



Prince George County

Water Source Overview

Major sources include the James River, groundwater wells, and purchased water.

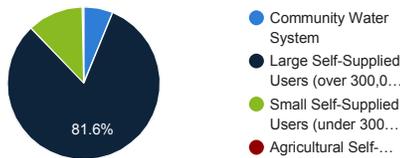
***Table 1:** Reported (2010) and projected (2040) water use by system type for Prince George County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	0.957	1.791
Large Self-Supplied Users (over 300,000 gal/month)	12.626	23.923
Small Self-Supplied Users (under 300,000 gal/month)	1.834	3.475
Agricultural Self-Supplied Users	0.048	0.086

Water Use by System Type

Approximately 26,208 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 Prince George 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)
2.88	12.58	5.44	23.84

***Figure 3:** Prince George County highlighted in the Commonwealth of Virginia



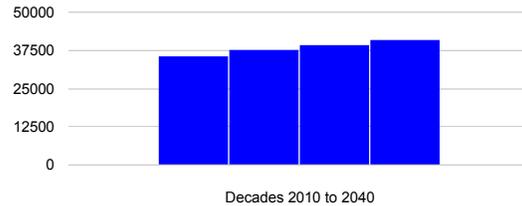
Projected Water Demand

Population and demand are projected to increase through the planning period. Prince George County anticipates a peak day deficit of 0.9 MGD by 2020 and the Appomattox River Water Authority (main supplier of water to Prince George County) anticipates a system wide deficit of 9.4 MGD by the year 2040. Possible alternatives include increases in current water supply allocations and the development of additional supply (new groundwater sources, new intake on the Appomattox River, and a new surface water reservoir).

***Table 3:** Prince George County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/2013)

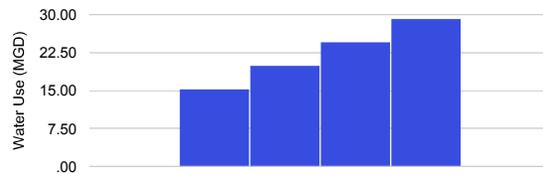
2010	2020	2030	2040	% Change (2010-2040)
35,725	37,751	39,447	40,899	14.3%

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



***Table 4 & Figure 5:** Prince George 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)
15.47	20.07	24.67	29.27	89.3%



Drought Management Practices

The County adopted an ordinance for the implementation and enforcement of the Drought Response and Contingency Plan. (Appomattox River Water Authority and Hopewell Regional WSP)