

Robbins Water System

2019 ▼

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1. System Information

Contact Information

Water System Name: Robbins Water System PWSID: 03-63-015
Mailing Address: PO Box 296
Robbins, NC 27325 Ownership: Municipality
Contact Person: Davis Reynolds Title: Water Distribution ORC
Phone: 910-245-1221 Cell/Mobile: 910-690-6463

Provisional

Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Asbestos Cement	6-12	25.00 %
Cast Iron	4-8	30.00 %
Galvanized Iron	3/4-2	15.00 %
Polyvinyl Chloride	1-12	30.00 %

What are the estimated total miles of distribution system lines? 30 Miles

How many feet of distribution lines were replaced during 2019? 15,300 Feet

How many feet of new water mains were added during 2019? 0 Feet

How many meters were replaced in 2019? 16

How old are the oldest meters in this system? 22 Year(s)

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? 3

What is this system's finished water storage capacity? 0.7000 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.* Yes

We are working to address the low pressure areas. We are in the process of making the improvements needed.

Programs

Does this system have a program to work or flush hydrants? Yes, As Needed

Does this system have a valve exercise program? No, Annually

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? No

Does this system have a leak detection program? No

Water Conservation

What type of rate structure is used? Increasing Block

How much reclaimed water does this system use? 0.0400 MGD For how many connections? 1


Does this system have an interconnection with another system capable of providing water in an emergency? No

2. Water Use Information

Service Area

Sub-Basin(s)	% of Service Population	County(s)	% of Service Population
Deep River (02-2)	100 %	Moore	100 %

What was the year-round population served in 2019? 1,097

System Map: [download](#) 

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	525	0.0725	0	0.0000
Commercial	70	0.0205	0	0.0000
Industrial	5	0.0050	0	0.0000
Institutional	26	0.0072	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.0040 MGD

Water Sales

Purchaser	PWSID	Average Daily Sold (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Moore County	03-63-155	0.0461	365	0.0500	2021	Yes	Yes	8,10	Regular

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	0.1787		May	0.1787		Sep	0.1787	
Feb	0.1787		Jun	0.1787		Oct	0.1787	
Mar	0.1787		Jul	0.1787		Nov	0.1787	
Apr	0.1787		Aug	0.1787		Dec	0.1787	



Surface Water Sources

Stream	Reservoir	Average Daily Withdrawal		Maximum Day Withdrawal (MGD)	Available Raw Water Supply		Usable On-Stream Raw Water Supply Storage (MG)
		MGD	Days Used		MGD	* Qualifier	
Bear Creek	Charlie B. Brooks Reservoir	0.0000	0	0.0000	0.0520	F	120.0000

* Qualifier: C=Contract Amount, SY20=20-year Safe Yield, SY50=50-year Safe Yield, F=20% of 7Q10 or other instream flow requirement, CUA=Capacity Use Area Permit

Surface Water Sources (continued)

Stream	Reservoir	Drainage Area (sq mi)	Metered?	Sub-Basin	County	Year Offline	Use Type
Bear Creek	Charlie B. Brooks Reservoir	134	No	Deep River (02-2)	Moore	2007	Emergency

What is this system's off-stream raw water supply storage capacity? 0 Million gallons

Are surface water sources monitored? No, As Needed

Are you required to maintain minimum flows downstream of its intake or dam? No

Does this system anticipate transferring surface water between river basins? No

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			
Montgomery County Water System	03-62-010	0.1787	365	0.2500	2019	Yes	12	Regular

Water Treatment Plants

Plant Name	Permitted Capacity (MGD)	Is Raw Water Metered?	Is Finished Water Output Metered?	Source
Robbins WTP	0.5000	Yes	Yes	Charlie B. Brooks Reservoir, its source is Bear C

Did average daily water production exceed 80% of approved plant capacity for five consecutive days during 2019? No

If yes, was any water conservation implemented?

Did average daily water production exceed 90% of approved plant capacity for five consecutive days during 2019? No

If yes, was any water conservation implemented?

Are peak day demands expected to exceed the water treatment plant capacity in the next 10 years? No

4. Wastewater Information

Monthly Discharges

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	0.2258	May	0.0968	Sep	0.0667
Feb	0.2857	Jun	0.1000	Oct	0.0968
Mar	0.2258	Jul	0.0968	Nov	0.1333
Apr	0.2667	Aug	0.0968	Dec	0.1935



How many sewer connections does this system have? 435

How many water service connections with septic systems does this system have? 184

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

Wastewater Permits


Permit Number	Permitted Capacity (MGD)	Design Capacity (MGD)	Average Annual Daily Discharge (MGD)	Maximum Day Discharge (MGD)	Receiving Stream	Receiving Basin
NC0062855	1.3000	1.3000	0.1838		Deep River	Deep River (02-2)

5. Planning

Projections

	2019	2020	2030	2040	2050	2060
Year-Round Population	1,097	1,140	1,200	1,250	1,300	1,350
Seasonal Population	0	0	0	0	0	0
Residential	0.0725	0.0810	0.0830	0.0850	0.0870	0.0890
Commercial	0.0205	0.0150	0.0160	0.0170	0.0180	0.0190

Industrial	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
Institutional	0.0072	0.0080	0.0090	0.0090	0.0100	0.0100
System Process	0.0040	0.0060	0.0055	0.0055	0.0050	0.0050
Unaccounted-for	0.0234	0.0229	0.0236	0.0242	0.0249	0.0255

 Demand v/s Percent of Supply

	2019	2020	2030	2040	2050	2060
Surface Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ground Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Purchases	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
Future Supplies		0.0000	0.0000	0.0000	0.0000	0.0000
Total Available Supply (MGD)	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
Service Area Demand	0.1326	0.1379	0.1421	0.1457	0.1499	0.1535
Sales	0.0461	0.0500	0.0500	0.0500	0.0500	0.0500
Future Sales		0.0000	0.0000	0.0000	0.0000	0.0000
Total Demand (MGD)	0.1787	0.1879	0.1921	0.1957	0.1999	0.2035
Demand as Percent of Supply	71%	75%	77%	78%	80%	81%



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 66 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.

Are there other demand management practices you will implement to reduce your future supply needs? **Improving water metering and accountability for systems**

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs? **Long term increase in the purchasing of water from Montgomery County**

How does the water system intend to implement the demand management and supply planning components above? **Improve management practices for the distribution systems**

Additional Information

Has this system participated in regional water supply or water use planning? **No**

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

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:

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