

# SHELBY COUNTY WATER SERVICES

## WATER RESOURCES CONSERVATION AND EMERGENCY PLAN

Shelby County Water Services' Plan Developed and Implemented: May, 2007  
2017 Plan Updated and Adopted through Shelby County Commission: January, 2017  
Plan Implementation: February 1, 2017

## **PREFACE**

The purpose of this document is to provide a plan for necessary steps to take when water resource availability, whether raw water from the river or finished water for the distribution system, becomes hampered through natural causes (i.e. drought or other types of natural disasters) or due to mechanical/electrical failures within the system. The plan is intended to provide guidance for both retail customers and wholesale customers on water usage during those times of possible water storages.

## **I. SYSTEM INFORMATION**

Shelby County Water Services (SCWS) has two (2) sources of water supply; the Shelby County South Water Treatment Plant (PWSID 1671) and purchase water from the Talladega/Shelby Water Treatment Plant (PWSID 1261). Both of these water treatment plants withdraw water from the Coosa River/Lay Lake project operated by Alabama Power Company. SCWS currently serves (+/-) 11,800 retail customers, an approximate population of 35,400. These retail customers consist of both residential and commercial customers. The average daily usage between October and April is approximately 5.3 MGD and the average daily usage between May and September is approximately 7.5 MGD with a daily maximum usage of 13.7 MGD.

SCWS also has three (3) primary wholesale customers. They are the City of Pelham Water Works, the Alabaster Water Board, and Sterrett/Vandiver Water. In addition to these customers, SCWS has emergency connections to supply water to Leeds Water Works, Birmingham Water Works Board, and Vincent Water. SCWS has emergency connections with Birmingham Water Works Board and Columbiana Water Board to receive water into the system.

SCWS is located in Region 3 as defined in the Alabama Drought Management Plan dated May 22, 2013. SCWS' service area is located in the northeastern part of Shelby County along US Hwy 280 from the eastern town limits of Westover going west along US Hwy. 280 to AL Hwy. 119. It covers areas both north and south of US Hwy. 280. The service area includes the town of Westover, the city of Chelsea, a small portion of the city of Hoover, and several unincorporated parts of Shelby County. A map of the service area is provided in Appendix A of this plan.

## **II. WATER RESOURCE CONSERVATION ACTIONS**

### *Definitions:*

Even-numbered addresses means the house/service address, box number or rural route ends with the numbers 0,2,4,6,8 or the letters A-M, or at locations with no address at the even-numbered side of the street. Post Office Box numbers are not included.

Odd-numbered addresses means the house/service address, box number or rural route ends with the numbers 1,3,5,7,9 or letters N-Z, or at locations with no address at the odd-numbered side of the street. Post Office Box numbers are not included.

## **LEVEL 1 WATER RESOURCE ADVISORY**

Through various means of media publications (Print/online media, TV/radio, and social media) and information via billing messages, door hangers and road signs; SCWS will request customers to voluntarily conserve water. Listed below are some suggestions, with several other resources available on different websites through various web searches.

### **Residential/Commercial Customers**

- Reduce watering of lawns and landscape
- Do not hose down sidewalks or driveways
- Verify and repair any leaks in homes or businesses
- Avoid flushing toilets unnecessarily
- Don't let the water run while brushing your teeth, shaving, or washing your face
- Take showers instead of tub baths
- Wash only full loads of dishes and laundry. Use appropriate water levels and load size options for both.
- Minimize filling pools back up
- Wash vehicles with an adjustable nozzle or sprayer that turns off when not in use
- Store drinking water in the refrigerator.

### **Wholesale Customers**

SCWS will also notify primary wholesale customers and request they implement voluntary water reduction for their customers in the same manner. Emergency wholesale customers shall be limited in amount available based on supplies needed to meet retail and primary wholesale customer demands first.

### ***Triggers for Level 1 Response:***

Any of the following may trigger this level response:

- Combined production of water treatment plants and distribution capacity consistently at 75% of operational capacity for 4 consecutive days and long range forecast shows continued weather related impact.
- Alabama Power Company request voluntary response in accordance with current withdrawal permit.
- For acute emergencies as deemed necessary by SCWS.

## **LEVEL 2 WATER RESOURCE WATCH**

Through various means of media publications (Print/online media, TV/radio, and social media) and information via billing messages, door hangers and road signs; SCWS will require its customers to follow the measures listed below, in addition to all of the suggested practices in Level 1 Response for voluntary water reduction.

