



Russell County and the Towns of Cleveland, Honaker, and Lebanon

Water Source Overview

Major water supply sources include Chaney Creek, Big Cedar Creek, groundwater wells, and springs.

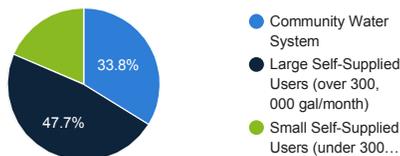
***Table 1:** Reported (2010) and projected (2040) water use by system type for Russell County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	1.415	1.415
Large Self-Supplied Users (over 300,000 gal/month)	1.995	1.995
Small Self-Supplied Users (under 300,000 gal/month)	0.776	0.193

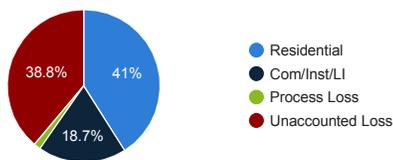
Water Use by System Type

Approximately 12,800 people use private groundwater wells for residential water supply. All tables and graphs represent reported water use including Sales to other localities, if applicable.

***Figure 1:** Percentage of reported water use by system type in 2010 (No use data shown on graph if less than .01 MGD: Refer to Table 1)



***Figure 2:** Disaggregated water use percentages for Community Water Systems in 2010 (No graph shown if no disaggregated use data reported)



***Table 2:** Reported (2010) and projected (2040) groundwater and surface water use for Russell County in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
1.21	2.97	0.63	2.97

***Figure 3:** Russell County highlighted in the Commonwealth of Virginia



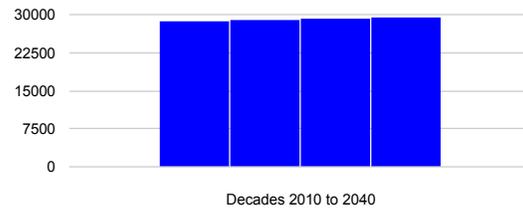
Projected Water Demand

Population is projected to increase during the planning period. The County may experience a deficit of 0.12 MGD by 2040. The regional alternatives for addressing projected shortfalls include maintaining, increasing, or initiating supply interconnections with neighboring localities, infrastructure upgrades, groundwater source development, increasing permitted surface water withdrawals, upgrading current VDH permitted capacities, and continuing existing water conservation policies or developing new ones.

***Table 3:** Russell County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

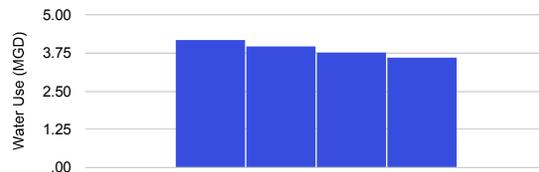
2010	2020	2030	2040	% Change (2010-2040)
28,897	29,051	29,296	29,534	3.6%

***Figure 4:** Russell County population projections by decade for 2010, 2020, 2030 & 2040



***Table 4 & Figure 5:** Russell County water demand trends by decade for 2010, 2020, 2030 & 2040 in MGD

Reported Use 2010 MGD	Projected Use 2020 MGD	Projected Use 2030 MGD	Projected Use 2040 MGD	Percent Change (2010-2040)
4.19	3.99	3.80	3.60	-13.9%



Drought Management Practices

The County and Towns adopted ordinances for the implementation and enforcement of the Drought Response and Contingency Plan. (Southwest Virginia Regional WSP)