

NC DEQ Division of Water Resources

Local Water Supply Planning

2022 ▼

Lowell

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1. System Information

Contact Information

Complete

Water System Name:	Lowell	PWSID:	01-36-060
Mailing Address:	101 W. First St. Lowell, NC 28098	Ownership:	Municipality
Contact Person:	Thomas Shrewsbury	Title:	Public Works Director
Phone:	704-824-1072	Cell/Mobile:	980-241-4410

Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Asbestos Cement	6-12	2.00 %
Cast Iron	6-12	20.00 %
Ductile Iron	6-12	15.00 %
Galvanized Iron	2	38.00 %
Polyvinyl Chloride	2"-12	25.00 %

What are the estimated total miles of distribution system lines? 33 Miles

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

How many feet of new water mains were added during 2022? 1,450 Feet

How many meters were replaced in 2022? 14

How old are the oldest meters in this system? 25 Year(s)

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? 112

What is this system's finished water storage capacity? 0.6000 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, Annually

Does this system have a valve exercise program? No, As Needed

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? Yes

Does this system have an active water conservation public education program? Yes

Does this system have a leak detection program? No

Water Conservation

What type of rate structure is used? Decreasing 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

South Fork Catawba River (03-2) 100 %

What was the year-round population served in 2022? 3,825

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	1,917	0.1750	0	0.0000
Commercial	117	0.0370	0	0.0000
Industrial	0	0.0000	0	0.0000
Institutional	5	0.0190	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.0170 MGD

Water Sales

Purchaser	PWSID	Average Daily Sold (MGD)	Days Use MGD	Contract Expiration	Recurring	Required to comply with water use	Pipe Size(s) (Inches)	Use Type
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					restrictions ?			
McAdenville	01-36-045	0.0000	0	0.6000	No	No	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	0.3080		May	0.3070		Sep	0.5300	
Feb	0.2600		Jun	0.2770		Oct	0.1710	
Mar	0.2770		Jul	0.3170		Nov	0.3940	
Apr	0.2640		Aug	0.1970		Dec	0.4070	

Water Purchases From Other Systems

Seller	PWSID	Average Daily Purchased (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Two Rivers Utilities	01-36-010	0.3099	365	0.6180	2029	Yes	Yes	12	Regular

4. Wastewater Information

Monthly Discharges

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	0.1952	May	0.1888	Sep	0.1776
Feb	0.1516	Jun	0.1675	Oct	0.1910
Mar	0.2231	Jul	0.1757	Nov	0.2135
Apr	0.2369	Aug	0.1775	Dec	0.2740

How many sewer connections does this system have? 1,675

How many water service connections with septic systems does this system have? 107

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

Wastewater Permits

Permit Number	Type	Permitted Capacity (MGD)	Design Capacity (MGD)	Average Annual Daily Discharge (MGD)	Maximum Day Discharge (MGD)	Receiving Stream	Receiving Basin
NC0025861	WWTP	0.6000	0.6000	0.1952	0.9000	South Fork of Catawba River	South Fork Catawba River (03-2)

5. Planning

Projections

	2022	2030	2040	2050	2060	2070
Year-Round Population	3,825	4,106	4,344	4,528	4,712	4,979
Seasonal Population	0	0	0	0	0	0
Residential	0.1750	0.2250	0.2300	0.2400	0.2490	0.2570
Commercial	0.0370	0.0460	0.0480	0.0500	0.0530	0.0570
Industrial	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Institutional	0.0190	0.0220	0.0230	0.0240	0.0250	0.0260
System Process	0.0170	0.0180	0.0190	0.0200	0.0210	0.0220
Unaccounted-for	0.0619	0.0640	0.0658	0.0688	0.0717	0.0746

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Purchases	0.6180	0.6180	0.6180	0.6180	0.6180	0.6180
Future Supplies		0.0000	0.0000	0.0000	0.0000	0.0000
Total Available Supply (MGD)	0.6180	0.6180	0.6180	0.6180	0.6180	0.6180
Service Area Demand	0.3099	0.3750	0.3858	0.4028	0.4197	0.4366
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)	0.3099	0.3750	0.3858	0.4028	0.4197	0.4366
Demand as Percent of Supply	50%	61%	62%	65%	68%	71%

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 46 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?

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs?

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

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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