

# UNION COUNTY

## SHORT-TERM WATER ALLOCATION PLAN

**DATE:** SEPTEMBER 21, 2009 (AMENDED AND RESTATED)

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### PREFACE

In February 2008, Union County's Board of Commissioners adopted a resolution that, among other requirements, tasked the County Manager and Public Works Department with developing a Short-Term Water Allocation Plan. This resolution acknowledged that, at times, the Union County Water System's (UCWS) Peak Day Demand exceeded available water treatment capacity. As a result, the opportunity to provide water service to new customers is limited. The Short-Term Water Allocation Plan is intended to provide an action plan for the County as it seeks to continue to provide a high level of service to existing customers, and new water service connections for continued population and economic growth. When new treatment plant capacity is in-place, it is expected that this Short-Term Water Allocation Plan will no longer be required.

On October 20, 2008, a Water Allocation Policy was adopted by the Board of Commissioners and put into action by Union County Public Works (UCPW). Subsequently, changing economic conditions and a desire to maintain future water allocations within current, permitted, and contracted water treatment capacity led to the desire to revise the Water Allocation Policy. On January 20, 2009, the Board of Commissioners directed UCPW staff to stop applying for Water Permits under the previously adopted Water Allocation Policy (except for Government Facilities and Nonresidential Projects). On April 8, 2009, the Board of Commissioners directed County staff to draft revisions to the Water Allocation Policy to allow for new development, with a baseline of one-day-per-week outdoor irrigation for customers; to stop applying for all Water Permits; and to pursue recovery of capacity.

On August 4, 2009, the Permit Extension Act of 2009 was enacted into law, effective on that date. A few days thereafter, the Permit Extension Act of 2009 was amended. This Act, as amended, specifically allows Union County to recover and reallocate water allocation from projects that are not ready to proceed, but sets forth guidelines that must be followed in doing so.

During development of these revisions, it has now been determined that the number of residential lots with an existing Water Permit provides sufficient inventory for new residential construction until new water treatment capacity can be delivered, and that the limited remaining available water to be allocated should be provided to Nonresidential, Government Facilities, One Tap, and Self Help Projects. In addition, the name of this document has been revised from a Water Allocation Policy to a Short-Term Water Allocation Plan to better reflect its purpose and intent.

This Short-Term Water Allocation Plan (Plan) seeks to document current water use by UCWS customers and quantify the amount of capacity that is available for system expansion. As presented herein, the short-term available capacity for new customers to the UCWS is a function of the type of

water use restrictions implemented on the current customer base. In developing this Plan, the County has sought to:

- protect public health and safety;
- maintain a high level of service to existing water customers;
- be fair and equitable in allocation of future water service;
- comply with the Permit Extension Act of 2009, as amended; and,
- eliminate excursions of Peak Day Demands above current allocated capacity.

The Union County Public Works Department is actively pursuing additional water treatment capacity, and is currently in the planning, permitting, engineering design, and/or construction phase of numerous projects that are intended to secure additional water supply and delivery capacity to current and future residents of the County. However, until several of these projects are completed, it is necessary to have this Plan in place to establish guidelines for allocating water treatment capacity.

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## 1.0 DEFINITIONS

Unless otherwise specified herein, or unless clearly required by context, the words and phrases defined below shall have the meaning indicated when used in this Plan.

- **Accessibility Letter** – refers to a letter issued by UCPW that describes the proximity of a proposed Development Project to existing UCWS water infrastructure and the requirements for obtaining water service.
- **Anson County Water Treatment Plant (ACWTP)** – refers to Anson County’s water treatment facility. The ACWTP has a rated capacity of 16 MGD. Union County has a contracted capacity for 4 MGD from the ACWTP. However, current hydraulic system limitations restrict the available water capacity to approximately 2 MGD from the ACWTP. Union County Public Works has several ongoing projects to eliminate these hydraulic restrictions and make fully available the 4 MGD contract capacity.
- **Average Day Demand** – refers to the annual average daily water demand (estimated or actual) placed on a single connection, portion, or all of the UCWS.
- **Catawba River Water Treatment Plant (CRWTP)** – refers to the water treatment facility that is jointly owned by Union County and Lancaster. The CRWTP has a rated capacity of 36 MGD. Union County has ownership rights to 50% of this capacity, or a total of 18 MGD.
- **County** – refers to Union County.
- **Development Project, or Project** – refers to an undertaking involving real property improvement, One Tap Projects, and Self Help Projects for which a new or expanded connection to the UCWS is requested.
- **Effective Date** – refers to twelve noon on September 28, 2009.
- **Government Facilities** – refers to facilities owned or operated by Union County, Union County Public Schools, or a municipality located within Union County, and facilities funded in whole or in part by Union County.
- **Lancaster** – refers to the Lancaster County Water and Sewer District.
- **Maximum Day (Max. Day or Peak Day) Capacity** – refers to the maximum day treatment capacity of a water treatment and distribution system. For the purposes of this Plan, the total Max. Day Capacity is 18 MGD. This value represents Union County’s contracted supply from the CRWTP.
- **Maximum Day (Max. Day or Peak Day) Demand** – refers to the highest daily water demand placed on a single connection, portion, or all of the UCWS.
- **MGD** – is million gallons per day.
- **Nonresidential Development Projects** – refers to all Development Projects other than Residential Development Projects and Government Facilities Projects.

- **Notice Period** – refers to the public notification period during which UCPW requested owners of any Development Projects, or others, who had received documentation from the County regarding the availability of water service to a potential site or parcel, to show evidence of the same. This correspondence may, but need not, be referred to as an Accessibility Letter. This notification period occurred between February 26, 2008, and March 27, 2008.
- **One Tap Projects** – refers to a Project where the owner of an existing parcel (as of October 20, 2008) requests a single residential tap by a service line from the UCWS. One Tap Projects shall include existing residences served by well.
- **Peak Day Demand** – see definition above for Maximum Day Demand.
- **Peaking Factor** – refers to the ratio of Maximum Day Demand to Average Day Demand.
- **Permit Extension Act** – refers to Session Law 2009–406 as amended, cited as the Permit Extension Act of 2009.
- **Plan** – refers to this amended and restated water allocation document. The use of the word “Plan” has replaced the word “Policy” as used in the original document to better reflect its purpose and intent.
- **Project** – has the same meaning as Development Project.
- **Residential Development Project** – refers to Development Projects for residences such as attached and detached single-family dwellings, apartment complexes, condominiums, townhouses, cottages, etc., and their associated outbuildings including garages, storage buildings, gazebos, etc., and customary home occupations. For purposes of this Plan, a Retirement Community shall not be deemed a Residential Development Project.
- **Retirement Community** – refers to a housing development that is designed for and restricted to occupancy by households having at least one member who is fifty–five (55) years of age or older, and in which children under eighteen (18) years of age shall not reside for more than ninety (90) days per calendar year.
- **Self Help Project** – refers to a Project that is derived from the County’s Self Help Program. The Self Help Program targets residents who face an existing or imminent threat to public health or to the environment due to poor water quality or insufficient water supply.
- **UCPW** – refers to the Union County Public Works Department.
- **UCWS** – refers to the potable water system owned by Union County and operated and maintained by UCPW.
- **Water Permit** – refers to an Authorization to Construct permit for water system infrastructure secured for a Development Project from the North Carolina – Department of Environment and Natural Resources (NC-DENR). After approval by UCPW staff, Development Projects are typically submitted to NC-DENR for an Authorization to Construct permit by the County.

