



City of Roanoke

Water Source Overview

Major water sources for the City include purchased water, the Roanoke River, and groundwater wells. The Western Virginia Water Authority provides water service to the residents of Roanoke County and the City of Roanoke. Water use and projected demand data for the City of Roanoke is included in the community water system (CWS) totals found in the Roanoke County snapshot.

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

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Large Self-Supplied Users (over 300,000 gal/month)	0.984	1.628

Water Use by System Type

There are no reported users of 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 Roanoke City in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
0.32	0.66	0.53	1.09

***Figure 3:** Roanoke City highlighted in the Commonwealth of Virginia



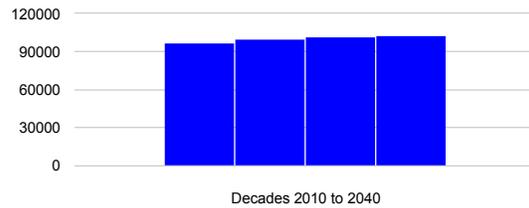
Projected Water Demand

Population and demand are projected to increase through the planning period. Existing water sources are expected to meet projected demands.

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

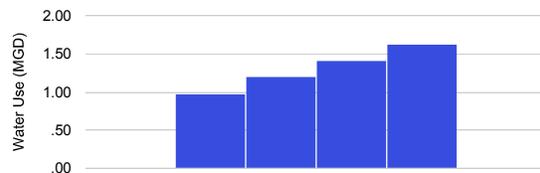
2010	2020	2030	2040	% Change (2010-2040)
97,032	99,287	101,174	102,656	5.2%

***Figure 4:** Roanoke City population projections by decade for 2010, 2020, 2030 & 2040



***Table 4 & Figure 5:** Roanoke City 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)
0.98	1.20	1.41	1.63	65.5%



Drought Management Practices

The City's drought enforcement measures shall be implemented and enforced by the Western Virginia Water Authority, per authorizing resolution. (Roanoke Valley Alleghany Regional Commission Regional WSP)