### **Residential Customers**

- Residential customers shall follow a 2 day a week watering schedule for established lawns and landscape.
  - Even-numbered addresses will be allowed to water lawns and landscape on Mondays and Thursdays.
  - Odd-numbered addresses will be allowed to water lawns and landscape on Tuesdays and Fridays
- No watering will be allowed during the hours of 8:00 a.m. and 8:00 p.m. on each allowable watering day.
- Customers to wash cars with a sponge, bucket and a water hose with a shut-off nozzle.
- Watering hard surfaces (i.e. sidewalks, driveways, etc...) shall be prohibited except where there is a risk to public health and safety.
- Single family residential pools will be required to follow the conservation guidelines listed below:
  - Except for times of extremely high contamination levels (i.e. fecal accidents), do not bypass the filter and waste water to sanitary sewer or other sub-surface disposal systems.
  - Backwash filters only when necessary (according to pressure, not time...typically, 7-10 p.s.i. above the starting pressure). Do not leave the filter unattended while backwashing and stop backwashing once the water is clear in the sight glass.
  - Check for leaks and repair any that exist. Perform a “bucket test” on the pool to help determine if water loss is from a leak or from environmental factors (i.e., evaporation or splash out).
  - Plug the overflow line when the pool is in use to prevent surge water from flowing down the drain or onto the ground.
  - If possible, cover the pool when it is not in use to help prevent evaporation.
  - Limit the use of decorative water features (bubblers, fountains, waterfalls, etc.). Limit operation of water slides and mushrooms.
  - Decrease pool/spa heater temperatures to help lower evaporation.
  - Do not overfill the pool. Keep the water level no higher than 3 inches above the bottom of the skimmer opening. Remember to turn off the fill line after the correct water level has been reached.
  - Only wash off decks and walkways when they cannot be cleaned effectively by other means.

- A one-time draining and subsequent refilling of swimming pools is allowed only for repairs if conditions threaten the integrity of the pool and/or its supporting infrastructure.
- Keep all pool equipment maintained in accordance with manufacturer's recommendations. Have any leaks in the system promptly repaired.
- Exemptions:
  - Newly installed lawns and landscape will be exempt from the day of the week restrictions for the first 30 days after installation; however, such watering shall be limited to the minimum necessary, and no watering between 8:00 a.m. and 8:00 p.m. on each allowable watering day. After 30 days, outdoor watering shall be in accordance with the schedule established above. Documentation to verify the date of planting shall be made available upon request.
  - Irrigation for the purpose of watering in insecticides, fungicides and herbicides where such watering is required by the manufacturer or by federal, state or local law shall not be restricted by days of the week; however, such watering shall be limited to the minimum necessary, and no watering is to be conducted between 8:00 a.m. and 8:00 p.m.

## **Commercial Customers**

- Commercial customers shall follow a 2 day a week watering schedule for established lawns and landscape.
  - Even-numbered addresses will be allowed to water lawns and landscape on Mondays and Thursdays.
  - Odd-numbered addresses will be allowed to water lawns and landscape on Tuesdays and Fridays
- Exemptions
  - Golf Courses (See below)
  - Sod producers
  - Ornamental growers
  - Fruit & vegetable growers
  - Retail garden centers/Commercial nurseries
  - Hydro-seeding
  - Power-washing
  - Construction sites
  - Producers of food and fiber
  - Commercial car washes
  - Watering-in of pesticides and herbicides on turf
  - Community Swimming Pools (See below)
  - Athletic Fields (See below)
- Golf Courses that use SCWS water for irrigation purposes:
  - Watering of the first 9 holes shall be allowed on Mondays and Wednesdays and watering of the back 9 holes shall be allowed on Tuesdays and Thursdays. All 18 holes may be watered between 10:00 p.m. Saturday and 6:00 a.m. Sunday. Greens and tee boxes can be watered daily as needed.

- Community Swimming Pools
  - Check for leaks and repair any that exist. Perform a “bucket test” on the pool to help determine if water loss is from a leak or from environmental factors (i.e., evaporation or splash out).
  - Only wash off decks and walkways when they cannot be cleaned effectively by other means.
  - Normal operations of swimming pool shall work to obtain a 5% reduction in water usage. Instances where usage for acute public health and safety incidents will not be considered part of normal operations.
  - All pool filtration and recirculation equipment shall be inspected and maintained in accordance with manufacturer’s recommendation. Any leaks in the system shall be promptly repaired.
  - All bathrooms shall be routinely inspected for leaking toilets and sinks. Needed repairs shall be promptly made.
  - Equipment inspection records shall be kept by the owner of the pool and available for review upon request.
- Athletic Fields
  - Fields may be watered 3 days a week between the hours of 4:00 a.m. and 9:00 a.m. Days should correspond to planned activities so fields do not become hazardous to the health and safety of children and athletes by being too hard by virtue of a lack of water.
- Fire Hydrants
  - All fire departments operating in the service area will be prohibited from flow testing hydrants. Hydrants shall be used only for firefighting or flushing sewers for health protection purposes.

