

RESOLUTION R2022-01

**A RESOLUTION OF THE CITY OF DAWSONVILLE
ADOPTION OF WATER CONSERVATION PLAN**

WHEREAS the City of Dawsonville realizes the need to update its water conservation plan to protect the natural resources of the City and comply with Georgia Environmental Protection Division guidelines for permitting groundwater withdrawals, and

WHEREAS the City has authorized the updated Water Conservation Plan for the City of Dawsonville dated February 2022,

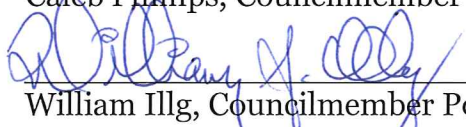
WE HEREBY RESOLVE to adopt the Water Conservation Plan for the City of Dawsonville dated February 2022, as prepared by Turnipseed Engineers.

THIS RESOLUTION was passed by a vote of 4 to 0 at a City Council Meeting held March 7, 2022.

MAYOR AND DAWSONVILLE CITY COUNCIL

By: 
Mike Eason, Mayor

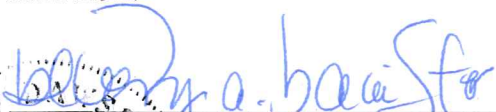

Caleb Phillips, Councilmember Post 1

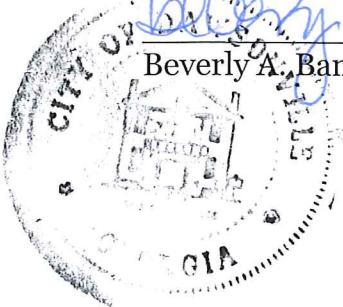

William Illg, Councilmember Post 2


John Walden, Councilmember Post 3


Mark French, Councilmember Post 4

ATTEST:


Beverly A. Banister, City Clerk



WATER CONSERVATION PLAN
FOR THE
CITY OF DAWSONVILLE

FEBRUARY 2022

PROJECT NO. 833.082

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Prepared by:



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Executive Summary

This updated Water Conservation Plan is prepared in accordance with requirements of Rule 391-3-2-.04 (11) and published guidelines of Georgia Department of Natural Resources. As the City of Dawsonville meets growing water demands of its customers, it must conserve and protect critical water resources of the Coosa River basin. The purposes of this plan are therefore to reduce lost and non-revenue water, establish programs for long term water demand management, and provide long range planning consistent with the Coosa-North Georgia Regional Water Plan.

I. System Management

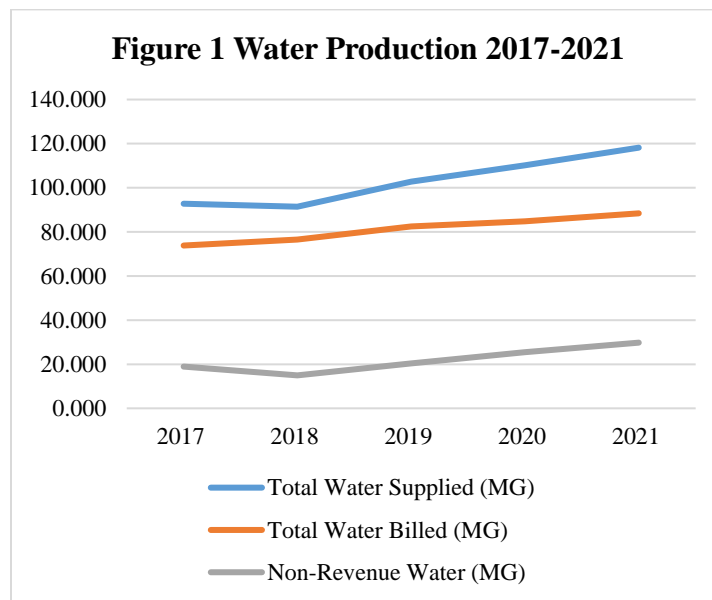
A. Existing Facilities, Production and Water Use

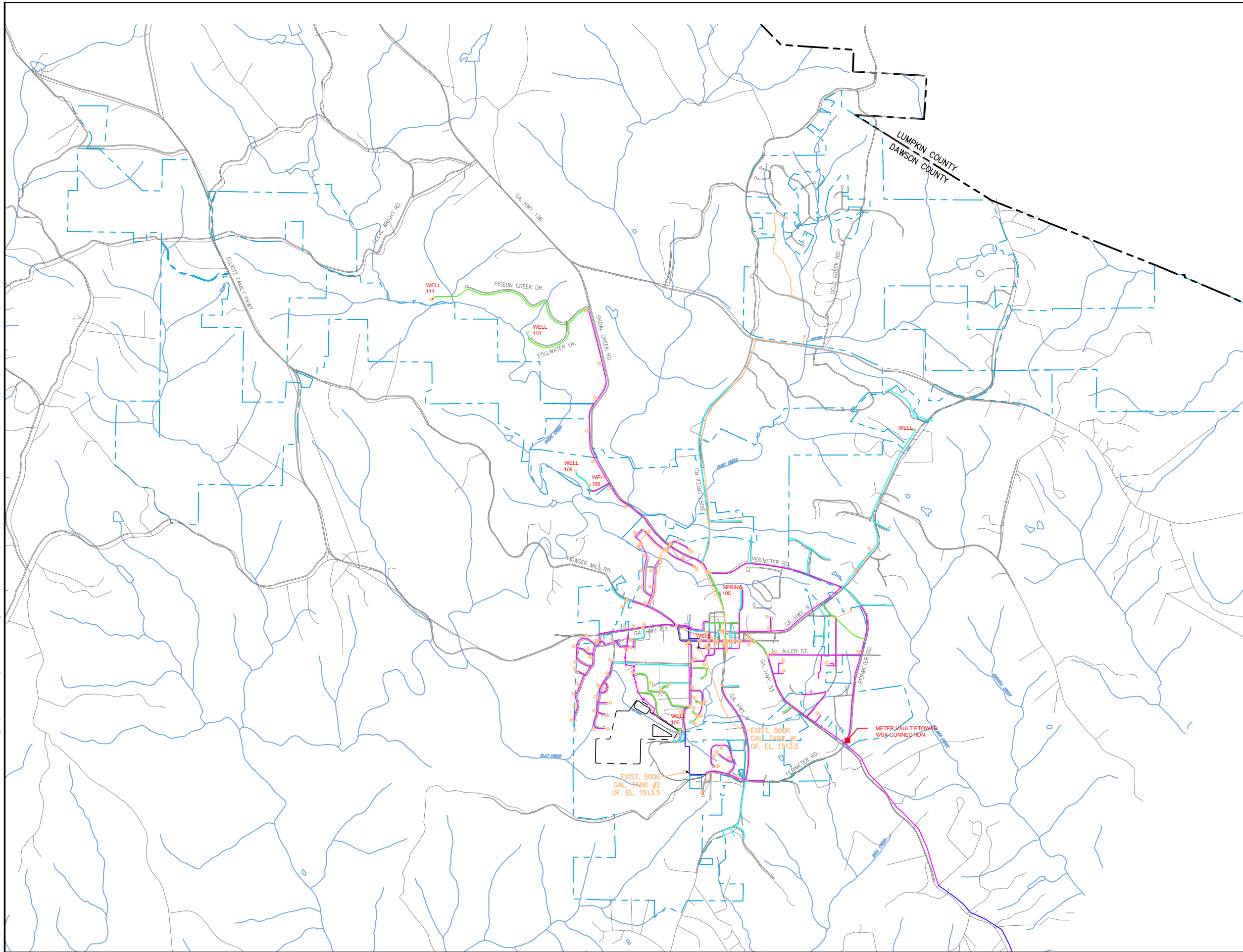
The City of Dawsonville water system consists of five groundwater wells, one spring, two elevated storage tanks and approximately 27 miles of 2-inch through 10-inch distribution lines. In addition to the existing system, the City has an emergency connection to the Etowah Water and Sewerage Authority water system. A municipal water system profile is included in the Appendix. A map of the water system is shown in Exhibit One on the following page.

Water production data from 2017 through 2021 is summarized in Table 1 and Figure 1.

Table 1 Water Production 2017-2021

<i>Year</i>	<i>Water Produced (MG)</i>	<i>Water Purchased (MG)</i>	<i>Total Water Supplied (MG)</i>	<i>Water Metered and Billed (MG)</i>	<i>Water Unmetered and Billed (MG)</i>	<i>Total Water Billed (MG)</i>	<i>Water Metered and Unbilled (MG)</i>	<i>Non-Revenue Water (MG)</i>	<i>Total Unmetered Water (MG)</i>
2017	77.694	15.065	92.759	73.809	0.000	73.809	0.125	18.950	18.825
2018	82.563	8.855	91.418	76.484	0.000	76.484	0.101	14.933	14.832
2019	102.809	0.000	102.809	82.468	0.000	82.468	0.107	20.341	20.234
2020	110.229	0.000	110.229	84.784	0.000	84.784	0.291	25.444	25.154
2021	118.179	0.000	118.179	88.406	0.000	88.406	0.663	29.772	29.110





LEGEND

- CITY / COUNTY LIMITS ---
- ROADS ---
- EXISTING WATER LINE (4" AND SMALLER) ---
- EXISTING WATER LINE (6") ---
- EXISTING WATER LINE (8") ---
- EXISTING WATER LINE (10" AND LARGER) ---
- EXISTING FIRE HYDRANT ●
- EXISTING VALVE ○
- EXISTING BOOSTER PUMP STATION □
- EXISTING MASTER METER □
- WELLS ■
- SPRING ■



GRAPHIC SCALE

CITY OF DAWSONVILLE, GEORGIA

WATER SYSTEM MAP

SCALE: AS SHOWN DATE: JANUARY 2022



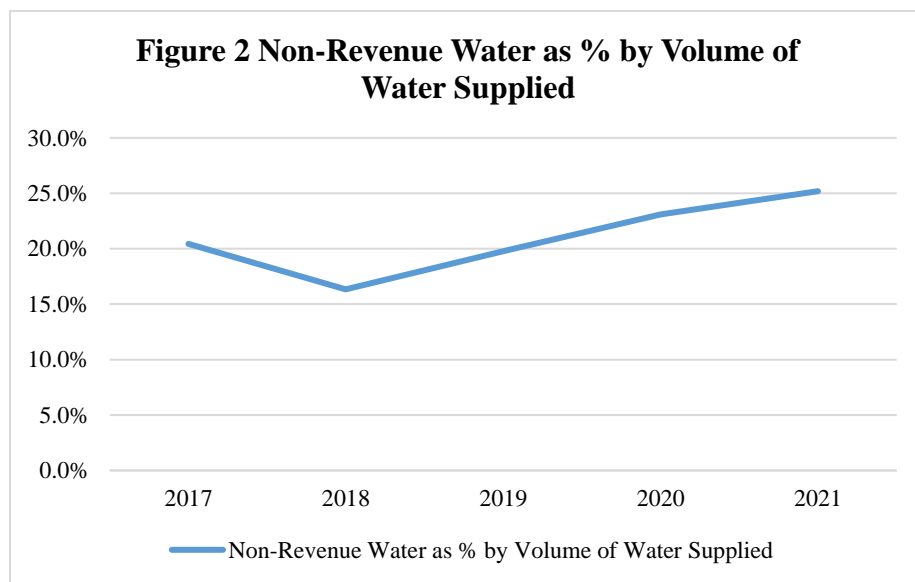
B. Non-Revenue Water Data

Prior to the 2020 Decennial Census, the US Census American Community Survey estimated the City population to be below 3,000. Water service population estimates were also below the threshold of 3,300 for annual water audits. Water audit reports are therefore not available currently. New estimates based on 2020 Census results, however, indicate the service population is now over 3,300, and water auditing procedures are planned to commence in 2022.

Non-revenue water data is shown in Table 2 and illustrated in Figure 2.

Table 2 Non-Revenue Water Summary, 2017-2021

<i>Year</i>	Water Supplied (MG/Year)	Billed Water (MG/Year)	Non-Revenue Water (MG/Year)	Non-Revenue Water as % by Volume of Water Supplied
<i>2017</i>	92.759	73.809	18.950	20.4%
<i>2018</i>	91.418	76.484	14.933	16.3%
<i>2019</i>	102.809	82.468	20.341	19.8%
<i>2020</i>	110.229	84.784	25.444	23.1%
<i>2021</i>	118.179	88.406	29.772	25.2%



As seen in Figure 2, the proportions of non-revenue water volumes to the volumes of water supplied have increased from 2017 through 2021. Although this would appear to be a negative trend, the increase reflects improved metering during the period. An automated meter reading (AMR) system was completed in 2017, improving consumption data. Because production meters at the wells and the spring were not as accurate, decreasing non-revenue water numbers in 2017 and 2018 are misleading. All production meters were replaced with new ultrasonic meters during 2019. Improved production metering during 2019 and in following years, in combination with accurate consumption metering, are reflected by an increase in the proportion of non-revenue water recorded. Improved data is critical for useful water auditing and progress toward the goal of reducing real water losses.

Non-revenue water represented about 24% of the water supplied to the system in 2020 and 2021, when new production meters were in use. All billed water is metered. As seen in Table 1, unbilled metered accounts only represented about 0.5% of water supplied in 2020 and 2021. Unmetered water accounted for almost all non-revenue water during the same period.

II. Water Conservation Measures

To address local needs and regional goals, City water management practices are consistent with the Coosa-North Georgia Regional Water Plan. The updated water conservation plan and City ordinances address high priorities identified in the regional water plan. The following initiatives implement water supply management practices prescribed by the regional water plan to reduce real and apparent water losses.

A. Leak Detection and Elimination

Leaks may be detected by accounting practices, field observation, pressure problems and other methods.

1. Accounting Practices: A calculation of lost water should be performed monthly based on the following equation:

$$\% \text{Lost} = \frac{(\text{VolProduced} - \text{VolSold} - \text{VolFlushed})}{\text{VolumeProduced}} (100)$$

*volume produced = pumped plus purchased

2. AMR Notifications: The AMR system notifies the City of potential customer leaks for resolution. While leaks on the customer side of the meter are not “non-revenue” usage, identifying customer leaks reduces unnecessary demands and requests to adjust bills resulting from leaks.
3. Field Observations: Field inspections are performed along line routes regularly by City personnel trained to identify sites with a high probability for leaks. The public may also report possible leaks. Priority for field investigation is based on public reports, losses indicated by accounting, repair history, and the age, material, and known conditions of lines. Leaks found are repaired immediately.
4. Pressure Problems: Pressures and tank levels in the system are monitored by a supervisory control and data acquisition system (SCADA) and may be

tested in specific locations as needed. Unusual flow and pressure readings are investigated and addressed.

5. SCADA Operation: The City monitors tank levels with its SCADA system on a constant basis to provide efficient use of storage, maintain water quality, prevent tank overflows, and control pumping rates.
6. Repair Inventory: An inventory of leaks and repairs is maintained to reduce the time required to find possible location of new leaks and to prioritize line replacements.
7. Water line replacement: Repair history, field inspection, operational data, and customer complaints are used to plan and prioritize point repairs, line replacements, and additional lines.
8. Flushing Program: Periodic flushing of lines removes mineral deposits to maintain adequate flow, pressure and water quality.

B. Availability of Accurate Maps

Accurate maps of the water system are maintained and available for viewing at City Hall and the Public Works Department. The City has a GIS map of the water system.

C. Meter Maintenance, Testing, Calibration, and Testing

In 2017, the City completed an automated meter reading (AMR) system, including complete service meter replacement. Billing software is integrated with reading software. The AMR system identifies most malfunctioning meters and allows the City to monitor cumulative through-put of individual meters. Meters are replaced when problems occur. The City is considering a sampling and testing procedure for customer meters in the future.

The Etowah Water and Sewerage Authority calibrates the master meter annually at the point from which the City purchases water from the Authority. Octave

ultrasonic meters were installed at the City's wells and spring in 2019. The representative for Master Meter stated these meters cannot be field calibrated and are intended to be replaced at 10 years.

D. Recycling and Reuse of Treated Wastewater

The City does not recycle backwash at the two wells with filters. Sewage from the City is treated and disposed in a land application system. Treated wastewater is not recycled currently.

E. Upgrades of Equipment

The City promptly repairs or replaces equipment not operating satisfactorily. As noted previously, production meters were replaced in 2019, and an AMR system with new meters was completed in 2017. Water storage tanks are rehabilitated on a schedule. Planned water system improvements include a new well and water line extensions.

