 0.39 | 0.41 |
| Total                                 | 0.28 | 0.29              | 0.29              | 0.31            | 0.32 | 0.34 | 0.36 | 0.37 | 0.39 | 0.41 |
| <b>Sub-Basin No. 4</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Polk                                  | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Rutherford                            | 0.35 | 0.36              | 0.36              | 0.38            | 0.40 | 0.42 | 0.44 | 0.47 | 0.49 | 0.52 |
| Cherokee                              | 0.05 | 0.05              | 0.05              | 0.05            | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 |
| Spartanburg                           | 0.04 | 0.04              | 0.04              | 0.04            | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 |
| Total                                 | 0.45 | 0.46              | 0.47              | 0.49            | 0.51 | 0.54 | 0.57 | 0.60 | 0.63 | 0.66 |
| <b>Sub-Basin No. CS</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Cleveland                             | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| McDowell                              | 0.09 | 0.09              | 0.09              | 0.09            | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 |
| Rutherford                            | 0.76 | 0.78              | 0.78              | 0.82            | 0.86 | 0.91 | 0.96 | 1.01 | 1.06 | 1.12 |
| Total                                 | 0.85 | 0.87              | 0.88              | 0.92            | 0.96 | 1.02 | 1.07 | 1.13 | 1.19 | 1.25 |
| <b>Sub-Basin No. 5</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Cleveland                             | 0.01 | 0.01              | 0.01              | 0.01            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Rutherford                            | 0.01 | 0.01              | 0.01              | 0.01            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Total                                 | 0.01 | 0.01              | 0.01              | 0.01            | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| <b>Sub-Basin No. 6</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Cleveland                             | 0.82 | 0.84              | 0.84              | 0.88            | 0.93 | 0.98 | 1.02 | 1.08 | 1.13 | 1.19 |
| Lincoln                               | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Rutherford                            | 0.33 | 0.34              | 0.34              | 0.36            | 0.37 | 0.39 | 0.42 | 0.44 | 0.46 | 0.49 |
| Total                                 | 1.15 | 1.18              | 1.19              | 1.24            | 1.30 | 1.37 | 1.44 | 1.52 | 1.60 | 1.68 |
| <b>Sub-Basin No. S</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Cleveland                             | 0.64 | 0.65              | 0.66              | 0.69            | 0.72 | 0.76 | 0.80 | 0.84 | 0.88 | 0.93 |
| Total                                 | 0.64 | 0.65              | 0.66              | 0.69            | 0.72 | 0.76 | 0.80 | 0.84 | 0.88 | 0.93 |
| <b>Sub-Basin No. 7</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Cleveland                             | 0.08 | 0.08              | 0.08              | 0.08            | 0.09 | 0.09 | 0.10 | 0.10 | 0.11 | 0.11 |
| Total                                 | 0.08 | 0.08              | 0.08              | 0.08            | 0.09 | 0.09 | 0.10 | 0.10 | 0.11 | 0.11 |

| Agriculture/Irrigation Rollup Summary |      |                   |                   |                 |      |      |      |      |      |      |
|---------------------------------------|------|-------------------|-------------------|-----------------|------|------|------|------|------|------|
| Sub-Basin / County                    | 2000 | Estimated<br>2005 | Estimated<br>2006 | Projected Flows |      |      |      |      |      |      |
|                                       |      |                   |                   | 2015            | 2025 | 2035 | 2045 | 2055 | 2065 | 2075 |
| <b>Sub-Basin No. 8</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.09 | 0.09              | 0.09              | 0.09            | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.13 |
| Cleveland                             | 0.95 | 0.97              | 0.97              | 1.02            | 1.07 | 1.13 | 1.18 | 1.24 | 1.31 | 1.37 |
| Rutherford                            | 0.12 | 0.12              | 0.12              | 0.13            | 0.13 | 0.14 | 0.15 | 0.16 | 0.16 | 0.17 |
| Total                                 | 1.15 | 1.18              | 1.19              | 1.24            | 1.30 | 1.37 | 1.44 | 1.51 | 1.59 | 1.67 |
| <b>Sub-Basin No. KM</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Cleveland                             | 0.30 | 0.31              | 0.31              | 0.32            | 0.34 | 0.35 | 0.37 | 0.39 | 0.41 | 0.43 |
| Gaston                                | 0.01 | 0.01              | 0.01              | 0.01            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 |
| Lincoln                               | 0.09 | 0.09              | 0.09              | 0.10            | 0.10 | 0.11 | 0.11 | 0.12 | 0.13 | 0.13 |
| Total                                 | 0.40 | 0.41              | 0.41              | 0.43            | 0.45 | 0.48 | 0.50 | 0.53 | 0.55 | 0.58 |
| <b>Sub-Basin No. 9</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.09 | 0.09              | 0.09              | 0.09            | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 |
| Cleveland                             | 0.55 | 0.56              | 0.57              | 0.59            | 0.62 | 0.65 | 0.69 | 0.72 | 0.76 | 0.80 |
| Gaston                                | 0.07 | 0.07              | 0.07              | 0.07            | 0.08 | 0.08 | 0.09 | 0.09 | 0.10 | 0.10 |
| Total                                 | 0.70 | 0.72              | 0.73              | 0.76            | 0.80 | 0.84 | 0.88 | 0.93 | 0.97 | 1.02 |
| <b>Sub-Basin No. GS</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.12 | 0.13              | 0.13              | 0.13            | 0.14 | 0.15 | 0.15 | 0.16 | 0.17 | 0.18 |
| Cleveland                             | 0.03 | 0.03              | 0.03              | 0.03            | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 |
| Total                                 | 0.15 | 0.15              | 0.15              | 0.16            | 0.17 | 0.18 | 0.18 | 0.19 | 0.20 | 0.21 |
| <b>Sub-Basin No. CF</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.40 |                   |                   | 0.43            | 0.45 | 0.47 | 0.50 | 0.52 | 0.55 | 0.58 |
| Cleveland                             | 0.05 | 0.05              | 0.05              | 0.06            | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 |
| Total                                 | 0.45 | 0.05              | 0.05              | 0.48            | 0.51 | 0.53 | 0.56 | 0.59 | 0.62 | 0.65 |
| <b>Sub-Basin No. 10</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.05 | 0.05              | 0.05              | 0.05            | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 |
| Total                                 | 0.05 | 0.05              | 0.05              | 0.05            | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 |
| <b>Sub-Basin No. NI</b>               |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.05 | 0.05              | 0.05              | 0.05            | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 |
| Total                                 | 0.05 | 0.05              | 0.05              | 0.05            | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 |
| <b>Columbia Canal Diversion Dam</b>   |      |                   |                   |                 |      |      |      |      |      |      |
| Richland                              | 0.89 | 0.92              | 0.92              | 0.96            | 1.01 | 1.07 | 1.12 | 1.18 | 1.24 | 1.30 |
| Total                                 | 0.89 | 0.92              | 0.92              | 0.96            | 1.01 | 1.07 | 1.12 | 1.18 | 1.24 | 1.30 |
| <b>Fairfield Dam</b>                  |      |                   |                   |                 |      |      |      |      |      |      |
| Fairfield                             | 0.06 | 0.06              | 0.06              | 0.07            | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | 0.09 |
| Total                                 | 0.06 | 0.06              | 0.06              | 0.07            | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | 0.09 |
| <b>Lockhart Dam</b>                   |      |                   |                   |                 |      |      |      |      |      |      |
| Chester                               | 0.01 | 0.01              | 0.01              | 0.01            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Union                                 | 0.04 | 0.04              | 0.04              | 0.04            | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| York                                  | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                                 | 0.05 | 0.05              | 0.05              | 0.05            | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| <b>Neal Shoals Dam</b>                |      |                   |                   |                 |      |      |      |      |      |      |
| Chester                               | 0.01 | 0.01              | 0.02              | 0.02            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Union                                 | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                                 | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 |
| <b>Node 11</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.26 | 0.27              | 0.28              | 0.30            | 0.33 | 0.36 | 0.40 | 0.44 | 0.49 | 0.54 |
| Cleveland                             | 0.12 | 0.13              | 0.13              | 0.13            | 0.14 | 0.15 | 0.15 | 0.16 | 0.17 | 0.18 |
| Gaston                                | 0.00 | 0.01              | 0.01              | 0.01            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| York                                  | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Total                                 | 0.41 | 0.43              | 0.43              | 0.46            | 0.50 | 0.54 | 0.59 | 0.64 | 0.69 | 0.75 |
| <b>Node 12</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.15 | 0.15              | 0.16              | 0.17            | 0.19 | 0.21 | 0.23 | 0.25 | 0.28 | 0.30 |
| York                                  | 0.15 | 0.15              | 0.15              | 0.16            | 0.17 | 0.18 | 0.18 | 0.19 | 0.20 | 0.21 |
| Total                                 | 0.29 | 0.31              | 0.31              | 0.33            | 0.35 | 0.38 | 0.41 | 0.44 | 0.48 | 0.52 |

| Agriculture/Irrigation Rollup Summary |      |                   |                   |                 |      |      |      |      |      |      |
|---------------------------------------|------|-------------------|-------------------|-----------------|------|------|------|------|------|------|
| Sub-Basin / County                    | 2000 | Estimated<br>2005 | Estimated<br>2006 | Projected Flows |      |      |      |      |      |      |
|                                       |      |                   |                   | 2015            | 2025 | 2035 | 2045 | 2055 | 2065 | 2075 |
| <b>Node 13</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.95 | 1.00              | 1.01              | 1.10            | 1.21 | 1.33 | 1.47 | 1.62 | 1.78 | 1.97 |
| Spartanburg                           | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Total                                 | 0.97 | 1.02              | 1.03              | 1.12            | 1.23 | 1.36 | 1.50 | 1.65 | 1.81 | 2.00 |
| <b>Node 14</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cleveland                             | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| Gaston                                | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| York                                  | 0.77 | 0.79              | 0.80              | 0.83            | 0.88 | 0.92 | 0.97 | 1.02 | 1.07 | 1.12 |
| Total                                 | 0.79 | 0.81              | 0.82              | 0.86            | 0.90 | 0.95 | 0.99 | 1.05 | 1.10 | 1.16 |
| <b>Node 15</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.24 | 0.25              | 0.25              | 0.28            | 0.30 | 0.34 | 0.37 | 0.41 | 0.45 | 0.50 |
| Greenville                            | 0.41 | 0.44              | 0.44              | 0.48            | 0.53 | 0.58 | 0.65 | 0.71 | 0.79 | 0.87 |
| Henderson                             | 0.07 | 0.07              | 0.07              | 0.07            | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.10 |
| Polk                                  | 0.18 | 0.19              | 0.19              | 0.19            | 0.20 | 0.22 | 0.23 | 0.24 | 0.25 | 0.26 |
| Rutherford                            | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Spartanburg                           | 1.73 | 1.77              | 1.78              | 1.85            | 1.94 | 2.04 | 2.14 | 2.24 | 2.35 | 2.47 |
| Union                                 | 0.10 | 0.11              | 0.11              | 0.11            | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Total                                 | 2.73 | 2.82              | 2.83              | 2.98            | 3.17 | 3.36 | 3.57 | 3.80 | 4.04 | 4.30 |
| <b>Node 16</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Cherokee                              | 0.07 | 0.08              | 0.08              | 0.08            | 0.09 | 0.10 | 0.11 | 0.13 | 0.14 | 0.15 |
| Chester                               | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Union                                 | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| York                                  | 0.12 | 0.12              | 0.12              | 0.13            | 0.13 | 0.14 | 0.15 | 0.15 | 0.16 | 0.17 |
| Total                                 | 0.21 | 0.22              | 0.22              | 0.23            | 0.25 | 0.27 | 0.28 | 0.30 | 0.32 | 0.35 |
| <b>Node 17</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Chester                               | 0.08 | 0.08              | 0.08              | 0.08            | 0.09 | 0.09 | 0.10 | 0.10 | 0.11 | 0.11 |
| York                                  | 0.64 | 0.65              | 0.66              | 0.69            | 0.72 | 0.76 | 0.80 | 0.84 | 0.88 | 0.93 |
| Total                                 | 0.72 | 0.74              | 0.74              | 0.77            | 0.81 | 0.85 | 0.90 | 0.94 | 0.99 | 1.04 |
| <b>Node 18</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Chester                               | 0.03 | 0.03              | 0.03              | 0.03            | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| Union                                 | 0.17 | 0.17              | 0.17              | 0.17            | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Total                                 | 0.20 | 0.20              | 0.20              | 0.20            | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 |
| <b>Node 19</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Chester                               | 0.02 | 0.02              | 0.02              | 0.02            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 |
| Union                                 | 0.07 | 0.07              | 0.07              | 0.07            | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Total                                 | 0.09 | 0.09              | 0.09              | 0.09            | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 |
| <b>Node 20</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Chester                               | 0.27 | 0.27              | 0.28              | 0.29            | 0.30 | 0.32 | 0.33 | 0.35 | 0.37 | 0.39 |
| Fairfield                             | 0.00 | 0.00              | 0.00              | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                                 | 0.27 | 0.27              | 0.28              | 0.29            | 0.30 | 0.32 | 0.33 | 0.35 | 0.37 | 0.39 |
| <b>Node 21</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Greenville                            | 1.77 | 1.87              | 1.89              | 2.06            | 2.27 | 2.50 | 2.76 | 3.05 | 3.37 | 3.72 |
| Spartanburg                           | 2.14 | 2.20              | 2.21              | 2.30            | 2.41 | 2.53 | 2.65 | 2.78 | 2.92 | 3.07 |
| Union                                 | 0.57 | 0.57              | 0.57              | 0.57            | 0.57 | 0.58 | 0.58 | 0.58 | 0.58 | 0.59 |
| Total                                 | 4.49 | 4.63              | 4.66              | 4.93            | 5.26 | 5.61 | 6.00 | 6.42 | 6.87 | 7.37 |
| <b>Node 22</b>                        |      |                   |                   |                 |      |      |      |      |      |      |
| Greenville                            | 2.26 | 2.38              | 2.41              | 2.62            | 2.90 | 3.20 | 3.53 | 3.90 | 4.30 | 4.75 |
| Laurens                               | 1.56 | 1.60              | 1.61              | 1.67            | 1.76 | 1.84 | 1.93 | 2.03 | 2.13 | 2.23 |
| Newberry                              | 0.43 | 0.44              | 0.45              | 0.47            | 0.49 | 0.52 | 0.54 | 0.57 | 0.60 | 0.63 |
| Spartanburg                           | 0.51 | 0.53              | 0.53              | 0.55            | 0.58 | 0.61 | 0.63 | 0.67 | 0.70 | 0.73 |
| Union                                 | 0.12 | 0.12              | 0.12              | 0.12            | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 |
| Total                                 | 4.89 | 5.07              | 5.11              | 5.44            | 5.84 | 6.28 | 6.76 | 7.28 | 7.85 | 8.47 |



| Agriculture/Irrigation Rollup Summary |              |              |              |                 |              |              |              |              |              |              |
|---------------------------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Sub-Basin / County                    | 2000         | Estimated    | Estimated    | Projected Flows |              |              |              |              |              |              |
|                                       |              | 2005         | 2006         | 2015            | 2025         | 2035         | 2045         | 2055         | 2065         | 2075         |
| <b>Node 23</b>                        |              |              |              |                 |              |              |              |              |              |              |
| Chester                               | 0.02         | 0.02         | 0.02         | 0.02            | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         |
| Fairfield                             | 0.28         | 0.29         | 0.29         | 0.30            | 0.32         | 0.33         | 0.35         | 0.37         | 0.39         | 0.41         |
| Newberry                              | 0.08         | 0.08         | 0.08         | 0.08            | 0.09         | 0.09         | 0.09         | 0.10         | 0.10         | 0.11         |
| Union                                 | 0.14         | 0.14         | 0.14         | 0.14            | 0.14         | 0.14         | 0.14         | 0.14         | 0.14         | 0.14         |
| <b>Total</b>                          | <b>0.51</b>  | <b>0.52</b>  | <b>0.52</b>  | <b>0.54</b>     | <b>0.56</b>  | <b>0.58</b>  | <b>0.61</b>  | <b>0.63</b>  | <b>0.66</b>  | <b>0.68</b>  |
| <b>Node 24</b>                        |              |              |              |                 |              |              |              |              |              |              |
| Fairfield                             | 0.02         | 0.02         | 0.02         | 0.02            | 0.02         | 0.02         | 0.02         | 0.02         | 0.03         | 0.03         |
| Newberry                              | 0.10         | 0.10         | 0.10         | 0.11            | 0.11         | 0.12         | 0.12         | 0.13         | 0.14         | 0.14         |
| Richland                              | 0.01         | 0.01         | 0.01         | 0.01            | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         |
| <b>Total</b>                          | <b>0.12</b>  | <b>0.13</b>  | <b>0.13</b>  | <b>0.13</b>     | <b>0.14</b>  | <b>0.15</b>  | <b>0.16</b>  | <b>0.16</b>  | <b>0.17</b>  | <b>0.18</b>  |
| <b>Node 25</b>                        |              |              |              |                 |              |              |              |              |              |              |
| Chester                               | 0.02         | 0.02         | 0.02         | 0.02            | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         |
| Fairfield                             | 0.86         | 0.89         | 0.89         | 0.93            | 0.98         | 1.03         | 1.08         | 1.14         | 1.19         | 1.25         |
| Richland                              | 0.01         | 0.01         | 0.01         | 0.01            | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         |
| <b>Total</b>                          | <b>0.90</b>  | <b>0.92</b>  | <b>0.93</b>  | <b>0.97</b>     | <b>1.02</b>  | <b>1.07</b>  | <b>1.13</b>  | <b>1.18</b>  | <b>1.24</b>  | <b>1.31</b>  |
| <b>Node 26</b>                        |              |              |              |                 |              |              |              |              |              |              |
| Fairfield                             | 0.30         | 0.31         | 0.31         | 0.33            | 0.34         | 0.36         | 0.38         | 0.40         | 0.42         | 0.44         |
| Lexington                             | 0.24         | 0.25         | 0.25         | 0.28            | 0.30         | 0.34         | 0.37         | 0.41         | 0.45         | 0.50         |
| Newberry                              | 0.01         | 0.01         | 0.01         | 0.01            | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         |
| Richland                              | 0.75         | 0.77         | 0.77         | 0.81            | 0.85         | 0.89         | 0.94         | 0.98         | 1.03         | 1.09         |
| <b>Total</b>                          | <b>1.29</b>  | <b>1.33</b>  | <b>1.34</b>  | <b>1.41</b>     | <b>1.50</b>  | <b>1.59</b>  | <b>1.69</b>  | <b>1.80</b>  | <b>1.91</b>  | <b>2.03</b>  |
| <b>Parr Shoals Dam</b>                |              |              |              |                 |              |              |              |              |              |              |
| Fairfield                             | 0.10         | 0.11         | 0.11         | 0.11            | 0.12         | 0.12         | 0.13         | 0.14         | 0.14         | 0.15         |
| Newberry                              | 0.34         | 0.35         | 0.35         | 0.37            | 0.38         | 0.40         | 0.42         | 0.45         | 0.47         | 0.49         |
| <b>Total</b>                          | <b>0.44</b>  | <b>0.45</b>  | <b>0.46</b>  | <b>0.48</b>     | <b>0.50</b>  | <b>0.53</b>  | <b>0.55</b>  | <b>0.58</b>  | <b>0.61</b>  | <b>0.64</b>  |
| <b>Grand Total</b>                    | <b>29.36</b> | <b>29.85</b> | <b>30.02</b> | <b>32.04</b>    | <b>33.99</b> | <b>36.07</b> | <b>38.31</b> | <b>40.71</b> | <b>43.29</b> | <b>46.06</b> |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY** *Buncombe*  
**STATE:** *NORTH CAROLINA*

