

## Section 1: Watershed Location and Setting

The Wissahickon Creek Watershed is located in southeastern Pennsylvania. It covers 64 square miles and includes a population of approximately 221,000 people (2010 Census). The watershed includes the 1,400 acre Wissahickon Valley Park, part of the Fairmont Park system within the City of Philadelphia; Fort Washington State Park in Montgomery County; 1,200 acres of protected land and 21 miles of trails in Montgomery County protected under stewardship of the Wissahickon Valley Watershed Association; as well as many smaller municipal parks and preserves.

The watershed lies within the lower Delaware River Basin and discharges to the Schuylkill River in the City of Philadelphia. Most of the watershed is located in Montgomery County, with approximately 16 percent located in Philadelphia County (Figure 1.A). A total of 16 municipalities lie either all or partially within the watershed. The population of those municipalities is provided in Table 1.A, along with the percentage of the watershed draining each municipality.

**Table 1.A Population by Municipality**

<b>2010 Population by Municipality</b>			
Municipality	2010 Census	Municipality % in Watershed	2010 Population in Watershed
Abington Township	55,310	22.94%	12,687
Ambler Borough	6,417	100.00%	6,417
Cheltenham Township	36,793	1.39%	514
Horsham Township	26,147	0.56%	147
Lansdale Borough	16,269	23.65%	3,848
Lower Gwynedd Township	11,405	88.29%	10,069
Montgomery Township	24,790	14.01%	3,473
North Wales Borough	3,229	100.00%	3,229
Philadelphia County	1,526,006	7.34%	112,075
Springfield Township	19,418	94.57%	18,364
Upper Dublin Township	25,569	90.30%	23,090
Upper Gwynedd Township	15,552	61.86%	9,622
Upper Moreland Township	24,015	0.29%	70
Whitemarsh Township	17,349	56.38%	9,782
Whitpain Township	18,875	41.68%	7,868
Worcester Township	9,750	0.64%	63

The Wissahickon Creek watershed contains approximately 115 miles of defined streams and tributaries.<sup>1</sup> Figure 1.B shows the main stem and major tributaries within the watershed. The flow regimen and the interrelationships between surface and groundwater are affected by geology, land cover, topography, and climate. They are also a product of development and other human activities within the basin. The bedrock geology is highly diverse and the watershed is underlain by 14 different rock formations.<sup>2</sup> More than half of the watershed, generally the area north of the Pennsylvania Turnpike, is composed of sedimentary rocks of the Lockatong and Stockton shales. Within the City of Philadelphia, the Wissahickon formation is the dominant geology, and is a combination of sedimentary and igneous rocks. Each of the numerous rock formations has a different set of physical characteristics including texture, mineral composition, hardness, and permeability, which affect the way in which they weather and decompose, and the differences in the soils and terrains that develop over them. These factors combine with human induced changes in land cover and water management to influence the ways in which water enters and moves through the stream network. Consequently, the hydrologic regimen of the Wissahickon Creek and its tributaries varies greatly within the larger watershed.

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<sup>1</sup> *Wissahickon Creek Watershed Comprehensive Characterization Report, City of Philadelphia Water Department, 2007*

<sup>2</sup> *Pennsylvania Bureau of Topographic and Geologic Survey, Pennsylvania Department of Conservation and Natural Resources, 2001.*



