

**WATER AUDITS and LOSS REDUCTION REPORT  
2016**

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 2016: The State had 31 water systems serving a population greater than 10,000 people. Twenty-nine of these systems completed an audit and 44.8% of the systems reported water loss below 10%, while 55.2% reported more than 10% water loss. Collectively these 29 water systems produced 107.3 billion gallons (bg) of water in 2016. Of those billions of gallons, 18.3 bg were lost.

<b>System</b>	<b>Population</b>	<b>2016 Loss</b>	<b>Water Loss Reduction Plan</b>
Aberdeen	16,200	8.80%	N
Annapolis	35,000	16.00%	Y
Bowie	25,000	2.60%	N
Broad Creek (AA DPW)	22,479	10.00%	N
Cambridge	15,000	8.70%	N
Chapel Hill	13,152	3.20%	N
Crofton-Odenton (AA DPW)	62,986	3.90%	N
Cumberland	23,600	29.11%	**
Easton	11,760	9.20%	N
Elkton	12,458	29.00%	Y
Frederick	54,000	12.80	Y
Freedom District	23,687	11.60%	Y
Frostburg	11,000	11.60%	Y
Fort George G. Meade	50,001	<0.01%	N
Glen Burnie, Broadneck (AA DPW)	239,447	4.70%	N
Hagerstown	88,000	20.60%	Y
Harford County	104,567	17.60%	Y
Havre de Grace	14,000	5.10%	N
Lexington Park	39,056	7.00%	N
MD American Water Co.	13,200	14.40%	Y
New Design	40,241	10.48%	Y
Ocean City	30,000	17.00%	Y
Ocean Pines	11,800	12.00%	Y

Patuxent Naval Air Station (NAWCAD)	22,000	1.40%	No metering
Rockville	46,500	18.15%	Y
Salisbury	30,343	19.00%	Y
Waldorf	70,640	0.90%	N
Westminster	35,256	16.60%	Y
WSSC	1.8M	20.92%	Y

**Table 1 Water 2016 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.