**BASIN CONTRIBUTION:**  
*ABOVE 99 ISLAND DAM*

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |   |
|-------------------|--------------|--------------|---|
| Total             | 422280       | -            |   |
| Sub-Basin No. 2   | 1984         | 0.5%         | X |
| Sub-Basin No. LL  | 24436        | 5.8%         | X |
| Broad River Basin | 26420        | 6.3%         |   |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.60   |
| 1990 | 0.91   |
| 1995 | 1.17   |
| 2000 | 0.34   |

*\*Data from USGS*

| AGR      |        |
|----------|--------|
| 15 Yr    | -3.7%  |
| 10 Yr    | -9.4%  |
| 5 Yr     | -21.9% |
| Assigned | -0.5%  |

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type     | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|---------------------|--------------------|---------|-------------------------|------------------------|
|                     | Ground             | Surface |                         |                        |
| <i>Golf Courses</i> | 0.00               | 2.36    | 81%                     | 100%                   |
| <i>Crops</i>        | 0.03               | 0.51    | 19%                     | 94%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.09                    | 0.07         | 0.02  |
| 1990 | 0.54                    | 0.44         | 0.09  |
| 1995 | 2.18                    | 1.77         | 0.38  |
| 2000 | 2.90                    | 2.36         | 0.51  |

*\*Golf course and crop irrigation data from USGS*

*\*\*Total" column includes ground and surface waters*

*\*\*Golf Courses" and "Crops" columns include surface water only*

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 26.1% |
| 10 Yr    | 18.3%        | 18.3% |
| 5 Yr     | 5.9%         | 5.9%  |
| Assigned | 0.5%         | 0.5%  |

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |        | Golf  |        | Crops |        |
|------|-----------|--------|-------|--------|-------|--------|
|      | Sub-2     | Sub-LL | Sub-2 | Sub-LL | Sub-2 | Sub-LL |
| 2000 | 0.00      | 0.02   | 0.01  | 0.14   | 0.00  | 0.03   |
| 2015 | 0.00      | 0.02   | 0.01  | 0.15   | 0.00  | 0.03   |
| 2025 | 0.00      | 0.02   | 0.01  | 0.15   | 0.00  | 0.03   |
| 2035 | 0.00      | 0.02   | 0.01  | 0.16   | 0.00  | 0.04   |
| 2045 | 0.00      | 0.02   | 0.01  | 0.17   | 0.00  | 0.04   |
| 2055 | 0.00      | 0.01   | 0.01  | 0.18   | 0.00  | 0.04   |
| 2065 | 0.00      | 0.01   | 0.02  | 0.19   | 0.00  | 0.04   |
| 2075 | 0.00      | 0.01   | 0.02  | 0.20   | 0.00  | 0.04   |

COUNTY CLEVELAND  
STATE: NORTH CAROLINA

BASIN CONTRIBUTION:  
ABOVE 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |
|-------------------|--------------|--------------|
| Total             | 299702       | -            |
| Sub-basin No. 5   | 421          | 0.1% X       |
| Sub-basin No. 6   | 68552        | 22.9% X      |
| Sub-basin No. 7   | 4637         | 1.5% X       |
| Sub-basin No. 8   | 57695        | 19.3% X      |
| Sub-basin No. 9   | 54123        | 18.1% X      |
| Sub-basin No. S   | 62890        | 21.0% X      |
| Sub-basin No. CS  | 314          | 0.1% X       |
| Sub-basin No. CF  | 5080         | 1.7% X       |
| Sub-basin No. KM  | 29343        | 9.8% X       |
| Sub-basin No. GS  | 2547         | 0.8% X       |
| Broad River Basin | 248318       | 83%          |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.60   |
| 1990 | 0.54   |
| 1995 | 1.06   |
| 2000 | 0.93   |

| AGR      |       |
|----------|-------|
| 15 Yr    | 3.0%  |
| 10 Yr    | 5.6%  |
| 5 Yr     | -2.6% |
| Assigned | 0.5%  |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.25               | 2.26    | 84%                     | 90%                    |
| Crops           | 0.10               | 0.39    | 16%                     | 80%                    |

| Year | Irrigation Demand (mgd) |              |       | AGR      | Golf Courses | Crops |
|------|-------------------------|--------------|-------|----------|--------------|-------|
|      | Total                   | Golf Courses | Crops |          |              |       |
| 1985 | 0.43                    | 0.32         | 0.06  | 15 Yr    | 13.8%        | 13.8% |
| 1990 | 0.88                    | 0.66         | 0.11  | 10 Yr    | 13.0%        | 13.0% |
| 1995 | 2.41                    | 1.82         | 0.31  | 5 Yr     | 4.5%         | 4.5%  |
| 2000 | 3.00                    | 2.26         | 0.39  | Assigned | 0.5%         | 0.5%  |

\*Golf course and crop irrigation data from USGS

\*AGRs based on Historical Demand

\*\*Total\* column includes ground and surface waters

\*Assigned AGR based on judgement of projector.

\*\*Golf Courses\* and \*Crops\* columns include surface water only

**Agricultural/Irrigation Demand Projections (In mgd)**

| Year | Livestock |       |       |       |       |       |        |        |        |        |
|------|-----------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
|      | Sub-5     | Sub-6 | Sub-7 | Sub-8 | Sub-9 | Sub-S | Sub-CS | Sub-CF | Sub-KM | Sub-GS |
| 2000 | 0.00      | 0.21  | 0.03  | 0.44  | 0.07  | 0.08  | 0.00   | 0.01   | 0.04   | 0.00   |
| 2015 | 0.00      | 0.23  | 0.04  | 0.47  | 0.08  | 0.09  | 0.00   | 0.01   | 0.04   | 0.00   |
| 2025 | 0.00      | 0.24  | 0.04  | 0.49  | 0.08  | 0.09  | 0.00   | 0.01   | 0.04   | 0.00   |
| 2035 | 0.00      | 0.25  | 0.04  | 0.52  | 0.08  | 0.10  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2045 | 0.00      | 0.27  | 0.04  | 0.54  | 0.09  | 0.10  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2055 | 0.00      | 0.28  | 0.05  | 0.57  | 0.09  | 0.11  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2065 | 0.00      | 0.29  | 0.05  | 0.60  | 0.10  | 0.11  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2075 | 0.00      | 0.31  | 0.05  | 0.63  | 0.10  | 0.12  | 0.00   | 0.01   | 0.06   | 0.00   |

| Year | Golf  |       |       |       |       |       |        |        |        |        |
|------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
|      | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 | Sub-S | Sub-CS | Sub-CF | Sub-KM | Sub-GS |
| 2000 | 0.00  | 0.52  | 0.03  | 0.44  | 0.41  | 0.47  | 0.00   | 0.04   | 0.22   | 0.02   |
| 2015 | 0.00  | 0.56  | 0.04  | 0.47  | 0.44  | 0.51  | 0.00   | 0.04   | 0.24   | 0.02   |
| 2025 | 0.00  | 0.59  | 0.04  | 0.49  | 0.46  | 0.54  | 0.00   | 0.04   | 0.25   | 0.02   |
| 2035 | 0.00  | 0.62  | 0.04  | 0.52  | 0.49  | 0.56  | 0.00   | 0.05   | 0.26   | 0.02   |
| 2045 | 0.00  | 0.65  | 0.04  | 0.54  | 0.51  | 0.59  | 0.00   | 0.05   | 0.28   | 0.02   |
| 2055 | 0.00  | 0.68  | 0.05  | 0.57  | 0.54  | 0.62  | 0.00   | 0.05   | 0.29   | 0.03   |
| 2065 | 0.00  | 0.71  | 0.05  | 0.60  | 0.56  | 0.66  | 0.00   | 0.05   | 0.31   | 0.03   |
| 2075 | 0.00  | 0.75  | 0.05  | 0.63  | 0.59  | 0.69  | 0.00   | 0.06   | 0.32   | 0.03   |

| Year | Crops |       |       |       |       |       |        |        |        |        |
|------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
|      | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 | Sub-S | Sub-CS | Sub-CF | Sub-KM | Sub-GS |
| 2000 | 0.00  | 0.09  | 0.01  | 0.08  | 0.07  | 0.08  | 0.00   | 0.01   | 0.04   | 0.00   |
| 2015 | 0.00  | 0.10  | 0.01  | 0.08  | 0.08  | 0.09  | 0.00   | 0.01   | 0.04   | 0.00   |
| 2025 | 0.00  | 0.10  | 0.01  | 0.09  | 0.08  | 0.09  | 0.00   | 0.01   | 0.04   | 0.00   |
| 2035 | 0.00  | 0.11  | 0.01  | 0.09  | 0.08  | 0.10  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2045 | 0.00  | 0.11  | 0.01  | 0.09  | 0.09  | 0.10  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2055 | 0.00  | 0.12  | 0.01  | 0.10  | 0.09  | 0.11  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2065 | 0.00  | 0.12  | 0.01  | 0.10  | 0.10  | 0.11  | 0.00   | 0.01   | 0.05   | 0.00   |
| 2075 | 0.00  | 0.13  | 0.01  | 0.11  | 0.10  | 0.12  | 0.00   | 0.01   | 0.06   | 0.00   |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY** GASTON  
**STATE:** NORTH CAROLINA

**BASIN CONTRIBUTION:**  
 ABOVE 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |   |
|-------------------|--------------|--------------|---|
| Total             | 232525       | -            |   |
| Sub-basin No. 9   | 5876         | 2.5%         | X |
| Sub-basin No. KM  | 913          | 0.4%         | X |
| Broad River Basin | 6789         | 3%           |   |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.25   |
| 1990 | 0.20   |
| 1995 | 0.25   |
| 2000 | 0.30   |

\*Data from USGS

| AGR      |      |
|----------|------|
| 15 Yr    | 1.2% |
| 10 Yr    | 4.1% |
| 5 Yr     | 3.7% |
| Assigned | 0.5% |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.38               | 2.13    | 88%                     | 85%                    |
| Crops           | 0.04               | 0.31    | 12%                     | 89%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.04                    | 0.03         | 0.00  |
| 1990 | 0.34                    | 0.25         | 0.04  |
| 1995 | 2.26                    | 1.68         | 0.24  |
| 2000 | 2.86                    | 2.13         | 0.31  |

\*Golf course and crop irrigation data from USGS

\*\*Total column includes ground and surface waters

\*\*Golf Courses and Crops columns include surface water only

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | 32.9%        | 32.9% |
| 10 Yr    | 23.7%        | 23.7% |
| 5 Yr     | 4.8%         | 4.8%  |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |        | Golf  |        | Crops |        |
|------|-----------|--------|-------|--------|-------|--------|
|      | Sub-9     | Sub-KM | Sub-9 | Sub-KM | Sub-9 | Sub-KM |
| 2000 | 0.01      | 0.00   | 0.05  | 0.01   | 0.01  | 0.00   |
| 2015 | 0.01      | 0.00   | 0.06  | 0.01   | 0.01  | 0.00   |
| 2025 | 0.01      | 0.00   | 0.06  | 0.01   | 0.01  | 0.00   |
| 2035 | 0.01      | 0.00   | 0.06  | 0.01   | 0.01  | 0.00   |
| 2045 | 0.01      | 0.00   | 0.07  | 0.01   | 0.01  | 0.00   |
| 2055 | 0.01      | 0.00   | 0.07  | 0.01   | 0.01  | 0.00   |
| 2065 | 0.01      | 0.00   | 0.07  | 0.01   | 0.01  | 0.00   |
| 2075 | 0.01      | 0.00   | 0.08  | 0.01   | 0.01  | 0.00   |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY** HENDERSON  
**STATE:** NORTH CAROLINA

**BASIN CONTRIBUTION:**  
 ABOVE 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |   |
|-------------------|--------------|--------------|---|
| Total             | 239834       | -            |   |
| Sub-basin No. LS  | 27153        | 11.3%        | X |
| Sub-basin No. LA  | 23508        | 9.8%         | X |
| Sub-basin No. LL  | 15802        | 6.6%         | X |
| Broad River Basin | 50661        | 21%          |   |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.39   |
| 1990 | 0.81   |
| 1995 | 0.32   |
| 2000 | 0.21   |

\*Data from USGS

| AGR      |        |
|----------|--------|
| 15 Yr    | -4.0%  |
| 10 Yr    | -12.6% |
| 5 Yr     | -8.1%  |
| Assigned | 0.0%   |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.00               | 3.10    | 61%                     | 100%                   |
| Crops           | 0.11               | 1.90    | 39%                     | 95%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.19                    | 0.12         | 0.07  |
| 1990 | 0.50                    | 0.30         | 0.19  |
| 1995 | 3.82                    | 2.32         | 1.42  |
| 2000 | 5.11                    | 3.10         | 1.90  |

\*Golf course and crop irrigation data from USGS

\*\*"Total" column includes ground and surface waters

\*\*"Golf Courses" and "Crops" columns include surface water only

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 24.5% |
| 10 Yr    | 26.2%        | 26.2% |
| 5 Yr     | 6.0%         | 6.0%  |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |        |        | Golf Courses |        |        | Crops  |        |        |
|------|-----------|--------|--------|--------------|--------|--------|--------|--------|--------|
|      | Sub-LS    | Sub-LA | Sub-LL | Sub-LS       | Sub-LA | Sub-LL | Sub-LS | Sub-LA | Sub-LL |
| 2000 | 0.02      | 0.02   | 0.01   | 0.35         | 0.30   | 0.20   | 0.22   | 0.19   | 0.13   |
| 2015 | 0.02      | 0.02   | 0.01   | 0.38         | 0.33   | 0.22   | 0.23   | 0.20   | 0.13   |
| 2025 | 0.02      | 0.02   | 0.01   | 0.40         | 0.34   | 0.23   | 0.24   | 0.21   | 0.14   |
| 2035 | 0.02      | 0.02   | 0.01   | 0.42         | 0.36   | 0.24   | 0.26   | 0.22   | 0.15   |
| 2045 | 0.02      | 0.02   | 0.01   | 0.44         | 0.38   | 0.26   | 0.27   | 0.23   | 0.16   |
| 2055 | 0.02      | 0.02   | 0.01   | 0.46         | 0.40   | 0.27   | 0.28   | 0.25   | 0.16   |
| 2065 | 0.02      | 0.02   | 0.01   | 0.49         | 0.42   | 0.28   | 0.30   | 0.26   | 0.17   |
| 2075 | 0.02      | 0.02   | 0.01   | 0.51         | 0.44   | 0.30   | 0.31   | 0.27   | 0.18   |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY**    *LINCOLN*  
**STATE:**    *NORTH CAROLINA*

**BASIN CONTRIBUTION:**  
*ABOVE 99 ISLAND DAM*

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |   |
|-------------------|--------------|--------------|---|
| Total             | 196167       | -            |   |
| Sub-basin No. 6   | 245          | 0.1%         | X |
| Sub-basin No. KM  | 12888        | 6.6%         | X |
| Broad River Basin | 13133        | 7%           |   |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.34   |
| 1990 | 0.44   |
| 1995 | 0.87   |
| 2000 | 0.62   |

| AGR      |       |
|----------|-------|
| 15 Yr    | 4.1%  |
| 10 Yr    | 3.5%  |
| 5 Yr     | -6.6% |
| Assigned | 0.5%  |

*\*Data from USGS*

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type     | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|---------------------|--------------------|---------|-------------------------|------------------------|
|                     | Ground             | Surface |                         |                        |
| <i>Golf Courses</i> | 0.06               | 0.53    | 69%                     | 90%                    |
| <i>Crops</i>        | 0.03               | 0.24    | 31%                     | 89%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.34                    | 0.21         | 0.09  |
| 1990 | 0.03                    | 0.02         | 0.01  |
| 1995 | 0.78                    | 0.48         | 0.22  |
| 2000 | 0.86                    | 0.53         | 0.24  |

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 6.4%  |
| 10 Yr    | 39.9%        | 39.9% |
| 5 Yr     | 2.0%         | 2.0%  |
| Assigned | 0.5%         | 0.5%  |

*\*Golf course and crop irrigation data from USGS*

*\*AGRs based on Historical Demand*

*\*\*"Total" column includes ground and surface waters*

*\*Assigned AGR based on judgement of projector.*

*\*\*"Golf Courses" and "Crops" columns include surface water only*

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |        | Golf Courses |        | Crops |        |
|------|-----------|--------|--------------|--------|-------|--------|
|      | Sub-6     | Sub-KM | Sub-6        | Sub-KM | Sub-6 | Sub-KM |
| 2000 | 0.00      | 0.04   | 0.00         | 0.03   | 0.00  | 0.02   |
| 2015 | 0.00      | 0.04   | 0.00         | 0.04   | 0.00  | 0.02   |
| 2025 | 0.00      | 0.05   | 0.00         | 0.04   | 0.00  | 0.02   |
| 2035 | 0.00      | 0.05   | 0.00         | 0.04   | 0.00  | 0.02   |
| 2045 | 0.00      | 0.05   | 0.00         | 0.04   | 0.00  | 0.02   |
| 2055 | 0.00      | 0.05   | 0.00         | 0.05   | 0.00  | 0.02   |
| 2065 | 0.00      | 0.06   | 0.00         | 0.05   | 0.00  | 0.02   |
| 2075 | 0.00      | 0.06   | 0.00         | 0.05   | 0.00  | 0.02   |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY** McDOWELL  
**STATE:** NORTH CAROLINA

**BASIN CONTRIBUTION:**  
 ABOVE 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |   |
|-------------------|--------------|--------------|---|
| Total             | 285659       | -            |   |
| Sub-basin No. LL  | 547          | 0.2%         | X |
| Sub-basin No. 2   | 19256        | 6.7%         | X |
| Sub-basin No. CS  | 19799        | 6.9%         | X |
| Broad River Basin | 19804        | 7%           |   |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.10   |
| 1990 | 7.57   |
| 1995 | 3.58   |
| 2000 | 0.25   |

\*Data from USGS

| AGR      |        |
|----------|--------|
| 15 Yr    | 6.3%   |
| 10 Yr    | -28.9% |
| 5 Yr     | -41.3% |
| Assigned | 0.5%   |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.04               | 0.70    | 73%                     | 95%                    |
| Crops           | 0.00               | 0.28    | 27%                     | 100%                   |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.02                    | 0.01         | 0.01  |
| 1990 | 0.16                    | 0.11         | 0.04  |
| 1995 | 0.84                    | 0.58         | 0.23  |
| 2000 | 1.02                    | 0.70         | 0.28  |