## 2.0 RECITALS

- 2.1. The UCWS is operated by UCPW and is supplied with potable water by the CRWTP and the ACWTP. Union County has ownership rights in the CRWTP that includes a Maximum Day Capacity of 18 MGD. Considering current hydraulic restrictions, the UCWS has a Maximum Day Capacity of approximately 2 MGD available from the ACWTP. While the current total Maximum Day Capacity available in the UCWS is approximately 20 MGD, water from each of these sources is isolated to distinct service areas of the UCWS. That is, water supply from the CRWTP cannot easily be utilized in the UCWS served by the ACWTP, and vice-versa. These service area boundaries are generally outlined as shown on attached Figure 1.
- 2.2. Given the location of population growth, proposed Development Projects, and increasing water demands within the County, this Plan applies to the allocation of available water treatment plant capacity from the CRWTP and the UCWS currently served by this water supply source. A review of historical water use data indicates that the Maximum Day Capacity from the CRWTP has been exceeded due to high Peak Day Demands associated primarily with outdoor irrigation in this service area.
- 2.3. The UCWS has interconnections with Charlotte-Mecklenburg Utilities and the City of Monroe. These interconnections are utilized for emergency purposes only and do not offer an increase in long-term available water treatment capacity to the County's water system.
- 2.4. Due to varying topography throughout the County, the UCWS operates on four distinct pressure gradients, or pressure zones. While these pressure zones are interconnected, universal movement of water throughout the UCWS is not possible.
- 2.5. For a number of years, high population growth, coupled with other commercial, industrial, and institutional growth, has placed increasing water demands on the UCWS, particularly in the western part of the County. These demands have stressed the limits of available water treatment capacity and the hydraulics of moving this water through the piping distribution network to the County's customers.
- 2.6. The UCWS has also observed significant peak demands in water use associated with a hot, dry climate and numerous drought years since 1998. These Peak Day Demands are indicative of water systems with a heavy residential component with high outdoor water use, particularly for irrigation.
- 2.7. Union County recently participated in Duke Energy's Federal Energy Regulatory Commission (FERC) relicensing process for the Catawba River. Union County was one of many regional governments who became a signatory stakeholder for Duke Energy's Comprehensive Relicensing Agreement (CRA). This CRA establishes rules and guidelines for how the Catawba River system will be operated for the next 50 years, ending in year 2058. One major element of the CRA is the implementation of a Low Inflow Protocol (LIP) that establishes a policy for how Duke Energy and other stakeholders will operate during periods of drought. This LIP requires regional water users to move through a series of staged water use restrictions during worsening drought conditions. It should be noted that the LIP establishes minimum requirements for water use restrictions. Each water utility has the

flexibility to impose greater restrictions, if desired. Regional cooperation between Duke Energy and large water users along the Catawba River helped preserve and protect available water supply during the extreme drought of 2007 and 2008.

- 2.8. While UCWS customers were under no water restrictions and had unlimited water use available, the Union County Water System experienced eight days in May of 2007 where Peak Day Demand exceeded the Max. Day Capacity of 18 MGD from the CRWTP. The highest daily usage measured was 21.3 MGD. To supply adequate water to meet these demands, UCPW had to utilize, on a temporary basis, water capacity from the CRWTP that is designated to Lancaster.
- 2.9. In June of 2007, UCPW instituted Stage 2 water use restrictions, which required its customers to limit outdoor water use (including irrigation) to two days per week. While under these water use restrictions, the UCWS experienced two days where Peak Day Demand exceeded the Max. Day Capacity of 18 MGD from the CRWTP, again reaching 19.5 MGD. To supply adequate water to meet these demands, UCPW again had to utilize water capacity from the CRWTP that is designated to Lancaster.
- 2.10. During the latter part of 2007 and through the first quarter of 2008, as the regional drought continued to worsen, UCPW instituted stricter Stage 3 water use restrictions including the elimination of outdoor irrigation. These restrictions showed a measurable reduction in water use by the County's customers.
- 2.11. In April of 2008, UCPW continued Stage 3 water restrictions, and modified provisions to require its customers to limit outdoor water use (including irrigation) to one day per week. Even under these water use restrictions, the UCWS experienced numerous days where Peak Day Demand exceeded the Max. Day Capacity of 18 MGD from the CRWTP, with the highest daily demand reaching 19.8 MGD. To supply adequate water to meet these demands, UCPW continued to utilize water capacity from the CRWTP that is designated to Lancaster.
- 2.12. The information presented in Articles 2.8 – 2.11 is illustrated in attached Figure 2.
- 2.13. Continued use of Lancaster's allocated water treatment capacity is not considered a viable alternative to increasing available water treatment plant capacity for the UCWS. Allowing additional customers to utilize Lancaster's allocated capacity in the CRWTP service area would put in jeopardy continued reliable service to the UCWS existing customer base.
- 2.14. Without water use restrictions, there would be no (0 MGD) additional water treatment capacity to allocate to new customers.
- 2.15. Prior efforts by UCPW to limit outdoor water use have typically included customer watering based on odd/even addresses – where approximately 50% of the customer base is given a weekend day to water (i.e., Saturday or Sunday) . A review of water use data indicates that, while this approach may reduce overall total water use, it increases the Peaking Factor between Maximum Day conditions and average conditions. Analysis of water use data indicates that spreading this irrigation demand will decrease the Peaking Factor. If Maximum Day Demand can be lowered below 18 MGD, additional water treatment capacity can be allocated to new customers.

- 2.16.** In August 2008, UCPW established a revised water rate structure to promote water conservation among its highest use customers. It is likely that this rate change will reduce Peak Day usage within the County, thereby extending available water treatment capacity.
- 2.17.** With outdoor water use restrictions set at a 1-day per week requirement – and spread over a 7-day period of use – it is estimated that, during periods of peak demand, approximately 2.4 MGD of Average Day Demand is available for allocation to new customers. It should be emphasized that these values are estimates based on analytical evaluation of limited historical data.
- 2.18.** Peak Day Demand depends on many variables including time of year (i.e., season), temperature, recent precipitation patterns, other climatic conditions, economic conditions, water rates, and other factors. As such, the Union County Manager and UCPW will monitor these variables and Peak Day Demand trends and make recommendations to the Board of Commissioners regarding adjustments in water use restrictions for customers. Any recommended adjustments will be made in accordance with the provisions outlined in the County’s Water Conservation Ordinance. Historical trends, coupled with other factors (e.g., recent water rate adjustments, recent changes in irrigation distribution among customers), indicate that there exists a strong likelihood to maintain outdoor irrigation for customers at 2-days per week or greater.
- 2.19.** The County will continue to cooperate with Duke Energy and other regional water utilities to implement and comply with the LIP as required.
- 2.20.** In recognition of the changing economic conditions and current inventory of Residential Projects with Water Permits, it was determined that Nonresidential and Government Facilities Projects should receive the limited remaining water allocation. Current data to support these changing conditions is outlined below:
- Residential building permit applications have declined significantly.
  - In April 2009, over 4,000 vacant residential building lots in the CRWTP service area without building permits have both Water Permits and existing water infrastructure in place.
- 2.21.** The Peaking Factor associated with Nonresidential Development Projects is typically lower than the Peaking Factor associated with Residential Development Projects. As such, the impact on the UCWS is lessened during future Peak Day Demand conditions as it relates to Nonresidential Projects.
- 2.22.** The Plan set forth herein is intended to provide guidelines for allocating, in a fair and equitable manner among competing interests, the available water treatment capacity. Subject to approval of the County Manager, the UCPW Director may authorize a departure from these guidelines when strict adherence would frustrate the purpose of these guidelines or endanger the health and safety of the citizens of Union County. The County Manager shall report any such departure to the Board of County Commissioners immediately.
- 2.23.** This Plan creates no legal right to receive, nor any legal duty on the part of Union County or UCPW to provide, any amount of existing or future water treatment capacity from the CRWTP, or other sources.