### **Wholesale Customers**

Primary wholesale customers will be contacted to implement mandatory water reductions similar to those listed above. Contractual obligations to each primary wholesale customer shall be reviewed and they shall be notified of any issues related to water availability. Emergency wholesale customers shall be limited in amount available based on supplies needed to meet retail and primary wholesale customer demands first.

### ***Triggers for Level 2 Response:***

Any of the following may trigger this level response:

- Combined production of water treatment plants and distribution capacity consistently at 85% of operational capacity for 4 consecutive days and long range forecast shows continued weather related impact.
- Alabama Power Company request mandatory response in accordance with current withdrawal permit.
- For acute emergencies as deemed necessary by SCWS.

## **LEVEL 3 WATER RESOURCE WARNING**

Through various means of media publications (Print/online media, TV/radio, and social media) and information via billing messages, door hangers and road signs; SCWS will require its customers to follow the measures listed below, in addition to all of the practices listed in the Level 1 and Level 2 Responses. Water conservation will be required by all residential, commercial, and wholesale customers.

Once the announcement is made moving to Level 3, the following rate structure will be implemented and customers will notice any increases due to this rate structure on the second (2<sup>nd</sup>) bill following the announcement. Door hangers will be used to communicate with customers concerning their usage in comparison to their March usage.

### **Residential and Commercial Customers**

For all water used by a water customer in a month that exceeds 1.75 times the usage by that customer for the monthly billing period that occurred in March, the conservation rate for the usage that exceeds that amount shall be billed at a multiple of 2 times the standard rate. This conservation rate shall remain in effect until further notice.

Should SCWS be mandated by an agency having jurisdiction to reduce withdrawals, all retail customers shall be required to reduce their consumption in accordance with that mandate. This may require lowering the amount of water each customer class may use from the above amount, depending on the requirements of the mandate.

For accounts that are established later than the billing period that occurred in March, the drought rate begins for monthly water usage that exceeds the following amounts:

- 1-1/2 inch or smaller meters—10,000 gallons per month.
- 2 inch meters—18,000 gallons per month
- 3 inch meters—40,000 gallons per month
- 4 inch meters—70,000 gallons per month
- 6 inch meters—158,000 gallons per month
- Greater than 6 inch meters—determined case by case.

For fire hydrant meters used for acceptable purposes, as determined by SCWS; all water will be billed at 2 times the standard rate. All such usage shall be approved by SCWS prior to each occurrence. Each occurrence shall be reviewed on a case-by-case basis.

In addition to the rate structure listed above, the following conservation measures shall be put in place.

- Customers will be allowed to water established lawns and landscape by hand only using a hose with a nozzle one (1) day per week

- No watering shall be allowed on Tuesdays, Wednesdays, Thursdays, Saturdays, and Sundays.
- No watering shall be allowed between 8:00 a.m. and 8:00 p.m.
- Golf courses using water from SCWS shall be permitted to water only greens and tees Mondays, Wednesdays, and Fridays, between the hours of 1:00 a.m. and 5:00 a.m.
- Athletic Fields may be watered on Wednesdays and Saturdays between 4:00 a.m. and 9:00 a.m. when determined that said fields are hazardous to the health and safety of children and athletes, by being too hard by virtue of a lack of water.
- Hotels and motels are requested to ask customers to reuse towels and sheets when possible.
- Vehicles may only be washed at commercial car washes, excepted as listed below in exemptions.
- Car wash fundraisers are prohibited

#### Exemptions

- Commercial Car Washing
  - Car Washes and Limousine services are permitted to operate under normal operations
  - Auto Dealers shall limit vehicle washing to only purchased vehicles
  - Body shops and car rental agencies shall limit vehicle washing to those vehicles that are delivered to customers.
  - Corporations and government agencies with fleet vehicles shall limit vehicle washing to the minimum amount necessary but not to exceed more than once per week.
- Outdoor water for New Lawns and Landscaping
  - New lawns and landscaping are exempt from the day of the week restrictions for the first 20 days after installation. However, such irrigation or hand watering shall be limited to the minimum necessary and shall not be conducted between the hours of 8:00 a.m. and 8:00 p.m.
  - After 20 days, customers will be required to water as noted above.
- Community Swimming Pools
  - Pools shall follow all guidelines given under the Level 2 category. They will not be allowed to drain and refill their pools unless it is necessary for repairs and/or public health is at risk. Minimum water should be used to maintain an adequate water level in the pools.
  - Pool operator shall keep all records of any repairs.
  - Pool operator shall coordinate all filling operations with SCWS prior to proceeding with work.
  - Usage for rate structure shall be based the usage from the first full meter reading cycle the pool is opened.
- Sod producers
- Ornamental growers
- Fruit and vegetable growers
- Retail garden centers/Commercial nurseries
- Hydro-seeding