\*Golf course and crop irrigation data from USGS

\*\*"Total" column includes ground and surface waters

\*\*"Golf Courses" and "Crops" columns include surface water only

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 30.0% |
| 10 Yr    | 20.4%        | 20.4% |
| 5 Yr     | 4.0%         | 4.0%  |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |       |        | Golf Courses |       |        | Crops  |       |        |
|------|-----------|-------|--------|--------------|-------|--------|--------|-------|--------|
|      | Sub-LL    | Sub-2 | Sub-CS | Sub-LL       | Sub-2 | Sub-CS | Sub-LL | Sub-2 | Sub-CS |
| 2000 | 0.00      | 0.02  | 0.02   | 0.00         | 0.05  | 0.05   | 0.00   | 0.02  | 0.02   |
| 2015 | 0.00      | 0.02  | 0.02   | 0.00         | 0.05  | 0.05   | 0.00   | 0.02  | 0.02   |
| 2025 | 0.00      | 0.02  | 0.02   | 0.00         | 0.05  | 0.05   | 0.00   | 0.02  | 0.02   |
| 2035 | 0.00      | 0.02  | 0.02   | 0.00         | 0.06  | 0.06   | 0.00   | 0.02  | 0.02   |
| 2045 | 0.00      | 0.02  | 0.02   | 0.00         | 0.06  | 0.06   | 0.00   | 0.02  | 0.02   |
| 2055 | 0.00      | 0.02  | 0.02   | 0.00         | 0.06  | 0.06   | 0.00   | 0.02  | 0.03   |
| 2065 | 0.00      | 0.02  | 0.02   | 0.00         | 0.07  | 0.07   | 0.00   | 0.03  | 0.03   |
| 2075 | 0.00      | 0.02  | 0.03   | 0.00         | 0.07  | 0.07   | 0.00   | 0.03  | 0.03   |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

COUNTY *POLK*  
STATE: *NORTH CAROLINA*

BASIN CONTRIBUTION:  
*ABOVE 99 ISLAND DAM*

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |   |
|-------------------|--------------|--------------|---|
| Total             | 152685       | -            |   |
| Sub-basin No. 1   | 832          | 0.5%         | X |
| Sub-basin No. 3   | 67837        | 44.4%        | X |
| Sub-basin No. 4   | 3879         | 2.5%         | X |
| Sub-basin No. LA  | 36822        | 24.1%        | X |
| Broad River Basin | 68669        | 45%          |   |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.08   |
| 1990 | 0.09   |
| 1995 | 0.13   |
| 2000 | 0.07   |

| AGR      |        |
|----------|--------|
| 15 Yr    | -0.9%  |
| 10 Yr    | -2.5%  |
| 5 Yr     | -11.6% |
| Assigned | 0.5%   |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.02               | 0.42    | 75%                     | 95%                    |
| Crops           | 0.00               | 0.15    | 25%                     | 100%                   |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.08                    | 0.06         | 0.02  |
| 1990 | 0.10                    | 0.07         | 0.03  |
| 1995 | 0.60                    | 0.43         | 0.15  |
| 2000 | 0.59                    | 0.42         | 0.15  |

|          | AGR   | Golf Courses | Crops |
|----------|-------|--------------|-------|
|          | 15 Yr | 14.2%        | 14.2% |
| 10 Yr    | 19.4% | 19.4%        |       |
| 5 Yr     | -0.3% | -0.3%        |       |
| Assigned | 0.5%  | 0.5%         |       |

\*Golf course and crop irrigation data from USGS

\*AGRs based on Historical Demand

\*\*Total\* column includes ground and surface waters

\*Assigned AGR based on judgement of projector.

\*\*Golf Courses\* and \*Crops\* columns include surface water only

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |       |       |        | Golf Courses |       |       |        | Crops |       |       |        |
|------|-----------|-------|-------|--------|--------------|-------|-------|--------|-------|-------|-------|--------|
|      | Sub-1     | Sub-3 | Sub-4 | Sub-LA | Sub-1        | Sub-3 | Sub-4 | Sub-LA | Sub-1 | Sub-3 | Sub-4 | Sub-LA |
| 2000 | 0.00      | 0.03  | 0.00  | 0.02   | 0.00         | 0.19  | 0.01  | 0.10   | 0.00  | 0.07  | 0.00  | 0.04   |
| 2015 | 0.00      | 0.03  | 0.00  | 0.02   | 0.00         | 0.20  | 0.01  | 0.11   | 0.00  | 0.07  | 0.00  | 0.04   |
| 2025 | 0.00      | 0.04  | 0.00  | 0.02   | 0.00         | 0.21  | 0.01  | 0.11   | 0.00  | 0.08  | 0.00  | 0.04   |
| 2035 | 0.00      | 0.04  | 0.00  | 0.02   | 0.00         | 0.22  | 0.01  | 0.12   | 0.00  | 0.08  | 0.00  | 0.04   |
| 2045 | 0.00      | 0.04  | 0.00  | 0.02   | 0.00         | 0.23  | 0.01  | 0.13   | 0.00  | 0.08  | 0.00  | 0.05   |
| 2055 | 0.00      | 0.04  | 0.00  | 0.02   | 0.00         | 0.25  | 0.01  | 0.13   | 0.00  | 0.09  | 0.01  | 0.05   |
| 2065 | 0.00      | 0.04  | 0.00  | 0.02   | 0.00         | 0.26  | 0.01  | 0.14   | 0.00  | 0.09  | 0.01  | 0.05   |
| 2075 | 0.00      | 0.05  | 0.00  | 0.02   | 0.00         | 0.27  | 0.02  | 0.15   | 0.00  | 0.10  | 0.01  | 0.05   |



**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

COUNTY RUTHERFORD  
STATE: NORTH CAROLINA

BASIN CONTRIBUTION:  
ABOVE 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |
|-------------------|--------------|--------------|
| Total             | 361842       | -            |
| Sub-basin No. 2   | 93788        | 25.9% X      |
| Sub-basin No. 4   | 55564        | 15.4% X      |
| Sub-basin No. 5   | 1199         | 0.3% X       |
| Sub-basin No. 6   | 52257        | 14.4% X      |
| Sub-basin No. 8   | 18622        | 5.1% X       |
| Sub-basin No. LL  | 19484        | 5.4% X       |
| Sub-basin No. CS  | 120548       | 33.3% X      |
| Broad River Basin | 361462       | 100%         |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.23   |
| 1990 | 0.41   |
| 1995 | 0.34   |
| 2000 | 0.35   |

| AGR      |       |
|----------|-------|
| 15 Yr    | 2.8%  |
| 10 Yr    | -1.6% |
| 5 Yr     | 0.6%  |
| Assigned | 0.6%  |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.09               | 1.68    | 87%                     | 95%                    |
| Crops           | 0.01               | 0.25    | 13%                     | 96%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.04                    | 0.03         | 0.00  |
| 1990 | 0.05                    | 0.04         | 0.01  |
| 1995 | 2.45                    | 2.03         | 0.30  |
| 2000 | 2.03                    | 1.68         | 0.25  |

|          | AGR   | Golf Courses | Crops |
|----------|-------|--------------|-------|
|          |       |              |       |
| 10 Yr    | 44.8% | 44.8%        |       |
| 5 Yr     | -3.7% | -3.7%        |       |
| Assigned | 0.5%  | 0.5%         |       |

\*Golf course and crop irrigation data from USGS

\*AGRs based on Historical Demand

\*\*Total column includes ground and surface waters

\*Assigned AGR based on judgement of projector.

\*\*Golf Courses\* and \*Crops\* columns include surface water only

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |       |       |       |       |        |        |
|------|-----------|-------|-------|-------|-------|--------|--------|
|      | Sub-2     | Sub-4 | Sub-5 | Sub-6 | Sub-8 | Sub-LL | Sub-CS |
| 2000 | 0.09      | 0.05  | 0.00  | 0.05  | 0.02  | 0.02   | 0.12   |
| 2015 | 0.10      | 0.06  | 0.00  | 0.06  | 0.02  | 0.02   | 0.13   |
| 2025 | 0.11      | 0.06  | 0.00  | 0.06  | 0.02  | 0.02   | 0.14   |
| 2035 | 0.11      | 0.07  | 0.00  | 0.06  | 0.02  | 0.02   | 0.14   |
| 2045 | 0.12      | 0.07  | 0.00  | 0.07  | 0.02  | 0.02   | 0.15   |
| 2055 | 0.13      | 0.08  | 0.00  | 0.07  | 0.03  | 0.03   | 0.16   |
| 2065 | 0.14      | 0.08  | 0.00  | 0.08  | 0.03  | 0.03   | 0.17   |
| 2075 | 0.14      | 0.09  | 0.00  | 0.08  | 0.03  | 0.03   | 0.18   |

| Year | Golf  |       |       |       |       |        |        |
|------|-------|-------|-------|-------|-------|--------|--------|
|      | Sub-2 | Sub-4 | Sub-5 | Sub-6 | Sub-8 | Sub-LL | Sub-CS |
| 2000 | 0.44  | 0.26  | 0.01  | 0.24  | 0.09  | 0.09   | 0.56   |
| 2015 | 0.47  | 0.28  | 0.01  | 0.26  | 0.09  | 0.10   | 0.60   |
| 2025 | 0.49  | 0.29  | 0.01  | 0.27  | 0.10  | 0.10   | 0.63   |
| 2035 | 0.52  | 0.31  | 0.01  | 0.29  | 0.10  | 0.11   | 0.67   |
| 2045 | 0.55  | 0.32  | 0.01  | 0.30  | 0.11  | 0.11   | 0.70   |
| 2055 | 0.57  | 0.34  | 0.01  | 0.32  | 0.11  | 0.12   | 0.74   |
| 2065 | 0.60  | 0.36  | 0.01  | 0.34  | 0.12  | 0.13   | 0.77   |
| 2075 | 0.63  | 0.38  | 0.01  | 0.35  | 0.13  | 0.13   | 0.81   |

| Year | Crops |       |       |       |       |        |        |
|------|-------|-------|-------|-------|-------|--------|--------|
|      | Sub-2 | Sub-4 | Sub-5 | Sub-6 | Sub-8 | Sub-LL | Sub-CS |
| 2000 | 0.06  | 0.04  | 0.00  | 0.04  | 0.01  | 0.01   | 0.08   |
| 2015 | 0.07  | 0.04  | 0.00  | 0.04  | 0.01  | 0.01   | 0.09   |
| 2025 | 0.07  | 0.04  | 0.00  | 0.04  | 0.01  | 0.02   | 0.09   |
| 2035 | 0.08  | 0.05  | 0.00  | 0.04  | 0.02  | 0.02   | 0.10   |
| 2045 | 0.08  | 0.05  | 0.00  | 0.05  | 0.02  | 0.02   | 0.10   |
| 2055 | 0.09  | 0.05  | 0.00  | 0.05  | 0.02  | 0.02   | 0.11   |
| 2065 | 0.09  | 0.05  | 0.00  | 0.05  | 0.02  | 0.02   | 0.12   |
| 2075 | 0.09  | 0.06  | 0.00  | 0.05  | 0.02  | 0.02   | 0.12   |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY** CHEROKEE  
**STATE:** SOUTH CAROLINA

**BASIN CONTRIBUTION:**  
 ABOVE 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |   |
|-------------------|--------------|--------------|---|
| Total             | 254013       | -            |   |
| Sub-basin No. 4   | 4701         | 1.9%         | X |
| Sub-basin No.8    | 8808         | 3.5%         | X |
| Sub-basin No. 9   | 8648         | 3.4%         | X |
| Sub-basin No. 10  | 4614         | 1.8%         | X |
| Sub-basin No. CF  | 40179        | 15.8%        | X |
| Sub-basin No. GS  | 12369        | 4.9%         | X |
| Sub-basin No. NI  | 5142         | 2.0%         | X |
| Broad River Basin | 84460        | 33.3%        |   |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.09   |
| 1990 | 0.15   |
| 1995 | 0.15   |
| 2000 | N/A    |

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 5.2% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Total Irrigation |
|-----------------|--------------------|-------------------------|
| Golf Courses    | 0.60               | 26%                     |
| Crops           | 1.75               | 74%                     |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.12                    | 0.03         | 0.09  |
| 1990 | 0.40                    | 0.10         | 0.30  |
| 1995 | 0.20                    | 0.05         | 0.15  |
| 2000 | 2.35                    | 0.60         | 1.75  |

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 21.9% |
| 10 Yr    | 5.2%         | 5.2%  |
| 5 Yr     | 27.2%        | 27.2% |
| Assigned | 0.5%         | 0.5%  |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (In mgd)**

| Year | Livestock |       |       |        |        |        |        |
|------|-----------|-------|-------|--------|--------|--------|--------|
|      | Sub-4     | Sub-8 | Sub-9 | Sub-10 | Sub-CF | Sub-GS | Sub-NI |
| 2000 | 0.00      | 0.01  | 0.01  | 0.00   | 0.02   | 0.01   | 0.00   |
| 2015 | 0.00      | 0.01  | 0.01  | 0.00   | 0.03   | 0.01   | 0.00   |
| 2025 | 0.00      | 0.01  | 0.01  | 0.00   | 0.03   | 0.01   | 0.00   |
| 2035 | 0.00      | 0.01  | 0.01  | 0.00   | 0.03   | 0.01   | 0.00   |
| 2045 | 0.00      | 0.01  | 0.01  | 0.00   | 0.03   | 0.01   | 0.00   |
| 2055 | 0.00      | 0.01  | 0.01  | 0.00   | 0.03   | 0.01   | 0.00   |
| 2065 | 0.00      | 0.01  | 0.01  | 0.00   | 0.03   | 0.01   | 0.00   |
| 2075 | 0.00      | 0.01  | 0.01  | 0.00   | 0.04   | 0.01   | 0.00   |

| Year | Golf  |       |       |        |        |        |        |
|------|-------|-------|-------|--------|--------|--------|--------|
|      | Sub-4 | Sub-8 | Sub-9 | Sub-10 | Sub-CF | Sub-GS | Sub-NI |
| 2000 | 0.01  | 0.02  | 0.02  | 0.01   | 0.09   | 0.03   | 0.01   |
| 2015 | 0.01  | 0.02  | 0.02  | 0.01   | 0.10   | 0.03   | 0.01   |
| 2025 | 0.01  | 0.02  | 0.02  | 0.01   | 0.11   | 0.03   | 0.01   |
| 2035 | 0.01  | 0.02  | 0.02  | 0.01   | 0.11   | 0.03   | 0.01   |
| 2045 | 0.01  | 0.03  | 0.03  | 0.01   | 0.12   | 0.04   | 0.02   |
| 2055 | 0.01  | 0.03  | 0.03  | 0.01   | 0.12   | 0.04   | 0.02   |
| 2065 | 0.02  | 0.03  | 0.03  | 0.02   | 0.13   | 0.04   | 0.02   |
| 2075 | 0.02  | 0.03  | 0.03  | 0.02   | 0.14   | 0.04   | 0.02   |

| Year | Crops |       |       |        |        |        |        |
|------|-------|-------|-------|--------|--------|--------|--------|
|      | Sub-4 | Sub-8 | Sub-9 | Sub-10 | Sub-CF | Sub-GS | Sub-NI |
| 2000 | 0.03  | 0.06  | 0.06  | 0.03   | 0.28   | 0.09   | 0.04   |
| 2015 | 0.03  | 0.07  | 0.06  | 0.03   | 0.30   | 0.09   | 0.04   |
| 2025 | 0.04  | 0.07  | 0.07  | 0.04   | 0.31   | 0.10   | 0.04   |
| 2035 | 0.04  | 0.07  | 0.07  | 0.04   | 0.33   | 0.10   | 0.04   |
| 2045 | 0.04  | 0.08  | 0.07  | 0.04   | 0.35   | 0.11   | 0.04   |
| 2055 | 0.04  | 0.08  | 0.08  | 0.04   | 0.36   | 0.11   | 0.05   |
| 2065 | 0.04  | 0.08  | 0.08  | 0.04   | 0.38   | 0.12   | 0.05   |
| 2075 | 0.05  | 0.09  | 0.09  | 0.05   | 0.40   | 0.12   | 0.05   |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY** SPARTANBURG  
**STATE:** SOUTH CAROLINA

**BASIN CONTRIBUTION:**  
 ABOVE 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Acres) | Pct of Total |
|-------------------|--------------|--------------|
| Total             | 524046       | -            |
| Sub-Basin No. 4   | 3071         | 0.6% X       |
| Broad River Basin | 3071         | 0.6%         |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.24   |
| 1990 | 0.23   |
| 1995 | 0.23   |
| 2000 | N/A    |

\*Data from USGS

| AGR      |       |
|----------|-------|
| 15 Yr    | -     |
| 10 Yr    | -0.4% |
| 5 Yr     | 0.0%  |
| Assigned | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Total Irrigation |
|-----------------|--------------------|-------------------------|
| Golf Courses    | 3.30               | 51%                     |
| Crops           | 3.13               | 49%                     |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.28                    | 0.14         | 0.14  |
| 1990 | 0.37                    | 0.19         | 0.18  |
| 1995 | 0.38                    | 0.20         | 0.18  |
| 2000 | 6.43                    | 3.30         | 3.13  |

\*Data from USGS

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | 23.2%        | 23.2% |
| 10 Yr    | 3.1%         | 3.1%  |
| 5 Yr     | 5.7%         | 5.7%  |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock Sub-4 | Golf Sub-4 | Crops Sub-4 |
|------|-----------------|------------|-------------|
| 2000 | 0.00            | 0.02       | 0.02        |
| 2015 | 0.00            | 0.02       | 0.02        |
| 2025 | 0.00            | 0.02       | 0.02        |
| 2035 | 0.00            | 0.02       | 0.02        |
| 2045 | 0.00            | 0.02       | 0.02        |
| 2055 | 0.00            | 0.03       | 0.02        |
| 2065 | 0.00            | 0.03       | 0.03        |
| 2075 | 0.00            | 0.03       | 0.03        |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** CLEVELAND  
**STATE:** NORTH CAROLINA

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 468.6            | -            |
| Sub-1 Node 11     | 16.2             | 3.5%         |
| Sub-2 Node 14     | 2.5              | 0.5%         |
| Broad River Basin | 18.7             | 4%           |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.60   |
| 1990 | 0.54   |
| 1995 | 1.06   |
| 2000 | 0.93   |

| AGR      |       |
|----------|-------|
| 15 Yr    | 3.0%  |
| 10 Yr    | 5.6%  |
| 5 Yr     | -2.6% |
| Assigned | 0.5%  |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.25               | 2.26    | 84%                     | 90%                    |
| Crops           | 0.10               | 0.39    | 16%                     | 80%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.43                    | 0.32         | 0.06  |
| 1990 | 0.88                    | 0.66         | 0.11  |
| 1995 | 2.41                    | 1.82         | 0.31  |
| 2000 | 3.00                    | 2.26         | 0.39  |

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 13.8% |
| 10 Yr    | 13.0%        | 13.0% |
| 5 Yr     | 4.5%         | 4.5%  |
| Assigned | 0.5%         | 0.5%  |

\*Golf course and crop irrigation data from USGS

\*AGRs based on Historical Demand

\*\*"Total" column includes ground and surface waters

\*Assigned AGR based on judgement of projector.

