

Winterville, Town of

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

1. System Information

Contact Information

Complete

Water System Name:	Winterville, Town of	PWSID:	04-74-040
Mailing Address:	PO Box 1459 Winterville, NC 28590	Ownership:	Municipality
Contact Person:	Cliff McGuffin	Title:	Public Works Director
Phone:	252-215-2428	Cell/Mobile:	252-414-8793
Secondary Contact:	Mike Houston	Phone:	--
Mailing Address:	, NC 28525	Cell/Mobile:	919-812-6088

Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Asbestos Cement	6-12	8.00 %
Cast Iron	1-10	1.00 %
Ductile Iron	6-12	0.50 %
Galvanized Iron	1-2	0.50 %
Polyvinyl Chloride	2-12	90.00 %

What are the estimated total miles of distribution system lines? 68 Miles

How many feet of distribution lines were replaced during 2022? 0 Feet

How many feet of new water mains were added during 2022? 0 Feet

How many meters were replaced in 2022? 144

How old are the oldest meters in this system? 11 Year(s)

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? 130

What is this system's finished water storage capacity? 0.5000 Million Gallons

Has water pressure been inadequate in any part of the system since last update? *Line breaks that were repaired quickly should not be included.* No

Programs

Does this system have a program to work or flush hydrants? Yes, As Needed
 Does this system have a valve exercise program? Yes, 2 Years or More
 Does this system have a cross-connection program? Yes
 Does this system have a program to replace meters? Yes
 Does this system have a plumbing retrofit program? No
 Does this system have an active water conservation public education program? Yes
 Does this system have a leak detection program? No

Employees look for leaks while in the field and utilize NCRWA on an as needed basis.

Water Conservation

What type of rate structure is used? Increasing Block
 How much reclaimed water does this system use? 0.0000 MGD For how many connections? 0
 Does this system have an interconnection with another system capable of providing water in an emergency? Yes

2. Water Use Information

Service Area

Sub-Basin(s) % of Service Population

Neuse River (10-1) 100 %

What was the year-round population served in 2022? 10,462
 Has this system acquired another system since last report? No

Water Use by Type

Type of Use	Metered Connections	Metered Average Use (MGD)	Non-Metered Connections	Non-Metered Estimated Use (MGD)
Residential	4,133	0.5191	0	0.0000
Commercial	247	0.0795	0	0.0000
Industrial	0	0.0000	0	0.0000
Institutional	35	0.0018	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.0200 MGD

We recently implemented a new flushing program which increased our average daily system process totals.

Water Sales

Purchaser	PWSID	Average Daily Sold (MGD)	Days Used	Contract MGD Expiration	Contract Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
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Bell Arthur Water	04-74-045	0.0000	0	0.0000	9999	No	No	10	Emergency
Greenville Utilities	04-74-010	0.0000	0	0.0000	2034	Yes	Yes	12	Emergency

3. Water Supply Sources

Monthly Withdrawals & Purchases

	Average Daily Use (MGD)	Max Day Use (MGD)	Average Daily Use (MGD)	Max Day Use (MGD)	Average Daily Use (MGD)	Max Day Use (MGD)		
Jan	0.6012	0.3220	May	0.7024	0.5430	Sep	0.6475	0.5400
Feb	0.6155	0.3220	Jun	0.7414	0.5380	Oct	0.6687	0.6340
Mar	0.5994	0.3180	Jul	0.6918	0.4660	Nov	0.5985	0.3500
Apr	0.6667	0.4370	Aug	0.6979	0.6040	Dec	0.6382	0.6010

Ground Water Sources

Name or Number	Average Daily Withdrawal (MGD)		Max Day Withdrawal (MGD)	12-Hour Supply (MGD)	CUA Reduction	Year Offline	Use Type
	MGD	Days Used					
2	0.0874	364	0.2000	0.1656	CUA25		Regular
3	0.0000	0	0.0000	0.1080	CUA25	2010	Emergency
4	0.1907	365	0.4340	0.4320	CUA25		Regular

Ground Water Sources (continued)

Name or Number	Well Depth (Feet)	Casing Depth (Feet)	Screen Depth (Feet)		Well Diameter (Inches)	Pump Intake Depth (Feet)	Metered?
			Top	Bottom			
2	436	57	340	432	10	215	Yes
3	377	60	256	372	10	205	Yes
4	432	40	326	427	12	190	Yes

Are ground water levels monitored? Yes, Monthly

Does this system have a wellhead protection program? Yes

Water Purchases From Other Systems

Seller	PWSID	Average Daily Purchased (MGD)	Days Used	Contract		Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type	
				MGD	Expiration Recurring				
Bell Arthur Water	04-74-045	0.0000	0	0.0000	9999	No	No	10	Emergency
Greenville Utilities Commission	04-74-010	0.3770	365	0.6000	2034	Yes	Yes	12	Regular