- Power washing
- Construction sites
- Producers of food and fiber
- Watering in of pesticides and herbicides on turf

All exempted groups listed above shall restrict their water usage to the minimum amount necessary. All groups will be subject to the rate structure listed in this section.

### **Wholesale Customers**

Primary wholesale customers will not be allowed to exceed the daily maximum allowed usage by contract. SCWS shall require all primary wholesale customers to enact their conservation management plan that matches the requirements imposed on SCWS' retail customers. Should SCWS be given mandatory reductions from any agency having jurisdiction, those reductions will apply to the wholesale customers as well.

Emergency wholesale customers will not be allowed to receive any water during this period.

#### ***Triggers for Level 3 Response:***

Any of the following may trigger this level response:

- Combined production of water treatment plants and distribution capacity consistently at 95% of operational capacity for 2 consecutive days and long range forecast shows continued dry weather.
- An agency or entity having legal jurisdiction imposes mandates for mandatory water restrictions/reductions.
- Alabama Power Company request mandatory response in accordance with current withdrawal permit.
- For acute emergencies as deemed necessary by SCWS.

## **LEVEL 4 WATER RESOURCE EMERGENCY**

Through various means of media publications (Print/online media, TV/radio, and social media) and information via billing messages, door hangers and road signs; SCWS will require its customers to follow the measures listed below, in addition to all of the practices listed in the Level 1, Level 2 and Level 3 Responses. Water conservation will be required by all residential, commercial, and wholesale customers.

Once the announcement is made moving to Level 4, the following rate structure will be implemented and customers will notice any increases due to this rate structure on the second (2<sup>nd</sup>) bill following the announcement. Door hangers will be used to communicate with customers concerning their usage in comparison to their March usage.

### **Residential and Commercial Customers**

For all water used by a water customer in a month that exceeds 1.75 times the usage by that customer for the monthly billing period that occurred in March, the conservation rate for the usage that exceeds that amount shall be billed at a multiple of 4 times the standard rate. This conservation rate shall remain in effect until further notice. The usage structure listed in Level 3 for new accounts shall apply for this level response.

Should SCWS be mandated by any agency having jurisdiction to reduce withdrawals, all retail customers shall be required to reduce their consumption in accordance with that mandate. This may require lowering the amount of water each customer class may use from the above amount, depending on the requirements of the mandate.

Customers will be prohibited from outdoor watering, washing vehicles, cleaning outdoor surfaces, cleaning buildings, equipment, and machinery and operating ornamental fountains. All exemptions listed in Level 3 are hereby withdrawn for commercial outdoor water users. Under this level response, outdoor water use will only be allowed for instances where there is a risk to public health and only with the authorization from SCWS. All instances shall be considered on a case-by-case basis.

### **Wholesale Customers**

Primary wholesale customers will not be allowed to exceed the daily maximum usage allowed by contract. SCWS shall require all primary wholesale customers to enact their conservation management plan that matches the requirements imposed on SCWS' retail customers. Should SCWS be given mandatory reductions from any agency having jurisdiction, those reductions will apply to the wholesale customers as well.

Emergency wholesale customers will not be allowed to receive any water during this period.

### ***Triggers for Level 4 Response:***

- Combined production of water treatment plants and distribution capacity not allowing storage tanks to maintain a level and begin dropping for 2 consecutive days.
- An agency or entity having legal jurisdiction imposes mandates for mandatory water restrictions/reductions.
- Alabama Power Company request mandatory response in accordance with current withdrawal permit.
- For acute emergencies as deemed necessary by SCWS.

## **PLAN ADMINISTRATION**

SCWS' staff that will be responsible for sending and receiving information concerning voluntary and mandatory restrictions shall be in the following order.

### **Primary Contact:**

Water Services Manager: Michael Cain, P.E.

