

**WATER AUDITS and LOSS REDUCTION REPORT  
2017**

Water audits are conducted to determine the amount of water lost from a distribution system due to leakage, storage overflow, water theft, and/or water meter malfunctions. A comprehensive audit can provide the water system with a detailed profile of the distribution system and the water uses allowing for more effective management of the resource and infrastructure.

As a condition of the water system's Water Appropriation and Use Permit, water audits are usually required for water systems serving greater than 10,000 people. Audits are completed annually using data from the previous year and report on how efficiently the systems are operating. When water loss is greater than 10%, it triggers submission of a water loss reduction plan.

For calendar year 2017: The State had 31 water systems serving a population greater than 10,000 people. Twenty-nine of these systems completed an audit and 55% of the systems reported water loss below 10%, while 45% reported more than 10% water loss. Collectively these 29 water systems produced 106.5 billion gallons (bg) of water in 2017. Of those billions of gallons, 14.4 bg were lost.

<b>System</b>	<b>Population</b>	<b>2017 Loss</b>	<b>Water Loss Reduction Plan</b>
Aberdeen	16,200	5.60%	N
Annapolis	35,000	4.78%	N
Bowie	25,000	9.20%	N
Broad Creek (AA DPW)	22,479	12.00%	Y
Cambridge	15,000	3.00%	N
Chapel Hill	13,152	3.00%	N
Crofton-Odenton (AA DPW)	62,986	5.23%	N
Cumberland	23,600	27.99%	**
Easton	11,760	7.08%	N
Elkton	12,458	31.14%	Y
Frederick	54,000	8.10%	N
Freedom District	23,687	8.50%	N
Frostburg	11,000	11.87%	Y
Fort George G. Meade	50,001	<0.01%	N
Glen Burnie, Broadneck (AA DPW)	239,447	11.30%	Y
Hagerstown	88,000	15.70%	Y
Harford County	104,567	14.50%	Y
Havre de Grace	14,000	6.80%	N
Lexington Park	39,056	6.00%	N
MD American Water Co.	13,200	16.00%	Y
New Design	40,241	2.60%	N
Ocean City	30,000	4.00%	N
Ocean Pines	11,800	9.60%	N

Patuxent Naval Air Station (NAWCAD)	22,000	1.30%	No metering
Rockville	46,500	15.60%	Y
Salisbury	30,343	17.80%	Y
Waldorf	70,640	1.70%	N
Westminster	35,256	14.70%	Y
WSSC	1.8M	15.72%	Y

**Table 1 Water 2017 Audit Submission Summary**

Note: Baltimore City and Howard County both have populations over 10,000 people but are not required to conduct a water audit. Baltimore City is statutorily exempt from obtaining a Water Appropriation and Use permit; Howard County receives its water from Baltimore City.

\*\*Cumberland does not have a Water Appropriation and Use permit. Its sources are located in Pennsylvania and are subject to Pennsylvania permit requirements.