

Boiling Springs

2022 ▾

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: | Boiling Springs | PWSID: | 01-23-025 |
| Mailing Address: | PO Box 1014 Boiling Springs, NC 28017 | Ownership: | Municipality |
| Contact Person: | Mike Gibert | Title: | Public Works Director |
| Phone: | 704-434-2357 | Cell/Mobile: | -- |
| Secondary Contact: | Justin Longino | Phone: | 704-434-2357 |
| Mailing Address: | PO Box 1014 Boiling Springs, NC 28017 | Cell/Mobile: | -- |

Complete

Distribution System

| Line Type | Size Range (Inches) | Estimated % of lines |
|--------------------|---------------------|----------------------|
| Asbestos Cement | 6 | 2.00 % |
| Cast Iron | 6 | 5.00 % |
| Ductile Iron | 6-16 | 10.00 % |
| Polyvinyl Chloride | 2-12 | 83.00 % |

What are the estimated total miles of distribution system lines? **43 Miles**

How many feet of distribution lines were replaced during 2022? **1,430 Feet**

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

How many meters were replaced in 2022? **12**

How old are the oldest meters in this system? **20 Year(s)**

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? **123**

What is this system's finished water storage capacity? **0.2000 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**

The Town plans to start replacing the oldest water meters in the system starting this year 2023.

Programs

Does this system have a program to work or flush hydrants? **Yes, Monthly**

Does this system have a valve exercise program? **Yes, 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? **Yes**

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 | County(s) | % of Service Population |
|--------------------|-------------------------|-----------|-------------------------|
| Broad River (01-1) | 100 % | Cleveland | 100 % |

What was the year-round population served in 2022? **4,769**

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 | 1,784 | 0.2323 | 0 | 0.0000 |
| Commercial | 148 | 0.0420 | 0 | 0.0001 |
| Industrial | 1 | 0.0011 | 0 | 0.0000 |
| Institutional | 47 | 0.0770 | 0 | 0.0000 |

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? **0.0052 MGD**

System processes = estimated water main flushing, fire department training and usage.
 Non-metered usage = bulk water purchased.

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 |
|---------------------|-----------|--------------------------|-----------|-----|---------------------|-----------|---|-----------------------|-----------|
| Cleveland County SD | 01-23-055 | 0.0000 | 0 | | | Yes | Yes | 6 | 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 | 0.3350 | 0.4420 | May | 0.3780 | 0.5010 | Sep | 0.4030 | 0.4990 |
| Feb | 0.3490 | 0.4150 | Jun | 0.4370 | 0.5750 | Oct | 0.3710 | 0.4800 |
| Mar | 0.3160 | 0.3780 | Jul | 0.5100 | 0.7650 | Nov | 0.3230 | 0.4220 |
| Apr | 0.3690 | 0.6900 | Aug | 0.4290 | 0.5620 | Dec | 0.3170 | 0.5370 |

All water purchased from the City of Shelby. PWS ID # 01-23-010.



Water Purchases From Other Systems

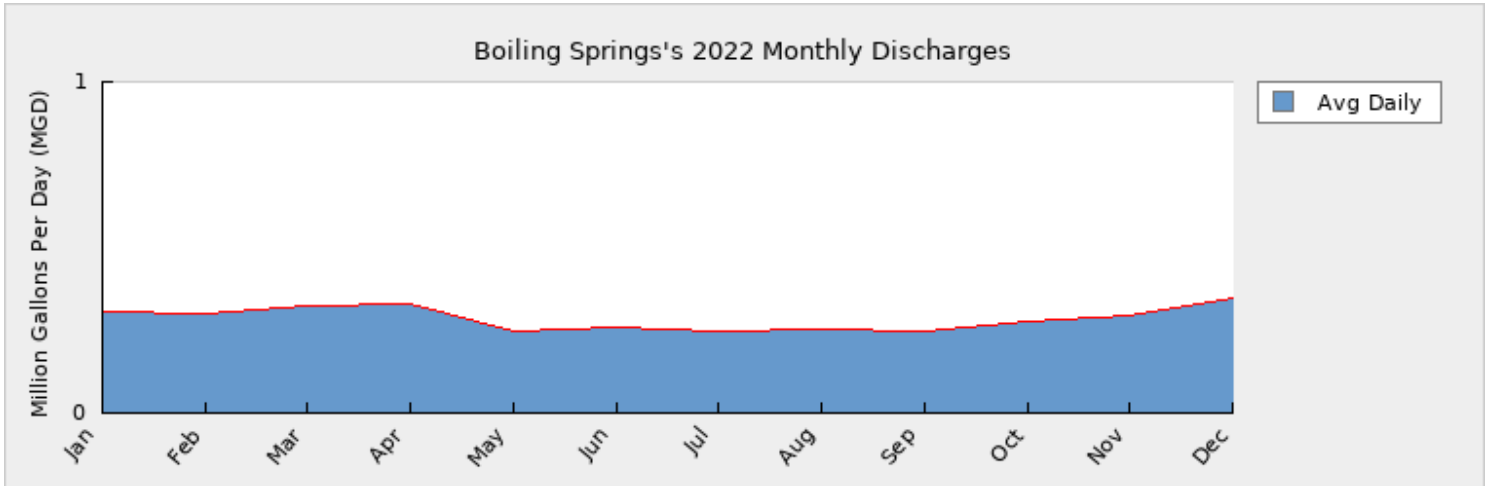
| Seller | PWSID | Average Daily Purchased (MGD) | Days Used | MGD | Contract Expiration | Recurring | Required to comply with water use restrictions? | Pipe Size(s) (Inches) | Use Type |
|---------------------|-----------|-------------------------------|-----------|--------|---------------------|-----------|---|-----------------------|-----------|
| CLEVELAND COUNTY SD | 01-23-055 | 0.0000 | 0 | | | Yes | Yes | 6 | Emergency |
| SHELBY | 01-23-010 | 0.3800 | 365 | 1.0000 | 2034 | Yes | Yes | 16 | Regular |

