



Lee County and the Towns of Jonesville, Pennington Gap, and St. Charles

**Water Source Overview**

Major water sources include the Powell River, Wynn Spring, and the KVS Quarry Pond.

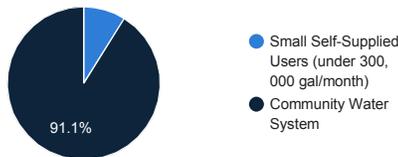
**\*Table 1:** Reported (2010) and projected (2040) water use by system type for Lee County in MGD

| Type  | Reported Use 2010 MGD | Projected Use 2040 MGD |
|---|-----------------------|------------------------|
| Small Self-Supplied Users (under 300,000 gal/month) | 0.265                 | 0.265                  |
| Community Water System                              | 2.712                 | 2.668                  |

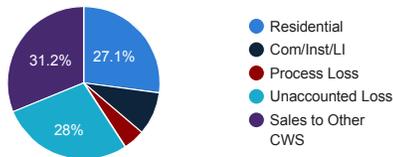
**Water Use by System Type**

Approximately 5,800 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 Lee 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) |
|-------------------------------------|---------------------------------------|--------------------------------------|--|
| 0.27                                | 2.71                                  | 0.27                                 | 2.67                                   |

**\*Figure 3:** Lee County highlighted in the Commonwealth of Virginia



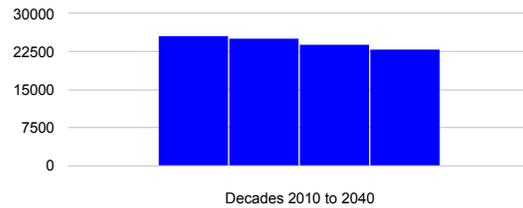
**Projected Water Demand**

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

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

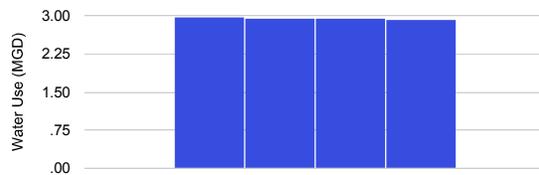
| 2010   | 2020   | 2030   | 2040   | % Change (2010-2040) |
|--------|--------|--------|--------|----------------------|
| 25,587 | 25,063 | 23,961 | 22,951 | -12.0%               |

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



**\*Table 4 & Figure 5:** Lee 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) |
|-----------------------|------------------------|------------------------|------------------------|----------------------------|
| 2.98                  | 2.96                   | 2.95                   | 2.93                   | -1.5%                      |



**Drought Management Practices**

The Town of St. Charles adopted an ordinance for the implementation and enforcement of the Drought Response and Contingency Plan. The status of drought enforcement in Lee County and the Towns of Pennington Gap and Jonesville is pending and will be resolved by the five-year update of the water supply plan. (Southwest Virginia Regional Water Supply Plan)