### **3.0 SCOPE**

This Plan applies to the allocation of approximately 2.4 MGD (Average Day Demand) that is estimated to be available using the water use restrictions described in Section 2.17 above. Except as otherwise stated herein, this Plan applies to all Development Projects located in the CRWTP service area served by the UCWS for which the owner or developer requests a new or expanded connection. Nothing in this Plan shall prevent residential customers from securing an irrigation tap and meter.

### **4.0 PURPOSE**

This Plan is intended to establish a plan for allocating the existing limited water treatment capacity in a fair and equitable manner, and to reallocate water treatment capacity from Development Projects that are not ready to proceed, to Development Projects that are ready to begin construction, consistent with the provisions of the Permit Extension Act, taking into consideration, among other things:

- The need to fulfill outstanding legal obligations Union County has, if any, to provide water system service;
- The need to reserve capacity to serve public school facilities, County projects, and other Governmental Facilities;
- The desire to provide a high level of service to existing customers;
- The desire to treat alike all Development Projects that are similarly situated as to: (i) type of Project; and (ii) stage of progress in the procedures required to connect to the Union County Water System;
- The desire to determine actual capacity and to distribute the remaining capacity in a fair and equitable manner;
- The desire to reallocate capacity from Development Projects that are not ready to proceed with construction to Development Projects that are ready to begin construction;
- The desire to prevent allocation or reallocation of capacity in excess of what UCWS can reliably provide;
- The desire to promote Nonresidential Development Projects among multiple owners or developers. These Nonresidential Development Projects will reduce the impact on Peak Day Demands as compared to Residential Projects. These Nonresidential Development Projects will also support an increase in the County's employment and property tax base while imposing fewer demands than those imposed by Residential Development Projects (e.g., overburdened schools); and,
- The need to protect public health and safety.

### **5.0 EFFECTIVE DATE**

The original Water Allocation Policy became effective upon adoption by the Union County Board of Commissioners on October 20, 2008.

The Amended and Restated Plan shall become effective at noon on September 28, 2009, and may be repealed or modified at any time, without notice.

A public hearing was held on October 6, 2008, regarding the Water Allocation Policy. A second public hearing was held on July 20, 2009, regarding proposed revisions.

## 6.0 WATER ALLOCATIONS

The attached Table 1 provides a summary of Projects identified during development of the Short-Term Water Allocation Plan where existing water permits have been secured. Many of these projects also have water infrastructure in-place. Table 1 also outlines the estimated Average Day Demand for each Project. Residential flow allocation is based on a calculated average use for the UCWS of approximately 250 gallons per day (gpd) per unit. Nonresidential and Government Facilities were assigned flow either from actual flow estimated by the Development Project, or from the calculated average use for current UCWS Nonresidential customers of approximately 1,500 gpd per connection.

The following sub-sections provide a more detailed explanation of category level assignments.

### 6.1 Category A Projects

Category A Projects include:

▪ Government Facilities Projects	0.057 MGD
▪ Nonresidential Projects	0.315 MGD
▪ Residential Projects	1.748 MGD
▪ One Tap Projects	0.080 MGD
▪ Self Help Projects	0.047 MGD
▪ Future Health and Safety Project Reserve	0.010 MGD
▪ Nonresidential/Government Facilities Project Reserve	0.143 MGD
<b>TOTAL</b>	<b>2.400 MGD</b>

These Category A Projects account for an estimated total of approximately 2.4 MGD of Average Day Demand. This Plan directs UCPW to provide water allocation capacity to these Projects, and allocates all of the remaining available capacity.

#### 6.1.1 Category A – One Tap Projects

Once a One Tap Project is approved by UCPW for existing residences, owners will have 60 days to complete installation of a service connection and pay all associated tap fees before expiration of this water allocation.

Once a One Tap Project is approved for existing vacant residential lots, owners will have to comply with the following:

- Confirm that existing water lines are contiguous to the vacant residential lot to be served directly or through an existing right-of-way.
- Confirm proper land use permitting (including zoning) from all applicable jurisdictions to allow the proposed tap to occur.
- UCPW staff may, if desired, request additional information from the owner in order to make a final determination. If approved, UCPW will issue, in writing, a water allocation for the proposed dwelling. Failure to obtain a building permit

for the dwelling within 180 days from written approval of the Project shall result in termination of the water allocation for the dwelling. If a building permit is issued within 180 days from written approval of the Project and thereafter expires, or is otherwise terminated without issuance of a certificate of occupancy, it shall result in termination of the water allocation for the dwelling that is subject of the expired or terminated building permit.

### **6.1.2 Nonresidential/Government Facilities Project Reserve**

It is the intent of this Plan to award allocation under the Nonresidential/Government Facilities Project Reserve to multiple owners or developers. This allocation will be utilized for Projects that are estimated to use 20,000 gpd or less (as determined by UCPW) and are located in the CRWTP service area. This allocation shall be assigned to Nonresidential/Government Facilities Projects on a first come, first serve basis. An applicant for water allocation under this section shall not be considered an active applicant until they demonstrate to the satisfaction of UCPW the ability to begin construction as set forth in this section. The amount available is estimated at 143,000 gpd plus the amount of water allocation secured from other Category A Projects that fail to move forward as outlined in Section 7.0 below.

