

## Henry County Water Supply Demand Projection

### Henry County Public Service Authority Water Supply Demand Projection (Community Public System)

#### Existing Data

Data Source	HCPSA records courtesy of HCPSA and DEQ													U.S. Census Bureau, Census 2000	Virginia Employment Commission Projections		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Community Water System	Residential Demand (D <sub>R</sub> )	Commercial, Institutional, Industrial (CIL) Demand (D <sub>CIL</sub> )	Heavy Industrial Demand (D <sub>HI</sub> )	Military Water Demand (D <sub>M</sub> )	Production Process Water (D <sub>PP</sub> )	Unaccounted-for-water (D <sub>UAW</sub> )	Sales (D <sub>S</sub> )	Other (D <sub>O</sub> )	Other	Total Demand (Withdrawal) (D <sub>T</sub> )	Population Served 2006 (P <sub>SVD</sub> )	Number of Residential Connections	Number of Commercial Connections	Population 2000 (P <sub>2000</sub> )	County Population 2030 (P <sub>2030</sub> )	Annual average percent change in population from 2000 to 2030 (P <sub>C%</sub> )	Annual average percent change in employment from 2004 to 2014 (E <sub>C%</sub> )
	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month	Million Gallons per Month							
HCPSA (MG per month)	40.71	8.72	0.00	0.00	2.91	5.82	0.00	0.00	0.00	58.16	17,114	6,000		57,930	52,977	0	0.907%
	Annual Average MG	Annual Average MG	Annual Average MG	Annual Average MG	Annual Average MG	Annual Average MG	Annual Average MG	Annual Average MG	Annual Average MG	Annual Average MG							
HCPSA (MG)	488.50	104.68			34.89	69.79				697.86							
Assumed %	70.00	15.00			5.00	10.00											

Note: HCPSA did not disaggregate the water demand so all PSA water demand is assumed as shown.

#### Community (Public and Private) Water Supply Demand Projection

Name	Population Served	Number of Connections	Annual Average MG
Eastwood Subdivision	182	104	3.4
Harris Trailer Court	55	28	1.51
Sherwood Manor Apartments			
Countryside Trailer Park	28	28	0.77
Fairfield Court	75	27	2.05
Ridgeview Apartments	23	69	4.76
Robertson Trailer Park	50	21	1.37
Twin Oaks Mobile Home Park	42	22	3.28
Ridgeway Trailer Park	120	57	3.29
Wildwood Estates	56	49	2.68
<b>Total</b>	<b>631.00</b>	<b>405.00</b>	<b>23.11</b>

- Notes:
1. Based on 75 gpd per person
  2. Based on 2.52 people per connection and 75 gpd per person
  3. Based on well's average daily design capacity

**Henry County (Private - Self supplied - non agricultural greater than 300,000 gallons per month) Water Supply Demand Projection**

Name	Use Category	Average Daily Withdrawal	Estimated Annual Average Use
		MGD	MG
Active Wear Inc.	MAN	0.000	
Bassett Mirror Co.	MAN	0.003	0.93
Beaver Hills Golf Club	COM	0.000	
Blue Ridge Airport	COM	0.003	1.10
GS Industries of Bassett	MAN	0.000	
Magna Vista High School		0.036	13.15
Philpott Lake		0.072	26.30
Philpott RES - Bowens Creek Beach		0.072	26.30
Rangeley Mini Mart & Deli	COM	0.000	0.15
Virginia Glass Products Corp	MAN	0.000	
Virginia Glass Products Corp	COM	0.029	10.52
Bassett Furniture Ind.	MAN	0.025	9.24
Bassett Furniture Ind.	MAN	0.101	36.72
Bassett Furniture Ind.	MAN	0.000	
Bassett Furniture Ind.	MAN	0.025	9.13
Boxley Materials Co.	MIN	0.000	
Boxley Materials Co.	MIN	0.000	
Boxley Materials Co.	MIN	0.000	
Chatmoss County Club	IRR	0.053	19.30
CPFilms Inc	MAN	1.047	382.50
Dupont E I De Nemours	MAN	0.000	
Forest Park Country Club	COM	0.026	9.50
Pillowtex Corp		0.000	
Stanley Furniture Co.	MAN	0.041	15.07
<b>Total</b>			<b>559.90</b>

- Notes
1. Schools - Per SCAT Regs. - 10 gallons per day per person, 5 days a week
  2. Motels - Per SCAT Regs. - 130 gallons per day
  3. Restaurants - Per SCAT Regs. - 50 gallons per day per seat
  4. Camps - 65 gallons per bed per day for 3 months (summer)
  5. Campsites - Per SCAT Regs. - 50 gallons per campsite for 3 months (summer)
  6. Based on well's average daily design capacity
  7. Manufacturing - Per SCAT Regs. - 25 gallons per day per person
  8. Based on system's permitted capacity

**Henry County (Private - Self supplied - agricultural greater than 300,000 gallons per month) Water Supply Demand Projection**

Name	Use Category	Average Daily Withdrawal	Estimated Annual Average Use
		MGD	MG
Livestock Water Use		0.09579	34.99
Crop Irrigation Water Use		0.64155	234.33
<b>Total</b>			<b>269.31</b>

**Henry County (Private - Self supplied, individual well users - less than 300,000 gallons per month) Water Supply Demand Projection**

12	14	18	19
Population Served by BCP SA 2006 (P <sub>SVD</sub> )	Population 2000 (P <sub>2000</sub> )	Population on Private Systems	Private Demand (D <sub>P</sub> ) Annual Average MG
631	57,930	57,299	1569.63