F. Enforcement of Plumbing Ordinances

Chapter 102 of the City Code of Ordinances adopts the Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments for high-efficiency plumbing fixtures and fittings). The City enforces the code through permitting, inspection, and fines.

G. Prevention of Unauthorized and Excessive Water Use

Chapter 14 of the City Code of Ordinances prohibits unauthorized connections and use of unmetered water. The Dawson County Sheriff's Office may be informed to investigate suspected water theft, such as unauthorized use of water from hydrants. Violations may be referred to the appropriate court.

H. Selection Criteria for Conservation Measures

The City works with its consulting engineers in planning needed capital improvements. City personnel prioritize improvements in phases according to urgency, benefits, costs, availability of funding, and effects on user rates. Improvements, such as the AMR system and replacement of production meters, have had immediate benefits for water conservation.

Many conservation measures, such as identifying and repairing leaks and maintenance of production and customer meters are incorporated in standard operating procedures.

I. Potential Barriers to Implementation of Water Conservation Measures

There are no known legal barriers to implementing water conservation measures or improving efficiency of the water system. The City government has legal authority and has demonstrated commitment to implement beneficial policies.

The most significant barriers are financial. Costs of improvements, as well as all operational and maintenance costs, are supported by water customers. Capital improvements must therefore be affordable for all customers, including residents with low incomes. This requires careful prioritization and phasing of improvements. Many conservation measures are incorporated into standard operating procedures. Most routine measures to improve efficiency decrease costs of operating and therefore benefit water customers.

J. Other Water Conservation Efforts for Further Analysis

After the City has obtained results from future water audits, a useful step may be to establish an economic level of leakage (ELOL) to represent the ultimate, cost-effective goal for efficiency. This goal may be used in coordination with the City's capital improvements plan and water audit results to prioritize and determine the feasibility of water conservation activities, maintenance initiatives and construction projects.

III. Drought Contingency Plan

A. Drought Condition Indicators

Conditions which reduce the normal supply of water and pressure excessively may be considered either a drought or emergency condition to compel the City of Dawsonville to put its priority use system into effect. These conditions may be any one or more of the following.

1. High water demand
2. Drought and excessive heat conditions
3. Low water levels or reduced recovery in wells
4. Other supply interruptions
5. Power failures
6. Water main breakages or failures
7. A drought declaration by the Director of the Georgia Environmental Protection Division
8. Other emergencies and *force majeure*

As a policy the City will declare a drought response consistent with and in conjunction with the Etowah Water and Sewerage Authority.

B. Potable Water Use Priorities Program

1. During a drought condition or emergency, the City will implement a priority use program for water usage. The general ranking of uses in decreasing order of importance is:
 - a. Emergency facilities for essential life support
 - b. Public health, necessity and safety
 - c. Domestic and personal uses, including drinking, cooking, washing, sanitation and health
 - d. Farm uses
 - e. Industrial and commercial uses
 - f. Construction activities

- g. Other uses such as lawn irrigation, non-commercial car washing, and garden watering
- h. Outdoor recreational uses, swimming pools
- i. Line flushing, except as necessary for public health or to maintain water quality
- j. Street cleaning and hydrant testing

Schools and similar facilities may be temporarily closed, if necessary.

- 2. The priority use system will be put into effect only during water shortage periods such as droughts and maintenance problem periods. The principal causes for establishing water use priorities include, but are not limited to the indicators listed in Section A.
- 3. The following conditions are included in the City's priority use program:
 - a. The City reserves the right to discontinue its service without notice for the following reasons:
 - i. To prevent fraud or abuse
 - ii. Consumer's willful disregard of municipality rules
 - iii. Emergency repairs
 - iv. Insufficiency of water supply due to circumstances beyond the City's control
 - v. Legal processes
 - vi. Direction of public authorities
 - vii. Strike, riot, fire, natural disaster, unavoidable accident, actions of others or other *force majeure*
 - b. The City shall have the right to adopt specific rules and regulations at any time to allocate water to consumers to maintain a reliable water supply and respond to emergencies.

- c. Water usage priorities will be established for each emergency or condition requiring curtailed use of water, generally as listed above in this section. Priorities and allocations can be established and enforced by the City through administrative procedures or legal actions, including citations and water use surcharges. The City's AMR system will provide consumption information with which the City can monitor and address usage issues. If water usage must be strictly curtailed or rationed, it is the policy of City to seek compliance on a voluntary basis with coverage in the news media and by public announcements. Violations may be referred to the Dawson County Sheriff's Office and be heard before the appropriate court as necessary for serious or repeated violations and dire emergencies.
- d. Water rationing may be employed to address extreme water shortages. In such an event, the City may determine a minimum requirement and allocate a volume of water for each customer per day based on the number of people served.
- e. If the system appears to become completely depleted, or if service is interrupted for an extended period in a portion of the service area, affected residents may be encouraged to obtain bottled water from private sources. Central supply points may also be established, from which residents may receive water.

C. Restrictions on Lower Priority Uses

The City will respond to drought declarations and fully implement response strategies provided by Rule 391-3-30 of the Department of Natural Resources for Drought Management. If circumstances require, various uses may be designated by time of day and/or time of week. Discretionary water use and collection (storage) of water during off-peak hours may also be encouraged. Water reuse will be encouraged when practical, such as wash water for watering plants. Due to

potential need to import or export of water, restrictions will be coordinated with the Etowah Water and Sewerage Authority.

Table 3 shows standard watering restrictions. Additional restrictions and exemptions are provided in DNR Rule 391-3-30.

Table 3 – Outdoor Watering Schedule

<i>Drought Condition</i>	<i>Address/ Activity</i>	<i>Time Permitted for Outdoor Watering</i>
Non-Drought	No special restrictions	4:00 pm to 10:00 am
Level One Drought / Emergency	No special restrictions	4:00 pm to 10:00 am
Level Two Drought / Emergency	Odd Numbered Addresses	Thursday, Sunday 4:00 pm to 10:00 am
	Even Numbered Addresses	Wednesday, Saturday 4:00 pm to 10:00 am
Level Three Drought / Emergency	Food Gardens, Hand-watering	4:00 pm to 10:00 am
	Athletic Fields, Public Recreation Areas, Golf Courses	Special restrictions

The City’s tiered conservation water rates comply with criteria in the Coosa-North Georgia Regional Water Plan. The Authority is therefore not required to develop a drought surcharge program.

D. Alternative Water Sources

The City of Dawsonville maintains a connection with Etowah Water and Sewerage Authority. The agreement between the two parties allows each party to purchase water from the other subject to availability if needed to meet its customer demands. Either party may purchase a maximum of 200,000 gallons of potable water per day from the other to a limit of 6,000,000 gallons per month. Either party may purchase

additional water from the other on an emergency basis by agreement between the Mayor of the City and the Chairman of the Authority. A copy of this agreement is included in the Appendix.

In dire emergencies or circumstances in which no water can be transmitted to a segment of the customer population, customers may receive water from designated supply points.

IV. Implementation of Water Conservation Measures

The City implements water conservation measures consistent with practices described in the Coosa-North Georgia Regional Water Plan.

A. Georgia Water Conservation Law Compliance

Chapter 102 of the City Code of Ordinances adopts the Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments for high-efficiency plumbing fixtures and fittings). The City enforces the code through permitting, inspection, and fines.

Chapter 14 of the City Code prohibits unauthorized connections and use of unmetered water. The Dawson County Sheriff's Office will be informed to investigate suspected water theft, such as unauthorized use of water from hydrants. Violations will be addressed in the appropriate court.

B. Outside and Special Water Use

Landscape irrigation and outdoor water use are subject to Georgia Rule 391-3-30 for Drought Management and all permanent and temporary restrictions required under this rule. Chapter 14 of the City Code maintains permanent restrictions.

Car washes are subject to Georgia Rule 391-3-31 for Water Conservation Best Management Practices and Certification.

C. Operating Procedures

The City water system service population appears to have reached the threshold at which annual water loss audits are required. Accounting for the audits is

commencing, with the first report due next year. Results will be used to identify and implement management procedures to reduce real and apparent losses.

Standard operating procedures in Section II of this plan implement routine conservation practices.

D. Conservation Rate Structure

The City utilizes a conservation water rate structure with four increasing rate tiers for all billed customer classes. Because this structure complies with criteria in the regional water plan, the City is not required to develop a drought surcharge program.

E. Water Conservation Progress Reports

Copies of the City's Water Conservation Progress Report and Water Loss Control Program are included in the Appendix.

V. Analysis of Benefits and Costs

Implemented water conservation measures reduce operating costs and withdrawal demands. New water auditing will produce better estimates of the costs of real and apparent water losses. The complete meter replacement in 2017 substantially reduced non-revenue water due to poor metering and provided reliable revenue to maintain and improve the water system. Non-revenue water appears to have increased since new production meters were installed in 2019. This observation, however, is a positive outcome because it reflects improved capability to measure and improve system efficiency.

VI. Education Efforts

It is the policy of the City of Dawsonville to promote water conservation through routine public education, with intensified efforts during droughts and emergencies.

Pamphlets or booklets on water supply and conservation will be placed in the water billing office as available from American Water Works Association, Georgia Rural Water Association, National Resources Conservation Service, Georgia Environmental Protection Division, County Extension Service and others.

Printed materials may be provided as bill inserts. In the future, the City may also use a targeted approach by placing links on the City website on its Utilities Division page to high quality agency and topical resources for water conservation and watershed protection. The City may also select documents or information to highlight or post from such sites. The following are examples of useful websites:

EPD Water Conservation Resources – <https://epd.georgia.gov/water-conservation>

Clean Water Campaign – <http://cleanwatercampaign.org/>

EPA Water Sense Kids – <https://www3.epa.gov/watersense/kids/index.html>

Natural Resources Conservation Service – <http://www.nrcs.usda.gov/>

United States Environmental Protection Agency - Learn about water –
<https://www.epa.gov/learn-issues/learn-about-water>

University of Georgia Extension Service – <http://extension.uga.edu/>

Water Smart - water conservation – <http://www.watersmart.net/>

100 ways to save water – <http://wateruseitwisely.com/100-ways-to-conserve/>

VII. Demand Forecast

Tables 4, 5, 6 and 7 show population and water demand data and projections for the Dawsonville water system. Population data to 2020 is provided by United States Census Bureau Decennial Censuses. The Governor’s Office of Planning and Budget 2020 population projections for Dawson County to 2065 were used to project proportional City and service area populations beyond 2020.

Table 4 Population Projections

<i>Year</i>	<i>Dawson County^{1,2}</i>	<i>Dawson County Growth Rate</i>	<i>City Population^{1,3}</i>	<i>Service Population^{3,4}</i>
1980	4,774		342	
1990	9,429	97.5%	467	
2000	15,999	69.7%	619	
2010	22,330	39.6%	2,536	
2020	26,798	20.0%	3,720	3,409
2025	31,420	17.2%	4,362	3,997
2030	36,790	17.1%	5,107	4,680
2035	39,781	8.1%	5,522	5,061
2040	43,867	10.3%	6,089	5,580
2045	48,072	9.6%	6,673	6,115
2050	52,901	10.0%	7,344	6,730

Sources:

¹*US Census Bureau Decennial Census 1980-2020*

²*Georgia County Residential Projections 2020 to 2065, OPB 2020*

³*From 2025-2065, City and service populations are projected according to county growth rate.*

⁴*2020 Service population is estimated by persons per housing unit from the 2020 Census (2.57), multiplied by the number of residential services.*

Table 5 Water Demand 2017-2021

<i>Year</i>	<i>Annual Average Daily Demand (MGD)</i>	<i>High Month Average Daily Water Demand (MGD)</i>	<i>Maximum 24-hour Water Demand (MGD)</i>	<i>Ratio of High Month Average Daily to AADD</i>	<i>Ratio of Maximum 24-hour demand to AADD</i>
2017	0.254		0.378		1.5
2018	0.250		0.356		1.4
2019	0.282		0.467		1.7
2020	0.301	0.356	0.546	1.2	1.8
2021	0.324	0.343	0.498	1.1	1.5

From operating data provided by the City, 2017-2021

Table 6 Monthly Water Distribution

<i>Month</i>	<i>Total Distribution (Gallons)</i>	<i>Total Distribution (MG)</i>	<i>Monthly Daily Average Distribution (MGD)</i>
2021			
January	8,905,900	8.906	0.287
February	7,865,400	7.865	0.281
March	9,496,900	9.497	0.306
April	9,725,300	9.725	0.324
May	10,374,200	10.374	0.335
June	10,162,200	10.162	0.339
July	10,345,500	10.346	0.334
August	11,038,300	11.038	0.356
September	10,638,800	10.639	0.355
October	10,519,500	10.520	0.339
November	9,073,400	9.073	0.302
December	10,036,100	10.036	0.324
Totals	118,181,500	118.182	0.324
High Month			0.356
2020			
<i>Month</i>	<i>Total Distribution (Gallons)</i>	<i>Total Distribution (MG)</i>	<i>Total Distribution (MG)</i>
January	8,512,900	8.513	0.275
February	7,751,700	7.752	0.267
March	8,134,200	8.134	0.262
April	8,455,000	8.455	0.282
May	9,005,500	9.006	0.291
June	9,535,100	9.535	0.318
July	10,625,200	10.625	0.343
August	10,589,400	10.589	0.342
September	10,025,900	10.026	0.334
October	9,570,900	9.571	0.309
November	9,010,300	9.010	0.300
December	9,012,400	9.012	0.291
Totals	110,228,500	110.229	0.301
High Month			0.343

Table 7 Demand Projections

<i>Year</i>	<i>Annual Average CNGWPR Per Capita Daily Demand for Dawson County (GPD)¹</i>	<i>City Service Population</i>	<i>Annual Average Daily Demand from CNGWPR Projections (MGD)²</i>	<i>High Month Demand from CNGWPR Projections (MGD)^{2,4}</i>	<i>Maximum 24-Hour Demand from CNGWPR Projections (MGD)^{2,5}</i>	<i>Average Annual Daily Demand based on City Data (MGD)³</i>	<i>High Month Demand from City Data (MGD)^{3,4}</i>	<i>Maximum 24-Hour Demand from City Data (MGD)⁵</i>
2020	156.3	3,409	0.533	0.639	0.853	0.324	0.356	0.546
2025	155.6	3,997	0.622	0.746	0.995	0.377	0.452	0.603
2030	154.9	4,680	0.725	0.870	1.160	0.438	0.525	0.700
2035	154.2	5,061	0.780	0.936	1.248	0.470	0.564	0.751
2040	153.4	5,580	0.856	1.027	1.370	0.514	0.616	0.822
2045	152.7	6,115	0.933	1.120	1.494	0.558	0.670	0.893
2050	151.9	6,730	1.022	1.227	1.636	0.609	0.731	0.975

¹Per capita demands and efficiency adjustments from the Coosa-North Georgia Water Planning Region Water and Wastewater Forecasting Technical Memorandum, March 30, 2017

²Coosa-North Georgia Water Planning Region per-capita projections multiplied by service population

³Projected from 2021 City demand, increasing proportionally to population, less CNGWPR efficiency reduction of 0.15 GPD per capita per year

⁴Average annual daily demand multiplied by 1.2.

⁵Average annual daily demand multiplied by 1.6.