\*\*"Golf Courses" and "Crops" columns include surface water only

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |       | Golf  |       | Crops |       |
|------|-----------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-1 | Sub-2 | Sub-1 | Sub-2 |
| 2000 | 0.03      | 0.00  | 0.08  | 0.01  | 0.01  | 0.00  |
| 2015 | 0.03      | 0.01  | 0.08  | 0.01  | 0.01  | 0.00  |
| 2025 | 0.04      | 0.01  | 0.09  | 0.01  | 0.02  | 0.00  |
| 2035 | 0.04      | 0.01  | 0.09  | 0.01  | 0.02  | 0.00  |
| 2045 | 0.04      | 0.01  | 0.10  | 0.02  | 0.02  | 0.00  |
| 2055 | 0.04      | 0.01  | 0.10  | 0.02  | 0.02  | 0.00  |
| 2065 | 0.04      | 0.01  | 0.11  | 0.02  | 0.02  | 0.00  |
| 2075 | 0.05      | 0.01  | 0.11  | 0.02  | 0.02  | 0.00  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** GASTON  
**STATE:** NORTH CAROLINA

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 363.6            | -            |
| Sub-1 Node 11     | 0.7              | 0.2% X       |
| Sub-2 Node 14     | 0.0              | 0.0% X       |
| Broad River Basin | 0.7              | 0%           |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.25   |
| 1990 | 0.20   |
| 1995 | 0.25   |
| 2000 | 0.30   |

| AGR      |      |
|----------|------|
| 15 Yr    | 1.2% |
| 10 Yr    | 4.1% |
| 5 Yr     | 3.7% |
| Assigned | 0.5% |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.38               | 2.13    | 88%                     | 85%                    |
| Crops           | 0.04               | 0.31    | 12%                     | 89%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.04                    | 0.03         | 0.00  |
| 1990 | 0.34                    | 0.25         | 0.04  |
| 1995 | 2.26                    | 1.68         | 0.24  |
| 2000 | 2.86                    | 2.13         | 0.31  |

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 32.9% |
| 10 Yr    | 23.7%        | 23.7% |
| 5 Yr     | 4.8%         | 4.8%  |
| Assigned | 0.5%         | 0.5%  |

\*Golf course and crop irrigation data from USGS

\*\*Total column includes ground and surface waters

\*\*Golf Courses and Crops columns include surface water only

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock |       | Golf  |       | Crops |       |
|------|-----------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-1 | Sub-2 | Sub-1 | Sub-2 |
| 2000 | 0.00      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 2015 | 0.00      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 2025 | 0.00      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 2035 | 0.00      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 2045 | 0.00      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 2055 | 0.00      | 0.00  | 0.01  | 0.00  | 0.00  | 0.00  |
| 2065 | 0.00      | 0.00  | 0.01  | 0.00  | 0.00  | 0.00  |
| 2075 | 0.00      | 0.00  | 0.01  | 0.00  | 0.00  | 0.00  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

COUNTY: HENDERSON  
 STATE: NORTH CAROLINA

BASIN CONTRIBUTION:  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 374.9            | -            |
| Sub-1 Node 15     | 4.9              | 1.3% X       |
| Broad River Basin | 5                | 1%           |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.39   |
| 1990 | 0.81   |
| 1995 | 0.32   |
| 2000 | 0.21   |

\*Data from USGS

| AGR      |        |
|----------|--------|
| 15 Yr    | -4.0%  |
| 10 Yr    | -12.6% |
| 5 Yr     | -8.1%  |
| Assigned | 0.0%   |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.00               | 3.10    | 61%                     | 100%                   |
| Crops           | 0.11               | 1.90    | 39%                     | 95%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.19                    | 0.12         | 0.07  |
| 1990 | 0.50                    | 0.30         | 0.19  |
| 1995 | 3.82                    | 2.32         | 1.42  |
| 2000 | 5.11                    | 3.10         | 1.90  |

\*Golf course and crop irrigation data from USGS

\*\*"Total" column includes ground and surface waters

\*\*"Golf Courses" and "Crops" columns include surface water only

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 24.5% |
| 10 Yr    | 26.2%        | 26.2% |
| 5 Yr     | 6.0%         | 6.0%  |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock Sub-1 | Golf Courses Sub-1 | Crops Sub-1 |
|------|-----------------|--------------------|-------------|
| 2000 | 0.00            | 0.04               | 0.02        |
| 2015 | 0.00            | 0.04               | 0.03        |
| 2025 | 0.00            | 0.05               | 0.03        |
| 2035 | 0.00            | 0.05               | 0.03        |
| 2045 | 0.00            | 0.05               | 0.03        |
| 2055 | 0.00            | 0.05               | 0.03        |
| 2065 | 0.00            | 0.06               | 0.03        |
| 2075 | 0.00            | 0.06               | 0.04        |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

COUNTY: POLK  
STATE: NORTH CAROLINA

BASIN CONTRIBUTION:  
BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 238.7            | -            |
| Sub-1 Node 15     | 67.5             | 28.3%        |
| Broad River Basin | 67               | 28%          |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.08   |
| 1990 | 0.09   |
| 1995 | 0.13   |
| 2000 | 0.07   |

\*Data from USGS

| AGR      |        |
|----------|--------|
| 15 Yr    | -0.9%  |
| 10 Yr    | -2.5%  |
| 5 Yr     | -11.6% |
| Assigned | 0.5%   |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.02               | 0.42    | 75%                     | 95%                    |
| Crops           | 0.00               | 0.15    | 25%                     | 100%                   |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.08                    | 0.06         | 0.02  |
| 1990 | 0.10                    | 0.07         | 0.03  |
| 1995 | 0.60                    | 0.43         | 0.15  |
| 2000 | 0.59                    | 0.42         | 0.15  |

\*Golf course and crop irrigation data from USGS

\*\*Total column includes ground and surface waters

\*\*Golf Courses and Crops columns include surface water only

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 14.2% |
| 10 Yr    | 19.4%        | 19.4% |
| 5 Yr     | -0.3%        | -0.3% |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock Sub-1 | Golf Courses Sub-1 | Crops Sub-1 |
|------|-----------------|--------------------|-------------|
| 2000 | 0.02            | 0.12               | 0.04        |
| 2015 | 0.02            | 0.13               | 0.05        |
| 2025 | 0.02            | 0.13               | 0.05        |
| 2035 | 0.02            | 0.14               | 0.05        |
| 2045 | 0.02            | 0.15               | 0.05        |
| 2055 | 0.03            | 0.16               | 0.06        |
| 2065 | 0.03            | 0.16               | 0.06        |
| 2075 | 0.03            | 0.17               | 0.06        |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** RUTHERFORD  
**STATE:** NORTH CAROLINA

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 565.7            | -            |
| Sub-1 Node 15     | 0.5              | 0.1% X       |
| Broad River Basin | 0                | 0%           |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.23   |
| 1990 | 0.41   |
| 1995 | 0.34   |
| 2000 | 0.35   |

| AGR      |       |
|----------|-------|
| 15 Yr    | 2.8%  |
| 10 Yr    | -1.6% |
| 5 Yr     | 0.6%  |
| Assigned | 0.6%  |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) |         | Pct of Total Irrigation | Pct from Surface Water |
|-----------------|--------------------|---------|-------------------------|------------------------|
|                 | Ground             | Surface |                         |                        |
| Golf Courses    | 0.09               | 1.68    | 87%                     | 95%                    |
| Crops           | 0.01               | 0.25    | 13%                     | 96%                    |

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.04                    | 0.03         | 0.00  |
| 1990 | 0.05                    | 0.04         | 0.01  |
| 1995 | 2.45                    | 2.03         | 0.30  |
| 2000 | 2.03                    | 1.68         | 0.25  |

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 29.9% |
| 10 Yr    | 44.8%        | 44.8% |
| 5 Yr     | -3.7%        | -3.7% |
| Assigned | 0.5%         | 0.5%  |

\*Golf course and crop irrigation data from USGS

\*\*Total column includes ground and surface waters

\*\*Golf Courses and Crops columns include surface water only

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigation Demand Projections (in mgd)**

| Year | Livestock Sub-1 | Golf Sub-1 | Crops Sub-1 |
|------|-----------------|------------|-------------|
| 2000 | 0.00            | 0.00       | 0.00        |
| 2015 | 0.00            | 0.00       | 0.00        |
| 2025 | 0.00            | 0.00       | 0.00        |
| 2035 | 0.00            | 0.00       | 0.00        |
| 2045 | 0.00            | 0.00       | 0.00        |
| 2055 | 0.00            | 0.00       | 0.00        |
| 2065 | 0.00            | 0.00       | 0.00        |
| 2075 | 0.00            | 0.00       | 0.00        |



**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** Cherokee  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 397.2            | -            |
| Sub-1 Node 11     | 41.1             | 10.4%        |
| Sub-2 Node 12     | 23.3             | 5.9%         |
| Sub-3 Node 13     | 150.7            | 37.9%        |
| Sub-4 Node 14     | 0.2              | 0.1%         |
| Sub-5 Node 15     | 38.0             | 9.6%         |
| Sub-6 Node 16     | 11.6             | 2.9%         |
| Broad River Basin | 265.0            | 66.7%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.09   |
| 1990 | 0.15   |
| 1995 | 0.15   |
| 2000 | N/A    |

\*Data from USGS

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 5.2% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 0.60               | 26%               |       |
| Crops           | 1.75               | 74%               |       |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.12                    | 0.03         | 0.09  |
| 1990 | 0.40                    | 0.10         | 0.30  |
| 1995 | 0.20                    | 0.05         | 0.15  |
| 2000 | 2.35                    | 0.60         | 1.75  |

\*Data from USGS

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 21.9% |
| 10 Yr    | 5.2%         | 5.2%  |
| 5 Yr     | 27.2%        | 27.2% |
| Assigned | 1.0%         | 1.0%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       |       |       |       | Golf Courses |       |       |       |       |       |
|------|-----------|-------|-------|-------|-------|-------|--------------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-1        | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 |
| 2000 | 0.02      | 0.01  | 0.06  | 0.00  | 0.01  | 0.00  | 0.06         | 0.04  | 0.23  | 0.00  | 0.06  | 0.02  |
| 2015 | 0.02      | 0.01  | 0.06  | 0.00  | 0.02  | 0.00  | 0.07         | 0.04  | 0.26  | 0.00  | 0.07  | 0.02  |
| 2025 | 0.02      | 0.01  | 0.07  | 0.00  | 0.02  | 0.01  | 0.08         | 0.05  | 0.29  | 0.00  | 0.07  | 0.02  |
| 2035 | 0.02      | 0.01  | 0.07  | 0.00  | 0.02  | 0.01  | 0.09         | 0.05  | 0.32  | 0.00  | 0.08  | 0.02  |
| 2045 | 0.02      | 0.01  | 0.07  | 0.00  | 0.02  | 0.01  | 0.10         | 0.06  | 0.36  | 0.00  | 0.09  | 0.03  |
| 2055 | 0.02      | 0.01  | 0.08  | 0.00  | 0.02  | 0.01  | 0.11         | 0.06  | 0.39  | 0.00  | 0.10  | 0.03  |
| 2065 | 0.02      | 0.01  | 0.08  | 0.00  | 0.02  | 0.01  | 0.12         | 0.07  | 0.43  | 0.00  | 0.11  | 0.03  |
| 2075 | 0.02      | 0.01  | 0.08  | 0.00  | 0.02  | 0.01  | 0.13         | 0.07  | 0.48  | 0.00  | 0.12  | 0.04  |

| Year | Crops |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 |
| 2000 | 0.18  | 0.10  | 0.66  | 0.00  | 0.17  | 0.05  |
| 2015 | 0.21  | 0.12  | 0.77  | 0.00  | 0.19  | 0.06  |
| 2025 | 0.23  | 0.13  | 0.85  | 0.00  | 0.21  | 0.07  |
| 2035 | 0.26  | 0.15  | 0.94  | 0.00  | 0.24  | 0.07  |
| 2045 | 0.28  | 0.16  | 1.04  | 0.00  | 0.26  | 0.08  |
| 2055 | 0.31  | 0.18  | 1.15  | 0.00  | 0.29  | 0.09  |
| 2065 | 0.35  | 0.20  | 1.27  | 0.00  | 0.32  | 0.10  |
| 2075 | 0.38  | 0.22  | 1.40  | 0.00  | 0.35  | 0.11  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

COUNTY: *Chester*  
 STATE: *South Carolina*

BASIN CONTRIBUTION:  
*BELOW 99 ISLAND DAM*

**County Land Area Distribution**

| Designation           | Area (Sq. Miles) | Pct of Total |
|-----------------------|------------------|--------------|
| Total                 | 586.4            | -            |
| Sub-1 Lockhart Dam    | 2.9              | 0.5%         |
| Sub-2 Neal Shoals Dam | 8.2              | 1.4%         |
| Sub-3 Node 16         | 0.1              | 0.0%         |
| Sub-4 Node 17         | 44.2             | 7.5%         |
| Sub-5 Node 18         | 17.0             | 2.9%         |
| Sub-6 Node 19         | 10.1             | 1.7%         |
| Sub-7 Node 20         | 150.2            | 25.6%        |
| Sub-8 Node 23         | 8.7              | 1.5%         |
| Sub-9 Node 25         | 12.6             | 2.2%         |
| Broad River Basin     | 254.0            | 43.3%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.10   |
| 1990 | 0.13   |
| 1995 | 0.13   |
| 2000 | N/A    |

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 2.7% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

*\*Data from USGS*

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 0.60               | 66%               |       |
| Crops           | 0.31               | 34%               |       |

*\*Data from 2000 South Carolina Water Plan*

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.00                    | 0.00         | 0.00  |
| 1990 | 0.00                    | 0.00         | 0.00  |
| 1995 | 0.00                    | 0.00         | 0.00  |
| 2000 | 0.91                    | 0.60         | 0.31  |

*\*Data from USGS*

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | -            | -     |
| 10 Yr    | -            | -     |
| 5 Yr     | -            | -     |
| Assigned | 0.5%         | 0.5%  |

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       |       |       |       |       |       |       |
|------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 |
| 2000 | 0.00      | 0.00  | 0.00  | 0.01  | 0.00  | 0.00  | 0.03  | 0.00  | 0.00  |
| 2015 | 0.00      | 0.00  | 0.00  | 0.01  | 0.00  | 0.00  | 0.04  | 0.00  | 0.00  |
| 2025 | 0.00      | 0.00  | 0.00  | 0.01  | 0.00  | 0.00  | 0.04  | 0.00  | 0.00  |
| 2035 | 0.00      | 0.00  | 0.00  | 0.01  | 0.00  | 0.00  | 0.04  | 0.00  | 0.00  |
| 2045 | 0.00      | 0.00  | 0.00  | 0.01  | 0.00  | 0.00  | 0.04  | 0.00  | 0.00  |
| 2055 | 0.00      | 0.00  | 0.00  | 0.01  | 0.01  | 0.00  | 0.04  | 0.00  | 0.00  |
| 2065 | 0.00      | 0.00  | 0.00  | 0.01  | 0.01  | 0.00  | 0.05  | 0.00  | 0.00  |
| 2075 | 0.00      | 0.00  | 0.00  | 0.01  | 0.01  | 0.00  | 0.05  | 0.00  | 0.00  |

| Year | Golf Courses |       |       |       |       |       |       |       |       |
|------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|
|      | Sub-1        | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 |
| 2000 | 0.00         | 0.01  | 0.00  | 0.05  | 0.02  | 0.01  | 0.15  | 0.01  | 0.01  |
| 2015 | 0.00         | 0.01  | 0.00  | 0.05  | 0.02  | 0.01  | 0.17  | 0.01  | 0.01  |
| 2025 | 0.00         | 0.01  | 0.00  | 0.05  | 0.02  | 0.01  | 0.17  | 0.01  | 0.01  |
| 2035 | 0.00         | 0.01  | 0.00  | 0.05  | 0.02  | 0.01  | 0.18  | 0.01  | 0.02  |
| 2045 | 0.00         | 0.01  | 0.00  | 0.06  | 0.02  | 0.01  | 0.19  | 0.01  | 0.02  |
| 2055 | 0.00         | 0.01  | 0.00  | 0.06  | 0.02  | 0.01  | 0.20  | 0.01  | 0.02  |
| 2065 | 0.00         | 0.01  | 0.00  | 0.06  | 0.02  | 0.01  | 0.21  | 0.01  | 0.02  |
| 2075 | 0.00         | 0.01  | 0.00  | 0.07  | 0.03  | 0.01  | 0.22  | 0.01  | 0.02  |

| Year | Crops |       |       |       |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 |
| 2000 | 0.00  | 0.00  | 0.00  | 0.02  | 0.01  | 0.01  | 0.08  | 0.00  | 0.01  |
| 2015 | 0.00  | 0.00  | 0.00  | 0.03  | 0.01  | 0.01  | 0.09  | 0.00  | 0.01  |
| 2025 | 0.00  | 0.00  | 0.00  | 0.03  | 0.01  | 0.01  | 0.09  | 0.01  | 0.01  |
| 2035 | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.01  | 0.09  | 0.01  | 0.01  |
| 2045 | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.01  | 0.10  | 0.01  | 0.01  |
| 2055 | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.01  | 0.10  | 0.01  | 0.01  |
| 2065 | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.01  | 0.11  | 0.01  | 0.01  |
| 2075 | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.01  | 0.12  | 0.01  | 0.01  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** Fairfield  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation           | Area (Sq. Miles) | Pct of Total |
|-----------------------|------------------|--------------|
| Total                 | 710.0            | -            |
| Sub-1 Fairfield Dam   | 16.1             | 2.3%         |
| Sub-2 Node 20         | 0.0              | 0.0%         |
| Sub-3 Node 23         | 72.9             | 10.3%        |
| Sub-4 Node 24         | 4.9              | 0.7%         |
| Sub-5 Node 25         | 224.3            | 31.6%        |
| Sub-6 Node 26         | 78.6             | 11.1%        |
| Sub-7 Parr Shoals Dam | 26.8             | 3.8%         |
| Broad River Basin     | 424              | 59.7%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.06   |
| 1990 | 0.07   |
| 1995 | 0.07   |
| 2000 | N/A    |

\*Data from USGS

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 1.6% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 0.20               | 8%                |       |
| Crops           | 2.46               | 92%               |       |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.00                    | 0.00         | 0.00  |
| 1990 | 0.00                    | 0.00         | 0.00  |
| 1995 | 0.00                    | 0.00         | 0.00  |
| 2000 | 2.66                    | 0.20         | 2.46  |

