

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: Waynesville PWSID: 01-44-010
 Mailing Address: PO Box 100 Ownership: Municipality
 Waynesville, NC 28786
 Contact Person: Fred Baker Title: Director of Public Works
 Phone: 828-456-4410 Fax: 828-452-1492

Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Asbestos Cement	6	0.40 %
Cast Iron	4-24	38.80 %
Ductile Iron	4-30	26.90 %
Galvanized Iron	1-2	11.60 %
Other	2	0.50 %
Polyvinyl Chloride	2-12	21.80 %

What are the estimated total miles of distribution system lines? 143 Miles

How many feet of distribution lines were replaced during 2012? 10,940 Feet

How many feet of new water mains were added during 2012? 0 Feet

How many meters were replaced in 2012? 542

How old are the oldest meters in this system? 32 Year(s)

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? 32

What is this system's finished water storage capacity? 6.000 Million Gallons

Has water pressure been inadequate in any part of the system since last update? No

Other is HDPE DR9 2 inch. Changed to HDPE service lines.

FA replacements: Calhoun Rd 440' - 2" galv to HDPE; Off Sulphur Sprgs to old Bypass Power 100' - 2" galv to HDPE; Scenic Cir 480' - 6" DIP, 880' - 2" galv to HDPE; Morning Dr 1,400' - 2" galv to HDPE; Vance St 1,100' - 2" galv to HDPE.

Freestone Dellwood/19 project: 1,825' - 8" DIP, 150' - 6" DIP, 2,500' - 2" PVC 13.5 (replace CIP and galv)

Franklin contract: Maxima, Arnold Htgs, Liner, Rogers, Henry, Rebe, Stratford 2,050' - 2" PVC 13.5 and 15' - 6"DIP (all services HDPE)

Programs

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

Does this system have a valve exercise program? No
 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? Yes

Equipment, training, work order records, educating customers to report leak appearance, monthly apparent losses quantification and meter replacements

Water Conservation

What type of rate structure is used? Uniform
 How much reclaimed water does this system use? 0.000 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
Pigeon River (05-3)	100 %	Haywood	100 %

What was the year-round population served in 2012? 16,150
 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	5,638	0.705	16	0.006
Commercial	730	0.349	0	0.000
Industrial	3	0.144	0	0.000
Institutional	0	0.000	0	0.000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.073 MGD

Evergreen 0.399 down from 0.419; Giles 0.059 no change; Sonoco 0.033 up from 0.017

Water Sales

Purchaser	PWSID	Average Daily Sold (MGD)	Days Used	Contract		Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
				MGD	Expiration			
Junaluska Sanitary District	01-44-035	0.399	365	0.750	2021	Yes	two 4	Regular
Lake Junaluska Assembly (SEJAC)	01-44-107	0.139	365	0.300	2020	Yes	two 6	Regular

Maggie Valley Sanitary Distric	01-44-040	0.010	365	0.160	2016	Yes	Yes	6x2	Regular
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Add MVSD low pressure tap for 2013

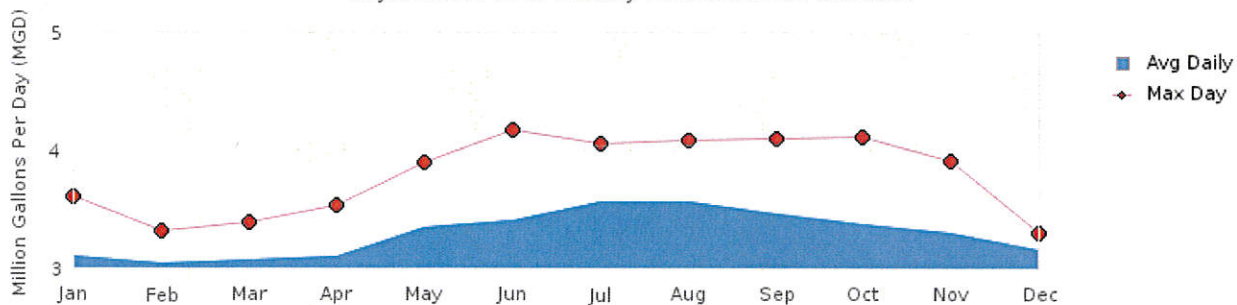
Town of Waynesville sold sold Maggie Valley .010 MGD for 366 days for a separately owned system (Smokey Mountain Retreat-Eagle's Nest; ID 10-44-004). The water sold did not supply Maggie Valley's system.

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	3.090	3.598	May	3.348	3.895	Sep	3.461	4.102
Feb	3.043	3.309	Jun	3.404	4.164	Oct	3.364	4.115
Mar	3.061	3.387	Jul	3.565	4.061	Nov	3.303	3.913
Apr	3.093	3.525	Aug	3.555	4.077	Dec	3.147	3.299

Waynesville's 2012 Monthly Withdrawals & Purchases



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	
Allens Creek	Waynesville	3.286	365	4.164	10.500	SY50	450.000

* 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
Allens Creek	Waynesville	13	Yes	Pigeon River (05-3)	Haywood		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? Yes

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

3.5 CFS minimum release

Water Treatment Plants

Plant Name	Permitted Capacity (MGD)	Is Raw Water Metered?	Is Finished Water Output Metered?	Source
Waynesville	8.000	Yes	Yes	Allens Creek / Waynesville Reservoir

Did average daily water production exceed 80% of approved plant capacity for five consecutive days during 2012? No

If yes, was any water conservation implemented?