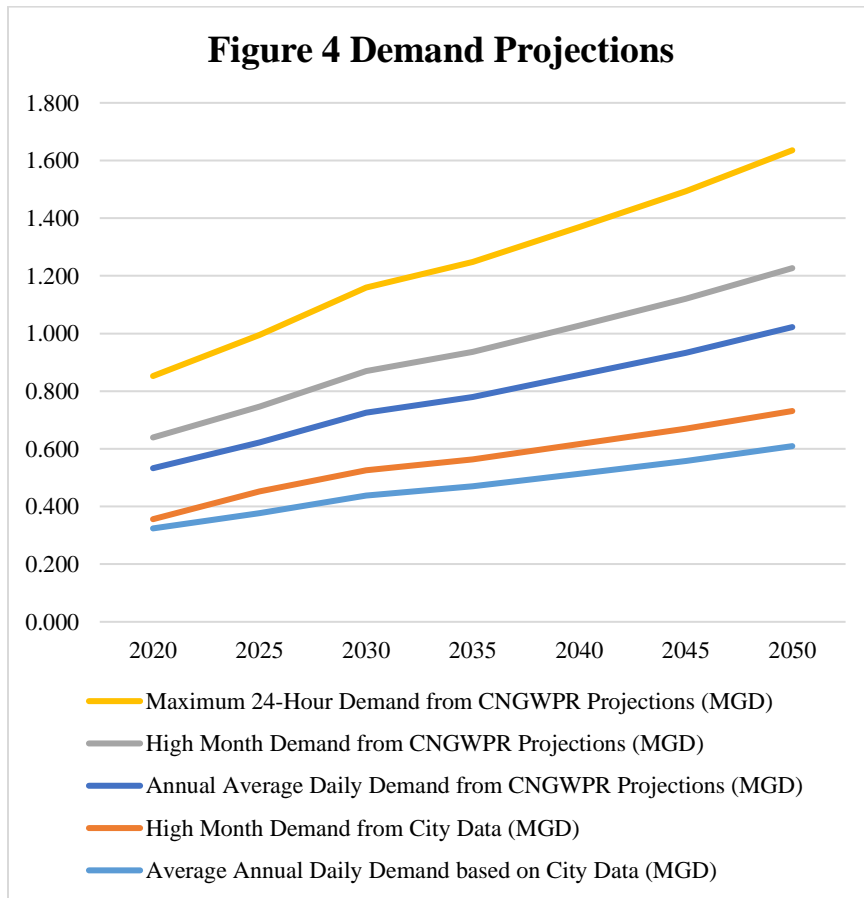
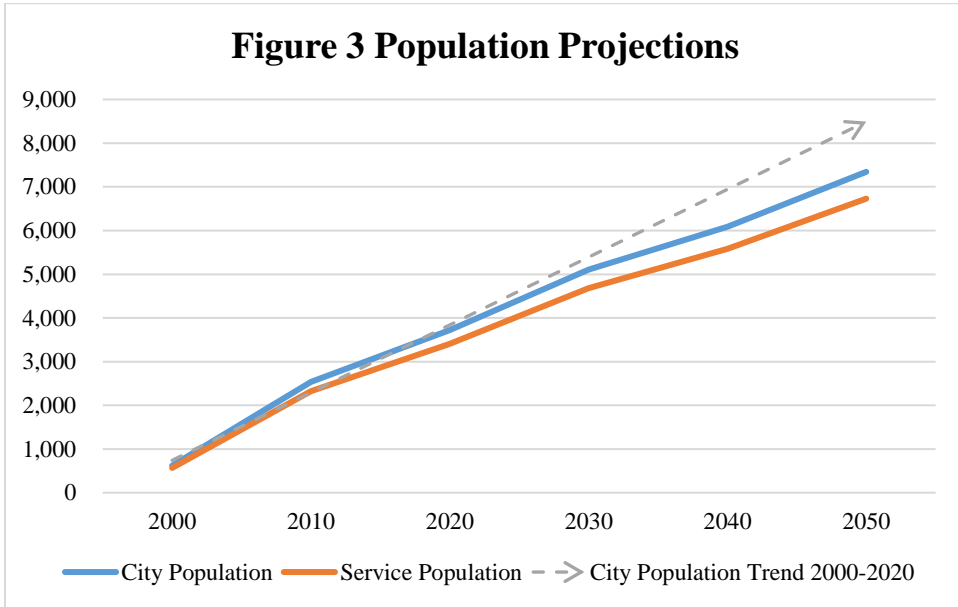
Future water demands were first estimated based on projected service populations multiplied by per capita demands with plumbing efficiency adjustments for Dawson County from the Water and Wastewater Forecasting Technical Memorandum dated March 30, 2017 of the Coosa-North Georgia Water Planning Region. Using regional water plan estimates, 2035 annual average daily demand was projected to be 0.78 MGD. In 2035, a high monthly average daily demand of 0.94 MGD and a maximum 24-hour demand of 1.25 MGD were projected.

For comparison, separate projections were based on actual demands, with increases proportional to projected growth of the service population. These estimates were also reduced by 0.15 gallons per day (GPD) per capita per year to reflect estimates of plumbing efficiency under required codes. This reduction for Dawson County was provided by the region Technical Memorandum. An annual average daily demand of 0.47 million gallons per day (MGD), a high monthly average daily demand of 0.56 MGD, and a maximum 24-hour demand of 0.75 MGD were projected in 2035. In 2045, an annual average daily demand of 0.56 million MGD, a high monthly average daily demand of 0.67 MGD, and a maximum 24-hour demand of 0.89 MGD were projected.

Each method of projecting demand has limitations. Per capita demand estimates in the regional water plan forecast appear high based on City demand data. Projections based on these estimates for 2020 significantly exceeded actual demands in 2020 and 2021.

Using OPB county growth projections and existing demand to estimate growth in City water demand, however, may underestimate demand. Figure 3 shows actual City population and a trend line based on Census data from 2000 to 2020. Beyond 2020, City growth shown is proportional to OPB projections for Dawson County. The actual City growth rate from 2000 to 2020 exceeds the long-term OPB projected growth rate. Trends of migration to the Dawsonville area from more densely populated metropolitan areas have exceeded previous American Community Survey estimates and continue. The OPB population projections are the best available for long-term growth, but do not appear conservative in planning water supply for the city service population during the next decade, during which the current rate of growth may not slow.

Demand projections using both methods are illustrated in Figure 4.



To plan for required water supply in the next decade, both methods should be considered. For 2035, this study recommends using the average of projections based on the Coosa-North Georgia Water Planning Region Forecasting Technical Memorandum and projections based on current demands. A permitted capacity of an annual average of 0.65 MGD and a monthly average of 0.75 MGD is therefore recommended. Total supply capacity of 1.0 MGD is recommended to meet maximum 24-hour demands in the next decade.

VIII. Evaluation of Strategy

Continued growth in the City of Dawsonville and the surrounding area depends on the availability of a safe and reliable water supply. Implementation of an updated water conservation plan will help to ensure this supply. Improved production metering and audit practices will produce reliable data and loss reports to use in system management and plan implementation. Future City growth, capital improvements, results of water conservation measures and changes in the service area will prompt future refinements and modifications to this plan.

The City Council will review and certify this water conservation plan.

Appendix

Appendix A – Water System Profile

CITY OF DAWSONVILLE WATER SYSTEM PROFILE - 2021

A. SERVICE CHARACTERISTICS		NUMBER	
1) Estimated Service Population			3640
2) Estimated Service Area (square miles) - Provide Map			8.6 square miles
3) Interconnections with other systems (provide copies of contractual agreements)			1
4) Provide copy of signed House Bill 489 Service Delivery Agreement ¹			Enclosed
5) Number of treatment plants (Provide copies of discharge permits)			5 well and spring plants
B. ANNUAL WATER SUPPLY 2021 (FROM MONTHLY OPERATING REPORTS)	ANNUAL VOLUME (GALLONS)	PERCENT METERED	
1) Groundwater	118,178,500		100%
2) Surface Water			
3) Purchases - raw			
4) Purchases - treated	0		100%
5) Total annual water supply	118,178,500		
C. SERVICE CONNECTIONS	CONNECTIONS	PERCENT METERED	
1) Residential - single-family/multi-family	1418		100
2) Commercial/retail	178		100
3) Industrial	4		100
4) Public (churches, libraries, etc.)			
5) Other			
D. WASTEWATER DISCHARGE	TOTAL CONNECTIONS	NUMBER ON SEPTIC	NUMBER CONNECTED TO SEWER
1) Residential - single-family/multi-family	1418	132	1286
2) Commercial/retail	178	1	153
3) Industrial	4	0	4
4) Public (churches, libraries, etc.)			
5) Other			
E. WATER DEMAND (TO SYSTEM)	ANNUAL VOLUME (GALLONS)	PERCENT OF TOTAL WATER USED	AVERAGE WATER USED PER CONNECTION (GALLONS)
1) Metered residential sales	59,905,972	50.7%	42,247
2) Metered commercial sales	26,691,715	22.6%	149,953
3) Metered industrial sales	8,269,100	7.0%	2,067,275
4) Other metered sales		0.0%	0
5) Unmetered sales			
6) Non-revenue water ²	23,311,713	19.7%	
7) Total system demand (total distribution)	118,178,500	100.0%	
F. AVERAGE & PEAK DEMAND	VOLUME (GALLONS)	TOTAL SUPPLY CAPACITY	PERCENT OF TOTAL CAPACITY
1) Average-day demand (withdrawal)	323,777	1,000,000	32%
2) Maximum-day demand (withdrawal)	498,100	1,000,000	50%
G. PRICING	RATE STRUCTURE ³	METER SCHEDULE ⁴	BILLING SCHEDULE ³
1) Residential rate	Increasing Block	Monthly	Monthly
2) Non-residential rate	Increasing Block	Monthly	Monthly
3) Other rate	Uniform	Per Usage	Monthly
H. WATER CONSERVATION MEASURES	QUANTITY (GALLONS)	PERCENT OF TOTAL CAPACITY	
1) Improved metering (Negative annual volume reflects improved data since new meters in service)	(6,300,000)		-5.3%

¹ Each water provider shall provide a signed service delivery agreement depicting service areas for water and sewer so as to minimize inefficiencies resulting from duplication of services. This agreement shall be signed by all water providers within the given county. Also provide a map depicting the delivery areas for each water provider in the given county.			
² Non-revenue water is water not sold to customers.			
³ Uniform, increasing block, decreasing-block, seasonal, or other (please specify and provide copies of any surcharges which may apply to certain customers)			
⁴ Quarterly, monthly, or other (please specify)			
I. Describe the condition, calibration frequency, type, etc. of raw and finished water metering.			
In 2019, well meters were replaced with Octave ultrasonic water meters. These meters have no moving parts and cannot be calibrated in the field. They are warranted for 10 years.			
J. Provide an analysis of in-plant water use for filter backwashing, overflows, laboratory use, etc. as a percentage of total plant production.			
Well 111 avg backwash- one time a day (8,800 gal per backwash cycle)			
Well 108 avg backwash- one time every 3 days (4,200 gal per backwash cycle)			
Backwash represents approximately 3% of overall production.			
K. Describe any recycling or reuse of filter backwash water.			
None.			
L. Describe effects of rate structure implementation on water conservation efforts.			
The increasing block structure discourages excessive high volume use.			
M. Is the water system financially self-supporting?			
yes			
N. Are water system expenditures subsidized by non-water/sewer system revenues?			
no			
O. Describe any system policies concerning second meters for landscape irrigation and any use of sewer meters for billing.			
None.			

Appendix B – Service Delivery Strategy



SERVICE DELIVERY STRATEGY

FORM 1

COUNTY: **DAWSON**

I. GENERAL INSTRUCTIONS:

1. **FORM 1 is required for ALL SDS submittals.** Only one set of these forms should be submitted per county. The completed forms shall clearly present the collective agreement reached by all cities and counties that were party to the service delivery strategy.
2. List each local government and/or authority that provides services included in the service delivery strategy in Section II below.
3. List all services provided or primarily funded by each general purpose local government and/or authority within the county that are continuing *without change* in Section III, below. (It is acceptable to break a service into separate components if this will facilitate description of the service delivery strategy.)

<p align="center">OPTION A <i>Revising or Adding to the SDS</i></p>	<p align="center">OPTION B <i>Extending the Existing SDS</i></p>
<ol style="list-style-type: none"> 4. List all services provided or primarily funded by each general purpose local government and authority within the county which are revised or added to the SDS in Section IV, below. (It is acceptable to break a service into separate components if this will facilitate description of the service delivery strategy.) 5. For each service or service component listed in Section IV, complete a separate, updated <i>Summary of Service Delivery Arrangements</i> form (FORM 2). 6. Complete one copy of the <i>Certifications</i> form (FORM 4) and have it signed by the authorized representatives of participating local governments. [Please note that DCA cannot validate the strategy unless it is signed by the local governments required by law (see Instructions, FORM 4).] 	<ol style="list-style-type: none"> 4. In Section IV type, "NONE." 5. Complete one copy of the <i>Certifications for Extension of Existing SDS</i> form (FORM 5) and have it signed by the authorized representatives of the participating local governments. [Please note that DCA cannot validate the strategy unless it is signed by the local governments required by law (see Instructions, FORM 5).] 6. Proceed to step 7, below. <div data-bbox="841 1178 1544 1409" style="background-color: #333; color: white; padding: 10px; text-align: center;"> <p><i>For answers to most frequently asked questions on Georgia's Service Delivery Act, links and helpful publications, visit DCA's website at http://www.dca.ga.gov/development/PlanningQualityGrowth/programs/servicedelivery.asp, or call the Office of Planning and Quality Growth at (404) 679-5279.</i></p> </div>

7. If any of the conditions described in the existing *Summary of Land Use Agreements* form (FORM 3) have changed or if it has been ten (10) or more years since the most recent FORM 3 was filed, update and include FORM 3 with the submittal.
8. Provide the completed forms and any attachments to your regional commission. The regional commission will upload digital copies of the SDS documents to the Department's password-protected web-server.

NOTE: ANY FUTURE CHANGES TO THE SERVICE DELIVERY ARRANGEMENTS DESCRIBED ON THESE FORMS WILL REQUIRE AN UPDATE OF THE SERVICE DELIVERY STRATEGY AND SUBMITTAL OF REVISED FORMS AND ATTACHMENTS TO THE GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS UNDER THE "OPTION A" PROCESS DESCRIBED, ABOVE.

II. LOCAL GOVERNMENTS INCLUDED IN THE SERVICE DELIVERY STRATEGY:

In this section, list all local governments (including cities located partially within the county) and authorities that provide services included in the service delivery strategy.

Dawson County, City of Dawsonville, Etowah Water and Sewer Authority

III. SERVICES INCLUDED IN THE EXISTING SERVICE DELIVERY STRATEGY THAT ARE BEING EXTENDED WITHOUT CHANGE:

In this section, list each service or service component already included in the existing SDS which will continue as previously agreed with no need for modification.

Water Supply and Distribution - (FORM 2 intentionally omitted from this SDSA - see previous SDSA)

* See attached Water Agreements

Sewage Collection/Disposal - (FORM 2 intentionally omitted from this SDSA - see previous SDSA)

* See attached Sewer Service Area Agreement

Development Permitting and Inspections

Building Permitting and Inspections

Soil Erosion Permitting and Enforcement

Storm Water Management

Solid Waste Management

Planning and Zoning

Senior Citizen Services

IV. SERVICES THAT ARE BEING REVISED OR ADDED IN THIS SUBMITTAL:

In this section, list each new service or new service component which is being added and each service or service component which is being revised in this submittal. For each item listed here, a separate Summary of Service Delivery Arrangements form (FORM 2) must be completed.

Police Protection

Solid Waste Collection

Parks and Recreation

Elections

Emergency Services: Fire & EMS

Transit

Environmental Health

Public Health

Animal Control

Street/Road Repair & Maintenance and Street/Road Cleaning

Service: Water Supply and Distribution

The attached Water Purchase Agreements between the City of Dawsonville and Etowah Water & Sewer Authority have been in place since before the 2008 SDSA. They do not indicate any type of amendment or modification to this service category, but rather they are being included with this SDSA to complete the record due to a previous omission of the documents.

WATER PURCHASE AGREEMENT

THIS AGREEMENT for the sale and purchase of water is entered into as of the 5th day of September, 1989, between the City of Dawsonville, a municipal corporation in Dawson County, Georgia, hereinafter referred to as the "City" and the Etowah Water & Sewer Authority situated in Dawson County, Georgia, hereinafter referred to as the "Authority".

WITNESSETH:

WHEREAS, the Authority is organized and established under the Laws of Georgia for the purpose of constructing and operating a water supply distribution system serving water users principally within Dawson County.

WHEREAS, the City currently operates a water system serving approximately 300 customers inside the City and adjacent thereto, supplied by wells and springs which are inadequate to serve the customers' needs, and

WHEREAS, due to increased growth and development the City desires to purchase water from the Authority, and

WHEREAS, Authority desires to expand its facilities so that it may adequately meet the needs and demands of its customers, the City included, and;

WHEREAS, the Authority has applied to the Appalachian Regional Commission for a grant to finance the facilities which would enable the City to purchase water from the Authority, and

WHEREAS, it is the desire and intention of the parties that all monies from the Appalachian Regional Commission grant be used

by the Authority to construct facilities to enable the City to obtain water from the Authority, and;

WHEREAS, the City and the Authority would serve customers in accordance with a territorial provision which is a part of this Agreement, and

WHEREAS, this can best be accomplished by the parties entering into this agreement which shall supersede all previous contracts and agreements;

NOW THEREFORE, in consideration of the foregoing and the mutual covenants and agreements hereinafter set forth,

A. THE AUTHORITY AGREES:

1. (Quality and Quantity) To furnish the City at the main point of delivery which shall be at a meter at the intersection of Perimeter Road and Georgia Hwy. 53 during the term of this contract or any renewal or extension thereof, potable treated water meeting applicable purity standards of the Georgia Department of Natural Resources, Environmental Protection Division in such quantity and at such pressure as may be required for the City as determined by an engineer or engineering firm mutually agreed upon by the parties hereto.