In order to receive a water allocation, the owners or developers of Projects receiving water allocation under this section shall demonstrate the ability to begin construction by doing the following:

- Certify to UCPW that existing water lines are contiguous to the Project site directly or through an existing right-of-way, and that sufficient hydraulic capacity exists in the UCPW system to meet the needs of the Project. The requirement that existing water lines are contiguous to the Project site directly or through an existing right-of-way shall not apply to public schools since public schools have the right of eminent domain.
- Certify to UCPW the issuance of all applicable land use permits and approvals from all applicable jurisdictions to allow the proposed development to occur. These land use permits and approvals include, but are not limited to, zoning, major development permits, special use permits, conditional use permits, and preliminary plat approval.
- Submit a detailed written description of the Project to UCPW for approval (including type of project, projected number of employees, building use, building square footage, number and type of plumbing fixtures, average day water demand, irrigation demands, fire flow needs, and any other special conditions). Such written description shall include sufficient detail to enable UCPW to make a reasonable determination of the requested water demand and that it is more likely than not that the Project will proceed within the time constraints for obtaining a building permit, as outlined below.
- Demonstrate that the owner or developer of the Project has the ability to begin construction of the Project by furnishing a signed copy of a construction agreement, or other document that is satisfactory to UCPW, showing a date of commencement of construction of the utility infrastructure within 270 days of receipt of the water allocation, and containing a construction schedule that demonstrates that the construction will be diligently prosecuted to its completion within a reasonable period of time after commencement. The

construction agreement or document may contain a provision that it is contingent upon receiving a water allocation for the Project.

- UCPW staff may, if desired, request additional information from the Project's owner in order to make a final determination. If approved, UCPW will issue, in writing, a water allocation for the proposed Project.
- Failure to obtain a building permit for all facilities associated with the Development Project within 270 days from written approval of the Project shall result in a termination of the water allocation for those facilities for which a building permit has not been obtained. If a building permit is issued within 270 days from written approval of the Project and thereafter expires, or is otherwise terminated without issuance of a certificate of occupancy, it shall result in termination of the water allocation for the facilities that were subject to the expired or terminated building permit.
- UCPW shall have administrative authority (e.g., sub-metering) to ensure that all Projects receiving water allocation are not likely to exceed that allocation.

## **6.2 Future Development Projects**

All other Development Projects will be considered future Development Projects. UCPW will establish procedures to track future Development Projects that are brought forward for consideration of water service.

## **6.3 Adjustment of Water Allocations**

UCPW will continually update water use trend data and other variables to determine the effectiveness of the Plan. Should sufficient data become available to support revisions to the water allocations as outlined herein, the County Manager shall make amendment recommendations to the Board of Commissioners for approval.

## **7.0 REALLOCATION OF WATER CAPACITY**

When a Water Permit has been issued for a Development Project; and,

- (i) an engineer's certification of completion has not yet been submitted to NC-DENR; and,
- (ii) the expiration of the Water Permit has been suspended under the Permit Extension Act; and,
- (iii) it has been 24 months since the issuance of a Water Permit,

the County may reallocate the water allocation associated with that Project to applicants for new or additional allocations in accordance with this Section.

### **7.1 Requirements of Union County Public Works to Recover Capacity**

In order to reallocate capacity, UCPW shall:

- Mail a notice to the owner or developer of the Development Project by certified mail on or after 20 months from issuance of a Water Permit.
- Include in the notice the following information:
  - (a) that UCPW believes that the owner or developer is not ready to proceed or continue with the Project by beginning construction under the Water Permit within 120 days of the notice;
  - (b) that, in order to retain the water allocation associated with the Project, the owner or developer must demonstrate the ability or intent to begin construction under the Water Permit within 120 days of the date of the

- notice by actually beginning construction within 120 days of the date of the notice; and
- (c) that, in order to further demonstrate that the owner or developer has a bona fide ability or intent to begin construction within 120 days of the date of the notice, the owner or developer must provide UCPW with a signed copy of a construction agreement, or other document satisfactory to UCPW, containing a commencement date of construction under the Water Permit within 120 days of the date of the notice, and also containing a construction schedule that shows that the construction will be diligently prosecuted to its completion in a normal manner customary and common in the trade.
- Mail the notice:
    - (a) to the owner's address listed by the Union County Tax Assessor's office;
    - (b) to the address of the owner or developer's engineer, if the identity and address of the engineer for that Project is contained on the engineering plans that were submitted to NC-DENR in order to obtain the Water Permit; and,
    - (c) to the last known address of the owner or developer of the Project, if the identity and address of the owner or developer is contained in the records of UCPW concerning that Project.

## 7.2 Requirements of Owner or Developer to Retain Capacity

In order to retain the water allocation, the owner or developer shall, within 120 days of the date of the notice, demonstrate the ability or intent to begin construction under the Water Permit by:

- actually beginning construction under the Water Permit within 120 days of the date of the notice; and,
- demonstrating that the owner or developer has a bona fide ability or intent to begin construction under the Water Permit within 120 days of the date of the notice by providing UCPW with a signed copy of a construction agreement, or other document satisfactory to UCPW, containing a commencement date of construction under the Water Permit within 120 days of the date of the notice, and also containing a construction schedule that shows that the construction will be diligently prosecuted to its completion in a normal manner customary and common in the trade.

In the event that the owner or developer fails to demonstrate the ability or intent to begin construction under the Water Permit within 120 days of the date of the notice, UCPW shall reallocate the capacity associated with that Project in accordance with the provisions of Section 6.1.2, above.

In the event that the owner or developer of a Project:

- (i) retains capacity by beginning construction under the Water Permit within 120 days of the date of the notice; and,
- (ii) thereafter fails to continue or proceed with construction in a normal manner customary and common in the trade for a period of 120 days; then, owner or developer shall be deemed to have abandoned or terminated the Project.

In the event of termination or abandonment as defined herein, the water allocation that is associated with that Project will again be subject to reallocation, in accordance with the procedures of this section.

## **8.0 ACCEPTANCE OF NEW ENGINEERING PLANS AND WATER PERMIT APPLICATION PROCESS**

UCPW shall continue to accept new engineering plans and make application for Water Permits for Projects requiring connection to the Union County Water System in the Anson County Service Area.

In the CRWTP service area, effective August 12, 2008, UCPW shall not accept any new engineering plans or make any application for Water Permits for Projects other than Category A Projects. UCPW shall not accept any new engineering plans for Self Help Projects other than those listed as Category A Projects. For Projects where engineering plans have been received, but application for a Water Permit has not been made, UCPW staff shall provide comments on the proposed Project, but shall not apply for a Water Permit.