\*Data from USGS

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | -            | -     |
| 10 Yr    | -            | -     |
| 5 Yr     | -            | -     |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (In mgd)**

| Year | Livestock |       |       |       |       |       |       |
|------|-----------|-------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 |
| 2000 | 0.00      | 0.00  | 0.01  | 0.00  | 0.02  | 0.01  | 0.00  |
| 2015 | 0.00      | 0.00  | 0.01  | 0.00  | 0.02  | 0.01  | 0.00  |
| 2025 | 0.00      | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.00  |
| 2035 | 0.00      | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.00  |
| 2045 | 0.00      | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.00  |
| 2055 | 0.00      | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.00  |
| 2065 | 0.00      | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.00  |
| 2075 | 0.00      | 0.00  | 0.01  | 0.00  | 0.03  | 0.01  | 0.00  |

| Year | Golf Courses |       |       |       |       |       |       |
|------|--------------|-------|-------|-------|-------|-------|-------|
|      | Sub-1        | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 |
| 2000 | 0.00         | 0.00  | 0.02  | 0.00  | 0.06  | 0.02  | 0.01  |
| 2015 | 0.00         | 0.00  | 0.02  | 0.00  | 0.07  | 0.02  | 0.01  |
| 2025 | 0.01         | 0.00  | 0.02  | 0.00  | 0.07  | 0.03  | 0.01  |
| 2035 | 0.01         | 0.00  | 0.02  | 0.00  | 0.08  | 0.03  | 0.01  |
| 2045 | 0.01         | 0.00  | 0.03  | 0.00  | 0.08  | 0.03  | 0.01  |
| 2055 | 0.01         | 0.00  | 0.03  | 0.00  | 0.08  | 0.03  | 0.01  |
| 2065 | 0.01         | 0.00  | 0.03  | 0.00  | 0.09  | 0.03  | 0.01  |
| 2075 | 0.01         | 0.00  | 0.03  | 0.00  | 0.09  | 0.03  | 0.01  |

| Year | Crops |       |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 |
| 2000 | 0.06  | 0.00  | 0.25  | 0.02  | 0.78  | 0.27  | 0.09  |
| 2015 | 0.06  | 0.00  | 0.27  | 0.02  | 0.84  | 0.29  | 0.10  |
| 2025 | 0.06  | 0.00  | 0.29  | 0.02  | 0.88  | 0.31  | 0.11  |
| 2035 | 0.07  | 0.00  | 0.30  | 0.02  | 0.93  | 0.32  | 0.11  |
| 2045 | 0.07  | 0.00  | 0.32  | 0.02  | 0.97  | 0.34  | 0.12  |
| 2055 | 0.07  | 0.00  | 0.33  | 0.02  | 1.02  | 0.36  | 0.12  |
| 2065 | 0.08  | 0.00  | 0.35  | 0.02  | 1.07  | 0.38  | 0.13  |
| 2075 | 0.08  | 0.00  | 0.37  | 0.02  | 1.13  | 0.40  | 0.13  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** Greenville  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 794.9            | -            |
| Sub-1 Node 15     | 28.6             | 3.6%         |
| Sub-2 Node 21     | 122.6            | 15.4%        |
| Sub-3 Node 22     | 156.5            | 19.7%        |
| Broad River Basin | 308              | 38.7%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.15   |
| 1990 | 0.18   |
| 1995 | 0.18   |
| 2000 | N/A    |

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 1.8% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Total Irrigation |
|-----------------|--------------------|-------------------------|
| Golf Courses    | 6.20               | 55%                     |
| Crops           | 5.11               | 45%                     |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.25                    | 0.14         | 0.11  |
| 1990 | 0.34                    | 0.19         | 0.15  |
| 1995 | 0.38                    | 0.21         | 0.17  |
| 2000 | 11.31                   | 6.20         | 5.11  |

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | 28.9% |
| 10 Yr    | 4.3%         | 4.3%  |
| 5 Yr     | 6.3%         | 6.3%  |
| Assigned | 1.0%         | 1.0%  |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       | Golf Courses |       |       | Crops |       |       |
|------|-----------|-------|-------|--------------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-1        | Sub-2 | Sub-3 | Sub-1 | Sub-2 | Sub-3 |
| 2000 | 0.01      | 0.03  | 0.04  | 0.22         | 0.96  | 1.22  | 0.18  | 0.79  | 1.01  |
| 2015 | 0.01      | 0.03  | 0.04  | 0.26         | 1.11  | 1.42  | 0.21  | 0.91  | 1.17  |
| 2025 | 0.01      | 0.03  | 0.04  | 0.29         | 1.23  | 1.57  | 0.24  | 1.01  | 1.29  |
| 2035 | 0.01      | 0.03  | 0.04  | 0.32         | 1.35  | 1.73  | 0.26  | 1.12  | 1.43  |
| 2045 | 0.01      | 0.04  | 0.05  | 0.35         | 1.50  | 1.91  | 0.29  | 1.23  | 1.57  |
| 2055 | 0.01      | 0.04  | 0.05  | 0.39         | 1.65  | 2.11  | 0.32  | 1.36  | 1.74  |
| 2065 | 0.01      | 0.04  | 0.05  | 0.43         | 1.83  | 2.33  | 0.35  | 1.50  | 1.92  |
| 2075 | 0.01      | 0.04  | 0.05  | 0.47         | 2.02  | 2.58  | 0.39  | 1.66  | 2.12  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** *Laurens*  
**STATE:** *South Carolina*

**BASIN CONTRIBUTION:**  
*BELOW 99 ISLAND DAM*

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 723.5            | -            |
| Sub-1 Node 22     | 268.8            | 37.1%        |
| Broad River Basin | 269              | 37.1%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.29   |
| 1990 | 0.23   |
| 1995 | 0.23   |
| 2000 | N/A    |

*\*Data from USGS*

| AGR      |       |
|----------|-------|
| 15 Yr    | -     |
| 10 Yr    | -2.3% |
| 5 Yr     | 0.0%  |
| Assigned | 0.0%  |

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Total Irrigation |
|-----------------|--------------------|-------------------------|
| Golf Courses    | 0.80               | 20%                     |
| Crops           | 3.17               | 80%                     |

*\*Data from 2000 South Carolina Water Plan*

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.00                    | 0.00         | 0.00  |
| 1990 | 0.23                    | 0.05         | 0.18  |
| 1995 | 0.00                    | 0.00         | 0.00  |
| 2000 | 3.97                    | 0.80         | 3.17  |

*\*Data from USGS*

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | -            | -     |
| 10 Yr    | 33.0%        | 33.0% |
| 5 Yr     | -            | -     |
| Assigned | 0.5%         | 0.5%  |

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock Sub-1 | Golf Courses Sub-1 | Crops Sub-1 |
|------|-----------------|--------------------|-------------|
| 2000 | 0.09            | 0.30               | 1.18        |
| 2015 | 0.09            | 0.32               | 1.27        |
| 2025 | 0.09            | 0.34               | 1.33        |
| 2035 | 0.09            | 0.35               | 1.40        |
| 2045 | 0.09            | 0.37               | 1.47        |
| 2055 | 0.09            | 0.39               | 1.55        |
| 2065 | 0.09            | 0.41               | 1.63        |
| 2075 | 0.09            | 0.43               | 1.71        |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** Lexington  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 757.1            | -            |
| Sub-1 Node 26     | 8.4              | 1.1%         |
| Broad River Basin | 8                | 1.1%         |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.06   |
| 1990 | 0.86   |
| 1995 | 0.86   |
| 2000 | N/A    |

\*Data from USGS

| AGR      |       |
|----------|-------|
| 15 Yr    | -     |
| 10 Yr    | 30.5% |
| 5 Yr     | 0.0%  |
| Assigned | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Total Irrigation |
|-----------------|--------------------|-------------------------|
| Golf Courses    | 2.30               | 11%                     |
| Crops           | 18.30              | 89%                     |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.32                    | 0.04         | 0.28  |
| 1990 | 0.96                    | 0.11         | 0.85  |
| 1995 | 0.54                    | 0.06         | 0.48  |
| 2000 | 20.60                   | 2.30         | 18.30 |

\*Data from USGS

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | 32.0%        | 32.0% |
| 10 Yr    | 5.4%         | 5.4%  |
| 5 Yr     | 24.6%        | 24.6% |
| Assigned | 1.0%         | 1.0%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock Sub-1 | Golf Courses Sub-1 | Crops Sub-1 |
|------|-----------------|--------------------|-------------|
| 2000 | 0.01            | 0.03               | 0.20        |
| 2015 | 0.01            | 0.03               | 0.24        |
| 2025 | 0.01            | 0.03               | 0.26        |
| 2035 | 0.01            | 0.04               | 0.29        |
| 2045 | 0.01            | 0.04               | 0.32        |
| 2055 | 0.01            | 0.04               | 0.35        |
| 2065 | 0.01            | 0.05               | 0.39        |
| 2075 | 0.01            | 0.05               | 0.43        |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** Newberry  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation           | Area (Sq. Miles) | Pct of Total |
|-----------------------|------------------|--------------|
| Total                 | 647.6            | -            |
| Sub-1 Node 22         | 149.0            | 23.0%        |
| Sub-2 Node 23         | 26.1             | 4.0%         |
| Sub-3 Node 24         | 34.3             | 5.3%         |
| Sub-4 Node 26         | 2.4              | 0.4%         |
| Sub-5 Parr Shoals Dam | 116.7            | 18.0%        |
| Broad River Basin     | 328.4            | 50.7%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.33   |
| 1990 | 0.40   |
| 1995 | 0.40   |
| 2000 | N/A    |

\*Data from USGS

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 1.9% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 0.60               | 41%               |       |
| Crops           | 0.87               | 59%               |       |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.04                    | 0.02         | 0.02  |
| 1990 | 0.00                    | 0.00         | 0.00  |
| 1995 | 0.00                    | 0.00         | 0.00  |
| 2000 | 1.47                    | 0.60         | 0.87  |

\*Data from USGS

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | 27.2%        | 27.2% |
| 10 Yr    | -            | -     |
| 5 Yr     | -            | -     |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       |       |       | Golf Courses |       |       |       |       |
|------|-----------|-------|-------|-------|-------|--------------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-1        | Sub-2 | Sub-3 | Sub-4 | Sub-5 |
| 2000 | 0.09      | 0.02  | 0.02  | 0.00  | 0.07  | 0.14         | 0.02  | 0.03  | 0.00  | 0.11  |
| 2015 | 0.10      | 0.02  | 0.02  | 0.00  | 0.08  | 0.15         | 0.03  | 0.03  | 0.00  | 0.12  |
| 2025 | 0.11      | 0.02  | 0.02  | 0.00  | 0.08  | 0.16         | 0.03  | 0.04  | 0.00  | 0.12  |
| 2035 | 0.11      | 0.02  | 0.03  | 0.00  | 0.09  | 0.16         | 0.03  | 0.04  | 0.00  | 0.13  |
| 2045 | 0.12      | 0.02  | 0.03  | 0.00  | 0.09  | 0.17         | 0.03  | 0.04  | 0.00  | 0.14  |
| 2055 | 0.12      | 0.02  | 0.03  | 0.00  | 0.10  | 0.18         | 0.03  | 0.04  | 0.00  | 0.14  |
| 2065 | 0.13      | 0.02  | 0.03  | 0.00  | 0.10  | 0.19         | 0.03  | 0.04  | 0.00  | 0.15  |
| 2075 | 0.14      | 0.02  | 0.03  | 0.00  | 0.11  | 0.20         | 0.04  | 0.05  | 0.00  | 0.16  |

| Year | Crops |       |       |       |       |
|------|-------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 | Sub-5 |
| 2000 | 0.20  | 0.04  | 0.05  | 0.00  | 0.16  |
| 2015 | 0.22  | 0.04  | 0.05  | 0.00  | 0.17  |
| 2025 | 0.23  | 0.04  | 0.05  | 0.00  | 0.18  |
| 2035 | 0.24  | 0.04  | 0.05  | 0.00  | 0.19  |
| 2045 | 0.25  | 0.04  | 0.06  | 0.00  | 0.20  |
| 2055 | 0.26  | 0.05  | 0.06  | 0.00  | 0.21  |
| 2065 | 0.28  | 0.05  | 0.06  | 0.00  | 0.22  |
| 2075 | 0.29  | 0.05  | 0.07  | 0.00  | 0.23  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** Richland  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       |                              | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------------------|------------------|--------------|
| Total             |                              | 771.4            | -            |
| Sub-1             | Columbia Canal Diversion Dam | 112.2            | 14.5%        |
| Sub-2             | Node 24                      | 0.8              | 0.1%         |
| Sub-3             | Node 25                      | 1.7              | 0.2%         |
| Sub-4             | Node 26                      | 93.7             | 12.1%        |
| Broad River Basin |                              | 208.3            | 27.0%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.06   |
| 1990 | 0.08   |
| 1995 | 0.08   |
| 2000 | N/A    |

\*Data from USGS

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 2.9% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 4.30               | 71%               |       |
| Crops           | 1.77               | 29%               |       |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 1.43                    | 1.01         | 0.42  |
| 1990 | 0.39                    | 0.28         | 0.11  |
| 1995 | 0.35                    | 0.25         | 0.10  |
| 2000 | 6.07                    | 4.30         | 1.77  |

\*Data from USGS

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
| 15 Yr    | 10.1%        | 10.1% |
| 10 Yr    | 20.1%        | 20.1% |
| 5 Yr     | 76.9%        | 76.9% |
| Assigned | 0.5%         | 0.5%  |

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       |       | Golf Courses |       |       |       |
|------|-----------|-------|-------|-------|--------------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-1        | Sub-2 | Sub-3 | Sub-4 |
| 2000 | 0.01      | 0.00  | 0.00  | 0.01  | 0.63         | 0.00  | 0.01  | 0.52  |
| 2015 | 0.01      | 0.00  | 0.00  | 0.01  | 0.67         | 0.00  | 0.01  | 0.56  |
| 2025 | 0.01      | 0.00  | 0.00  | 0.01  | 0.71         | 0.00  | 0.01  | 0.59  |
| 2035 | 0.01      | 0.00  | 0.00  | 0.01  | 0.74         | 0.01  | 0.01  | 0.62  |
| 2045 | 0.01      | 0.00  | 0.00  | 0.01  | 0.78         | 0.01  | 0.01  | 0.65  |
| 2055 | 0.02      | 0.00  | 0.00  | 0.01  | 0.82         | 0.01  | 0.01  | 0.69  |
| 2065 | 0.02      | 0.00  | 0.00  | 0.01  | 0.86         | 0.01  | 0.01  | 0.72  |
| 2075 | 0.02      | 0.00  | 0.00  | 0.01  | 0.91         | 0.01  | 0.01  | 0.76  |

| Year | Crops |       |       |       |
|------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 |
| 2000 | 0.26  | 0.00  | 0.00  | 0.21  |
| 2015 | 0.28  | 0.00  | 0.00  | 0.23  |
| 2025 | 0.29  | 0.00  | 0.00  | 0.24  |
| 2035 | 0.31  | 0.00  | 0.00  | 0.26  |
| 2045 | 0.32  | 0.00  | 0.00  | 0.27  |
| 2055 | 0.34  | 0.00  | 0.01  | 0.28  |
| 2065 | 0.36  | 0.00  | 0.01  | 0.30  |
| 2075 | 0.37  | 0.00  | 0.01  | 0.31  |



**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** Spartanburg  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation       | Area (Sq. Miles) | Pct of Total |
|-------------------|------------------|--------------|
| Total             | 819.3            | -            |
| Sub-1 Node 13     | 4.0              | 0.5%         |
| Sub-2 Node 15     | 319.1            | 38.9%        |
| Sub-3 Node 21     | 396.4            | 48.4%        |
| Sub-4 Node 22     | 94.8             | 11.6%        |
| Broad River Basin | 814.3            | 99.4%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.24   |
| 1990 | 0.23   |
| 1995 | 0.23   |
| 2000 | N/A    |

| AGR      |       |
|----------|-------|
| 15 Yr    | -     |
| 10 Yr    | -0.4% |
| 5 Yr     | 0.0%  |
| Assigned | 0.0%  |

*\*Data from USGS*

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 3.20               | 76%               |       |
| Crops           | 1.00               | 24%               |       |

*\*Data from 2000 South Carolina Water Plan*

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.28                    | 0.21         | 0.07  |
| 1990 | 0.37                    | 0.28         | 0.09  |
| 1995 | 0.00                    | 0.00         | 0.00  |
| 2000 | 4.20                    | 3.20         | 1.00  |

| AGR      | Golf Courses | Crops |
|----------|--------------|-------|
|          | 15 Yr        | -     |
| 10 Yr    | -            | -     |
| 5 Yr     | -            | -     |
| Assigned | 0.5%         | 0.5%  |

*\*Data from USGS*

*\*AGRs based on Historical Demand*

*\*Assigned AGR based on judgement of projector.*

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       |       | Golf Courses |       |       |       |
|------|-----------|-------|-------|-------|--------------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-1        | Sub-2 | Sub-3 | Sub-4 |
| 2000 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.25  | 1.55  | 0.37  |
| 2015 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.34  | 1.67  | 0.40  |
| 2025 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.41  | 1.75  | 0.42  |
| 2035 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.48  | 1.84  | 0.44  |
| 2045 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.56  | 1.94  | 0.46  |
| 2055 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.64  | 2.04  | 0.49  |
| 2065 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.72  | 2.14  | 0.51  |
| 2075 | 0.00      | 0.09  | 0.11  | 0.03  | 0.02         | 1.81  | 2.25  | 0.54  |

| Year | Crops |       |       |       |
|------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 |
| 2000 | 0.00  | 0.39  | 0.48  | 0.12  |
| 2015 | 0.01  | 0.42  | 0.52  | 0.12  |
| 2025 | 0.01  | 0.44  | 0.55  | 0.13  |
| 2035 | 0.01  | 0.46  | 0.58  | 0.14  |
| 2045 | 0.01  | 0.49  | 0.61  | 0.14  |
| 2055 | 0.01  | 0.51  | 0.64  | 0.15  |
| 2065 | 0.01  | 0.54  | 0.67  | 0.16  |
| 2075 | 0.01  | 0.57  | 0.70  | 0.17  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

COUNTY: Union  
STATE: South Carolina

BASIN CONTRIBUTION:  
BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation           | Area (Sq. Miles) | Pct of Total |
|-----------------------|------------------|--------------|
| Total                 | 516.2            | -            |
| Sub-1 Lockhart Dam    | 17.2             | 3.3%         |
| Sub-2 Neal Shoals Dam | 2.3              | 0.4%         |
| Sub-3 Node 15         | 43.6             | 8.4%         |
| Sub-4 Node 16         | 9.4              | 1.8%         |
| Sub-5 Node 18         | 69.8             | 13.5%        |
| Sub-6 Node 19         | 28.0             | 5.4%         |
| Sub-7 Node 21         | 236.8            | 45.9%        |
| Sub-8 Node 22         | 50.9             | 9.9%         |
| Sub-9 Node 23         | 58.2             | 11.3%        |
| Broad River Basin     | 516              | 100.0%       |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.07   |
| 1990 | 0.08   |
| 1995 | 0.08   |
| 2000 | N/A    |