2. (Accounting System) To establish an accounting system satisfactory to all parties which shall facilitate the identification of costs actually used in calculating the cost per 1,000 gallons of producing and delivering water to the City; and to be responsible for operation of the water supply in accordance with all applicable laws and regulations.

3. (Metering Equipment) To furnish, install and operate at Authority's expense a meter at the intersection of Perimeter Road and Georgia Hwy. 53, a meter at the booster station at the 250,000 gallon reservoir, a meter at the end of existing City lines on Ga. Hwy. 9 South of the Perimeter Road, and, a meter or meters at such other points as may be mutually agreed to by the parties, (the "metering equipment") including meter houses or pits, and required devices of standard type for properly measuring the quantity to or from the City and to calibrate such metering equipment whenever requested by the City or Authority. Meters shall be checked and calibrated by the Authority not less frequently than once every twelve (12) months. A meter registering not more than two percent (2%) above or below the test result shall be deemed to be accurate. The previous reading of any meter disclosed by the test to be inaccurate shall be corrected for the 6 months previous to such test in accordance with the percentage of inaccuracy found by such tests. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount delivered in the corresponding period immediately prior to the failure, unless the Authority and City shall agree upon a different amount. The metering equipment shall be read on or about the 15th of each month. An appropriate official of the City at all reasonable times shall have access to each meter for the purpose of verifying its readings.

4. (Connections to Existing Lines) To bear all costs of connecting the City's service lines to the Authority's existing service lines as set out in Exhibit "B" of the May 1989 Report of

Campbell Wallace Consulting Engineers, hereinafter referred to as "Engineer's Report"; a copy of which has been initialed by the respective officers of the parties and is attached to, incorporated into and made a part of this Agreement as "Exhibit A".

5. (Billing Procedure) To furnish the City at the above address not later than the 1st day of each month, with an itemized statement of the amount of water furnished the City during the preceding month.

6. (Grant Monies) To covenant that all monies received from the Appalachian Regional Commission Grant (the "grant") for the purpose of constructing facilities to enable the City to purchase water from the Authority shall be used for no other purpose absent a written agreement by the City. The Authority or its designated agent shall report to the City not less than monthly on the use of the grant funds in such detail as shall be specified by the City. This reporting requirement shall continue until all grant funds have been expended and construction has been completed and accepted by the City and the Appalachian Regional Commission.

7. (Indemnification) The Authority shall assume all liability and risks for all damages and injuries to persons or property which shall or may arise or accrue out of the conduct of any activity relating to the performance of this Agreement by the Authority, its officials, employees, agents or servants and shall indemnify and save harmless the City from any and all liability actions, causes of actions, suits, damages, attorneys fees and costs relating to the performance of this Agreement by the Authority, its officials, employees, agents or servants.

B. THE CITY AGREES:

1. It is understood that the Authority will construct a water supply system in adequate size to meet the water needs of the City; therefore, the City agrees to purchase from the Authority all of the water needed to meet the requirements of its customers for the period of this contract, subject to the following conditions and exceptions:

(a) In the event of a failure to deliver as set out in Section C, paragraph 8 of this agreement, or in the event of an emergency shortage of water in which demand by the City exceeds supply from the Authority for more than four hours in any 24-hour period, the City reserves the right to procure water from any and all available sources, including its existing wells, to supplement the water supplied by Authority. The Authority agrees that the City may make such emergency supplements.

(b) In the event the City expands its service to an area substantially different from its present service area, and the Authority is not capable of delivering water at a satisfactory point and at a satisfactory rate, the Authority shall consent to allow the City to furnish water to meet the needs for the new area only, from any other source to be determined by the City.

2. (Rates and Payment Date) To pay the Authority, not later than the 15th day of each month, for water delivered in accordance with a rate schedule determined under the following guidelines:

(a) Payments under this contract shall be adequate to cover yearly amortization of the net cost of the lines to

serve Dawsonville (net cost not to exceed \$229,100) and yearly amortization of existing facilities (net cost not to exceed \$830,000) and cost of operations - all as illustrated in Exhibit F of the Engineer's Report provided, however, that

(b) The rate to Purchaser will not exceed \$1.37/thousand gallons for the first 18-months after initial delivery of water to the City by the Authority, the rate to Purchaser in any 12 month period shall not increase more than 7% over the rate in the previous 12-month period.

(c) Payments for capitalized costs and operation and maintenance expense shall be based on the actual cost of water produced and the actual usage by Authority and City.

C. IT IS FURTHER MUTUALLY AGREED BETWEEN THE AUTHORITY AND THE CITY AS FOLLOWS:

1. (Term of Agreement) That this contract shall extend for a term of 40 years from the date of the initial delivery of any water as shown by the first bill submitted by the Authority to the City and, thereafter may be renewed or extended for such term or terms, as may be agreed upon by the Authority and City.

2. (Territorial Provision) The parties have agreed on which portions of Dawson County each party shall be entitled to serve. This territorial agreement of the parties is illustrated by the map attached to and incorporated into and made a part of this Agreement as Exhibit "B".

3. (Debt Service Payment) That the principal and interest debt service allocated to the water service cost to The City shall

be the actual principal and interest payment on that portion of outstanding debt attributed to the cost of service to the City, more specifically,

a. new water lines installed to serve Dawsonville and set out in Exhibit "B" of Engineer's Report less credits set out in Exhibit "C" of Engineer's Report.

b. new 500,000 gallon tank and original plant as set out in Exhibit "D" of Engineer's Report.

4. Calculation of the amount of water purchased by the City shall be made by subtracting the water metered from Dawsonville at the booster station at the 250,000 gallon reservoir north on Georgia Highway 9 and at the end of the existing lines on Georgia Highway 9 south of the Perimeter Road from the water metered to Dawsonville at the intersection of Perimeter Road and Georgia Highway 53. ~~In calculating the monthly amount of water purchased by the City the Authority shall round off to the nearest thousand gallons so that 501 gallons or more shall be rounded to one thousand and 500 gallons or less shall be rounded to zero.~~

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(5) (Operation and Maintenance Payment) That the Authority shall be responsible for operating and maintaining the water system in the most economical manner feasible, and the City shall have the right to question specific items in the audit. The operation and maintenance costs chargeable to the treatment plant and delivery costs shall include:

(1) Labor, (2) Chemicals, (3) Electricity, (4) Other applicable utility costs, (5) Insurance, (6) Taxes, (7) Accounting, (8) Testing of all master meters on a yearly basis, (9) And any and all other miscellaneous costs related to water production, operation, and maintenance.

6. (Time Period from Start of Delivery Until Eighteen Months thereafter) The City shall pay a maximum of \$1.37 per 1,000 gallons of water used for a period of eighteen months from the date of initial delivery of water pursuant to this agreement.

7. (Time Period Beginning January 1st after the First Eighteen month period)

(a) An annual audit and report on the water treatment facility shall be made at the end of the first operating year, and each year thereafter, by a certified public accountant employed by the Authority. The audit shall determine the true operating and maintenance costs, and true debt service cost. The above total cost shall be divided by the total water metered from the plant during that year, excluding water metered for internal plant use. This calculation shall yield the unit cost per 1,000 gallons of water metered which shall be the cost per thousand gallons to be paid by the City to the Authority; provided, however, that the City shall not pay more than \$1.37 per 1,000 gallons of water used during the first eighteen months after initial delivery of water pursuant to this Agreement.

(b) Regardless of the unit cost as calculated under Paragraph "A" above, the Authority agrees not to increase the rate charged the City more than 7% in any twelve month period.

(c) Each year-end audit shall determine if the payments for the past year have been over or underpaid, based on actual audited costs. Overpayments shall be refunded or credited to the City's next monthly billed charges. Underpayments shall be collected on the next payment date after the audit.

(d) The above described year-end procedure shall be repeated annually at the end of each of the Authority's operating years.

(e) For the purposes of this Agreement, "operating year" shall be defined as beginning on August 1 of each year and ending on July 31 of the following year.

8. (Failure to Deliver) That the Authority will, at all times, operate and maintain its system in an efficient manner and will take such action as may be necessary to furnish the City with the quantity and quality of water required by the City. Temporary or partial failures to deliver water shall be remedied with all possible dispatch, and the failure to do so shall constitute a material breach of this agreement; provided, however, that the failure or inability, or partial failure or partial inability, of the Authority to deliver water which directly results from water withdrawal or distribution restrictions imposed on the Authority by the Georgia Department of Natural Resources or any other state or federal agency validly imposing such restrictions shall not constitute a material breach of this Agreement.

9. (Modification of Agreement) Except as otherwise provided herein, the provisions of this contract pertaining to the schedule of rates to be paid by the City for water delivered are subject to modification at the end of every 1 year period. Any increase or decrease in rates shall be based on a demonstrable increase or decrease in the costs of performance hereunder, but such costs shall not include increased capitalization of the Authority's distribution system. Other provisions of this contract may be modified or altered in writing by mutual agreement of the parties.

10. (Regulatory Agencies) That this contract is subject to such rules, regulations, or laws as may be applicable to similar Agreements in this State and the Authority and City shall reasonably cooperate in obtaining such permits, certificates, or the like, as may be required to comply therewith.

11. (Successor to the Parties) (a) That in the event of any occurrence rendering the City incapable of performing under this contract, any successor of the City, whether the result of legal process, assignment, or otherwise, shall succeed to the rights of the City hereunder.

(b) That in the event of any occurrence rendering the Authority incapable of performing under this contract, any successor of the Authority, whether the result of legal process, assignment, or otherwise, shall succeed to the rights of the Authority hereunder.

12. An original and one duplicate original of this Agreement shall be executed, and each of which so executed shall be deemed to be an original for purposes of introduction in evidence of any legal proceeding.

13. This Agreement shall be deemed to have been executed in the State of Georgia and shall be construed according to the laws of that state.

14. This writing terminates and supersedes all prior Agreements between the parties hereto pertaining to the subject matter herein whether orally or in writing and constitutes the entire Agreement between the parties hereto subject only to modification by a subsequent writing of equal formality with this

instrument executed by the parties hereto and making reference to the same.

15. (Discrimination in Employment or Services) (a) The Authority agrees that it shall not discriminate against any person in the provision of any services or in any terms or conditions of employment on the basis of race, color, religion, national origin, sex, age, or handicap, and will comply with all applicable Federal laws, regulations and guidelines prohibiting discrimination.

(b) The Authority shall take affirmative action to employ persons in the groups described in sub-paragraph (a) and shall report as requested by the City on the progress of such affirmative action.

(c) Failure of the Authority to comply with the provisions of subparagraphs (a) and (b) of this Paragraph shall constitute an additional event of default.

16. This Agreement is contingent on approval of this agreement by, and the successful closing of financing of the necessary financing from, the United States Department of Agriculture, Farmers Home Administration. The parties agree that neither shall be bound in any way by this Agreement absent such approval and closing. Such approval and closing shall be evidenced by the signature of the appropriate Farmers Home Administration official below.

17. (a) All disputes and controversies of every kind and nature between the City and the Authority arising out of or in connection with this Agreement as to the existence, construction, validity, interpretation or meaning, performance, non-performance,

enforcement, operation, breach, continuance or termination hereof shall be submitted to arbitration pursuant to the following procedure:

(i) Either party may demand such arbitration in writing within ninety (90) days after the controversy arises, which demand shall include the name of the arbitrator appointed by the party demanding arbitration together with a statement of the matter in controversy.

(ii) Within thirty (30) days after such demand, the other party shall name his arbitrator or in default thereof such arbitrator shall be named forthwith by the Senior Judge of the Superior Court of Dawson County, or if he refuses to so appoint, then any other judge of said Court shall appoint such second arbitrator, and the two arbitrators so selected shall name a third arbitrator within fifteen (15) days or in lieu of said agreement on a third arbitrator by the two arbitrators so appointed, a third arbitrator shall be appointed by a Judge of the Superior Court as above stated.

(iii) Each party shall bear its own arbitration costs and expenses and shall pay the fees and expenses of the designated arbitrator. The fees of the third arbitrator and his expenses shall be shared equally by the parties hereto.

(iv) The arbitration herein shall be held at Dawsonville, Georgia, on fifteen (15) days notice to the parties, the arbitration rules and procedures of the American Arbitration Association shall be incorporated by reference herein and the laws of evidence of the State of Georgia shall govern the presentation of evidence therein.

(v) The arbitration herein shall be concluded within three (3) days unless otherwise ordered by the arbitrators and the award hereon shall be made within ten (10) days after the close of the submission of evidence. To the extent permitted by law, and except as otherwise provided herein, an award rendered by a majority of the arbitrators appointed pursuant to this agreement shall be final and binding on all parties to the proceeding during the term of this agreement.

(b) Nothing herein contained shall be deemed to give the arbitrators any authority, power or right to alter, change, amend, modify, add to or subtract from any of the provisions of this Agreement.

(c) Any decision of the arbitrators may be appealed by either party de novo to the Superior Court of Dawson County.

(EXECUTION APPEARS ON THE FOLLOWING PAGE)

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized officers and their seals affixed.

CITY OF DAWSONVILLE, GEORGIA

ETOWAH WATER & SEWER AUTHORITY

Linda Sawney
Mayor

BY: Don D. Gordon

Mary A. Smith
Councilman

Title: Chairman

Charles R. Cain
Councilman

ATTEST:

Hudson Warner
Councilman

Attest: E. Deay Law

Michael J. Sosul
COUNCILMAN

Title: Secretary

This Agreement is approved on behalf of the United States Department of Agriculture, Farmers Home Administration this _____ day of _____, 19____, This approval further evidences the successful closing of the financing as contemplated by this Agreement.

By: _____

Title: _____

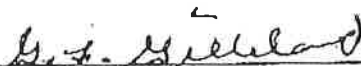
P: *DAVID*DAWSONCO*113_27WP.001

(August 11, 1989)

ACKNOWLEDGEMENT

The boundaries as contained herein accurately reflect the service area for water distribution by the City of Dawsonville, Georgia as granted under a contract by and between the City of Dawsonville, Georgia and the Etowah Water & Sewer Authority originally dated September 5, 1989 and subsequently amended May 3, 1991 as well as June 13, 1994 between the parties.

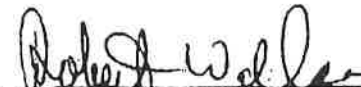
SO AGREED this 25th day of September, 2000.