Cleveland County Water installed a new larger 6" receiving interconnect to the Town of Boiling Springs water system. Currently the interconnect is for emergency use.

4. Wastewater Information

Monthly Discharges

| | Average Daily Discharge (MGD) | | Average Daily Discharge (MGD) | | Average Daily Discharge (MGD) |
|-----|-------------------------------|-----|-------------------------------|-----|-------------------------------|
| Jan | 0.3040 | May | 0.2490 | Sep | 0.2480 |
| Feb | 0.3020 | Jun | 0.2560 | Oct | 0.2760 |
| Mar | 0.3260 | Jul | 0.2470 | Nov | 0.2920 |
| Apr | 0.3300 | Aug | 0.2510 | Dec | 0.3460 |



How many sewer connections does this system have? 1,066

How many water service connections with septic systems does this system have? 779

Are there plans to build or expand wastewater treatment facilities in the next 10 years? Yes

The Town W/S CIP recommends plans to upgrade the electric power from 208 volts 3 phase to 480 volts 3 phase and build a new residuals digester in the next 5 years at the wastewater treatment plant.

The average daily discharge includes the wastewater from the Town of Lattimore collection system permit # WQCS00717.

Wastewater Permits

| Permit Number | Type | Permitted Capacity (MGD) | Design Capacity (MGD) | Average Annual Daily Discharge (MGD) | Maximum Day Discharge (MGD) | Receiving Stream | Receiving Basin |
|---------------|------|--------------------------|-----------------------|--------------------------------------|-----------------------------|-------------------|--------------------|
| NC0071943 | WWTP | 0.6000 | 0.6000 | 0.2860 | 1.0000 | SANDY RUN CREEK | Broad River (01-1) |
| WQCS00222 | CS | 0.0000 | 0.0000 | 0.0000 | | COLLECTION SYSTEM | Broad River (01-1) |

Wastewater Interconnections

| Water System | PWSID | Type | Average Daily Amount | | Contract Maximum (MGD) |
|---------------------|-----------|-----------|----------------------|-----------|------------------------|
| | | | MGD | Days Used | |
| Cleveland County SD | 01-23-055 | Receiving | 0.0170 | 365 | 0.0750 |

The Town of Boiling Springs operates the sewer collection system and treats the wastewater from the Town of Lattimore. The water provider for the Town of Lattimore is Cleveland County Water.

5. Planning

Projections

| | 2022 | 2030 | 2040 | 2050 | 2060 | 2070 |
|-----------------------|--------|--------|--------|--------|--------|--------|
| Year-Round Population | 4,769 | 4,800 | 4,850 | 4,900 | 4,950 | 5,000 |
| Seasonal Population | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0.2323 | 0.2370 | 0.2390 | 0.2410 | 0.2430 | 0.2450 |
| Commercial | 0.0421 | 0.0426 | 0.0431 | 0.0436 | 0.0441 | 0.0446 |
| Industrial | 0.0011 | 0.0013 | 0.0015 | 0.0017 | 0.0019 | 0.0022 |
| Institutional | 0.0770 | 0.0775 | 0.0780 | 0.0785 | 0.0790 | 0.0795 |
| System Process | 0.0052 | 0.0053 | 0.0054 | 0.0055 | 0.0056 | 0.0057 |
| Unaccounted-for | 0.0223 | 0.0225 | 0.0230 | 0.0235 | 0.0240 | 0.0245 |

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 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Future Supplies | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total Available Supply (MGD) | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Service Area Demand | 0.3800 | 0.3862 | 0.3900 | 0.3938 | 0.3976 | 0.4015 |
| 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) | 0.3800 | 0.3862 | 0.3900 | 0.3938 | 0.3976 | 0.4015 |
| Demand as Percent of Supply | 38% | 39% | 39% | 39% | 40% | 40% |



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 49 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 changes**

Are there other demand management practices you will implement to reduce your future supply needs? **The Town of Boiling Springs will work to reduce the per capita water use by continuing our active water conservation public education program, a plumbing retrofit program, a rate structure that encourages water conservation, and a water meter replacement program.**

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs? **The Town of Boiling Springs future per capita demand will be evaluated annually and additional measures will be implemented as needed to ensure that the per capita usage is being maintained or reduced.**

How does the water system intend to implement the demand management and supply planning components above? **With continued technical assistance from engineering and NCRWA. The Town recently recieved funding from an AIA grant \$150,000 for updating the Town Distribution System GIS Mapping, Distribution System Hydraulic Modeling, CIP, and Revenue Modeling.**

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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