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 1.3% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 0.40               | 34%               |       |
| Crops           | 0.76               | 66%               |       |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.00                    | 0.00         | 0.00  |
| 1990 | 0.00                    | 0.00         | 0.00  |
| 1995 | 0.00                    | 0.00         | 0.00  |
| 2000 | 1.16                    | 0.40         | 0.76  |

|          | AGR   | Golf Courses | Crops |
|----------|-------|--------------|-------|
|          | 15 Yr | -            | -     |
| 10 Yr    | -     | -            | -     |
| 5 Yr     | -     | -            | -     |
| Assigned | 0.0%  | 0.0%         | 0.0%  |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       |       |       |       |       |       |       |
|------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 |
| 2000 | 0.00      | 0.00  | 0.01  | 0.00  | 0.01  | 0.00  | 0.04  | 0.01  | 0.01  |
| 2015 | 0.00      | 0.00  | 0.01  | 0.00  | 0.01  | 0.00  | 0.04  | 0.01  | 0.01  |
| 2025 | 0.00      | 0.00  | 0.01  | 0.00  | 0.01  | 0.01  | 0.04  | 0.01  | 0.01  |
| 2035 | 0.00      | 0.00  | 0.01  | 0.00  | 0.01  | 0.01  | 0.04  | 0.01  | 0.01  |
| 2045 | 0.00      | 0.00  | 0.01  | 0.00  | 0.01  | 0.01  | 0.05  | 0.01  | 0.01  |
| 2055 | 0.00      | 0.00  | 0.01  | 0.00  | 0.01  | 0.01  | 0.05  | 0.01  | 0.01  |
| 2065 | 0.00      | 0.00  | 0.01  | 0.00  | 0.02  | 0.01  | 0.05  | 0.01  | 0.01  |
| 2075 | 0.00      | 0.00  | 0.01  | 0.00  | 0.02  | 0.01  | 0.05  | 0.01  | 0.01  |

| Year | Golf Courses |       |       |       |       |       |       |       |       |
|------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|
|      | Sub-1        | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 |
| 2000 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |
| 2015 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |
| 2025 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |
| 2035 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |
| 2045 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |
| 2055 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |
| 2065 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |
| 2075 | 0.01         | 0.00  | 0.03  | 0.01  | 0.05  | 0.02  | 0.18  | 0.04  | 0.05  |

| Year | Crops |       |       |       |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 | Sub-7 | Sub-8 | Sub-9 |
| 2000 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |
| 2015 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |
| 2025 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |
| 2035 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |
| 2045 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |
| 2055 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |
| 2065 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |
| 2075 | 0.03  | 0.00  | 0.06  | 0.01  | 0.10  | 0.04  | 0.35  | 0.07  | 0.09  |

**Agricultural/Irrigational Water Demand Projections for Livestock, Crops, and Golf Courses**

**COUNTY:** YORK  
**STATE:** South Carolina

**BASIN CONTRIBUTION:**  
 BELOW 99 ISLAND DAM

**County Land Area Distribution**

| Designation        | Area (Sq. Miles) | Pct of Total |
|--------------------|------------------|--------------|
| Total              | 695.6            | -            |
| Sub-1 Node 11      | 3.3              | 0.5%         |
| Sub-2 Node 12      | 22.5             | 3.2%         |
| Sub-3 Lockhart Dam | 0.3              | 0.0%         |
| Sub-4 Node 14      | 118.0            | 17.0%        |
| Sub-5 Node 16      | 17.8             | 2.6%         |
| Sub-6 Node 17      | 97.4             | 14.0%        |
| Broad River Basin  | 259.3            | 37.3%        |

**Livestock**

| Year | Demand |
|------|--------|
| 1985 | 0.22   |
| 1990 | 0.35   |
| 1995 | 0.35   |
| 2000 | N/A    |

| AGR      |      |
|----------|------|
| 15 Yr    | -    |
| 10 Yr    | 4.8% |
| 5 Yr     | 0.0% |
| Assigned | 0.5% |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Golf Course and Crop Irrigation Data (for 2000)**

| Irrigation Type | Water Demand (mgd) | Pct of Irrigation | Total |
|-----------------|--------------------|-------------------|-------|
| Golf Courses    | 3.20               | 76%               |       |
| Crops           | 1.00               | 24%               |       |

\*Data from 2000 South Carolina Water Plan

| Year | Irrigation Demand (mgd) |              |       |
|------|-------------------------|--------------|-------|
|      | Total                   | Golf Courses | Crops |
| 1985 | 0.12                    | 0.09         | 0.03  |
| 1990 | 0.13                    | 0.10         | 0.03  |
| 1995 | 0.10                    | 0.08         | 0.02  |
| 2000 | 4.20                    | 3.20         | 1.00  |

|          | AGR   | Golf Courses | Crops |
|----------|-------|--------------|-------|
|          | 15 Yr | 26.7%        | 26.7% |
| 10 Yr    | -1.8% | -1.8%        |       |
| 5 Yr     | 1.6%  | 1.6%         |       |
| Assigned | 0.5%  | 0.5%         |       |

\*Data from USGS

\*AGRs based on Historical Demand

\*Assigned AGR based on judgement of projector.

**Agricultural/Irrigational Demand Projections (in mgd)**

| Year | Livestock |       |       |       |       |       |
|------|-----------|-------|-------|-------|-------|-------|
|      | Sub-1     | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 |
| 2000 | 0.00      | 0.01  | 0.00  | 0.06  | 0.01  | 0.05  |
| 2015 | 0.00      | 0.01  | 0.00  | 0.07  | 0.01  | 0.05  |
| 2025 | 0.00      | 0.01  | 0.00  | 0.07  | 0.01  | 0.06  |
| 2035 | 0.00      | 0.01  | 0.00  | 0.07  | 0.01  | 0.06  |
| 2045 | 0.00      | 0.01  | 0.00  | 0.08  | 0.01  | 0.06  |
| 2055 | 0.00      | 0.02  | 0.00  | 0.08  | 0.01  | 0.07  |
| 2065 | 0.00      | 0.02  | 0.00  | 0.08  | 0.01  | 0.07  |
| 2075 | 0.00      | 0.02  | 0.00  | 0.09  | 0.01  | 0.07  |

| Year | Golf Courses |       |       |       |       |       |
|------|--------------|-------|-------|-------|-------|-------|
|      | Sub-1        | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 |
| 2000 | 0.01         | 0.10  | 0.00  | 0.54  | 0.08  | 0.45  |
| 2015 | 0.02         | 0.11  | 0.00  | 0.59  | 0.09  | 0.48  |
| 2025 | 0.02         | 0.12  | 0.00  | 0.62  | 0.09  | 0.51  |
| 2035 | 0.02         | 0.12  | 0.00  | 0.65  | 0.10  | 0.53  |
| 2045 | 0.02         | 0.13  | 0.00  | 0.68  | 0.10  | 0.56  |
| 2055 | 0.02         | 0.14  | 0.00  | 0.71  | 0.11  | 0.59  |
| 2065 | 0.02         | 0.14  | 0.00  | 0.75  | 0.11  | 0.62  |
| 2075 | 0.02         | 0.15  | 0.00  | 0.79  | 0.12  | 0.65  |

| Year | Crops |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|
|      | Sub-1 | Sub-2 | Sub-3 | Sub-4 | Sub-5 | Sub-6 |
| 2000 | 0.00  | 0.03  | 0.00  | 0.17  | 0.03  | 0.14  |
| 2015 | 0.01  | 0.03  | 0.00  | 0.18  | 0.03  | 0.15  |
| 2025 | 0.01  | 0.04  | 0.00  | 0.19  | 0.03  | 0.16  |
| 2035 | 0.01  | 0.04  | 0.00  | 0.20  | 0.03  | 0.17  |
| 2045 | 0.01  | 0.04  | 0.00  | 0.21  | 0.03  | 0.18  |
| 2055 | 0.01  | 0.04  | 0.00  | 0.22  | 0.03  | 0.18  |
| 2065 | 0.01  | 0.04  | 0.00  | 0.23  | 0.04  | 0.19  |
| 2075 | 0.01  | 0.05  | 0.00  | 0.25  | 0.04  | 0.20  |

**APPENDIX F:**  
**POWER WATER WITHDRAWAL PROJECTIONS -- DUKE ENERGY**

|                    |  | Summary of Net Outflows Broad River Basin Power Users |              |              |              |              |              |              |              |              |              |              |                              |               |               |               |               |               |               |
|--------------------|--|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sub-Basin / Entity | Facility   | Historical Net Outflows (MGD)                         |              |              |              |              |              |              |              |              |              |              | Projected Net Outflows (MGD) |               |               |               |               |               |               |
|                    |  | 1996  | 1997         | 1998         | 1999         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2015                         | 2025          | 2035          | 2045          | 2055          | 2065          | 2075          |
| Node CS            | Duke Cliffside Steam Station <sup>1,2a</sup>   | n/a   | n/a          | n/a          | n/a          | 6.72         | 6.70         | 6.72         | 6.70         | 6.70         | 6.72         | 6.72         | 20.68                        | 20.68         | 20.68         | 20.68         | 20.68         | 20.68         | 20.68         |
|                    | Subtotal   | n/a   | n/a          | n/a          | n/a          | 6.72         | 6.70         | 6.72         | 6.70         | 6.70         | 6.72         | 6.72         | 20.68                        | 20.68         | 20.68         | 20.68         | 20.68         | 20.68         | 20.68         |
| Node 99I           | Duke Lee Nuclear Power Station <sup>1,2b</sup>   | n/a   | n/a          | n/a          | n/a          | 0.00         | n/a          | 0.00         | n/a          | n/a          | 0.00         | 0.00         | 35.50                        | 35.50         | 35.50         | 35.50         | 35.50         | 35.50         | 35.50         |
|                    | Subtotal   | n/a   | n/a          | n/a          | n/a          | 0.00         | n/a          | 0.00         | n/a          | n/a          | 0.00         | 0.00         | 35.50                        | 35.50         | 35.50         | 35.50         | 35.50         | 35.50         | 35.50         |
| Neal Shoals Dam    | SCE&G Neal Shoals Hydro & Reservoir <sup>3</sup>   | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a                          | n/a           | n/a           | n/a           | n/a           | n/a           | n/a           |
|                    | Subtotal   | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a                          | n/a           | n/a           | n/a           | n/a           | n/a           | n/a           |
| Parr Shoals Dam    | SCE&G Parr Reservoir (Natural Evaporation) <sup>4,5,6a</sup>                               | n/a   | n/a          | n/a          | 8.66         | 8.74         | 8.66         | 9.16         | 9.47         | 10.05        | 9.87         | 9.25         | 9.23                         | 9.23          | 9.23          | 9.23          | 9.23          | 9.23          | 9.23          |
|                    | Subtotal   | 0.00  | 0.00         | 0.00         | 8.66         | 8.74         | 8.66         | 9.16         | 9.47         | 10.05        | 9.87         | 9.25         | 9.23                         | 9.23          | 9.23          | 9.23          | 9.23          | 9.23          | 9.23          |
| Fairfield Dam      | SCE&G Fairfield Pumpstation & Monticello Reservoir (Natural Evaporation) <sup>4,5,6b</sup> | 19.48   | 19.50        | 19.51        | 19.49        | 19.52        | 19.51        | 19.49        | 19.49        | 19.42        | 19.47        | 19.48        | 19.49                        | 19.49         | 19.49         | 19.49         | 19.49         | 19.49         | 19.49         |
|                    | SCE&G V C Summer Nuclear Station - Unit 1 (Current) <sup>6c, 6d</sup>                      | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | 17.83        | 15.06        | 14.42        | 17.12        | 15.51        | 15.99                        | 15.99         | 15.99         | 15.99         | 15.99         | 15.99         | 15.99         |
|                    | SCE&G V C Summer Nuclear Station - Unit 2 (Future 2016) <sup>6e</sup>                      | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a                          | 20.43         | 20.43         | 20.43         | 20.43         | 20.43         | 20.43         |
|                    | SCE&G V C Summer Nuclear Station - Unit 3 (Future 2019) <sup>6e</sup>                      | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a                          | 20.43         | 20.43         | 20.43         | 20.43         | 20.43         | 20.43         |
|                    | Subtotal   | 19.48   | 19.50        | 19.51        | 19.49        | 19.52        | 19.51        | 37.31        | 34.54        | 33.84        | 36.59        | 34.99        | 35.47                        | 76.33         | 76.33         | 76.33         | 76.33         | 76.33         | 76.33         |
| Node 24            | SCE&G Parr Hydro Station <sup>6</sup>  | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a                          | n/a           | n/a           | n/a           | n/a           | n/a           | n/a           |
|                    | SCE&G Summer Nuclear Training <sup>8</sup>   | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a                          | n/a           | n/a           | n/a           | n/a           | n/a           | n/a           |
|                    | Subtotal   | --  | --           | --           | --           | --           | --           | --           | --           | --           | --           | --           | 0.00                         | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          |
| Node 16            | Duke Energy Future Nuclear Station <sup>1,2c</sup>   | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | --           | 0.00                         | 0.00          | 35.55         | 35.55         | 35.55         | 35.55         | 35.55         |
|                    | Subtotal   | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | --           | 0.00                         | 0.00          | 35.55         | 35.55         | 35.55         | 35.55         | 35.55         |
| Node 19            | Duke Energy Future Fossil-Fuel Station <sup>1,2c</sup>                                     | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | --           | 0.00                         | 0.00          | 0.00          | 0.00          | 21.97         | 21.97         | 21.97         |
|                    | Subtotal   | n/a   | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | n/a          | --           | 0.00                         | 0.00          | 0.00          | 0.00          | 21.97         | 21.97         | 21.97         |
| <b>Grand Total</b> |  | <b>19.48</b>  | <b>19.50</b> | <b>19.51</b> | <b>28.15</b> | <b>34.98</b> | <b>34.88</b> | <b>53.20</b> | <b>50.72</b> | <b>50.59</b> | <b>53.18</b> | <b>50.96</b> | <b>100.89</b>                | <b>141.74</b> | <b>177.29</b> | <b>177.29</b> | <b>199.26</b> | <b>199.26</b> | <b>199.26</b> |

- Notes:
- Duke Power Withdrawals are actually net consumptive use or "outflows" from the system. No return projections are given for these facilities since the values reported here are for net outflow.
  - Net Outflows for Duke Energy provided by Duke Energy.
    - Cliffside Steam Station is an expansion of an existing facility. Historical outflows shown are the average for the time period.
    - Lee Nuclear Station is a planned new facility.
    - No additional future stations are currently being planned. These facilities, and their assigned nodes, are place holder for potential growth within the lower Broad River Basin.
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  - Parr and Monticello Reservoir Net Outflows represents the estimated evaporation losses at each reservoir. Historical evaporative losses were calculated based on data provided by SCE&G. Data provided included Hourly Reservoir Stage (USGS), Reservoir Stage-Area-Storage Conversion Tables, and Pan Evaporation Methodology developed by South Carolina State Climatology Office for Central South Carolina (see Note 2 for more detail). To estimate evaporative losses three steps were taken: (Step 1) hourly stage data was converted to hourly surface area, (Step 2) monthly average surface area was estimated from hourly surface area, and (Step 3) monthly average surface area was used in the Pan Evaporation Methodology to estimate each month's estimated evaporation.
  - Source information for Pan Evaporation Methodology provided by SCE&G.
 

Source: Pan Evaporation Records for the South Carolina Area, John C. Purvis, South Carolina State Climatology Office

FWS values were computed as 75 percent of pan evaporation values.

This factor was estimated from a discussion in NOAA Technical Report NWS 33, Evaporation Atlas for the 48 Contiguous States.

The conversion from evaporation in inches to evaporation rate in CFS per thousand acres is:  
 $(\text{inches}) \times (1 \text{ ft}/12 \text{ in}) \times (1 \text{ month}/31 \text{ or } 30 \text{ or } 28 \text{ days}) \times (43,560 \text{ SF}/\text{acre}) \times (1 \text{ day}/86,400 \text{ sec}) \times (1,000 \text{ acres}/\text{thousand acres})$
  - Reservoir Projections:
    - Natural Evaporation -- Parr Reservoir's projected net outflows are based on the current infrastructure and historical reservoir volumes. Projected net outflows are based on the 1999-2006 historic average. This assumption may be incorrect following the installation and operation of new facilities on Monticello Reservoir requiring increased pumping and blowdown from these facilities. However, due to lack of data it is not known how lake levels will fluctuate in the future.
    - Natural Evaporation -- Monticello Reservoir's projected net outflows from "natural evaporation" are based on current infrastructure and historic reservoir levels. Projected net outflows are based on 1996-2006 historic average. This assumption may be incorrect following the anticipated new facilities beginning in 2016. However, due to lack of data future reservoir levels could not be determined.
    - Forced Evaporation -- Monticello Reservoir's projected net outflows from "forced evaporation" is estimated by SCE&G.
    - Consumptive Use -- Consumptive use represents the net outflows for Unit 1. This is comprised of direct water losses through power generation and other user such as drinking water.
    - Future Facility -- SCE&G is currently planning to build a new nuclear facility on Monticello Reservoir. This facility will be comprised of two units (Unit 2 and Unit 3). Unit 2 is anticipated to go online in 2016. Unit 3 is anticipated to go online in 2019. These facilities will have cooling towers as opposed to the "in-lake" cooling that occurs with Unit #1. SCE&G has estimated each of the new units will generate 14,159 GPM in evaporative losses and 31 GPM in losses from drift.
  - Net outflows captured within net outflows of other components.

**Broad River Water Supply Study  
Duke Energy - Cliffside Power Plant Net Water Use**

**Table 1 - Cliffside Plant Data**

| Dry Bulb Temperature (°F) | Evaporation (gpm) |
|---------------------------|-------------------|
| 95                        | 6,540             |
| 81                        | 5,810             |
| 45                        | 4,672             |
| 33                        | 4,190             |

**Table 2 - Interpolated Evaporation Data**

| Temperature (°F) | Evaporation (gpm) |
|------------------|-------------------|
| 35               | 4,267             |
| 40               | 4,448             |
| 45               | 4,630             |
| 50               | 4,812             |
| 55               | 4,994             |
| 60               | 5,175             |
| 65               | 5,357             |
| 70               | 5,539             |
| 75               | 5,721             |
| 80               | 5,902             |
| 85               | 6,084             |
| 90               | 6,266             |
| 95               | 6,448             |

**Table 3 - Monthly Coefficient Calculations**

| Month   | Average Temperature (°F) | Evaporation (gpm) | Monthly Coefficient |
|---------|--------------------------|-------------------|---------------------|
| Jan     | 41.3                     | 4,496             | 0.87                |
| Feb     | 43.9                     | 4,590             | 0.89                |
| Mar     | 51.1                     | 4,852             | 0.94                |
| Apr     | 60.0                     | 5,175             | 1.00                |
| May     | 68.3                     | 5,477             | 1.06                |
| Jun     | 75.6                     | 5,742             | 1.11                |
| Jul     | 78.7                     | 5,855             | 1.13                |
| Aug     | 77.4                     | 5,808             | 1.12                |
| Sep     | 71.6                     | 5,597             | 1.08                |
| Oct     | 60.9                     | 5,208             | 1.00                |
| Nov     | 51.0                     | 4,848             | 0.94                |
| Dec     | 42.9                     | 4,554             | 0.88                |
| Average | 60.2                     | 5,183             | 1.00                |

Notes:

- 1 Net outflows from the Cliffside Power Plant are due to evaporation. Table 1 provides plant data regarding evaporation rate in relation to temperature.
- 2 Evaporation rates for the range in temperatures in Table 2 were interpolated from the data in Table 1.
- 3.00 The average monthly temperatures in Table 3 are historical averages for the Southern Piedmont of North Carolina (1931 - 2000). This data was obtained from page 44 of "Climatograph of the United States No. 85", prepared by the National Climatic Data Center of the National Oceanic and Atmospheric Administration.