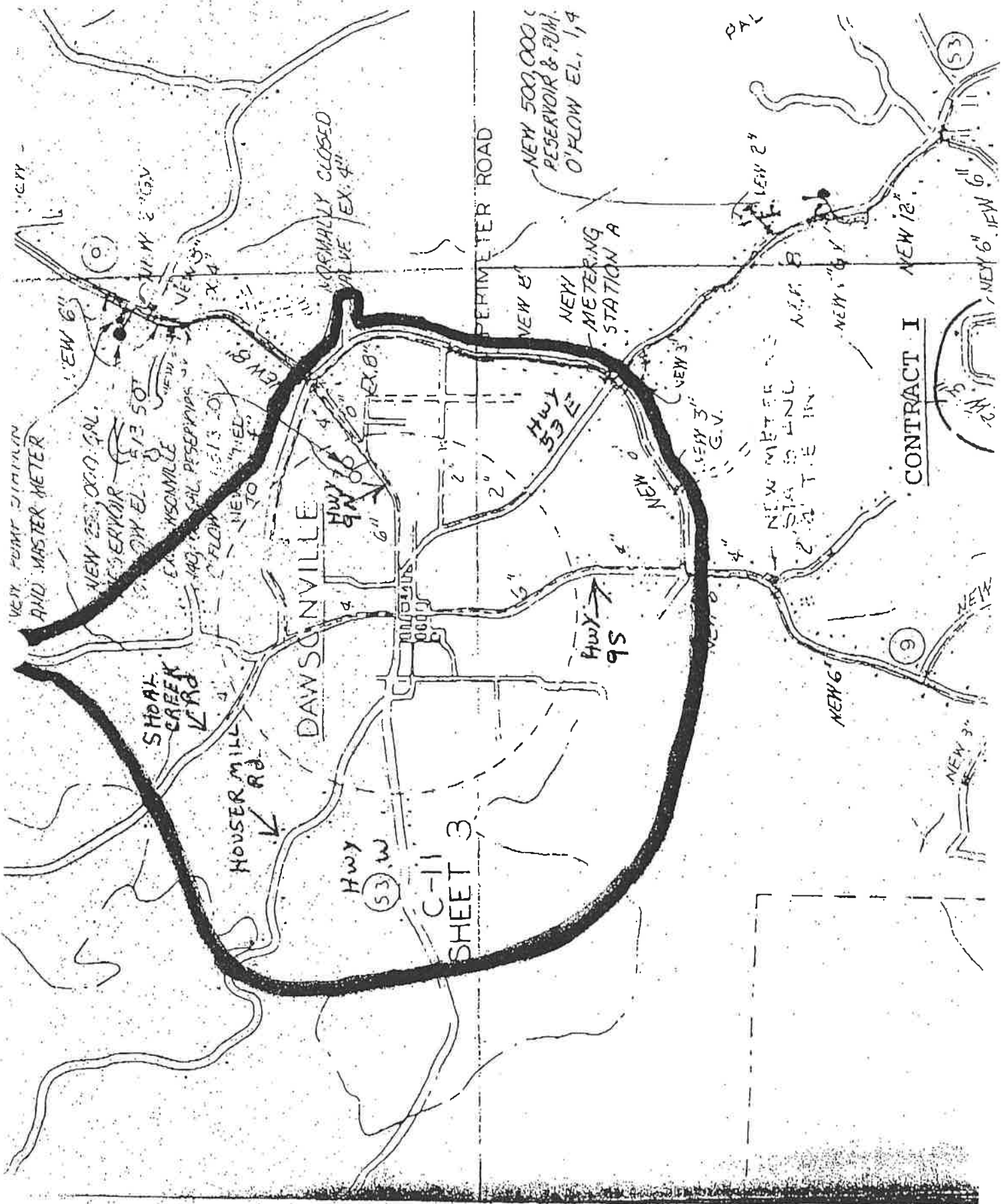
HONORABLE G.L. GILLELAND
Mayor, City of Dawsonville



DON GORDON
Chairman, Etowah & Sewer Authority



HONORABLE ROBERT WALLACE
Chairman, Dawson County Board of Commissioners.



Blumberg No. 5137
EXHIBIT
B

FIRST AMENDMENT TO WATER PURCHASE AGREEMENT

This First Amendment to Water Purchase Agreement is entered into as of the 3rd day of May, 1998, by and between the City of Dawsonville, a municipal corporation in Dawson County, Georgia, hereinafter referred to as the "City" and the Etowah Water & Sewer Authority situated in Dawson County, Georgia, hereinafter referred to as the "Authority".

WITNESSETH:

WHEREAS, the City and the Authority entered into a Water Purchase Agreement as of the 5th day of September, 1957, and

WHEREAS, the City and the Authority find it necessary to amend certain provisions of said Agreement;

NOW THEREFORE, in consideration of the foregoing, the mutual covenants and agreements hereinafter set forth, and the sum of one dollar paid by each party to the other, receipt and sufficiency of which is hereby acknowledged, the City and the Authority agree as follows:

1.

To amend paragraph nine of said Agreement by striking paragraph nine in its entirety and inserting in lieu thereof the following:

"9. (Modification of Agreement) Except as otherwise provided herein, the provisions of this contract pertaining to the schedule of rates to be paid by the City for water delivered are subject to modification at the end of every 1 year period. ~~Any increase or decrease in rates shall be based on a demonstrable increase or decrease in the costs of performance hereunder but such costs shall not include increased capitalization of the Authority's distribution system. All provisions of this contract including but not limited to the foregoing provisions may be modified or altered in writing by mutual agreement of the parties and approval by an appropriate official of the Farmers Home Administration.~~

2.

To amend paragraph sixteen of said Agreement by adding a new subparagraph (b) to paragraph sixteen to read as follows:

"16.(b) This Agreement is pledged as security for the loan described in paragraph 'a' above as provided in a contract between the Authority and the United States Department of Agriculture, Farmers Home Administration, denominated 'Letter of Conditions' and dated May 2, 1970."

3.

Except as otherwise expressly modified or amended by this First Amendment to Water Purchase Agreement, all provisions, terms and conditions of the original agreement between the parties shall continue in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Agreement to be executed by their duly authorized officers and their seals affixed to be effective as of the date first shown above.

CITY OF DAWSONVILLE, GEORGIA ETOWAH WATER & SEWER AUTHORITY

Jerry Savage
Mayor

BY: Don D. Guden

James Dean
Councilman

Title: Chairman

Mary A. Smith
Councilman

ATTEST:

Michael J. ...
Councilman

Attest: A. ...

Harold Weaver
Councilman

Title: Secretary

This First Amendment to Agreement is approved on behalf of the United States Department of Agriculture, Farmers Home Administration this _____ day of _____ 19 _____.

By: _____

Title: _____

P:\DAVID\DAWSON\CO\113_21\VP.002

SECOND AMENDMENT TO WATER PURCHASE AGREEMENT

This Second Amendment to Water Purchase Agreement is entered into as of the 13th day of June, 1994, by and between the City of Dawsonville, a Municipal Corporation in Dawson County, Georgia, hereinafter referred to as the "City", and the Etowah Water and Sewer Authority situated in Dawson County, Georgia, hereinafter referred to as the "Authority".

W I T N E S S E T H :

WHEREAS, the City and the Authority entered into a water purchase agreement as of the 5th day of September, 1989, and

WHEREAS, the City and the Authority provided for a first amendment to the water purchase agreement as of the 3rd day of May, 1991; and

WHEREAS, the City and the Authority find it necessary to amend certain provisions of said agreement;

NOW, THEREFORE, in consideration of the foregoing, the mutual covenants and agreements hereinafter set forth, and the sum of \$1.00 paid by each party to the other, receipt and sufficiency of which is hereby acknowledged, the City and the Authority agree as follows:

1.

To amend the first sentence of paragraph 3 of said agreement by striking said sentence in its entirety and inserting in lieu thereof the following:

2.

"3 (Metering Equipment). To furnish, install and operate at Authority's expense a meter at the intersection of Perimeter Road and Georgia Highway 53, a meter at the booster station at the 250,000 gallon reservoir, a meter at the intersection of Georgia Highway 9 South and Perimeter Road, and a meter or meters at such other points that may be mutually agreed to by the parties, (the "metering equipment") including meter houses or pits, and required devices of standard type for properly measuring the quantity to or from the City and to calibrate such metering equipment whenever requested by the City or the Authority. The Authority shall construct an 8-inch line for the City from the intersection of Georgia Highway 9 North and Perimeter Road a distance of 450 feet, more or less, towards the City's tank in exchange for all water properties of the City south of the intersection of Georgia Highway 9 South and Perimeter Road. ?

Perimeter Road shall be the service line between the City and the Authority at all locations. /

2.

Except as expressly modified or amended by this Second Amendment to Water Purchase Agreement, all provisions, terms, and conditions of the original agreement between the parties and the First Amendment to Water Purchase Agreement shall continue in full enforce and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Second

Amendment to Water Purchase Agreement to be executed by their duly authorized officers and their seals affixed to be effective as of the date first shown above.

CITY OF DAWSONVILLE

STOWAN WATER & SEWER AUTHORITY

Henry Savage
Mayor

BY: Don D. Fair

H. S. Belland
Councilman

Title: Chairman

Michael Harker
Councilman

ATTEST:

W. H. Smith
Councilman

Attest: E. Deane

Morton Hester
Councilman

Title: Secretary

THIS SECOND AMENDMENT TO AGREEMENT IS APPROVED ON BEHALF OF THE UNITED STATES DEPARTMENT OF AGRICULTURE, FARMERS HOME ADMINISTRATION THIS THE _____ DAY OF _____, 19____.

By: _____

Title: _____

THE AMENDMENT TO WATER PURCHASE AGREEMENT

This Third Amendment to Water Purchase Agreement is entered into effective as of the October 2, 2006, by and between the City of Dawsonville, a municipal corporation of the State of Georgia, hereinafter referred to as the "City", and the Etowah Water & Sewer Authority, an Authority organized and established under the laws of the State of Georgia located in Dawson County, hereinafter referred to as the "Authority."

WITNESSETH:

WHEREAS, the City and the Authority entered into a Water Purchase Agreement on December 5, 1989; and,

WHEREAS, the City and the Authority entered into a First Amendment to the Water Purchase Agreement on May 3, 1991; and,

WHEREAS, the City and the Authority entered into a Second Amendment to the Water Purchase Agreement on June 13, 1994, the *Water Purchase Agreement* as amended hereinafter being referred to as the "Agreement;" and,

WHEREAS, the City and the Authority find it necessary to further amend and modify certain provisions of the Agreement at this time;

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the sum of Ten (\$10.00) Dollars, paid by each party to the other, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each party, the City and the Authority agree as follows:

- 1.

The parties agree to add to paragraph B.1. of the Agreement a new subparagraph (c) as follows:

B. THE PARTIES AGREE:

1(c) Notwithstanding any provisions to the contrary in this Agreement, in the event the City develops wells or springs which produce potable water in sufficient amount to sell to the City's customers, the City may bring said wells and springs on-line and into use for sale to its customers without in any way violating the terms of this Agreement. In the event the City produces water in excess of its needs for its customers and the Authority is in need of water for its customers due to drought or other water shortage reason, the City may sell to the Authority, and the Authority may buy from the City, without further amendment to this agreement, such quantities of water not to exceed two hundred thousand (200,000) gallons per day up to a limit of six (6) million gallons per month at the current rate for sale of water from the Authority to the City as determined by the Agreement. In the event the City for any reason can not produce water to provide for the needs of its customers, the Authority, without further amendment to this agreement, may sell such quantities of water not to exceed two hundred thousand (200,000) gallons per day up to a limit of six (6) million gallons per month at the current rate for sale of water from the Authority to the City as determined by the Agreement. Notwithstanding the above, if the needs of either party are anticipated to exceed such amounts for any given monthly period, quantities may be requested and provided for either party on an emergency basis by agreement between the Chairman of the Authority and the Mayor of the City.

2.

The parties further agree that within thirty (30) days following the Georgia Environmental Protection Division of the Georgia Department of Natural Resources ("EPD") approval of the potable quality and quantity of such wells and springs as contemplated by the City to be 800,000 gallons per day (GPD) of production, the parties will negotiate with one another on a new Exhibit "B" to be attached to the Agreement as set forth in paragraph C.2. of the Agreement on Territorial Provision. It is the intent of the parties that they will work diligently and in good faith to arrive at a new Territorial Provision map. As may be necessary based upon EPD permitting and demand/supply for water, the parties additionally agree to renegotiate in good faith at such time the daily and monthly limitations on water each may purchase from the other as set out in Paragraph 1(c).

3.

Except as expressly modified or amended by this Third Amendment to Water Purchase Agreement, all provisions, terms and conditions of the original Water Purchase Agreement, the First Amendment to Water Purchase Agreement and the Second Amendment to Water Purchase Agreement shall continue in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Third Amendment to Water Purchase Agreement to be executed by their duly authorized officers and their seals affixed to be effective as of the date first shown above.

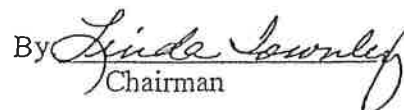
CITY OF DAWSONVILLE,
GEORGIA


By:



Mayor

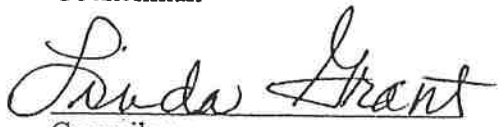
ETOWAH WATER &
SEWER AUTHORITY

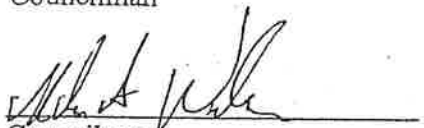
By:


Chairman

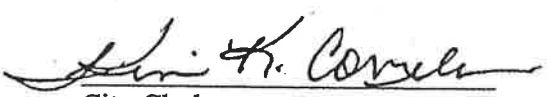

Councilman


Councilman

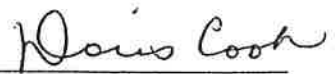

Councilman


Councilman

ATTEST:


City Clerk

ATTEST:

By: 
Secretary

Service: Sewage Collection/Disposal

The attached Sewer Service Area Agreement between the City of Dawsonville and Etowah Water & Sewer Authority has been in place since before the 2008 SDSA (with the exception of the 2018 IGA for Thunder Ridge Subdivision, also attached). Other than as indicated by the 2018 IGA, there have not been any amendments or modifications to this service category. The documents are being included with this SDSA to complete the record due to a previous omission of the documents.

SEWER SERVICE AREA AGREEMENT

This Sewer Service Area Agreement is entered into effective as of the 2nd
October, 2004, by and between the City of Dawsonville, a municipal corporation of the State of Georgia, hereinafter referred to as the "City," and the Etowah Water & Sewer Authority, an Authority organized and established under the laws of the State of Georgia located in Dawson County, hereinafter referred to as "EWSA."

WITNESSETH:

WHEREAS, the City and EWSA provide sewage disposal systems for residents and other legal entities within Dawson County and the City of Dawsonville; and

WHEREAS, the City and EWSA are authorized by law to enter into intergovernmental agreements for the provision of services including sewerage disposal services to residents and other legal entities within Dawson County and the City of Dawsonville; and

WHEREAS, the City and EWSA have determined that such an intergovernmental agreement is in the best interests of the health, safety, morality, and welfare of the citizens of Dawson County and the City; and

WHEREAS, the City and EWSA seek to establish a new sewer service area for the City to provide the most effective and efficient method for sewerage disposal within Dawson County and the City without duplication of services to the citizens, residents and other legal entities of the City and Dawson County;

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the sum of Ten (\$10.00) Dollars, paid by each party to the other, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each party, the City and EWSA agree as follows:

1.

1

This agreement shall become effective as of _____ and the obligations shall then begin, and, subject to the other provisions of this contract, unless otherwise renewed or amended by the parties, shall expire on _____.

2.

This service area agreed to by the parties to be the service area of the City is that area so designated as the blue-highlighted area on the map attached to this agreement as "Exhibit A." In addition, to the extent any portion of the service area depicted upon the map adjoins or borders a public road, the City, at its option, may request in writing on an individual basis authority from EWSA to provide sewer service to any parcel of land adjoining said road which is across the road from the City's service area. Upon approval in writing by EWSA or failure of EWSA to respond within thirty (30) days the City's service area shall be deemed to include said parcel only.

3.

This agreement supersedes all previous agreements between the parties with regard to sewerage service areas.

4.

This agreement is subject to such rules, regulations and laws as may be applicable to similar agreements in the State of Georgia and the City and EWSA shall reasonably cooperate in obtaining such permits, certificates or the like as may be required by such State of Georgia regulatory agencies. This agreement shall be construed according to the laws of the State of Georgia.



5.

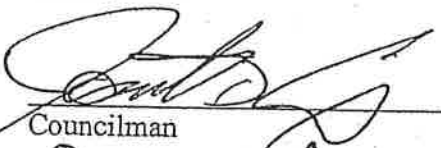
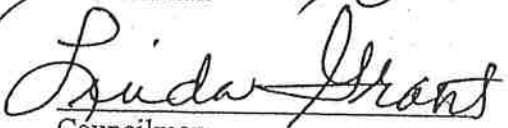
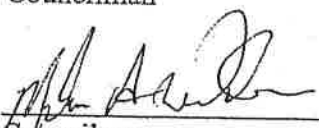
?

The City agrees to assume all liability and risks for all damages and injuries to persons or property which shall or may arise from the conduct of any of the City's activity relating to the provision of sewerage services within the sewer service area depicted on Exhibit A.

IN WITNESS WHEREOF, the parties have caused this Sewer Service Area Agreement to be executed by their duly authorized officers and their seals affixed to be effective as of the date first shown above.