Did average daily water production exceed 90% of approved plant capacity for five consecutive days during 2012? 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

Max day was 4.001 in Oct. Down from 4.44 in Jan 2011.

4. Wastewater Information

Monthly Discharges

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	3.930	May	3.020	Sep	2.480
Feb	3.020	Jun	2.620	Oct	2.810
Mar	3.220	Jul	2.900	Nov	2.270
Apr	3.290	Aug	2.670	Dec	3.100



How many sewer connections does this system have? 4,753

How many water service connections with septic systems does this system have? 1,584

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
NC 0025321	6.000	6.000	2.956	6.050	Pigeon River	Pigeon River (05-3)
NC 0049409	0.000	0.000	0.046	0.353	Allens Creek	Pigeon River (05-3)

Wastewater Interconnections

Water System	PWSID	Type	Average Daily Amount		Contract Maximum (MGD)
			MGD	Days Used	
Junaluska SD and Clyde (01-44-025)	01-44-035	Receiving	0.343	365	0.000
Lake Junaluska Assembly	01-44-107	Receiving	0.139	365	0.000
Town of Maggie Valley	01-44-040	Receiving	0.003	365	0.060

5. Planning

Projections

	2012	2020	2030	2040	2050	2060
Year-Round Population	16,150	17,350	19,000	21,000	23,000	25,000
Seasonal Population	0	0	0	0	0	0
Residential	0.711	0.765	0.840	0.920	1.010	1.100
Commercial	0.349	0.385	0.400	0.420	0.440	0.460
Industrial	0.144	0.160	0.180	0.200	0.220	0.240
Institutional	0.000	0.000	0.000	0.000	0.000	0.000
System Process	0.073	0.080	0.090	0.100	0.105	0.110
Unaccounted-for	1.453	1.400	1.300	1.200	1.100	1.000

Future Water Sales

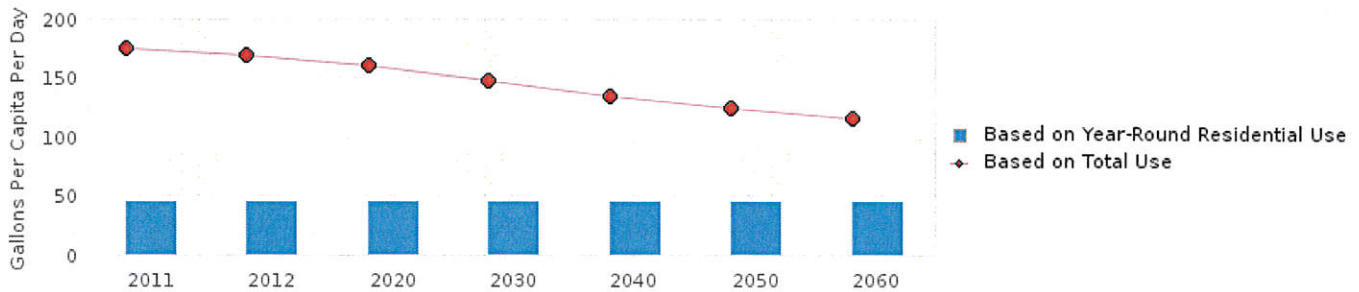
Purchaser	PWSID	MGD	Contract		Pipe Size(s) (Inches)	Use Type
			Year Begin	Year End		
Maggie Valley Sanitary District	01-44-040	0.000	2013		6	Emergency

Constructed 2012 Freestone Dellwood/19 project. First use on January 15-17, 2013; Tuesday 8 PM to Thursday 4PM.

Demand v/s Percent of Supply

	2012	2020	2030	2040	2050	2060
Surface Water Supply	10.500	10.500	10.500	10.500	10.500	10.500
Ground Water Supply	0.000	0.000	0.000	0.000	0.000	0.000
Purchases	0.000	0.000	0.000	0.000	0.000	0.000
Future Supplies		0.000	0.000	0.000	0.000	0.000
Total Available Supply (MGD)	10.500	10.500	10.500	10.500	10.500	10.500
Service Area Demand	2.730	2.790	2.810	2.840	2.875	2.910
Sales	0.547	1.210	1.210	1.210	1.210	1.210
Future Sales		0.000	0.000	0.000	0.000	0.000
Total Demand (MGD)	3.277	4.000	4.020	4.050	4.085	4.120
Demand as Percent of Supply	31%	38%	38%	39%	39%	39%

Waynesville's Projected Gallons Per Capita Per Day (GPCD) Over Time



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 44 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? **Water Loss Control Program; Urban Growth Boundary**

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs? **None**

How does the water system intend to implement the demand management and supply planning components above? **In house using existing user fee system**

Additional Information

Has this system participated in regional water supply or water use planning? **Yes, 1991 Haywood County interconnection study, McGill Associates.**

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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