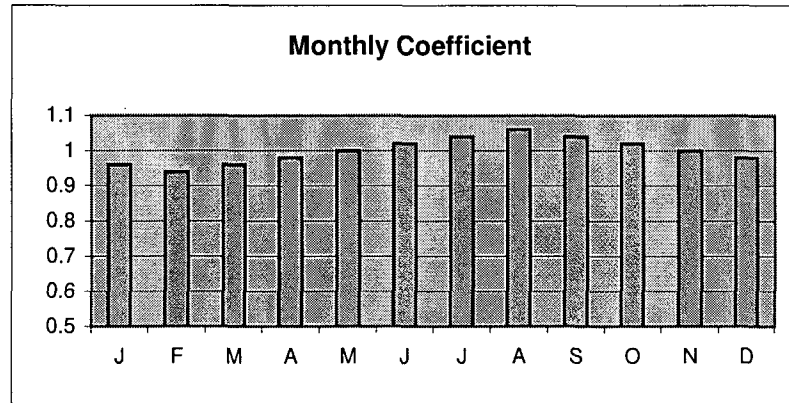
**Broad River Water Supply Study  
Duke Energy - Lee Nuclear Power Plant Net Water Use**

**Table 1 - Duke Energy Provided Data**

| Year | Net Water Use (MGD) |
|------|---------------------|
| 2015 | 50.4                |
| 2025 | 50.4                |
| 2035 | 50.4                |
| 2045 | 50.4                |
| 2055 | 50.4                |
| 2065 | 50.4                |
| 2075 | 50.4                |

**Table 2 - Monthly Coefficients**

|     |      |
|-----|------|
| J   | 0.96 |
| F   | 0.94 |
| M   | 0.96 |
| A   | 0.98 |
| M   | 1.00 |
| J   | 1.02 |
| J   | 1.04 |
| A   | 1.06 |
| S   | 1.04 |
| O   | 1.02 |
| N   | 1.00 |
| D   | 0.98 |
| Avg | 1.00 |



**Notes:**

- 1 Table 1 information was provided by Duke Energy.
- 2 Table 2 coefficients were determined based on two criteria:
  - The average of the coefficients must equal 1.00.
  - The average coefficient for May - Nov must be 6% larger than the Dec - Apr average.

**Data Provided by Duke Energy**

| Water Use (cfs)  | Phase    | Subbasin | Existing | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016-2027 | 2028-2054 | 2055-2075 |
|--|----------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-----------|-----------|
| <b>Net Water Use</b>                                     |          |          |          |       |       |       |       |       |       |       |       |           |           |           |
| Cliffside Steam Station                                  |          |          |          |       |       |       |       |       |       |       |       |           |           |           |
| Unit 1-4   | Phase I  |          | 2.60     | 2.60  | 2.60  | 2.60  | 2.60  | --    | --    | --    | --    | --        | --        | --        |
| Unit 5   | Phase I  |          | 7.80     | 7.80  | 7.80  | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00     | 15.00     | 15.00     |
| Unit 6   | Phase I  |          | 0.00     | 0.00  | 0.00  | 0.00  | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00     | 17.00     | 17.00     |
| Subtotal   | Phase I  |          | 10.40    | 10.40 | 10.40 | 17.60 | 34.60 | 32.00 | 32.00 | 32.00 | 32.00 | 32.00     | 32.00     | 32.00     |
| Lee Nuclear Station                                      |          |          |          |       |       |       |       |       |       |       |       |           |           |           |
| Unit 1   | Phase I  |          | --       | --    | --    | --    | --    | --    | --    | --    | 27.50 | 27.50     | 27.50     | 27.50     |
| Unit 2   | Phase I  |          | --       | --    | --    | --    | --    | --    | --    | --    | 27.50 | 27.50     | 27.50     | 27.50     |
| Subtotal   | Phase I  |          | --       | --    | --    | --    | --    | --    | --    | --    | 55.00 | 55.00     | 55.00     | 55.00     |
| Future Nuclear Station                                   |          |          |          |       |       |       |       |       |       |       |       |           |           |           |
| Assume intake location on Broad River just below Pacolet |          |          |          |       |       |       |       |       |       |       |       |           |           |           |
| Unit 1   | Phase II | Node 16  | --       | --    | --    | --    | --    | --    | --    | --    | --    | --        | 27.50     | 27.50     |
| Unit 2   | Phase II | Node 16  | --       | --    | --    | --    | --    | --    | --    | --    | --    | --        | 27.50     | 27.50     |
| Subtotal   | Phase II | Node 16  | --       | --    | --    | --    | --    | --    | --    | --    | --    | --        | 55.00     | 55.00     |
| Future Fossil-Fuel Station                               |          |          |          |       |       |       |       |       |       |       |       |           |           |           |
| Assume intake near SC 72                                 |          |          |          |       |       |       |       |       |       |       |       |           |           |           |
| Unit 1   | Phase II | Node 19  | --       | --    | --    | --    | --    | --    | --    | --    | --    | --        | --        | 17.00     |
| Unit 2   | Phase II | Node 19  | --       | --    | --    | --    | --    | --    | --    | --    | --    | --        | --        | 17.00     |
| Subtotal   | Phase II | Node 19  | --       | --    | --    | --    | --    | --    | --    | --    | --    | --        | --        | 34.00     |



**APPENDIX G:**  
**POWER WATER WITHDRAWAL PROJECTIONS -- SCE&G**

|                        |  | Summary of Net Outflows Broad River Basin Power Users |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
|------------------------|--|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------|--------|--------|--------|--------|--------|--------|
| Sub-Basin/Entity       | Facility   | Historical Net Outflows (MGD)                         |       |       |       |       |       |       |       |       |       |       | Projected Net Outflows (MGD) |        |        |        |        |        |        |
|                        |  | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2015                         | 2025   | 2035   | 2045   | 2055   | 2065   | 2075   |
| <b>Node CS</b>         |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| Duke                   | Cliffside Steam Station <sup>1,2a</sup>  | n/a   | n/a   | n/a   | n/a   | 6.72  | 6.70  | 6.72  | 6.70  | 6.70  | 6.72  | 6.72  | 20.68                        | 20.68  | 20.68  | 20.68  | 20.68  | 20.68  | 20.68  |
|                        | Subtotal   | n/a   | n/a   | n/a   | n/a   | 6.72  | 6.70  | 6.72  | 6.70  | 6.70  | 6.72  | 6.72  | 20.68                        | 20.68  | 20.68  | 20.68  | 20.68  | 20.68  | 20.68  |
| <b>Node 991</b>        |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| Duke                   | Lee Nuclear Power Station <sup>1,2b</sup>  | n/a   | n/a   | n/a   | n/a   | 0.00  | n/a   | 0.00  | n/a   | n/a   | 0.00  | 0.00  | 35.50                        | 35.50  | 35.50  | 35.50  | 35.50  | 35.50  | 35.50  |
|                        | Subtotal   | n/a   | n/a   | n/a   | n/a   | 0.00  | n/a   | 0.00  | n/a   | n/a   | 0.00  | 0.00  | 35.50                        | 35.50  | 35.50  | 35.50  | 35.50  | 35.50  | 35.50  |
| <b>Neal Shoals Dam</b> |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| SCE&G                  | Neal Shoals Hydro & Reservoir <sup>3</sup>   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a                          | n/a    | n/a    | n/a    | n/a    | n/a    | n/a    |
|                        | Subtotal   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a                          | n/a    | n/a    | n/a    | n/a    | n/a    | n/a    |
| <b>Parr Shoals Dam</b> |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| SCE&G                  | Parr Reservoir (Natural Evaporation) <sup>4,5,6a</sup>                               | n/a   | n/a   | n/a   | 8.66  | 8.74  | 8.66  | 9.16  | 9.47  | 10.05 | 9.87  | 9.25  | 9.23                         | 9.23   | 9.23   | 9.23   | 9.23   | 9.23   | 9.23   |
|                        | Subtotal   | 0.00  | 0.00  | 0.00  | 8.66  | 8.74  | 8.66  | 9.16  | 9.47  | 10.05 | 9.87  | 9.25  | 9.23                         | 9.23   | 9.23   | 9.23   | 9.23   | 9.23   | 9.23   |
| <b>Fairfield Dam</b>   |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| SCE&G                  | Fairfield Pumpstation & Monticello Reservoir (Natural Evaporation) <sup>4,5,6b</sup> | 19.48   | 19.50 | 19.51 | 19.49 | 19.52 | 19.51 | 19.49 | 19.49 | 19.42 | 19.47 | 19.48 | 19.49                        | 19.49  | 19.49  | 19.49  | 19.49  | 19.49  | 19.49  |
| SCE&G                  | V C Summer Nuclear Station - Unit 1 (Current) <sup>6c, 6d</sup>                      | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | 17.83 | 15.06 | 14.42 | 17.12 | 15.51 | 15.99                        | 15.99  | 15.99  | 15.99  | 15.99  | 15.99  | 15.99  |
| SCE&G                  | V C Summer Nuclear Station - Unit 2 (Future 2016) <sup>6e</sup>                      | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a                          | 20.43  | 20.43  | 20.43  | 20.43  | 20.43  | 20.43  |
| SCE&G                  | V C Summer Nuclear Station- Unit 3 (Future 2019) <sup>6e</sup>                       | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a                          | 20.43  | 20.43  | 20.43  | 20.43  | 20.43  | 20.43  |
|                        | Subtotal   | 19.48   | 19.50 | 19.51 | 19.49 | 19.52 | 19.51 | 37.31 | 34.54 | 33.84 | 36.59 | 34.99 | 35.47                        | 76.33  | 76.33  | 76.33  | 76.33  | 76.33  | 76.33  |
| <b>Node 24</b>         |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| SCE&G                  | Parr Hydro Station <sup>6</sup>  | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a                          | n/a    | n/a    | n/a    | n/a    | n/a    | n/a    |
| SCE&G                  | Summer Nuclear Training <sup>6</sup>   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a                          | n/a    | n/a    | n/a    | n/a    | n/a    | n/a    |
|                        | Subtotal   | --  | --    | --    | --    | --    | --    | --    | --    | --    | --    | --    | 0.00                         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| <b>Node 16</b>         |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| Duke Energy            | Future Nuclear Station <sup>1,2c</sup>   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | --    | 0.00                         | 0.00   | 35.55  | 35.55  | 35.55  | 35.55  | 35.55  |
|                        | Subtotal   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | --    | 0.00                         | 0.00   | 35.55  | 35.55  | 35.55  | 35.55  | 35.55  |
| <b>Node 19</b>         |  |   |       |       |       |       |       |       |       |       |       |       |                              |        |        |        |        |        |        |
| Duke Energy            | Future Fossil-Fuel Station <sup>1,2c</sup>   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | --    | 0.00                         | 0.00   | 0.00   | 0.00   | 21.97  | 21.97  | 21.97  |
|                        | Subtotal   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | --    | 0.00                         | 0.00   | 0.00   | 0.00   | 21.97  | 21.97  | 21.97  |
| <b>Grand Total</b>     |  | 19.48   | 19.50 | 19.51 | 28.15 | 34.98 | 34.88 | 53.20 | 50.72 | 50.59 | 53.18 | 50.96 | 100.89                       | 141.74 | 177.29 | 177.29 | 199.26 | 199.26 | 199.26 |

Notes:

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- Source information for Pan Evaporation Methodology provided by SCE&G.
 

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The conversion from evaporation in inches to evaporation rate in CFS per thousand acres is:

$$(\text{inches}) \times (1 \text{ ft}/12 \text{ in}) \times (1 \text{ month}/31 \text{ [or 30 or 28] days}) \times (43,560 \text{ SF/acre}) \times (1 \text{ day}/86,400 \text{ sec}) \times (1,000 \text{ acres}/\text{thousand acres})$$
- Reservoir Projections:
  - Natural Evaporation -- Parr Reservoir's projected net outflows are based on the current infrastructure and historical reservoir volumes. Projected net outflows are based on the 1999-2006 historic average. This assumption may be incorrect following the installation and operation of new facilities on Monticello Reservoir requiring increased pumping and blowdown from these facilities. However, due to lack of data it is not known how lake levels will fluctuate in the future.
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  - Forced Evaporation -- Monticello Reservoir's projected net outflows from "forced evaporation" is estimated by SCE&G.
  - Consumptive Use -- Consumptive use represents the net outflows for Unit 1. This is comprised of direct water losses through power generation and other user such as drinking water.
  - Future Facility -- SCE&G is currently planning to build a new nuclear facility on Monticello Reservoir. This facility will be comprised of two units (Unit 2 and Unit 3). Unit 2 is anticipated to go online in 2016. Unit 3 is anticipated to go online in 2019. These facilities will have cooling towers as opposed to the "in-lake" cooling that occurs with Unit #1. SCE&G has estimated each of the new units will generate 14,159 GPM in evaporative losses and 31 GPM in losses from drift.
- Net outflows captured within net outflows of other components.

**Neal Shoals**

|   | <b>Source</b>  | <b>Date or Period of Record</b> | <b>Notes</b>                            |
|---|----------------|---------------------------------|---|
| Hourly Headpond Elevations                  | USGS 02156449  | 9/30/1996 - Present             | See 02156449 Excel Files                |
| Hourly Tailwater Elevations                 | Not Available  | None                            |   |
| Hourly Discharges                           | USGS 02156500  | 10/1/1938 - Present             | See 02156500 Excel Files                |
| Reservoir Area/Capacity Data                | SCE&G          | Bathymetric Survey 1995         | See Neal Shoals Tab for Tables & Curves |
| Spillway Discharge Rating Curves            | Not Available  | None                            |   |
| Tailwater Rating Curve                      | Not Available  | None                            |   |
| Reservoir Operating Ranges and Requirements | SCE&G          | 1996 FERC License               | See Neal Shoals Tab for requirements    |
| System Flow Withdrawals                     | Not Applicable |                                 |   |

**Parr Hydro**

|   | <b>Source</b>  | <b>Date or Period of Record</b> | <b>Notes</b>                         |
|---|----------------|---------------------------------|--------------------------------------|
| Hourly Headpond Elevations                  | USGS 02160990  | 6/1/1993 - Present              | See 02160990 Excel Files             |
| Hourly Tailwater Elevations                 | USGS 02160991  | 10/1/1996 - Present             | See 02160991 Excel Files             |
| Hourly Discharges                           | USGS 02161000  | 1/1/1993 - Present              | See 02161000 Excel Files             |
| Reservoir Area/Capacity Data                | SCE&G          | 1972 License Application        | See Parr Hydro Tab for Table & Curve |
| Spillway Discharge Rating Curves            | SCE&G          | 1972 License Application        | See Parr Hydro Tab for Table & Curve |
| Tailwater Rating Curve                      | SCE&G          | 1972 License Application        | See Parr Hydro Tab for Table & Curve |
| Reservoir Operating Ranges and Requirements | SCE&G          |                                 | See Parr Hydro Tab for Requirements  |
| System Flow Withdrawals                     | Not Applicable |                                 |                                      |

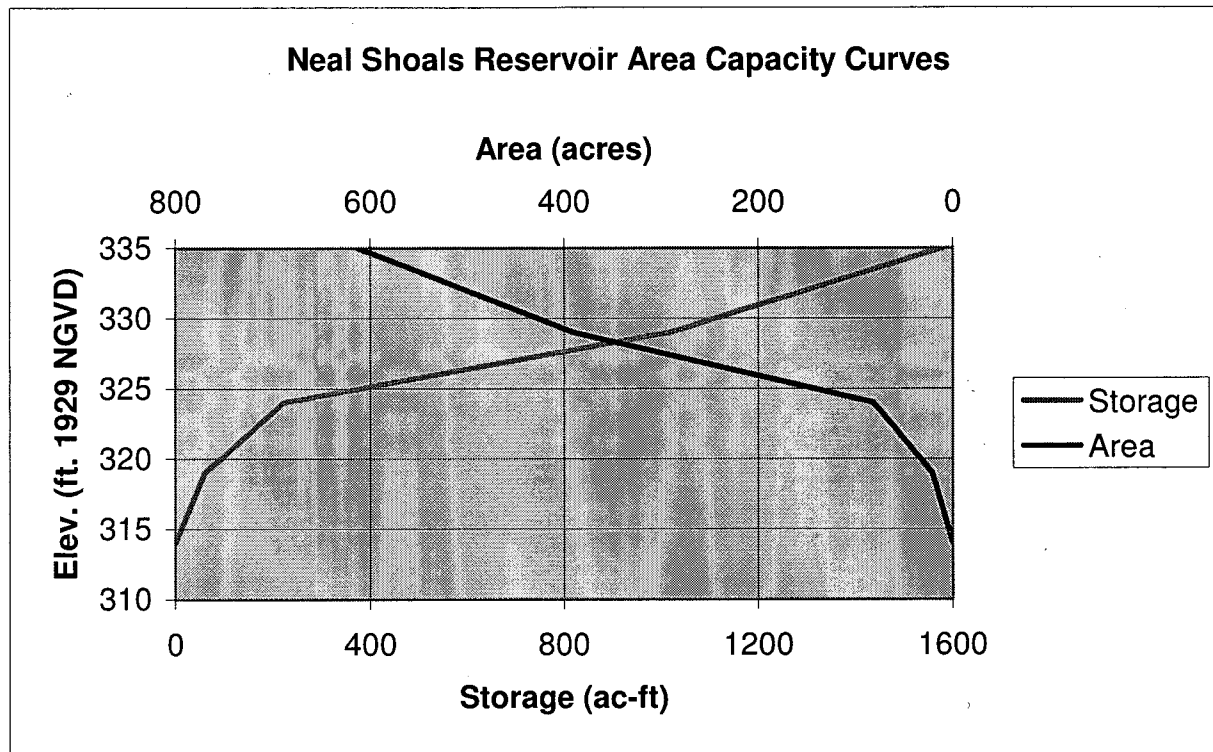
**Fairfield Pumped Storage**

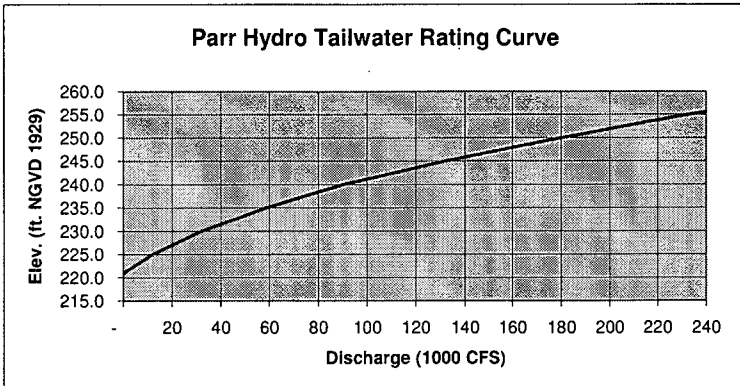
|   | <b>Source</b>  | <b>Date or Period of Record</b> | <b>Notes</b>                          |
|---|----------------|---------------------------------|---------------------------------------|
| Hourly Headpond Elevations                  | SCE&G - VCS    | 1/1/1996 - 7/30/2007            | See Monticello Level Excel Files      |
| Hourly Tailwater Elevations                 | USGS 02160991  | 10/1/1996 - Present             | See 02160991 Excel Files              |
| Hourly Discharges                           |                |                                 |                                       |
| Reservoir Area/Capacity Data                | SCE&G          | 1972 License Application        | See Parr Hydro Tab for Table & Curve  |
| Spillway Discharge Rating Curves            | Not Applicable | None                            |                                       |
| Tailwater Rating Curve                      | Not Applicable | None                            |                                       |
| Reservoir Operating Ranges and Requirements | SCE&G          |                                 | See Fairfield PS Tab for Requirements |
| System Flow Withdrawals                     | Not Applicable |                                 |                                       |

Stage-Area Table

| Area (acres) | Storage (ac-ft) | Elev. (ft. NGVD 1929) |
|--------------|-----------------|-----------------------|
| 0            | 0               | 314                   |
| 21           | 60              | 319                   |
| 82           | 220             | 324                   |
| 391          | 1020            | 329                   |
| 613          | 1580            | 335                   |

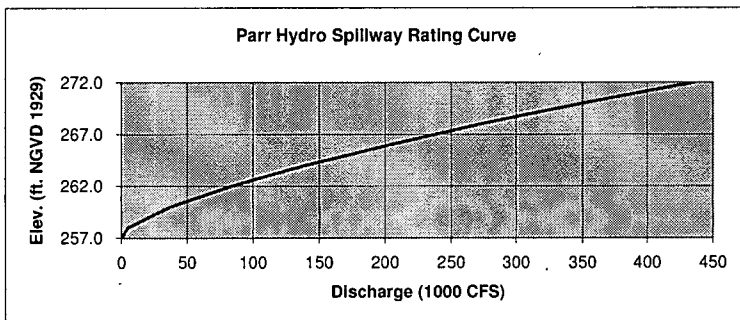
Reservoir Operating Range per license is 329.86 - 333.86 ft. NGVD 1929. Minimum flow per license is lesser of 730 CFS or inflow.