CITY OF DAWSONVILLE,
GEORGIA

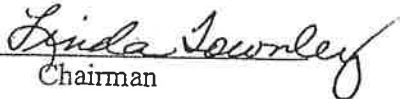
By: 
Mayor

Councilman


Councilman

Councilman

Councilman

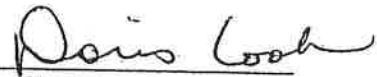
ATTEST:


City Clerk

ETOWAH WATER &
SEWER AUTHORITY

By: 
Chairman

ATTEST:

By: 
Secretary

Expanded Sewer Service Area

Legend







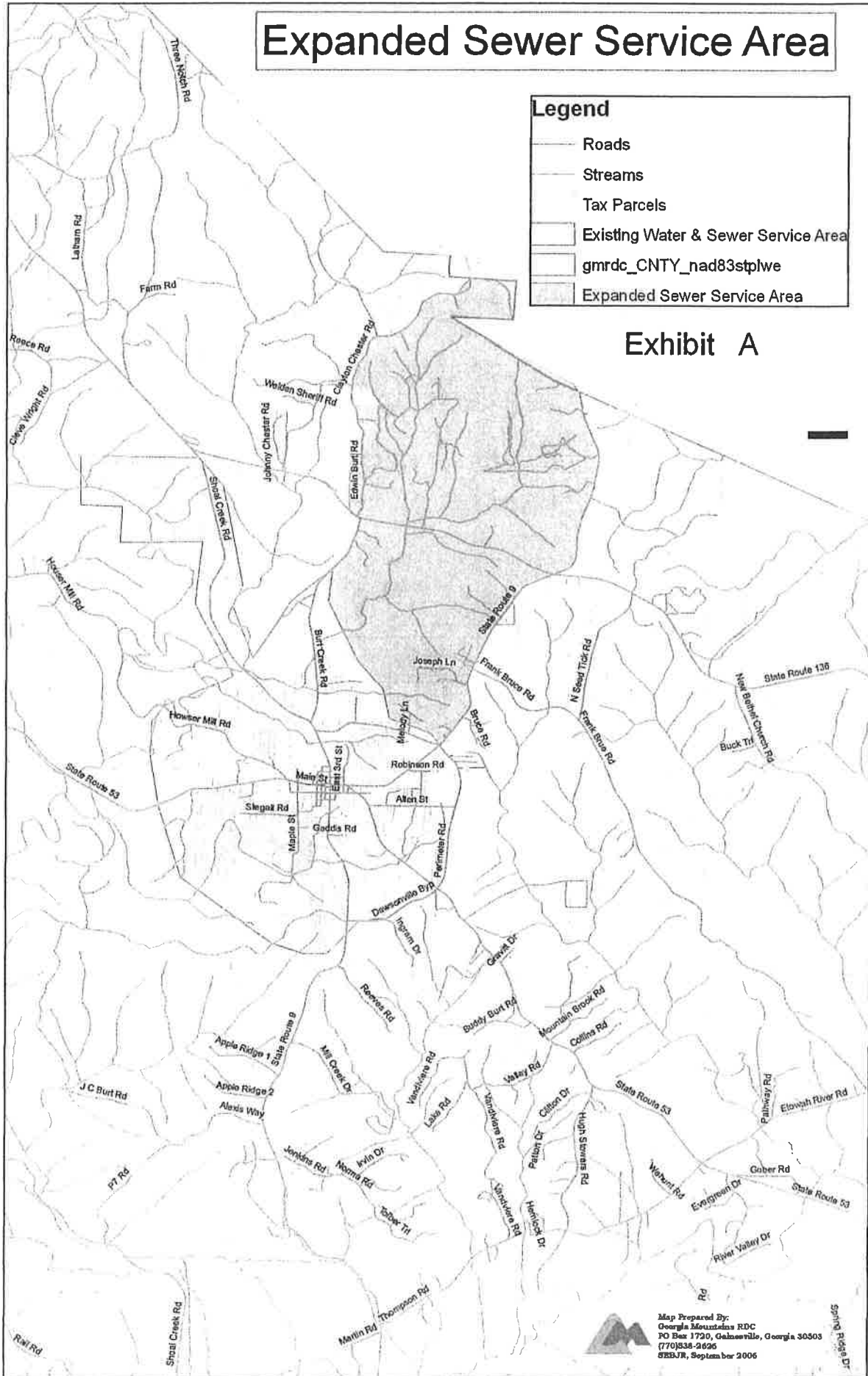
-  Roads
-  Streams
-  Tax Parcels
-  Existing Water & Sewer Service Area
-  gmrhc_CNTY_nad83stplwe
-  Expanded Sewer Service Area

Exhibit A



Map Prepared By:
 Georgia Mountains RDC
 PO Box 1720, Gainesville, Georgia 30503
 (770)838-2696
 SRSJR, Septem ber 2006

Spring Ridge Rd

**INTERGOVERNMENTAL AGREEMENT REGARDING WATER AND SEWER SERVICES TO
THUNDER RIDGE SUBDIVISION**

This Intergovernmental Agreement ("IGA") is hereby made this 10th day of July 2018 by and between the City of Dawsonville, Georgia ("City"), a municipal corporation of the State of Georgia, and Etowah Water and Sewer Authority (hereafter "the Authority"), a political subdivision of the State of Georgia.

WHEREAS, the City and the Authority provide and distribute water to the citizens and entities within their respective jurisdictions pursuant to previously negotiated agreements; and

WHEREAS, the City and the Authority also provide sewerage disposal and treatment services and systems to the citizens and entities within their respective jurisdictions pursuant to previously negotiated agreements; and

WHEREAS, the Developer of an approximate 280 lot subdivision (to be known as "Thunder Ridge") seeks to develop property located at Highway 9 South near the intersection of said Highway and JC Burt Road (Tax Parcels 084-003 and 094-046); and

WHEREAS, the City owns, operates and maintains a gravity sewer system and sewer treatment facility located proximate to Thunder Ridge and at the discharge point of a force main and sanitary sewer lift station to be owned, operated and maintained by the Authority; and

WHEREAS, the City and the Authority are authorized by law to enter into intergovernmental agreements for the provision of water and sewer services;

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each party, the City and the Authority hereby agree as follows:

1. Term. The term of this IGA shall be coterminous with the existing Water and Sewer Agreements between the City and the Authority and shall expire on October 1, 2034 unless earlier terminated in accord with paragraph 6 hereinbelow.
2. Obligations of the City.

The City of Dawsonville shall have the following obligations:

- a) It will set aside and provide sewer capacity and disposal services to the Thunder Ridge subdivision in exchange for the payments set forth in this IGA;
- b) It will own, operate, and maintain the gravity sewer from and including the manhole to be constructed by the Authority at GPS Coordinates Lat 34.408946 Long 84.121184 (the "New Manhole") to the existing connection point (the "Connection Point") in the City's sewer system located at GPS Coordinates Lat 34.411105 Long -84.121056;
- c) It will allow the Authority to pump sewage from the Thunder Ridge subdivision to the discharge point for disposal and treatment in the City's wastewater treatment plant;
- d) It will charge the Authority the City's Inside Residential Sewer Rates based upon the City's tiered scale, as the same may be changed from time to time, based on the volume of metered water consumption per month per active account within the Thunder Ridge subdivision.

3. Obligations of the Authority.

Etowah Water and Sewer Authority shall have the following obligations:

- a) It shall install and maintain, at no cost to the City, the appropriate individual metering equipment to measure the quantity of water used by the active account holders in the Thunder Ridge subdivision, which monthly consumption quantity of water, using the City's Inside Residential Sewer Rates tiered rate structure, will provide the basis for the amount that the Authority will pay to the City for sewage treatment, disposal and account management;
- b) It will set up an account in the name of the Authority with the City for sewer services to Thunder Ridge; and
- c) It will pay to the City any sewer tap fee charged for residential accounts within 30 days of the earlier of the receipt of the tap fee by the Authority or the establishment of any new residential account with the Authority; and

- d) Based on the monthly meter gallonage readings referenced above, the Authority will timely pay to the City the City's Inside Residential Sewer Rates based upon the City's tiered scale, as the same may be changed from time to time, on its account with the City; and
- e) It will adjust any of the foregoing meter readings to account for any customer water leak adjustments approved and credited to the customer by the Authority; and
- f) As per previous jurisdictional agreements, it will provide water services to Thunder Ridge; and
- g) It will manage and administer the individual water and sewer accounts for such services; and
- h) It will read all Thunder Ridge meters and bill its customers accordingly for both water and sewer services; and
- i) It will install at no expense to the City, own, operate, and maintain the sanitary lift station and its force main to the manhole ("New Manhole") for gravity sewer to be constructed by the Authority at GPS Coordinates Lat 34.408946 Long -84.121184. It will install at no expense to the City a new gravity sewer line from the New Manhole to the existing City gravity sewer connection point located at GPS Coordinates Lat 34.411105 Long -84.121056. The City will own, operate and maintain the New Manhole and the gravity sewer line from it to the connection point after the same is constructed by the Authority.

4. Consideration.

The parties hereto acknowledge, consent and agree that the terms hereof have been entered into in exchange for good and valuable consideration between the parties.

5. Representations and Warranties.

The parties hereto represent and warrant that each party has full power, authority and legal right to execute and perform this contract and agreement and has taken all necessary actions to authorize the execution and performance of this contract and agreement. This contract and agreement accurately references the legal, valid and binding obligations of each party.

Each party shall act in good faith to give effect to the intent of this agreement and shall take actions necessary or convenient to consummate the purpose and subject matter of this agreement.

6. Termination and Modification.

Either party may terminate this agreement if the other party fails to rectify a material breach of the terms hereof within ninety (90) days of receipt by the breaching party of written notice of such breach from the non-breaching party. The non-breaching party shall be entitled, without further notice, to cancel that party's obligations pursuant to the contract and agreement without prejudice to any claim for damages, breach of contract or otherwise. The failure or termination of any portion of this agreement shall not be a basis for terminating other severable obligations or provisions of this contract and agreement unless the failure or breach is such that the entire contract or agreement may no longer be performed.

The parties hereto acknowledge, consent, and agree that if the Authority can reasonably treat wastewater from the Thunder Ridge subdivision at any time during the term of this Agreement and upon 90 days written notice to the City, this Agreement shall terminate, the Authority shall provide sewer service to Thunder Ridge and both parties shall be released from the terms hereof. This Agreement may otherwise be modified by a written instrument executed by both parties hereto.

7. Notice.

Any notice or communication required or permitted in accord with the terms hereof shall be sufficiently given if delivered in person or by certified mail, return receipt requested, to the address listed herein or to such other address as a party may furnish in writing. The notice shall be deemed received when delivered or signed for or on the third day after mailing if not signed as received.

City of Dawsonville:

Mayor and City Council of Dawsonville
ATTN: City Manager
415 Highway 53 East
Dawsonville, GA 30534

Etowah Water and Sewer Authority:

Etowah Water and Sewer Authority
ATTN: General Manager
1162 Highway 53 East
Dawsonville, GA 30534

8. Assignment.

Neither party may assign or transfer this agreement without prior written consent of the other party.

9. Entire Agreement.

The contents hereof contain the entire agreement between the parties regarding the subject matter of this

10. Governing Law and Severability.

This IGA shall be construed and interpreted in accordance with Georgia law. If any sentence, phrase, provision, portion or clause of this IGA should at any time be declared or adjudged invalid, unlawful, unconstitutional or unenforceable for any reason, said adjudication or declaration shall in no manner or way effect the other sentences, phrases, provisions, portion of clauses hereof; and all remaining portions shall remain in full force and effect.

11. Non-Waiver.

The failure of either party to enforce any provision of this IGA and contract shall not be construed as a waiver or limitation of that party's right to subsequently enforce and compel strict compliance with every provision of this IGA.

This 10th day of July 2018.

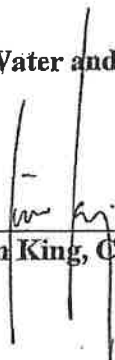
City of Dawsonville, Georgia

By: 
Jason Power, Mayor Pro-Tem

ATTEST:

By: 
Beverly Banister, Clerk

Etowah Water and Sewer Authority

By: 
Jim King, Chairman

ATTEST:

By: 
Linda Townley, Secretary

(Seal)





Georgia Department of
Community Affairs



SERVICE DELIVERY STRATEGY

FORM 4: Certifications

Instructions:




This form must, at a minimum, be signed by an authorized representative of the following governments: 1) the county; 2) the city serving as the county seat; 3) all cities having a 2010 population of over 9,000 residing within the county; and 4) no less than 50% of all other cities with a 2010 population of between 500 and 9,000 residing within the county. Cities with a 2010 population below 500 and local authorities providing services under the strategy are not required to sign this form, but are encouraged to do so.

COUNTY: DAWSON

We, the undersigned authorized representatives of the jurisdictions listed below, certify that:

1. We have executed agreements for implementation of our service delivery strategy and the attached forms provide an accurate depiction of our agreed upon strategy (O.C.G.A. 36-70-21);
2. Our service delivery strategy promotes the delivery of local government services in the most efficient, effective, and responsive manner (O.C.G.A. 36-70-24 (1));
3. Our service delivery strategy provides that water or sewer fees charged to customers located outside the geographic boundaries of a service provider are reasonable and are not arbitrarily higher than the fees charged to customers located within the geographic boundaries of the service provider (O.C.G.A. 36-70-24 (20); and
4. Our service delivery strategy ensures that the cost of any services the county government provides (including those jointly funded by the county and one or more municipalities) primarily for the benefit of the unincorporated area of the county are borne by the unincorporated area residents, individuals, and property owners who receive such service (O.C.G.A. 36-70-24 (3)).

JURISDICTION	TITLE	NAME	SIGNATURE	DATE
--------------	-------	------	-----------	------

<u>CITY OF DAWSONVILLE</u>	Mayor	Mike Eason		10/12/18
<u>DAWSON COUNTY</u>	Commission Chair	Billy Thurmond		10-04-18
<u>ETOWAH WATER AND SEWER AUTHORITY</u>	Board Chair	Jim King		10-11-18



SERVICE DELIVERY STRATEGY

FORM 1

COUNTY: **DAWSON COUNTY**

I. GENERAL INSTRUCTIONS:

1. FORM 1 is required for **ALL** SDS submittals. Only one set of these forms should be submitted per county. The completed forms shall clearly present the collective agreement reached by all cities and counties that were party to the service delivery strategy.
2. List each local government and/or authority that provides services included in the service delivery strategy in Section II below.
3. List all services provided or primarily funded by each general purpose local government and/or authority within the county that are continuing *without change* in Section III, below. (It is acceptable to break a service into separate components if this will facilitate description of the service delivery strategy.)

<p>OPTION A <i>Revising or Adding to the SDS</i></p>	<p>OPTION B <i>Extending the Existing SDS</i></p>
<ol style="list-style-type: none"> 4. List all services provided or primarily funded by each general purpose local government and authority within the county which are revised or added to the SDS in Section IV, below. (It is acceptable to break a service into separate components if this will facilitate description of the service delivery strategy.) 5. For each service or service component listed in Section IV, complete a separate, updated <i>Summary of Service Delivery Arrangements</i> form (FORM 2). 6. Complete one copy of the <i>Certifications</i> form (FORM 4) and have it signed by the authorized representatives of participating local governments. [Please note that DCA cannot validate the strategy unless it is signed by the local governments required by law (see Instructions, FORM 4).] 	<ol style="list-style-type: none"> 4. In Section IV type, "NONE." 5. Complete one copy of the <i>Certifications for Extension of Existing SDS</i> form (FORM 5) and have it signed by the authorized representatives of the participating local governments. [Please note that DCA cannot validate the strategy unless it is signed by the local governments required by law (see Instructions, FORM 5).] 6. Proceed to step 7, below. <div data-bbox="824 1182 1528 1419" style="background-color: #000080; color: white; padding: 10px; text-align: center;"> <p>For answers to most frequently asked questions on Georgia's Service Delivery Act, links and helpful publications, visit DCA's website at http://www.dca.ga.gov/development/PlanningQualityGrowth/programs/servicedelivery.asp, or call the Office of Planning and Quality Growth at (404) 679-5279.</p> </div>

7. If any of the conditions described in the existing *Summary of Land Use Agreements* form (FORM 3) have changed or if it has been ten (10) or more years since the most recent FORM 3 was filed, update and include FORM 3 with the submittal.
8. Provide the completed forms and any attachments to your regional commission. The regional commission will upload digital copies of the SDS documents to the Department's password-protected web-server.

NOTE: ANY FUTURE CHANGES TO THE SERVICE DELIVERY ARRANGEMENTS DESCRIBED ON THESE FORMS WILL REQUIRE AN UPDATE OF THE SERVICE DELIVERY STRATEGY AND SUBMITTAL OF REVISED FORMS AND ATTACHMENTS TO THE GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS UNDER THE "OPTION A" PROCESS DESCRIBED, ABOVE.