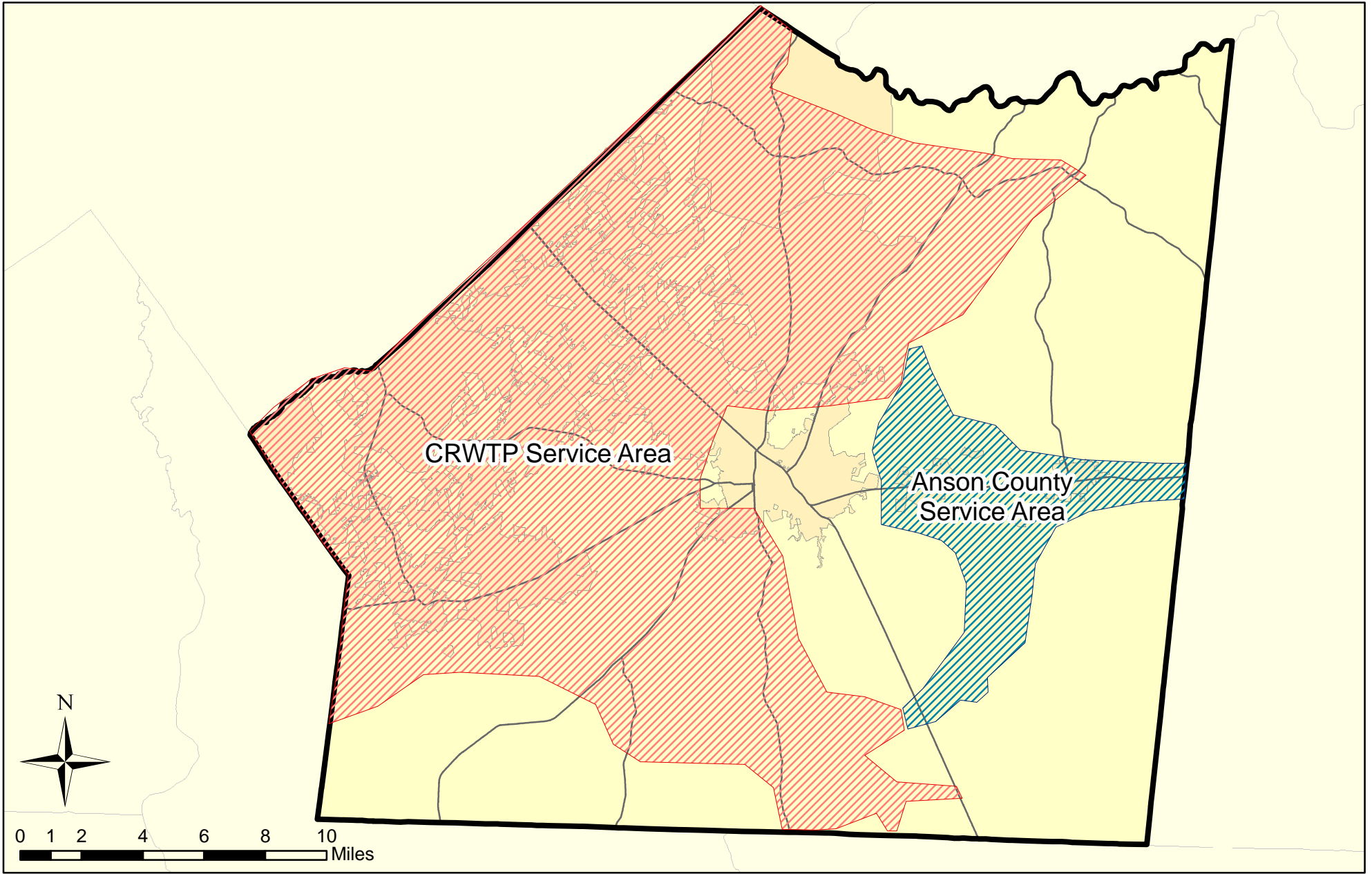
## **9.0 NOTIFICATION PERIOD FOR OMISSIONS/CORRECTIONS**

The owner or developer of any Project not appearing in Table 1 but for which UCPW has issued correspondence regarding water availability prior to August 11, 2008, had an opportunity within 30 days of the original adoption of the Policy (i.e., October 20, 2008) to submit written documentation of the same to the UCPW Director. The owner or developer of any Project listed in Table 1 that contended that the information listed to be in error had an opportunity within 30 days of the original adoption of the Policy (i.e., October 20, 2008) to submit written documentation of the proposed correction to the UCPW Director.

## **10.0 DIRECTIONS TO COUNTY STAFF**

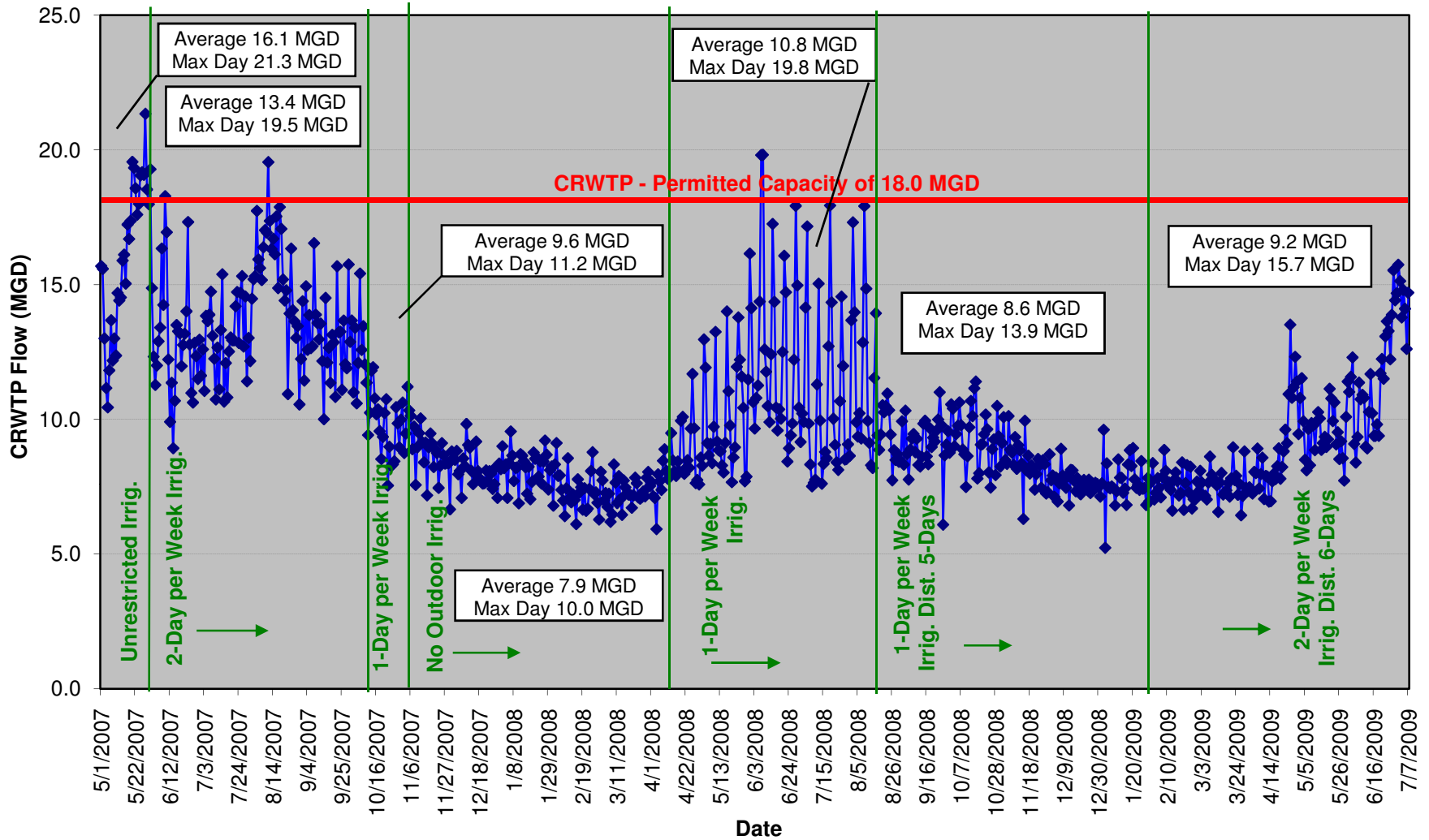
County staff shall notify the Board of Commissioners on a quarterly basis regarding water use trends. Staff shall also notify the Board of Commissioners when 100,000 gpd has been assigned. These updates shall include a summary of new connections and estimated capacity consumed by the new connections.

