



King George County

Water Source Overview

Major water sources are the Rappahannock River and groundwater wells.

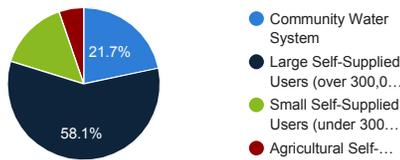
***Table 1:** Reported (2010) and projected (2040) water use by system type for King George County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	1.297	2.995
Large Self-Supplied Users (over 300,000 gal/month)	3.478	3.478
Small Self-Supplied Users (under 300,000 gal/month)	0.893	2.359
Agricultural Self-Supplied Users	0.315	0.315

Water Use by System Type

Approximately 9,000 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 King 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)
2.49	3.49	5.66	3.49

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



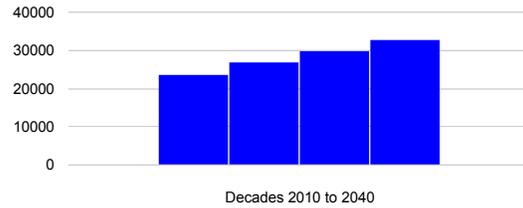
Projected Water Demand

Population and demand are projected to increase through the planning period. A water supply deficit of 1.5 to 2.0 MGD is estimated in the year 2030 for King George County community water systems. A water supply deficit of 1.0 to 1.5 MGD is estimated in the year 2030 for self-supplied residential users in King George County. Alternative water sources identified include wastewater reuse, interconnection with a neighboring locality, reservoir development, and an intake on the Rappahannock River.

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

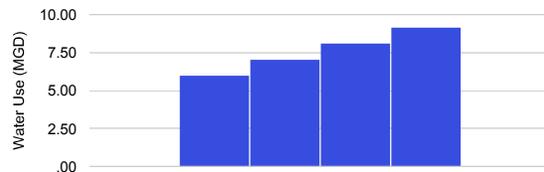
2010	2020	2030	2040	% Change (2010-2040)
23,584	27,109	29,997	32,734	39.1%

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



***Table 4 & Figure 5:** King 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)
5.98	7.04	8.09	9.15	52.9%



Drought Management Practices

King George County adopted a Drought Management Ordinance for the implementation and enforcement of the Drought Assessment and Response Plan. (King George County WSP)