II. LOCAL GOVERNMENTS INCLUDED IN THE SERVICE DELIVERY STRATEGY:

In this section, list all local governments (including cities located partially within the county) and authorities that provide services included in the service delivery strategy.

Dawson County
City of Dawsonville
Etowah Water and Sewer Authority

III. SERVICES INCLUDED IN THE EXISTING SERVICE DELIVERY STRATEGY THAT ARE BEING EXTENDED WITHOUT CHANGE:

In this section, list each service or service component already included in the existing SDS which will continue as previously agreed with no need for modification.

1. Water Supply/ Distribution
2. Sewage collection/ Disposal
3. Development Permitting and Inspections
4. Building Permitting and Inspections
5. Soil Erosion Permitting and Enforcement
6. Police Protection
7. Fire Protection
8. Street/Road Repair & Maintenance and Street/Road Cleaning
9. Storm Water Management
10. Solid Waste Management
11. Planning and Zoning
12. EMS

IV. SERVICES THAT ARE BEING REVISED OR ADDED IN THIS SUBMITTAL:

In this section, list each new service or new service component which is being added and each service or service component which is being revised in this submittal. For each item listed here, a separate Summary of Service Delivery Arrangements form (FORM 2) must be completed.

Senior Citizen Services (New)



SERVICE DELIVERY STRATEGY
FORM 4: Certifications

Instructions:

This form must, at a minimum, be signed by an authorized representative of the following governments: 1) the county; 2) the city serving as the county seat; 3) all cities having a 2010 population of over 9,000 residing within the county; and 4) no less than 50% of all other cities with a 2010 population of between 500 and 9,000 residing within the county. Cities with a 2010 population below 500 and local authorities providing services under the strategy are not required to sign this form, but are encouraged to do so.

COUNTY: DAWSON COUNTY

We, the undersigned authorized representatives of the jurisdictions listed below, certify that:

1. We have executed agreements for implementation of our service delivery strategy and the attached forms provide an accurate depiction of our agreed upon strategy (O.C.G.A. 36-70-21);
2. Our service delivery strategy promotes the delivery of local government services in the most efficient, effective, and responsive manner (O.C.G.A. 36-70-24 (1));
3. Our service delivery strategy provides that water or sewer fees charged to customers located outside the geographic boundaries of a service provider are reasonable and are not arbitrarily higher than the fees charged to customers located within the geographic boundaries of the service provider (O.C.G.A. 36-70-24 (2)); and
4. Our service delivery strategy ensures that the cost of any services the county government provides (including those jointly funded by the county and one or more municipalities) primarily for the benefit of the unincorporated area of the county are borne by the unincorporated area residents, individuals, and property owners who receive such service (O.C.G.A. 36-70-24 (3)).

JURISDICTION	TITLE	NAME	SIGNATURE	DATE
<u>DAWSON COUNTY</u>	County Chairman	Billy Thurmond		6/14/18
<u>DAWSONVILLE</u>	Mayor	Mike Eason		6/14/18



**DAWSON COUNTY
BOARD OF COMMISSIONERS**

RECEIVED

OCT 17 2008

Mike Berg
Chairman

Gary Pichon
Commissioner
District One

Terri Tragesser
Commissioner
District Two

Mike Connor
Commissioner
District Three

Julie Hughes Nix
Commissioner
District Four

*** Via Certified Mail ***
7006 2760 0004 2068 6787

October 16, 2008

Georgia Department of Community Affairs
Office of Planning and Quality Growth
60 Executive Park South, N.E.
Atlanta, Georgia 30329

Dear Sir or Madam:

Re: Dawson County, Georgia Service Delivery Strategy

On behalf of Dawson County and the City of Dawsonville, I am pleased to enclose our updated Service Delivery Strategy certifications and all supporting documentation dated October 14, 2008.

Sincerely,

Mike Berg
Mike Berg, Chairman
Dawson County Board of Commissioners

Enclosures

cc The Honorable Joe Lane Cox
Kevin Tanner, County Manager
Joey Homans, County Attorney



SERVICE DELIVERY STRATEGY UPDATE CERTIFICATIONS

Instructions:

This two page form must, at a minimum, be signed by an authorized representative of the following governments: 1) the county; 2) the city serving as the county seat; 3) all cities having a 2000 population of over 9,000 residing within the county; and 4) no less than 50% of all other cities with a 2000 population of between 500 and 9,000 residing within the county. Cities with a 2000 population below 500 and local authorities providing services under the strategy are not required to sign this form, but are encouraged to do so.

UPDATED SERVICE DELIVERY STRATEGY FOR DAWSON COUNTY

We, the undersigned authorized representatives of the jurisdictions listed below, certify that:

1. We have reviewed our existing Service Delivery Strategy and have determined that:
(Check only one box for question #1)

- A. Our Strategy continues to accurately reflect our preferred arrangements for providing local services throughout our county and no changes in our Strategy are needed at this time; or
- B. Our Strategy has been revised to reflect our preferred arrangements for providing local services.



If Option A is selected, only this form, signed by the appropriate local government representatives must be provided to DCA.

If Option B is selected, this form, signed by the appropriate local government representatives, must be submitted to DCA along with:

- an updated "Summary of Service Arrangements" form (page 2) for each local service that has been revised/updated;
 - any supporting local agreements pertaining to each of these services that has been revised/updated; and
 - an updated service area map depicting the agreed upon service area for each provider if there is more than one service provider for each service that has been revised/updated within the county, and if the agreed upon service areas do not coincide with local political boundaries.
2. Each of our governing bodies (County Commission and City Councils) that are a party to this strategy have adopted resolutions agreeing to the Service Delivery arrangements identified in our strategy and have executed agreements for implementation of our service delivery strategy (O.C.G.A. 36-70-21);
3. Our service delivery strategy continues to promote the delivery of local government services in the most efficient, effective, and responsive manner for all residents, individuals and property owners throughout the county (O.C.G.A. 36-70-24(1));
4. Our service delivery strategy continues to provide that water or sewer fees charged to customers located outside the geographic boundaries of a service provider are reasonable and are not arbitrarily higher than the fees charged to customers located within the geographic boundaries of the service provider (O.C.G.A. 36-70-24 (2));
5. Our service delivery strategy continues to ensure that the cost of any services the county government provides (including those jointly funded by the county and one or more municipalities) primarily for the benefit of the unincorporated area of the county are borne by the unincorporated area residents, individuals, and property owners who receive such service (O.C.G.A. 36-70-24 (3));

6. Our Service Delivery Strategy continues to ensure that the officially adopted County and City land use plans of all local governments located in the County are compatible and nonconflicting (O.C.G.A. 36-70-24 (4)(A));
7. Our Service Delivery Strategy continues to ensure that the provision of extraterritorial water and sewer services by any jurisdiction is consistent with all County and City land use plans and ordinances (O.C.G.A. 36-70-24 (4)(B)); and
8. Our Service Delivery Strategy continues to contain an agreed upon process between the county government and each city located in the county to resolve land use classification disputes when the county objects to the proposed land use of an area to be annexed into a city within the county (O.C.G.A. 36-70-24 (4)(C))' and;
9. DCA has been provided a copy of this certification and copies of all forms, maps and supporting agreements needed to accurately depict our agreed upon strategy (O.C.G.A. 36-70-27).

If the County does not have an Annexation/Land Use dispute resolution process with each of its cities, list the cities where no agreed upon process exists:

SIGNATURE:	NAME: (Please print or type)	TITLE:	JURISDICTION:	DATE:
	Mike Berg	Chairman	Dawson County Board of Commissioners	10/14/08
	Joe Lane Cox	Mayor	City of Dawsonville	10/14/08



GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

SERVICE DELIVERY STRATEGY

FOR

DAWSON

COUNTY

PAGE 1

I. GENERAL INSTRUCTIONS:

- 1. Only one set of these forms should be submitted per county. The completed forms should clearly present the collective agreement reached by all cities and counties that were party to the service delivery strategy.
2. List each local government and/or authority that provides services included in the service delivery strategy in Section II below.
3. List all services provided or primarily funded by each general purpose local government and authority within the county in Section III below. It is acceptable to break a service into separate components if this will facilitate description of the service delivery strategy.
4. For each service or service component listed in Section III, complete a separate Summary of Service Delivery Arrangements form (page 2).
5. Complete one copy of the Summary of Land Use Agreements form (page 3).
6. Have the Certifications form (page 4) signed by the authorized representatives of participating local governments. Please note that DCA cannot validate the strategy unless it is signed by the local governments required by law (see Instructions, page 4).
7. Mail the completed forms along with any attachments to:

Georgia Department of Community Affairs
Office of Planning and Quality Growth
60 Executive Park South, N.E.
Atlanta, Georgia 30329

For answers to most frequently asked questions on Georgia's Service Delivery Act, links and helpful publications, visit DCA's website at www.dca.servicedelivery.org, or call the Office of Planning and Quality Growth at (404) 679-5279.

Note: Any future changes to the service delivery arrangements described on these forms will require an official update of the service delivery strategy and submittal of revised forms and attachments to the Georgia Department of Community Affairs.

II. LOCAL GOVERNMENTS INCLUDED IN THE SERVICE DELIVERY STRATEGY:

In this section, list all local governments (including cities located partially within the county) and authorities that provide services included in the service delivery strategy.

Dawson County
City of Dawsonville
Etowah Water and Sewer Authority

III. SERVICES INCLUDED IN THE SERVICE DELIVERY STRATEGY:

For each service listed here, a separate Summary of Service Delivery Arrangements form (page 2) must be completed.

- 1. Water Supply/Distribution
2. Sewage Collection/Disposal
3. Development Permitting and Inspections
4. Building Permitting and Inspections
5. Soil Erosion Permitting and Enforcement
6. Police Protection
7. Fire Protection
8. Street/Road Repair & Maintenance and Street/Road Cleaning
9. Storm Water Management
10. Solid Waste Management
11. Planning and Zoning
12. EMS



**SERVICE DELIVERY STRATEGY
SUMMARY OF SERVICE DELIVERY ARRANGEMENTS PAGE 2**

Instructions:

Make copies of this form and complete one for each service listed on page 1, Section III. Use exactly the same service names listed on page 1. Answer each question below, attaching additional pages as necessary. If the contact person for this service (listed at the bottom of the page) changes, this should be reported to the Department of Community Affairs.

County: Dawson **Service:** #1 - Water Supply/Distribution

1. Check the box that best describes the agreed upon delivery arrangement for this service:

Service will be provided countywide (i.e., including all cities and unincorporated areas) by a single service provider. (If this box is checked, identify the government, authority or organization providing the service.): _____

Service will be provided only in the unincorporated portion of the county by a single service provider. (If this box is checked, identify the government, authority or organization providing the service.): _____

One or more cities will provide this service only within their incorporated boundaries, and the service will not be provided in unincorporated areas. (If this box is checked, identify the government(s), authority or organization providing the service): _____

One or more cities will provide this service only within their incorporated boundaries, and the county will provide the service in unincorporated areas. (If this box is checked, identify the government(s), authority or organization providing the service.): _____

Other (If this box is checked, **attach a legible map delineating the service area of each service provider**, and identify the government, authority, or other organization that will provide service within each service area.):

Etowah Water and Sewer Authority City of Dawsonville

2. In developing the strategy, were overlapping service areas, unnecessary competition and/or duplication of this service identified?

Yes No

If these conditions will continue under the strategy, **attach an explanation for continuing the arrangement** (i.e., overlapping but higher levels of service (See O.C.G.A. 36-70-24(1)), overriding benefits of the duplication, or reasons that overlapping service areas or competition cannot be eliminated).

If these conditions will be eliminated under the strategy, **attach an implementation schedule** listing each step or action that will be taken to eliminate them, the responsible party and the agreed upon deadline for completing it.

3. List each government or authority that will help to pay for this service and indicate how the service will be funded (e.g., enterprise funds, user fees, general funds, special service district revenues, hotel/motel taxes, franchise taxes, impact fees, bonded indebtedness, etc.).

<i>Local Government or Authority:</i>	<i>Funding Method:</i>
Etowah Water and Sewer Authority	User Fees
City of Dawsonville	User Fees

4. How will the strategy change the previous arrangements for providing and/or funding this service within the county?

Etowah Water and Sewer Authority provides service in the unincorporated areas, and the City of Dawsonville provides service in the incorporated areas unless otherwise mutually agreed upon through an agreement between Etowah Water and Sewer and the City of Dawsonville.

5. List any formal service delivery agreements or intergovernmental contracts that will be used to implement the strategy for this service:

<i>Agreement Name:</i>	<i>Contracting Parties:</i>	<i>Effective and Ending Dates:</i>

6. What other mechanisms (if any) will be used to implement the strategy for this service (e.g., ordinances, resolutions, local acts of the General Assembly, rate or fee changes, etc.), and when will they take effect?

7. Person completing form:

Joe Lane Cox, Mayor-City of Dawsonville 706.265.3256
Mike Berg, Chairman-Dawson County Board of Commissioners 706.344.3501
 Phone number: _____ Date completed: 10/14/08

8. Is this the person who should be contacted by state agencies when evaluating whether proposed local government projects are consistent with the service delivery strategy? Yes No

If not, provide designated contact person(s) and phone number(s) below:



**SERVICE DELIVERY STRATEGY
SUMMARY OF SERVICE DELIVERY ARRANGEMENTS PAGE 2**

Instructions:

Make copies of this form and complete one for each service listed on page 1, Section III. Use exactly the same service names listed on page 1. Answer each question below, attaching additional pages as necessary. If the contact person for this service (listed at the bottom of the page) changes, this should be reported to the Department of Community Affairs.

County: **Dawson** **Service:** **#2 - Sewer Collection/Disposal**

1. Check the box that best describes the agreed upon delivery arrangement for this service:

Service will be provided countywide (i.e., including all cities and unincorporated areas) by a single service provider. (If this box is checked, identify the government, authority or organization providing the service.): _____

Service will be provided only in the unincorporated portion of the county by a single service provider. (If this box is checked, identify the government, authority or organization providing the service.): _____

One or more cities will provide this service only within their incorporated boundaries, and the service will not be provided in unincorporated areas. (If this box is checked, identify the government(s), authority or organization providing the service): _____

One or more cities will provide this service only within their incorporated boundaries, and the county will provide the service in unincorporated areas. (If this box is checked, identify the government(s), authority or organization providing the service.): _____

Other (If this box is checked, **attach a legible map delineating the service area of each service provider**, and identify the government, authority, or other organization that will provide service within each service area.):

Etowah Water and Sewer Authority City of Dawsonville

2. In developing the strategy, were overlapping service areas, unnecessary competition and/or duplication of this service identified?

Yes No

If these conditions will continue under the strategy, **attach an explanation for continuing the arrangement** (i.e., overlapping but higher levels of service (See O.C.G.A. 36-70-24(1)), overriding benefits of the duplication, or reasons that overlapping service areas or competition cannot be eliminated).

If these conditions will be eliminated under the strategy, **attach an implementation schedule** listing each step or action that will be taken to eliminate them, the responsible party and the agreed upon deadline for completing it.

3. List each government or authority that will help to pay for this service and indicate how the service will be funded (e.g., enterprise funds, user fees, general funds, special service district revenues, hotel/motel taxes, franchise taxes, impact fees, bonded indebtedness, etc.).

<i>Local Government or Authority:</i>	<i>Funding Method:</i>
Etowah Water and Sewer Authority	User Fees; Intergovernmental Agreement
Dawson County	General Funds; Bonded Indebtedness
City of Dawsonville	User Fees

4. How will the strategy change the previous arrangements for providing and/or funding this service within the county?

Etowah Water and Sewer Authority provides service in the unincorporated areas, and the City of Dawsonville provides service in the incorporated areas unless otherwise mutually agreed upon through an agreement between Etowah Water and Sewer and the City of Dawsonville.

5. List any formal service delivery agreements or intergovernmental contracts that will be used to implement the strategy for this service:

<i>Agreement Name:</i>	<i>Contracting Parties:</i>	<i>Effective and Ending Dates:</i>
Operation & Maintenance Agreement	E.W.S.A. / Dawson County	
Sprayfield Agreement	E.W.S.A. / Dawson County	

6. What other mechanisms (if any) will be used to implement the strategy for this service (e.g., ordinances, resolutions, local acts of the General Assembly, rate or fee changes, etc.), and when will they take effect?