Within 90 days from the Effective Date, County staff will present to the Board of Commissioners an action plan for how water demand will be managed in the event that water demand in the CRWTP service area exceeds 17.5 mgd two times in a one-week period.



**Existing Service Areas**  
Figure 1

**Figure 2 - Union County Water System - Daily Water Demand from the Catawba River WTP (05/07 - 07/09)**



**Table 1 - Union County Water Allocation - Identified Future Development Projects (Category A)**  
**(Updated: August 2009)**

Ref.	Proj. ID	Project/Development	River Basin C-Catawba Y-Yadkin	Sewer Conveyance	Water Permit Approval Date	for Residential Est. Number of Units (@ Build- Out)	for Residential Est. Remaining Units (as of Aug. 2009)	Water Allocation (gpd)	Infrastructure Installed	Lots with no infra- structure (as of July 2009)	Flow Assoc. with no infra- structure (as of July 2009)	Jurisdiction	Land Use Approval
<b>Government Facilities Projects</b>													
01	463	MS/HS "D" Hemby Bridge (School)	C	TBD	-	-	38,400	No	-	-	County	No	
02	775	Waxhaw Regional Library	C	TBD	-	-	5,000	No	-	-	Waxhaw	No	
03	-	Bus Depot - UCPS Transpo. Facility	C	TBD	-	-	4,400	No	-	-	County	No	
04	-	Future Public ES	C	TBD	-	-	9,600	No	-	-	TBD	No	
<b>subtotal</b>							<b>57,400</b>						
<b>Non-Residential Projects</b>													
01	28	Austin Village Phase III	C	Permit	8/18/08	-	23,702	Not completed	-	-	Indian Trail	Yes	
02	95	Cahill Office Park	C	Permit	2/12/08	-	1,100	Yes	-	-	Indian Trail	Yes	
03	113	Carrington Square Office Park	C	Permit	6/20/08	-	7,600	No	-	7,600	Waxhaw	Yes	
04	140	CHS Cureton-Waxhaw	C	Permit	set - 10/18/07	-	27,500	Yes	-	-	Waxhaw	Yes	
05	245	Fieldstone Farms Amenity	Y	Permit	11/17/06	-	700	Yes	-	-	Indian Trail	Yes	
06	324	Holly Park Commercial (Ph. 3A&3B)	C	Permit	09/26/08	-	10,000	Yes	-	-	Indian Trail	Bd Apr	
07	-	Jackson Station	C	Permit	04/05/02	-	19,442	Yes	-	-	Waxhaw	Yes	
08	366	Lake Park Sewer Extension A,B,G	Y	Permit	-	-	9,175	No	-	9,175	County	PUD	
10	408	Lowes of Waxhaw	C	Permit	03/28/07	-	26,915	Yes	-	-	Waxhaw	Yes	
11	474	Newtown Market	C	Permit	04/18/08	-	2,076	Yes	-	-	County	SUP	
12	491	Old Hickory Industrial Park	Y	Permit	02/27/07	-	5,205	Yes	-	-	Indian Trail	Yes	
13	-	Rea Road Development	C	Permit	01/12/04	-	14,699	Yes	-	-	County	PUD	
14	-	Rea Road Retail Ph II	C	Permit	08/02/05	-	23,040	No	-	23,040	County	PUD	
15	629	Shoppes at Wesley Chapel 2	C	Permit	05/12/08	-	5,641	Yes	-	-	Wesley Chapel	CUB2	
16	679	Sun Valley Commons Ph II	Y	Permit	10/19/07	-	17,467	Yes	-	-	Indian Trail	Yes	
17	681	Sun Valley Retail Center	C	Permit	06/30/04	-	1,500	Yes	-	-	Indian Trail	Yes	
18	-	The Grove	C	Permit	04/25/06	-	27,878	Yes	-	-	Stallings	Yes	
19	734	Union West Business Park	Y	Permit	02/12/98	-	603	Yes	-	-	Stallings	Yes	
20	751	Village Commons @ Wesley Chapel 2	C	Permit	10/24/05	-	8,273	Yes	-	-	Wesley Chapel	CUB2	
21	752	Village Commons @ Wesley Chapel I	C	Permit	10/20/08	-	36,084	Not completed	-	-	Wesley Chapel	CUB2	
22	-	Waxhaw Commons	C	Permit	set - 5/3/2007	-	3,250	Yes	-	-	Waxhaw	Yes	
23	773	Waxhaw Medical Center	C	Permit	set - 12/18/07	-	2,188	Yes	-	-	Waxhaw	Yes	
24	774	Waxhaw Park Shopping Center	C	Permit	set - 6/16/08	-	1,500	Yes	-	-	Waxhaw	Yes	
25	-	Sun Valley Commons Phase I	Y	Permit	08/23/05	-	39,618	Yes	-	-	Indian Trail	Yes	
<b>subtotal</b>							<b>315,156</b>						
<b>Residential Projects</b>													
01	10	Anklin Forrest	C	Permit	07/11/05	179	95	23,750	Yes	-	-	Waxhaw	Yes
