

King

2025 ▾

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

Water System Name: King PWSID: 02-85-010
 Mailing Address: P.O. Box 1132 King, NC 27021 Ownership: Municipality
 Contact Person: Benjamin Marion Title: City Engineer
 Phone: 336-983-8265 Cell/Mobile: --

Complete

Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Asbestos Cement	6-12	19.00 %
Ductile Iron	6-16	3.00 %
Polyvinyl Chloride	2-12	78.00 %

What are the estimated total miles of distribution system lines? 346 Miles

How many feet of distribution lines were replaced during 2025? 140 Feet

How many feet of new water mains were added during 2025? 24,000 Feet

How many meters were replaced in 2025? 115

How old are the oldest meters in this system? 35 Year(s)

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? 63

What is this system's finished water storage capacity? 7.0630 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, Semi-Annually

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

Water Conservation

What type of rate structure is used? Decreasing Block

How much reclaimed water does this system use? 0.0100 MGD For how many connections? 2

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	County(s)	% of Service Population
Yadkin River (18-1)	97 %	Stokes	75 %
Roanoke River (14-1)	3 %	Forsyth	24 %
		Surry	1 %

What was the year-round population served in 2025? 24,868

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	9,352	1.3560	0	0.0000
Commercial	420	0.2096	6	0.0340
Industrial	7	0.0200	0	0.0000
Institutional	12	0.0200	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.0740 MGD

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	2.0490	2.5690	May	1.7840	2.2140	Sep	1.9730	2.2700
Feb	2.0400	2.5000	Jun	1.9300	2.2960	Oct	1.9010	2.2380
Mar	1.6500	2.0580	Jul	1.9950	2.4620	Nov	1.7380	2.1850
Apr	1.7070	2.1570	Aug	1.9380	2.2950	Dec	1.7520	2.0990



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	
Yadkin River		1.8345	365	3.0000	50.0000	F	0.0000

* 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
Yadkin River		1,659	Yes	Yadkin River (18-1)	Forsyth		Regular

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

Are surface water sources monitored? Yes, Daily

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 MGD	Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Winston-Salem	02-34-010	0.0000	0	3.0000	2052	Yes	Yes	16	Emergency

Water Treatment Plants

Plant Name	Permitted Capacity (MGD)	Is Raw Water Metered?	Is Finished Water Output Metered?	Source
City of King WTP	3.0000	Yes	Yes	Yadkin River

Did average daily water production exceed 80% of approved plant capacity for five consecutive days during 2025? No

If yes, was any water conservation implemented? No

Did average daily water production exceed 90% of approved plant capacity for five consecutive days during 2025? No

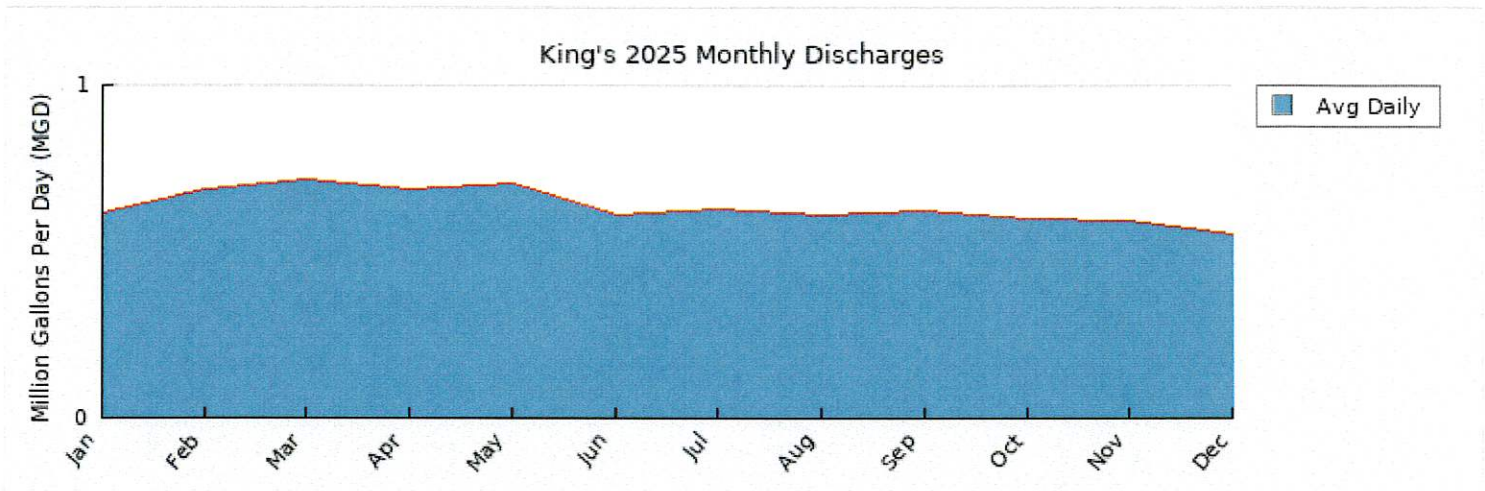
If yes, was any water conservation implemented? No

Are peak day demands expected to exceed the water treatment plant capacity in the next 10 years? Yes

4. Wastewater Information

Monthly Discharges

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	0.6200	May	0.7030	Sep	0.6260
Feb	0.6910	Jun	0.6120	Oct	0.6000
Mar	0.7160	Jul	0.6300	Nov	0.5970
Apr	0.6870	Aug	0.6130	Dec	0.5500



How many sewer connections does this system have? 3,425

How many water service connections with septic systems does this system have? 5,760

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
NC0088897	WTP	3.0000	3.0000	0.1000	0.8000	Old Richmond Creek	Yadkin River (18-1)

Wastewater Interconnections

Water System	PWSID	Type	Average Daily Amount		Contract Maximum (MGD)
			MGD	Days Used	
City of Winston-Salem	02-34-010	Discharging	0.5320	365	3.0000

5. Planning

Projections

2025	2030	2040	2050	2060	2070
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Year-Round Population	24,868	26,609	28,471	30,464	32,597	34,879
Seasonal Population	0	0	0	0	0	0
Residential	1.3560	1.6960	1.8150	1.9420	2.0780	2.2230
Commercial	0.2436	0.2480	0.2530	0.2560	0.2640	0.2690
Industrial	0.0200	0.0200	0.0210	0.0210	0.0220	0.0220
Institutional	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200
System Process	0.0740	0.0740	0.0820	0.0950	0.1110	0.1290
Unaccounted-for	0.1209	0.0848	0.0908	0.0971	0.1039	0.1110

Future Supply Sources

Source Name	PWSID	Source Type	Additional Supply	Year Online	Year Offline	Type
City of King Water Treatment Facility	02-85-010	Surface	3.0000	2030		Regular

Demand v/s Percent of Supply

	2025	2030	2040	2050	2060	2070
Surface Water Supply	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000
Ground Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Purchases	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Future Supplies		3.0000	3.0000	3.0000	3.0000	3.0000
Total Available Supply (MGD)	50.0000	53.0000	53.0000	53.0000	53.0000	53.0000
Service Area Demand	1.8345	2.1428	2.2818	2.4311	2.5989	2.7740
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)	1.8345	2.1428	2.2818	2.4311	2.5989	2.7740
Demand as Percent of Supply	4%	4%	4%	5%	5%	5%



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 **55** 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. **No Change**

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? **Increase Capacity at Water Treatment Facility**

How does the water system intend to implement the demand management and supply planning components above? **Implement PER to increase Water Treatment Facility Capacity.**

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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