#### Tailwater Rating Curve

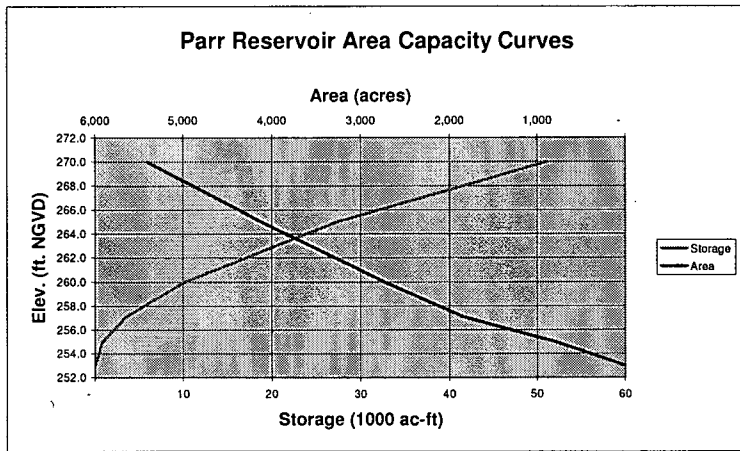
| Discharge (CFS) | Elev. (ft. NGVD) |
|-----------------|------------------|
| -               | 221.0            |
| 12,000          | 225.0            |
| 32,000          | 230.0            |
| 59,000          | 235.0            |
| 90,000          | 240.0            |
| 132,000         | 245.0            |
| 180,000         | 250.0            |
| 233,000         | 255.0            |
| 240,000         | 255.5            |



#### Spillway Rating Curve

| Discharge (CFS) | Elev. (ft. NGVD) |
|-----------------|------------------|
| 0               | 257.0            |
| 5,000           | 258.0            |
| 37,000          | 260.0            |
| 83,300          | 262.0            |
| 139,400         | 264.0            |
| 204,500         | 266.0            |
| 272,700         | 268.0            |
| 351,500         | 270.0            |
| 436,400         | 272.0            |

(Gates down)



#### Stage-Area-Storage Table

| Elev. (ft. NGVD 1929) | Area (acres) | Storage (ac-ft) |
|-----------------------|--------------|-----------------|
| 253.0                 | -            | -               |
| 255.0                 | 800          | 800             |
| 257.1                 | 1,850        | 3,533           |
| 260.0                 | 2,727        | 10,171          |
| 265.0                 | 4,116        | 27,321          |
| 270.0                 | 5,402        | 51,116          |

Normal operating range is 256.0 - 266.0. Top of dam is 257.0, top of bascule crest gates is 266.0.

Minimum flow per license:  
 March - May: Lesser of 1000 CFS hourly minimum or daily average inflow minus evaporation from Parr & Monticello Reservoirs.

Remainder of year: Lesser of 800 CFS daily average or daily average inflow minus evaporation from Parr & Monticello Reservoirs. Hourly minimum of 150 CFS.

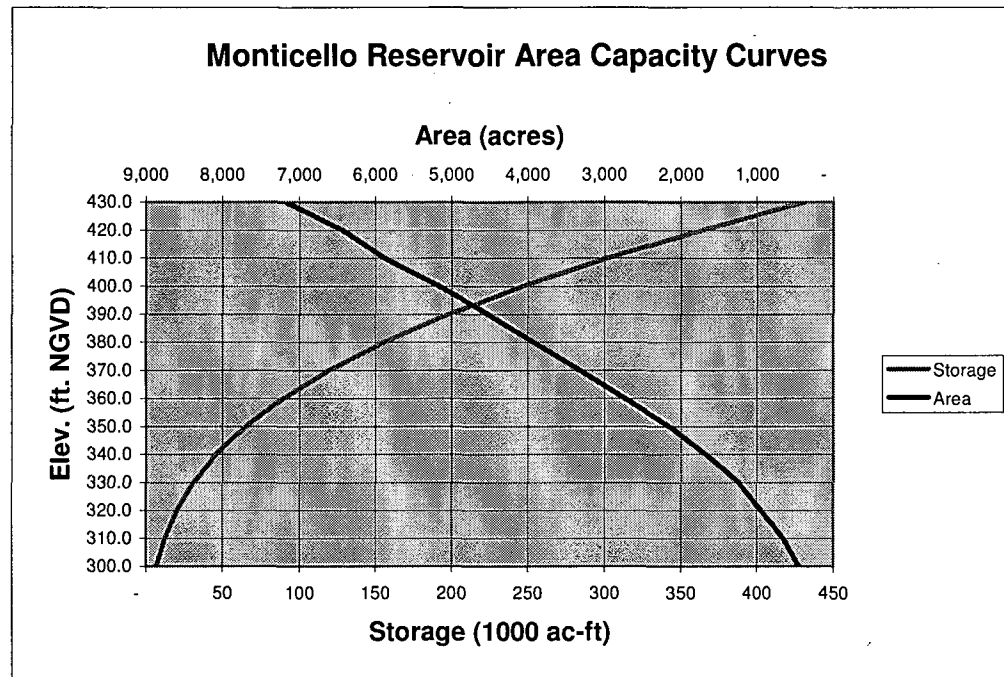
**Stage-Area-Storage Table**

| Area (acres) | Storage (ac-ft) | Elev. (ft. NGVD 1929) |
|--------------|-----------------|-----------------------|
| 37           | -               | 270.0                 |
| 137          | 870             | 280.0                 |
| 279          | 2,950           | 290.0                 |
| 451          | 6,600           | 300.0                 |
| 649          | 12,150          | 310.0                 |
| 943          | 20,110          | 320.0                 |
| 1,242        | 31,030          | 330.0                 |
| 1,682        | 45,650          | 340.0                 |
| 2,150        | 64,810          | 350.0                 |
| 2,730        | 89,250          | 360.0                 |
| 3,320        | 119,500         | 370.0                 |
| 3,920        | 155,700         | 380.0                 |
| 4,520        | 197,900         | 390.0                 |
| 5,160        | 246,300         | 400.0                 |
| 5,880        | 301,500         | 410.0                 |
| 6,430        | 363,050         | 420.0                 |
| 7,170        | 431,050         | 430.0                 |

Reservoir Operating Range per FERC is 420.5 - 425.0.

No minimum flow requirement.

Discharge from Fairfield PS must be reduced when Broad River discharge reaches 40,000 CFS to prevent additional flooding downstream.



Estimated Evaporation from Parr and Monticello Reservoirs

| Evaporation, Central SC |                              |                           | Reservoir Evaporation Loss Estimates in CFS |                        |                        |                           |
|-------------------------|------------------------------|---------------------------|---|------------------------|------------------------|---------------------------|
|                         | Avg. Monthly FWS Evap. (in). | Evap. Rate (CFS/1000 ac.) | Monticello Evap. Rate (CFS)                 | Parr Evap. Rate, (CFS) | Total Evap. Rate (CFS) | Total Evaporation (ac-ft) |
| January                 | 1.29                         | 1.75                      | 12  | 9                      | 21                     | 1,272                     |
| February                | 1.82                         | 2.74                      | 19  | 14                     | 32                     | 1,793                     |
| March                   | 3.19                         | 4.33                      | 29  | 22                     | 51                     | 3,140                     |
| April                   | 4.50                         | 6.31                      | 43  | 32                     | 74                     | 4,429                     |
| May                     | 5.24                         | 7.10                      | 48  | 35                     | 84                     | 5,149                     |
| June                    | 5.53                         | 7.75                      | 53  | 39                     | 91                     | 5,442                     |
| July                    | 5.77                         | 7.82                      | 53  | 39                     | 92                     | 5,672                     |
| August                  | 5.00                         | 6.78                      | 46  | 34                     | 80                     | 4,920                     |
| September               | 4.03                         | 5.64                      | 38  | 28                     | 67                     | 3,962                     |
| October                 | 3.08                         | 4.18                      | 28  | 21                     | 49                     | 3,033                     |
| November                | 2.00                         | 2.80                      | 19  | 14                     | 33                     | 1,965                     |
| December                | 1.37                         | 1.85                      | 13  | 9                      | 22                     | 1,345                     |
| <b>Whole Year</b>       | <b>42.8</b>                  | <b>4.92</b>               | <b>33</b>                                   | <b>25</b>              | <b>58</b>              | <b>42,121</b>             |
| <b>May-October</b>      | <b>28.7</b>                  | <b>6.54</b>               | <b>45</b>                                   | <b>33</b>              | <b>77</b>              | <b>28,178</b>             |
|                         | (Sum)                        | (Average)                 | (Average)                                   | (Average)              | (Average)              | (Sum)                     |

Source: Pan Evaporation Records for the South Carolina Area, John C. Purvis, South Carolina State Climatology Office  
 FWS values were computed as 75 percent of pan evaporation values.  
 This factor was estimated from a discussion in NOAA Technical Report NWS 33, Evaporation Atlas for the 48 Contiguous States.

Reservoir evaporation loss estimates are based on surface areas of 6,800 acres for Monticello and 5,000 acres for Parr.

The conversion from evaporation in inches to evaporation rate in CFS per thousand acres is:

$$(\text{inches}) \times (1 \text{ ft}/12 \text{ in}) \times (1 \text{ month}/31 \text{ [or } 30 \text{ or } 28] \text{ days}) \times (43,560 \text{ SF}/\text{acre}) \times (1 \text{ day}/86,400 \text{ sec}) \times (1,000 \text{ acres}/\text{thousand acres})$$

Estimated Evaporation from Parr and Monticello Reservoirs

| Evaporation, Central SC |                                 |                              | Reservoir Evaporation Loss Estimates in CFS |                           |
|-------------------------|---------------------------------|------------------------------|---|---------------------------|
|                         | Avg. Monthly FWS<br>Evap. (in). | Evap. Rate<br>(CFS/1000 ac.) | Lake Murray Evap. Rate<br>(CFS)             | Total Evaporation (ac-ft) |
| January                 | 1.29                            | 1.75                         | 84  | 5,175                     |
| February                | 1.82                            | 2.74                         | 131   | 8,074                     |
| March                   | 3.19                            | 4.33                         | 208   | 12,773                    |
| April                   | 4.50                            | 6.31                         | 303   | 18,617                    |
| May                     | 5.24                            | 7.10                         | 341   | 20,947                    |
| June                    | 5.53                            | 7.75                         | 372   | 22,873                    |
| July                    | 5.77                            | 7.82                         | 375   | 23,072                    |
| August                  | 5.00                            | 6.78                         | 325   | 20,012                    |
| September               | 4.03                            | 5.64                         | 271   | 16,654                    |
| October                 | 3.08                            | 4.18                         | 201   | 12,337                    |
| November                | 2.00                            | 2.80                         | 134   | 8,259                     |
| December                | 1.37                            | 1.85                         | 89  | 5,470                     |
| <b>Whole Year</b>       | <b>42.8</b>                     | <b>4.92</b>                  | <b>236</b>                                  | <b>174,263</b>            |
| <b>May-October</b>      | <b>28.7</b>                     | <b>6.54</b>                  | <b>314</b>                                  | <b>115,896</b>            |
|                         | (Sum)                           | (Average)                    | (Average)                                   | (Sum)                     |

Source: Pan Evaporation Records for the South Carolina Area, John C. Purvis, South Carolina State Climatology Office  
 FWS values were computed as 75 percent of pan evaporation values.

This factor was estimated from a discussion in NOAA Technical Report NWS 33, Evaporation Atlas for the 48 Contiguous States.

Reservoir evaporation loss estimates are based on surface area of 48,000 acres for Lake Murray.

The conversion from evaporation in inches to evaporation rate in CFS per thousand acres is:

$$(\text{inches}) \times (1 \text{ ft}/12 \text{ in}) \times (1 \text{ month}/31 \text{ [or 30 or 28] days}) \times (43,560 \text{ SF}/\text{acre}) \times (1 \text{ day}/86,400 \text{ sec}) \times (1,000 \text{ acres}/\text{thousand acres})$$



Source: AMMARELL, RAYMOND R [RAMMARELL@scana.com]  
 SCE&G  
 Email to J. Lemieux  
 Date: 11/28/2007

**VCS Unit 1**

| All Values in MGD     | 2002        | 2003        | 2004        | 2005        | 2006        | AVG.        |   |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|---|
| JAN                   | 845         | 845         | 845         | 845         | 845         | 845         |   |
| FEB                   | 845         | 845         | 845         | 845         | 845         | 845         |   |
| MAR                   | 845         | 845         | 845         | 845         | 845         | 845         |   |
| APR                   | 845         | 845         | 845         | 648         | 845         | 806         |   |
| MAY                   | 845         | 845         | 845         | 136         | 845         | 703         |   |
| JUN                   | 845         | 845         | 845         | 845         | 845         | 845         |   |
| JUL                   | 845         | 845         | 845         | 845         | 845         | 845         |   |
| AUG                   | 845         | 845         | 845         | 845         | 845         | 845         |   |
| SEP                   | 845         | 310         | 310         | 845         | 845         | 631         |   |
| OCT                   | 845         | 26          | 26          | 845         | 354         | 419         |   |
| NOV                   | 845         | 164         | 164         | 845         | 113         | 426         |   |
| DEC                   | 845         | 26          | 26          | 845         | 354         | 419         |   |
| <b>Annual Average</b> | <b>845</b>  | <b>607</b>  | <b>607</b>  | <b>769</b>  | <b>702</b>  | <b>706</b>  | * 0.00409 = <b>2.89 MGD Consumptive Use</b> |
|                       | <b>3.46</b> | <b>2.48</b> | <b>2.48</b> | <b>3.15</b> | <b>2.87</b> | <b>2.89</b> | <b>MGD Consumptive Use</b>                  |

**Incr. Evap.**

| All Values in MGD     | 2002        | 2003        | 2004        | 2005        | 2006        | AVG.        |                                  |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------------------|
| JAN                   | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        |                                  |
| FEB                   | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        |                                  |
| MAR                   | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        |                                  |
| APR                   | 14.3        | 14.3        | 7.7         | 11.0        | 14.3        | 12.3        |                                  |
| MAY                   | 14.3        | 14.3        | 14.3        | 13.0        | 14.3        | 14.1        |                                  |
| JUN                   | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        |                                  |
| JUL                   | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        |                                  |
| AUG                   | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        |                                  |
| SEP                   | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        | 14.3        |                                  |
| OCT                   | 14.3        | 4.6         | 4.6         | 14.3        | 6.0         | 8.8         |                                  |
| NOV                   | 14.3        | 2.4         | 2.4         | 14.3        | 1.9         | 7.1         |                                  |
| DEC                   | 14.3        | 14.3        | 13.4        | 14.3        | 14.3        | 14.2        |                                  |
| <b>Annual Average</b> | <b>14.3</b> | <b>12.5</b> | <b>11.9</b> | <b>14.0</b> | <b>12.6</b> | <b>13.1</b> | <b>MGD Increased Evaporation</b> |

**Drinking Water**

| All Values in MGD     | 2002         | 2003         | 2004         | 2005         | 2006         | AVG.         |                            |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------------|
| JAN                   | 0.021        | 0.026        | 0.030        | 0.024        | 0.021        | 0.024        |                            |
| FEB                   | 0.023        | 0.028        | 0.032        | 0.029        | 0.018        | 0.026        |                            |
| MAR                   | 0.021        | 0.029        | 0.029        | 0.025        | 0.021        | 0.025        |                            |
| APR                   | 0.030        | 0.029        | 0.037        | 0.024        | 0.019        | 0.028        |                            |
| MAY                   | 0.036        | 0.032        | 0.030        | 0.027        | 0.015        | 0.028        |                            |
| JUN                   | 0.032        | 0.029        | 0.030        | 0.021        | 0.014        | 0.025        |                            |
| JUL                   | 0.025        | 0.028        | 0.030        | 0.019        | 0.014        | 0.023        |                            |
| AUG                   | 0.026        | 0.029        | 0.031        | 0.020        | 0.015        | 0.024        |                            |
| SEP                   | 0.026        | 0.029        | 0.033        | 0.018        | 0.015        | 0.024        |                            |
| OCT                   | 0.023        | 0.035        | 0.030        | 0.018        | 0.025        | 0.026        |                            |
| NOV                   | 0.022        | 0.044        | 0.031        | 0.020        | 0.024        | 0.028        |                            |
| DEC                   | 0.022        | 0.033        | 0.033        | 0.019        | 0.013        | 0.024        |                            |
| <b>Annual Average</b> | <b>0.026</b> | <b>0.031</b> | <b>0.031</b> | <b>0.022</b> | <b>0.018</b> | <b>0.026</b> | <b>MGD Consumptive Use</b> |

Source: Email from AMMARELL, RAYMOND R [RAMMARELL@scana.com] on 11/9/2007

**Ray Ammarell**

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Water usage for VCS Units 2 & 3 (future):

These units will operate with closed cycle cooling towers with makeup from Monticello Reservoir, and blowdown discharge to Parr Reservoir. Each unit is estimated to use:

Evaporation: 14,159 GPM

Drift: 31 GPM

Blowdown: 4,719 to 14,159 GPM (discharged to Parr Reservoir)

Design team estimates actual total water usage for two units at 45,000 GPM.

Unit 2 is planned commercial in 2016

Unit 3 is planned commercial in 2019

**APPENDIX H:**  
**GEOGRAPHIC INFORMATION SYSTEM DATA**

(Electronic copy provided on enclosed CD)