7. Person completing form:

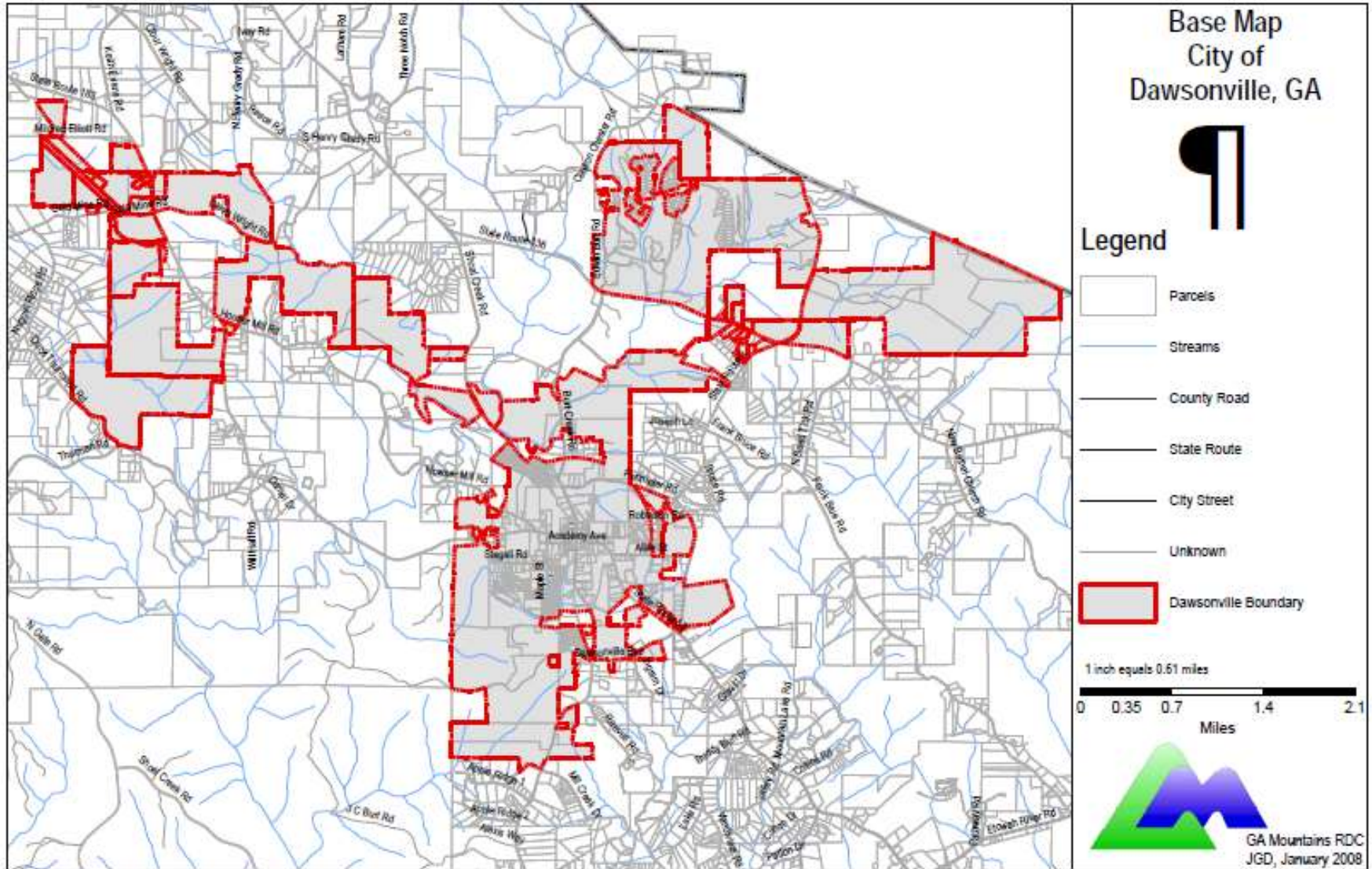
Joe Lane Cox, Mayor-City of Dawsonville 706.265.3256

Mike Berg, Chairman-Dawson County Board of Commissioners 706.344.3501

Phone number: _____ Date completed: 10/14/08

8. Is this the person who should be contacted by state agencies when evaluating whether proposed local government projects are consistent with the service delivery strategy? Yes No

If not, provide designated contact person(s) and phone number(s) below:



As per the Service Delivery Strategy Agreements for #1—Water Supply/Distribution, the City of Dawsonville provides within the incorporated areas unless agreed upon through an agreement between Etowah Water and Sewer Authority and the City of Dawsonville.

Appendix C – Intergovernmental Agreement

THE AMENDMENT TO WATER PURCHASE AGREEMENT

This Third Amendment to Water Purchase Agreement is entered into effective as of the October 2, 2006, by and between the City of Dawsonville, a municipal corporation of the State of Georgia, hereinafter referred to as the "City", and the Etowah Water & Sewer Authority, an Authority organized and established under the laws of the State of Georgia located in Dawson County, hereinafter referred to as the "Authority."

WITNESSETH:

WHEREAS, the City and the Authority entered into a Water Purchase Agreement on December 5, 1989; and,

WHEREAS, the City and the Authority entered into a First Amendment to the Water Purchase Agreement on May 3, 1991; and,

WHEREAS, the City and the Authority entered into a Second Amendment to the Water Purchase Agreement on June 13, 1994, the *Water Purchase Agreement* as amended hereinafter being referred to as the "Agreement;" and,

WHEREAS, the City and the Authority find it necessary to further amend and modify certain provisions of the Agreement at this time;

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the sum of Ten (\$10.00) Dollars, paid by each party to the other, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each party, the City and the Authority agree as follows:

1.

The parties agree to add to paragraph B.1. of the Agreement a new subparagraph (c) as follows:

B. THE PARTIES AGREE:

1(c) Notwithstanding any provisions to the contrary in this Agreement, in the event the City develops wells or springs which produce potable water in sufficient amount to sell to the City's customers, the City may bring said wells and springs on-line and into use for sale to its customers without in any way violating the terms of this Agreement. In the event the City produces water in excess of its needs for its customers and the Authority is in need of water for its customers due to drought or other water shortage reason, the City may sell to the Authority, and the Authority may buy from the City, without further amendment to this agreement, such quantities of water not to exceed two hundred thousand (200,000) gallons per day up to a limit of six (6) million gallons per month at the current rate for sale of water from the Authority to the City as determined by the Agreement. In the event the City for any reason can not produce water to provide for the needs of its customers, the Authority, without further amendment to this agreement, may sell such quantities of water not to exceed two hundred thousand (200,000) gallons per day up to a limit of six (6) million gallons per month at the current rate for sale of water from the Authority to the City as determined by the Agreement. Notwithstanding the above, if the needs of either party are anticipated to exceed such amounts for any given monthly period, quantities may be requested and provided for either party on an emergency basis by agreement between the Chairman of the Authority and the Mayor of the City.

2.

The parties further agree that within thirty (30) days following the Georgia Environmental Protection Division of the Georgia Department of Natural Resources ("EPD") approval of the potable quality and quantity of such wells and springs as contemplated by the City to be 800,000 gallons per day (GPD) of production, the parties will negotiate with one another on a new Exhibit "B" to be attached to the Agreement as set forth in paragraph C.2. of the Agreement on Territorial Provision. It is the intent of the parties that they will work diligently and in good faith to arrive at a new Territorial Provision map. As may be necessary based upon EPD permitting and demand/supply for water, the parties additionally agree to renegotiate in good faith at such time the daily and monthly limitations on water each may purchase from the other as set out in Paragraph 1(c).

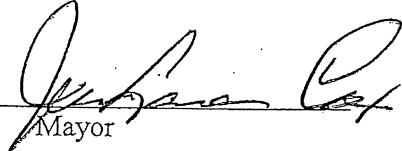
3.

Except as expressly modified or amended by this Third Amendment to Water Purchase Agreement, all provisions, terms and conditions of the original Water Purchase Agreement, the First Amendment to Water Purchase Agreement and the Second Amendment to Water Purchase Agreement shall continue in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Third Amendment to Water Purchase Agreement to be executed by their duly authorized officers and their seals affixed to be effective as of the date first shown above.

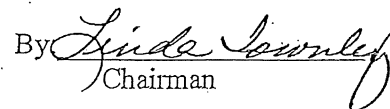
CITY OF DAWSONVILLE,
GEORGIA


By:

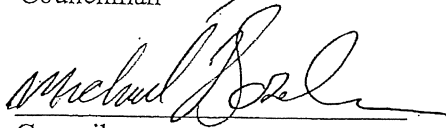

Mayor

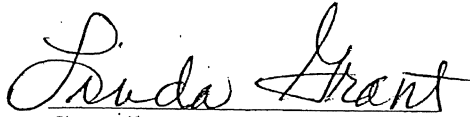
ETOWAH WATER &
SEWER AUTHORITY

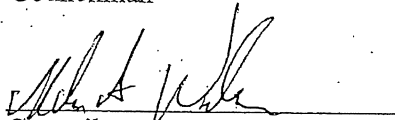
By:


Chairman

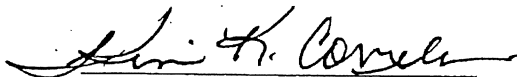

Councilman


Councilman

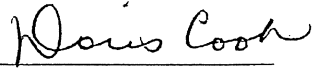

Councilman


Councilman

ATTEST:


City Clerk

ATTEST:

By: 
Secretary

Appendix D – Water Conservation Progress Report

Water Conservation Progress Report (Municipal)
Groundwater Withdrawal Permit

Permit Number:	042-0001
Permit Holder:	City of Dawsonville
River Basin:	Coosa River
Permit Limits (mgd):	0.500 MGD monthly average; 0.500 MGD annual average

1. Water System Usage

Report Year (month/yr)	Non-Revenue Water ¹ (annual avg gal/day)	Annual Average Daily Withdrawal (AADW) in (gal/day)	Service Area Population (pop)*	Equivalent Per Capita Usage (gal/capita/day) ² (AADW/pop)
12/2017	51,918	212,861	2,424	88
12/2018	40,913	226,199	2,540	89
12 /2019	55,729	281,669	2,641	107
12/2020	69,520	301,171	3,409	88
12/2021	81,567	323,777	3,640	89

**Service populations are estimated by persons per housing unit from the 2020 Census (2.57), multiplied by number of residential services. Estimates are interpolated for 2018 and 2019.*

¹Non-Revenue Water (NRW) is the difference between the volume of water supplied to a system (*Water Withdrawn + Purchased Water*) and volume of water billed to customers.

$$\text{Non-Revenue Water} = \text{Water Supplied} - \text{Water Billed to Customers}$$

²Per Capita Usage is calculated with the following formula:

$$\text{Per Capita Usage} = \text{Annual Average Daily Withdrawal} / \text{Population}$$

Note: Calculations for the above parameters apply only to service area of the system. Water sold outside the service area should be subtracted from the Water Withdrawn value.

2. Provide a brief description of actions taken to improve water conservation and reduce water loss in the following areas:

Leak Detection and Repair (Systems Serving Population Less than 3,300 Only)		
Performance Measure:	<u>Non-revenue water</u>	
Current Status:	<u>25.2% by volume supplied</u>	
Goal:	<u>Long-term NRW reduction</u>	
In Progress / Completed Actions	Beginning Date	Projected / Actual Completion Date
<u>AMR system installation</u>	<u>Complete</u>	<u>2017</u>
<u>Inventory of leaks and repairs</u>	<u>In place</u>	<u>On-going</u>
<u>Check pressures as complaints arose</u>	<u>On-going</u>	<u>On-going</u>
<u>Leak surveillance and response</u>	<u>On-going</u>	<u>On-going</u>
_____	_____	_____
_____	_____	_____
Notes / Comments:		

Meter Testing, Installation, Calibration, or Replacement (Systems Serving Population Less than 3,300 Only)		
Performance Measure:	<u>Meter Accuracy</u>	
Current Status:	<u>New meters in service</u>	
Goal:	<u>Scheduled testing of all</u>	
In Progress / Completed Actions	Beginning Date	Projected / Actual Completion Date
<u>Replace defective production meters</u>	<u>Complete</u>	<u>2029</u>
<u>Replace customer meters</u>	<u>Complete</u>	<u>2017</u>
<u>Implement long-term testing/replacement sched, w AMR diagnostics.</u>	<u>In place</u>	<u>On-going</u>
<u>All billed accounts are metered.</u>	<u>Complete</u>	<u>2017</u>
_____	_____	_____
_____	_____	_____
Notes / Comments:		
Master Meter states the Octave ultrasonic production meters at the wells cannot be field-calibrated and are designed to be replaced at 10 years. City is considering plans to begin sampling/testing customer meters on 5-7 year basis.		

Summer and/or Peak Use Surcharges (All Systems)

In Progress / Completed Actions

The City does not employ seasonal or peak use surcharges.
The City utilizes block rates with rates tiers increasing with usage to encourage conservation all year

Beginning Date

N/A
Current

Projected / Actual Completion Date

N/A
Current

Notes / Comments:

Enforcement of Ultra-Low Flow Plumbing Fixture Requirements (All Systems)

In Progress / Completed Actions

The City permits and inspects construction to enforce its building codes, which include the Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments for high-efficiency plumbing fixtures and fittings)

Beginning Date

Current

Projected / Actual Completion Date

Continuous

Notes / Comments:

Other Measure: Other Water Conservation Measures (All Systems, If Applicable)

In Progress / Completed Actions

The City has implemented Georgia Rules for outdoor water use.

The City utilizes the AMR system to notify customers of possible leaks.

**Beginning
Date**

Current
2017

**Projected / Actual
Completion Date**

Continuous
Continuous

Notes / Comments:

Notes / Comments (All Systems, If Applicable)

**Official Signature of Owner or
Authorized Official**

Robert D. Bolz, City Manager
**Printed Name of Owner or
Authorized Official**

Date February 4, 2022

Appendix E – Water Loss Control Program



Water Loss Control Program

Date: February 4, 2022 **Facility Name:** City of Dawsonville Water System, **Permit No:** 042-0001

In accordance with 391-3-33, Public Water Systems that regularly serve 3,300 or more individuals shall:

1. Conduct an annual water loss audits in accordance with American Water Works Association (AWWA) methodology;
2. Develop and conduct a water loss control program to investigate, assess, and implement efforts to improve water supply efficiency;
3. Establish individual goals to set measures of water supply efficiency and improve water supply efficiency; and
4. Make progress toward improving water supply efficiency.

In order to streamline the data submitted to meet these requirements, please use the template forms below. Note that a system’s water loss control program should reflect the results of the applicable annual water loss audits. Namely, the program should address at least the 3 recommendations offered by the most recent annual water loss audit. Please transfer each of the water audit recommendations to the forms below and address your system’s proposed actions to deal with those items. You may also use the “Notes/Comments” section to provide context or further information about any proposed actions. If you have any goals addressing other priority areas, please capture those items on additional copies of pages 3 or 4.

Audit Recommendation Area #1: <u>Annual Water Loss Audits</u>		
Performance Measure:	_____	NA
Current Status:	_____	NA
Goal:	_____	NA
Proposed Actions	Anticipated Beginning Date	Projected Completion Date
<u>Commence Annual Water Loss Audits</u>	<u>2/2022 (monitoring)</u>	<u>3/1/ 2023 (first report)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
Notes / Comments:		
<p>(1) <i>Prior to the 2020 Census, US Census American Community Survey estimates to 2019 indicated the City population was below 3,000, and service population estimates were also less.</i></p> <p>(2) <i>New estimates based on 2020 Census results and current residential service accounts indicate the service population is now over 3,300.</i></p>		

Other Priority Area: Water Supplied

Performance Measure: Volume from own sources
 Current Status: N/A
 Goal: 6

Proposed Actions	Anticipated Beginning Date	Projected Completion Date
<u>New production meters installed (all)</u>	<u>Complete</u>	<u>2019</u>
<u>Formalize annual accuracy testing</u>	<u>2022</u>	<u>On-going</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>

Notes / Comments:

Other Priority Area: Apparent Losses

Performance Measure: Data handling errors
 Current Status: NA
 Goal: 6

Proposed Actions	Anticipated Beginning Date	Projected Completion Date
<u>Written account policy, SOP</u>	<u>2022</u>	<u>3/1/ 2023 (first report)</u>
<u>Computerized billing system</u>	<u>Complete</u>	<u>2017</u>
<u>Internal annual audit</u>	<u>2022</u>	<u>3/1/ 2023 (first report)</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>

Notes / Comments:

Priority Area: _____

Notes / Comments: