



Smyth County and the Towns of Chilhowie, Marion, and Saltville

Water Source Overview

Major water supply sources include Staley's Creek, springs, and groundwater wells.

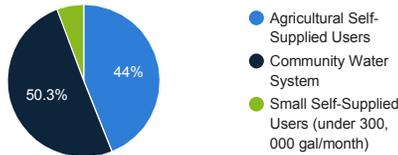
***Table 1:** Reported (2010) and projected (2040) water use by system type for Smyth County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Agricultural Self-Supplied Users	3.751	3.751
Community Water System	4.294	4.294
Small Self-Supplied Users (under 300,000 gal/month)	0.488	0.488

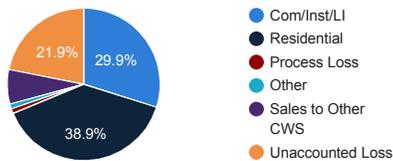
Water Use by System Type

Approximately 6,398 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 Smyth 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)
1.88	6.65	1.88	6.65

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



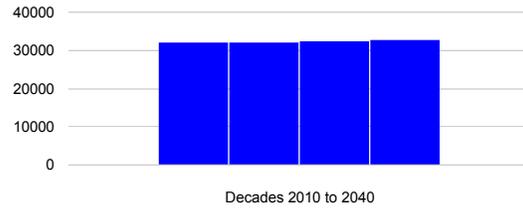
Projected Water Demand

Population is projected to increase slightly through the planning period of 2040. Existing water sources are expected to meet projected demand during the planning period. However, Southwest Virginia Regional WSP listed alternatives to address the any shortfall of municipal supply, which 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:** Smyth County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

2010	2020	2030	2040	% Change (2010-2040)
32,208	32,302	32,599	32,913	0.0%

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



***Table 4 & Figure 5:** Smyth 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)
8.53	8.53	8.53	8.53	0.0%



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)