4. Wastewater Information

Monthly Discharges

	Average Daily Discharge (MGD)	Average Daily Discharge (MGD)	Average Daily Discharge (MGD)
Jan	0.6855	May 0.5735	Sep 0.5571
Feb	0.6598	Jun 0.5254	Oct 0.6028
Mar	0.6316	Jul 0.5997	Nov 0.5545
Apr	0.5799	Aug 0.5791	Dec 0.5887

How many sewer connections does this system have? 4,037

How many water service connections with septic systems does this system have? 219

Are there plans to build or expand wastewater treatment facilities in the next 10 years? No

Wastewater flow is routed through several pumping stations where it flows to CMSD (Contentnea Metropolitan Sewage District) and then treated. The discharge effluent after treatment is discharged into the Contentnea Creek per Permit# 0032077. CMSD is in the planning phase of a possible upgrade.

Wastewater Permits

Permit Number	Type	Permitted Capacity (MGD)	Design Capacity (MGD)	Average Annual Daily Discharge (MGD)	Maximum Day Discharge (MGD)	Receiving Stream	Receiving Basin
NC0032077	WWTP	3.5000	4.0000	0.5947	3.6000	Contentnea Creek / Neuse River	Neuse River (10-1)

5. Planning

Projections

	2022	2030	2040	2050	2060	2070
Year-Round Population	10,462	11,564	13,107	14,670	16,420	18,379
Seasonal Population	0	0	0	0	0	0
Residential	0.5191	0.5737	0.6502	0.7277	0.8145	0.9116
Commercial	0.0795	0.0879	0.0996	0.1115	0.1247	0.1396
Industrial	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Institutional	0.0018	0.0020	0.0023	0.0025	0.0028	0.0032
System Process	0.0200	0.0221	0.0250	0.0280	0.0312	0.0350
Unaccounted-for	0.0345	0.0381	0.0432	0.0484	0.0541	0.0606

GUC has provided confirmation it is agreeable with increasing Winterville’s max. capacity to .910 MGD (the amount required to keep projected demand-to-supply ratios below 80 percent through 2050) for the purpose of the local water supply plan and meeting future water demands. Winterville and GUC Management plan to have discussions regarding Winterville’s long term water purchase needs.

Future Supply Sources

Source Name	PWSID	Source Type	Additional Supply	Year Online	Year Offline	Type
Greenville Utilities Commission	04-74-010	Purchase	0.3100	2024		Regular

Demand v/s Percent of Supply

	2022	2030	2040	2050	2060	2070
Surface Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ground Water Supply	0.2475	0.2475	0.2475	0.2475	0.2475	0.2475
Purchases	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Future Supplies		0.3100	0.3100	0.3100	0.3100	0.3100
Total Available Supply (MGD)	0.8475	1.1575	1.1575	1.1575	1.1575	1.1575
Service Area Demand	0.6549	0.7238	0.8203	0.9181	1.0273	1.1500
Sales	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Future Sales		0.0000	0.0000	0.0000	0.0000	0.0000
Total Demand (MGD)	0.6549	0.7238	0.8203	0.9181	1.0273	1.1500
Demand as Percent of Supply	77%	63%	71%	79%	89%	99%

The purpose of the above chart is to show a general indication of how the long-term per capita water demand changes over time. The per capita water demand may actually be different than indicated due to seasonal populations and the accuracy of data submitted. Water systems that have calculated long-term per capita water demand based on a methodology that produces different results may submit their information in the notes field.

Your long-term water demand is 50 gallons per capita per day. What demand management practices do you plan to implement to reduce the per capita water demand (i.e. conduct regular water audits, implement a plumbing retrofit program, employ practices such as rainwater harvesting or reclaimed water)? If these practices are covered elsewhere in your plan, indicate where the practices are discussed here. Work with surface water supplier to increase purchased water contract amount. Maximize well usage based off permitted amounts.

Are there other demand management practices you will implement to reduce your future supply needs? Public education about water conservation and more efficient fixtures and programs to help educate the consumers.

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs? As for the future water capacity for the Town we have been working with the Wooten Company Engineering firm to come up with a plan to better provide water for the Town. We are looking into an additional elevated tank and bigger distribution lines as the town is growing rapidly. We are also looking at our purchase agreement with Greenville Utilities Commission to purchase more water in the future as demand increases.

Wooten has all the numbers, and we meet regularly to look at the hydraulics and plan accordingly so to stay ahead of the increase in growth.

How does the water system intend to implement the demand management and supply planning components above? N/A

Additional Information

Has this system participated in regional water supply or water use planning? Yes, CCPCUA

What major water supply reports or studies were used for planning? CCPCUA

Please describe any other needs or issues regarding your water supply sources, any water system deficiencies or needed improvements (storage, treatment, etc.) or your ability to meet present and future water needs. Include both quantity and quality considerations, as well as financial, technical, managerial, permitting, and compliance issues: More staffing is needed to ensure proper flushing of the system and to keep up the demand of work orders for our growing system and aging infrastructure.

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