02	11	Annandale	Y	Permit	06/10/05	181	51	12,750	Yes	-	-	Indian Trail	Yes
03	-	Anney	C	Septic	01/02/09	49	49	12,250	No	49	12,250	Weddington	Yes
04	12	Anniston Grove	C	Septic	03/02/04	86	55	13,750	Yes	-	-	County	Yes
05	-	Ashcroft	Y	Permit	02/27/92	-	8	2,000	Yes	-	-	Indian Trail	Yes
06	36	Bard Property	C	Permit	07/06/09	16	16	4,000	No; permit exp.	16	4,000	Weddington	Yes
07	37	Barrington Ridge	C	Permit	12/06/04	153	78	19,500	Yes	-	-	Waxhaw	Yes
08	51	Bicket Ridge	Y	Permit	02/17/05	81	20	5,000	Yes	-	-	County	Yes
09	56	Blanchard Estates - water only	C	Septic	03/28/07	6	6	1,500	No	6	1,500	County	No
10	60	Bonner Oaks Estates - water only	C	Septic	09/13/07	10	10	2,500	Yes	-	-	Weddington	Yes
11	61	Bonterra (All Phases)	Y	Permit	7/3/03 & 11/19/03	454	255	63,750	Yes	-	-	Indian Trail	Yes
12	68	Brandon Oaks	C	Permit	05/19/05	949	104	26,000	Yes	-	-	County	Yes
13	73	Briarcrest North Phase 1	C	Permit	09/21/05	82	48	12,000	Yes	-	-	County	Yes
14	74	Briarcrest North Phase 2	C	Permit	09/23/05	70	42	10,500	Yes	-	-	County	Yes
15	84	Bromley	C	Permit	05/22/07	121	115	28,750	Not completed	45	11,250	Weddington	Yes
16	96	Callonwood	C	Permit	03/07/00	157	61	15,250	Yes	-	-	Indian Trail	Yes
17	-	Chatelaine	C	Permit	12/08/03	-	18	4,500	Yes	-	-	County	Yes
18	128	Chatsworth	C	Permit	12/02/04	37	12	3,000	Yes	-	-	County	Yes
19	134	Chestnut Place	C	Permit	12/27/05	45	29	7,250	Yes	-	-	Stallings	Yes
20	165	Crane Valley	C	Permit	02/23/06	108	1	250	Yes	-	-	County	Yes
21	172	Crismark - water only	Y	Septic	3/14/02 & 9/21/01	986	391	97,750	Not completed	51	12,750	Indian Trail	Yes
22	173	Crooked Creek Estates	Y	Permit	02/15/05	89	26	6,500	Yes	-	-	County	Yes
23	176	Crossbridge - water only	Y	Septic	08/13/03	26	3	750	Yes	-	-	County	Yes
24	-	Crown Estates at Lochaven	C	Septic	06/07/07	19	19	4,750	No	19	4,750	Weddington	Yes
25	183A	Cureton (total for all phases)	C	Permit	4/13/2006	724	366	91,500	Not completed	8	2,000	Waxhaw	Yes
26	195	Deerstyne Comm. (Garmons Cross.)	C	Permit	04/25/06	60	57	14,250	Not completed	59	14,750	Indian Trail	Yes
27	229	Ezzell Hill	C	Permit	12/05/06	55	52	13,000	Not completed	13	3,250	County	Yes
28	230	Ezzell Valley	C	Permit	08/07/08	103	103	25,750	No	103	25,750	Marvin	No
29	230A	Fincher Valley	C	Permit	10/13/03	91	4	1,000	Yes	-	-	County	Yes
30	234	Fairhaven Phase 1	Y	Permit	09/07/05	368	166	41,500	Yes	-	-	Stallings	Yes
31	-	Fairhaven Phase 2	Y	Permit	08/07/08	15	15	3,750	No	15	3,750	Stallings	Yes
32	238	Falcon Place	C	Permit	04/19/06	37	37	9,250	No	37	9,250	Weddington	Yes
33	244	Fieldstone Farm Subdivision	Y	Permit	11/17/06	501	285	71,250	Not completed	193	48,250	Indian Trail	Yes
34	-	Gardens on Providence	C	Permit	10/28/03	-	2	500	Yes	-	-	Weddington	Yes
35	-	Grayson Park Subdivision	C	Permit	01/17/02	-	70	17,500	Yes	-	-	County	Yes
36	-	Green Meadows 2nd Avenue	C	Permit	03/13/01	5	20	5,000	Yes	-	-	Indian Trail	Yes
37	-	Hadley Meadows	C	Permit	04/30/04	-	19	4,750	Yes	-	-	Weddington	Yes
38	298	Harrison Park	C	Permit	09/19/01	-	7	1,750	Yes	-	-	Waxhaw	Yes
39	318	Highgate	C	Permit	4/7/00 & 12/8/04	235	57	14,250	Yes	-	-	Weddington	Yes
40	-	Hollister	C	Permit	07/16/04	205	158	39,500	Yes	-	-	Weddington	Yes
42	-	Innesbrook	C	Permit	01/21/03	-	2	500	Yes	-	-	Marvin	Yes
43	-	Jackson Ridge S/D	C	Permit	10/12/00	-	1	250	Yes	-	-	Waxhaw	Yes
44	-	Jacobs Pointe	Y	Permit	11/19/99	-	1	250	Yes	-	-	Indian Trail	Yes
45	-	Longford Village	Y	Permit	08/26/08	5	5	1,250	Yes	-	-	Indian Trail	Yes
46	355	Kings Grant	Y	Permit	06/09/04	19	8	2,000	Yes	-	-	Wesley Chapel	Yes

Ref.	Proj. ID	Project/Development	River Basin C-Catawba Y-Yadkin	Sewer Conveyance	Water Permit Approval Date	for Residential Est. Number of Units (@ Build- Out)	for Residential Est. Remaining Units (as of Aug. 2009)	Water Allocation (gpd)	Infrastructure Installed	Lots with no infra- structure (as of July 2009)	Flow Assoc. with no infra- structure (as of July 2009)	Jurisdiction	Land Use Approval	
47	-	Kingston on Providence	C	Permit	04/27/95	-	4	1,000	Yes	-	-	Waxhaw	Yes	
48	363	Lake Forest Preserve	C	Permit	6/6/2005	211	71	17,750	Not completed	64	16,000	Weddington	Yes	
49	-	Lake Park Phases	Y	Permit	07/10/00	-	10	2,500	Yes	-	-	County	Yes	
50	368	Lake Park Town Center, Phase 3	Y	Permit	10/19/92	120	38	9,500	Yes	-	-	County	Yes	
51	-	Laurel Creek	Y	Permit	08/02/02	-	18	4,500	Yes	-	-	Indian Trail	Yes	
52	386A	Lawson (total for all phases)	C	Permit	10/23/07	589	259	64,750	Not completed	239	59,750	Waxhaw	Yes	
53	403	Longview (all phases)	C	Permit	1/22/02 & 6/27/07	340	174	43,500	Not completed	12	3,000	County	Yes	
54	420A	Marvin Creek (all phases)	C	Permit	06/29/05	360	12	3,000	Yes	-	-	Marvin	Yes	
55	427	McGee Valley	C	Permit	05/05/04	99	39	9,750	Not completed	6	1,500	County	Yes	
56	443	Millbridge	C	Permit	4/24/06,11/15/06, 6/27/07,6/27/07,6/ 27/07,10/24/07,1/ 14/08	1087	1013	253,250	Not completed	574	143,500	Waxhaw	Yes	
57	-	Oak Brook - water only	C	Septic	08/01/08	47	47	11,750	No, self help	-	-	County	Yes	
58	501	Park Grove Meadows, Sayebrook II	Y	Permit	07/08/08	15	15	3,750	Yes	-	-	County	Yes	
59	520	Ponds at Brandywine - water only	Y	Septic	03/04/08	40	40	10,000	No	40	10,000	County	Yes	
60	-	Poplar Glen	C	Permit	09/14/93	-	5	1,250	Yes	-	-	County	Yes	
61	531	Potters Creek Estate - water only	C	Septic	09/08/06	22	22	5,500	Yes	-	-	Weddington	Yes	
62	-	Prescot Residential	C	Permit	04/26/05	-	105	26,250	Yes	-	-	Waxhaw	Yes	
63	539	Prestwick	C	Permit	04/27/06	101	12	3,000	Yes	-	-	County	Yes	
64	544	Providence Downs	C	Permit	12/29/01	327	6	1,500	Yes	-	-	County	Yes	
65	545	Providence Downs South	C	Permit	06/22/04	62	18	4,500	Yes	-	-	County	Yes	
66	550	Providence Grove	C	Permit	04/05/04	145	20	5,000	Yes	-	-	Waxhaw	Yes	
67	566	Quintessa	C	Permit	06/25/02	89	43	10,750	Yes	-	-	Wesley Chapel	Yes	
68	-	Ridgefield Ph. II	C	Permit	03/22/96	-	10	2,500	Yes	-	-	County	Yes	
69	587	Rosehill	C	Permit	03/10/04	47	13	3,250	Yes	-	-	Weddington	Yes	
70	597	Sarsfield - water only	C	Septic	08/19/05	225	200	50,000	Yes	-	-	County	Yes	
71	615	Shadow Lake, Spring Creek	C	None	08/27/08	48	48	12,000	No	48	12,000	County	Yes	
72	619	Shannon Vista	C	Permit	02/04/04	182	98	24,500	Yes	-	-	County	Yes	
73	622	Sheridan Phase I	C	Permit	08/24/05	159	159	39,750	Not completed	57	14,250	Indian Trail	Yes	
74	623	Sheridan Phase II	C	Permit	09/14/06	86	61	15,250	Not completed	37	9,250	Indian Trail	Yes	
75	-	Skycroft	C	Permit	05/19/04	-	142	35,500	Yes	-	-	County	Yes	
76	636	Smith Field Subdivision	Y	Permit	07/29/05	68	16	4,000	Yes	-	-	Unionville	Yes	
77	650	St. John's Forest	C	Permit	08/25/06	93	93	23,250	Yes	-	-	County	Yes	
78	-	St. John's Forest 4B	C	Permit	01/18/07	5	5	1,250	No	5	1,250	County	Yes	
79	-	St. John's Forest 4C	C	Permit	05/12/08	10	10	2,500	No	10	2,500	County	Yes	
80	-	Stonebridge Parcel 4	C	Permit	06/06/03	65	22	5,500	Yes	-	-	County	Yes	
81	664	Stonebridge Parcel 5	C	Permit	04/11/06	46	46	11,500	No	46	11,500	County	Yes	
82	-	Stonebridge Parcel 6	C	Permit	07/22/04	-	57	14,250	Yes	-	-	County	Yes	
83	-	Stonebridge Parcel 7 & 9	C	Permit	03/07/07	125	125	31,250	No	125	31,250	County	Yes	
84	-	Stonebridge Parcel 8	C	Permit	10/19/04	42	19	4,750	Yes	-	-	County	Yes	
85	671	Stratford Hall	C	Permit	10/25/01	34	16	4,000	Yes	-	-	Weddington	Yes	
86	675	Sugar Magnolia Estates - water only	C	Septic	08/28/08	12	12	3,000	No	12	3,000	Weddington	Yes	
87	685	Taylor Glen	C	Permit	06/22/04	511	45	11,250	Yes	-	-	Indian Trail	Yes	
88	688	The Chimneys of Marvin	C	Permit	07/25/05	283	137	34,250	Yes	-	-	County	Yes	
89	695	The Grove	C	Permit	04/25/06	15	15	3,750	Yes	-	-	Stallings	Yes	
90	699	The Oaks at Camden - water only	Y	Septic	02/04/08	5	5	1,250	Yes	-	-	County	Yes	
91	-	The Retreat	C	Permit	06/13/07	-	9	2,250	Yes	-	-	Weddington	Yes	
92	710	The Woods	C	Septic	11/19/07	200	200	50,000	No	200	50,000	Weddington	Yes	
93	-	Tuscany 1A	C	Permit	08/22/08	17	17	4,250	Not completed	9	2,250	County	Yes	
94	725	Tuscany Phase 2B	C	Permit	03/09/07	74	74	18,500	Yes	-	-	County	Yes	
95	726	Tuscany Phase 2A	C	Permit	09/26/05	62	48	12,000	Yes	-	-	County	Yes	
96	731	Twelve Oaks	C	Permit	04/21/06	24	20	5,000	Yes	-	-	County	Yes	
97	-	Victoria Lake	C	Permit	12/03/03	-	10	2,500	Yes	-	-	County	Yes	
98	757	Wadsworth	C	Permit	08/23/04	13	10	2,500	Yes	-	-	Indian Trail	Yes	
99	758	Wadsworth Phase 2	C	Permit	01/18/06	13	10	2,500	Yes	-	-	Indian Trail	Yes	
100	778	Waybridge (Eaglechase) - water only	C	Septic	06/27/05	45	14	3,500	Yes	-	-	Weddington	Yes	
101	-	Weddington Forest	C	Permit	11/04/04	-	2	500	Yes	-	-	County	Yes	
102	-	Weddington Heights	C	Permit	07/16/01	-	15	3,750	Yes	-	-	Weddington	Yes	
103	792	Weddington Trace Subdivision	C	Permit	9/13 & 12/20, 04	238	140	35,000	Not completed	37	9,250	County	Yes	
104	802	Wesley Chase (Laney Subdivision)	C	Permit	11/01/05	30	30	7,500	Not completed	26	6,500	Wesley Chapel	Yes	
105	-	Wilkerson Farms	C	Permit	05/28/02	-	7	1,750	Yes	-	-	County	Yes	
106	823	Williamsburg	C	Permit	08/06/01	63	44	11,000	Yes	-	-	Weddington	Yes	
107	-	Willow Creek	C	Permit	07/17/01	-	37	9,250	Yes	-	-	County	Yes	
108	843	Woodcliff	C	Permit	03/09/07	10	10	2,500	Yes	-	-	Marvin	Yes	
109	851	Worthington - water only	C	Septic	07/09/07	13	7	1,750	Yes	-	-	Unionville	Yes	
110	854	Wyndham Hall Plantation	C	Permit	07/21/04	77	14	3,500	Yes	-	-	Marvin	Yes	
<b>subtotal</b>								<b>6,990</b>	<b>1,747,500</b>		<b>2161</b>	<b>580,065</b>		
<b>Subtotal - Identified Projects with Water Permits</b>									<b>2,120,000</b>					
<b>Residential Reserve - One Taps<sup>1</sup></b>							<b>320</b>	<b>80,000</b>						
<b>Self Help Taps<sup>2</sup></b>								<b>47,000</b>						
<b>Non-Residential/Government Facility - Reserve Allocation<sup>3</sup></b>								<b>143,000</b>						
<b>Future Health and Safety Projects (Reserve)<sup>4</sup></b>								<b>10,000</b>						
<b>TOTAL ALLOCATION</b>								<b>2,400,000</b>						
<b>Notes</b>														
1 Assume allocation is estimated for 4 years w/approximately 80 residential accounts added per year, with a baseline date of August 2009.														
2 Current pending self-help projects represent total allocation of approximately 70,000 gallons per day.														
3 Allocation is limited to ≤ 20,000 gpd per project.														
4 Reserve allocation for health and safety based on 10 residential taps per year for 4 years.														
									<b>Self Help Projects</b>					
									Oakbrook See 57 Above					
									Wellington Woods I		7,000			
									Polk Mountain		11,000			
									Dodge City		6,500			
									Lake Providence East		4,500			
									Greyland		8,750			
									Wellington Woods II and III		9,000			
											46,750			