Main Office Phone Number: 205-670-6540

Cell Phone Number: 205-475-5329

Mailing Address: P.O. Box 10  
Columbiana, AL 35051

Email: [mcain@shelbyal.com](mailto:mcain@shelbyal.com)

### **Secondary Contact:**

Water Services Superintendent: Robert Barbin

Main Office Phone Number: 205-670-6540

Cell Phone Number: 205-288-1515

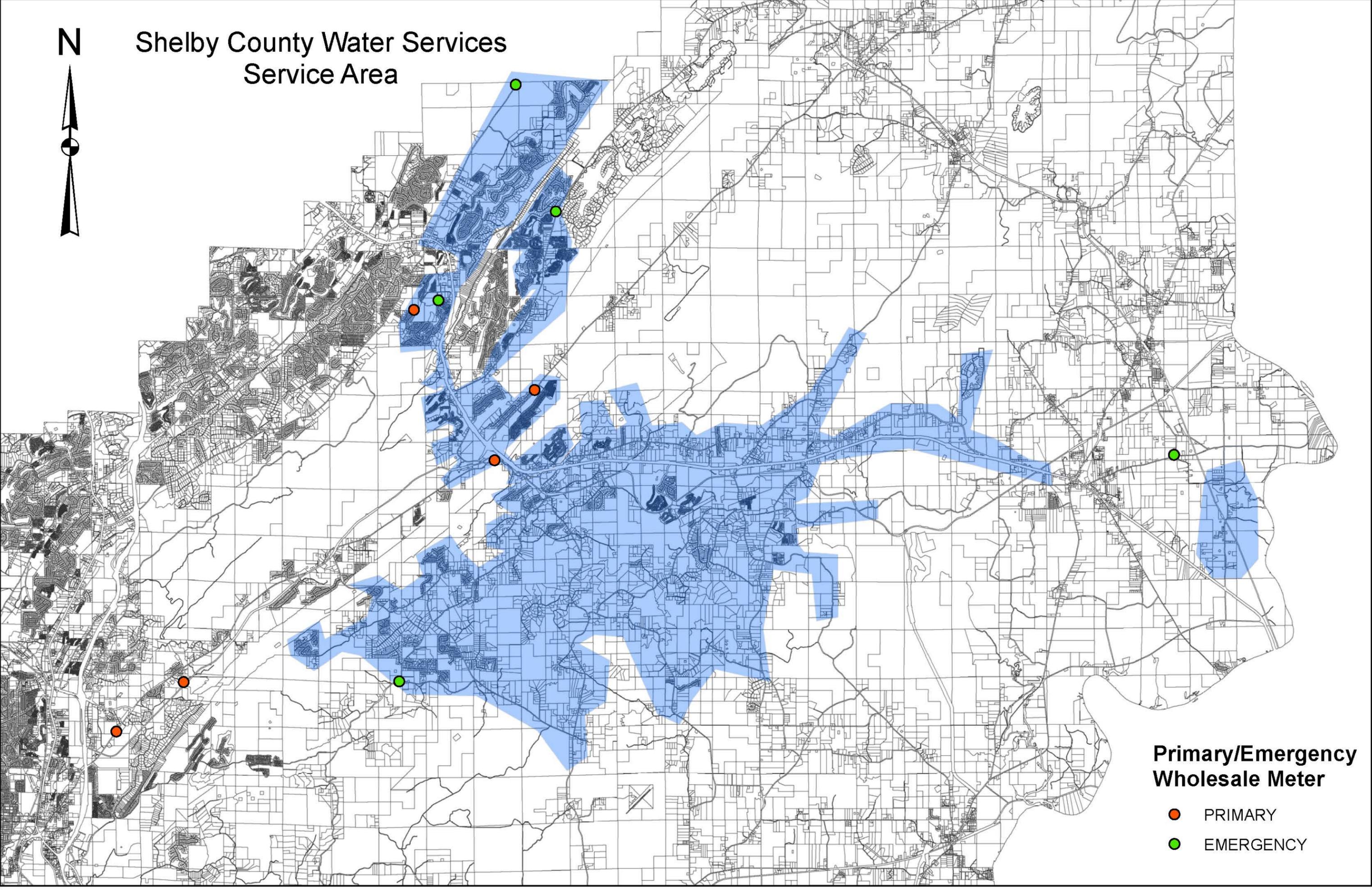
Mailing Address: P.O. Box 10  
Columbiana, AL 35051

Email: [rbarbin@shelbyal.com](mailto:rbarbin@shelbyal.com)

**APPENDIX A  
SERVICE AREA MAP**

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# Shelby County Water Services Service Area



## Primary/Emergency Wholesale Meter

- PRIMARY
- EMERGENCY