

1.0 SETTING OF THE WATERSHED – PEOPLE, PLACES AND THINGS

1.1 Watershed Management Area and Sub-Watershed:

As described on the New Jersey Department of Environmental Protection Division of Watershed Management website (<http://www.state.nj.us/dep/watershedmgt/index.html>), a watershed is “the area of land that drains into a body of water such as a river, lake, stream or bay. It is separated from other systems by high points in the area such as hills or slopes. It includes not only the waterway itself but also the entire land area that drains to it. For example, the watershed of a lake would include not only the streams entering the lake but also the land area that drains into those streams and eventually the lake. Drainage basins generally refer to large watersheds that encompass the watersheds of many smaller river and streams.”

The New Jersey Northeast Watershed Region is comprised of Watershed Management Areas 3, 4, 5 and 6. Of these, WMAs 3, 4 and 6 comprise the Passaic Watershed.

WMA 3 is the northern portion of the Passaic River Basin, located within two of the four physiological provinces of New Jersey, namely the Highlands and Piedmont regions. WMA 3 contains some of the State’s major water supply reservoir systems including the Wanaque Reservoir, the largest surface water reservoir in New Jersey. In New Jersey, WMA 3 encompasses 238 square miles and 21 municipalities, lying mostly in Passaic County but including parts of Bergen, Morris and Sussex Counties. Table 1.1.1 lists New Jersey municipalities within WMA 3. WMA 3 also includes 140 square miles in New York State. The location of WMA 3 is shown on Plate 1.1.1.

Four subwatersheds comprise WMA 3: Pequannock, Pompton, Ramapo and Wanaque. Subwatersheds are shown on Plate 1.1.2. The Pequannock, Wanaque and Ramapo Rivers all flow into the Pompton River. The Pompton River is, in turn, a major tributary to the Upper Passaic River.

The Pequannock River Watershed is 30 miles long and has a drainage area of 90 square miles. The headwaters are in Sussex County and the Pequannock River flows east, delineating the Morris/Passaic County boundary line. The Pequannock River joins the Wanaque River and flows to the Pompton River in Wayne Township. Some of the major impoundments within this watershed are Butler (Kakeout) Reservoir, Lake Kinnelon Reservoir, Clinton Reservoir, Canistear Reservoir, Oak Ridge Reservoir, Charlottesburg Reservoir and Echo Lake Reservoir. The great majority of the land within this watershed is forested and protected for water supply purposes and parklands.

The Ramapo River and Pompton River Watersheds comprise a drainage area of about 176 square miles; 104 square miles of which are in New York State. The Ramapo River flows from New York into Bergen County and joins the Pequannock River to form the Pompton River in Wayne Township. The Ramapo River is 15 miles long on the New Jersey side. The Pompton River, a tributary to the Passaic River, near Two Bridges, is 7 miles long. Some of the major impoundments within this watershed include Point View

Reservoir #1, Pompton Lake, and Pines Lake. Over one-half of this watershed is undeveloped; however, new development is extensive in many areas.

The Wanaque River Watershed has a total drainage area of 115 square miles, including 36 square miles in New York and 79 square miles in New Jersey. The headwaters of the river lie within New York State as a minor tributary to Greenwood Lake (located half in New Jersey and half in New York). The New Jersey part lies in West Milford, Passaic County. The Wanaque River joins up with the Pequannock River in Riverdale Township. The Wanaque River is 27 miles in length. Some of the major impoundments and lakes with this watershed are the Wanaque Reservoir, Monksville Reservoir, Greenwood Lake, Arcadia Lake and Lake Inez. Most of the land in this watershed is undeveloped, consisting of vacant lands, reservoirs, parks and farms.

At the confluence of the Pompton River with the Passaic River in the Middle Passaic Watershed at the Two Bridges area, the combined drainage area is 739 square miles (Pompton River and all tributaries, 378 square miles, Passaic River upstream of the Pompton River, 361 square miles).

Table 1.1.1
New Jersey Municipalities Within Watershed Management Area 3

COUNTY	MUNICIPALITY	Within WMA 3	
		Sq. miles	%
Bergen	Franklin Lakes Borough	6.0	61.2
Bergen	Mahwah Township	22.5	85.7
Bergen	Oakland Borough	8.7	100
Bergen	Ramsey Borough	2.2	39.5
Morris	Butler Borough	2.1	100
Morris	Jefferson Township	7.0	16.4
Morris	Kinnelon Borough	13.2	68.4
Morris	Lincoln Park Borough	4.7	67.3
Morris	Montville Township	4.1	21.7
Morris	Pequannock Township	7.1	100
Morris	Riverdale Borough	2.1	100
Morris	Rockaway Township	5.8	12.8
Passaic	Bloomington Borough	9.2	100
Passaic	North Haledon Borough	0.02	0.1
Passaic	Pompton Lakes Borough	3.2	100
Passaic	Ringwood Borough	28.1	100
Passaic	Wanaque Borough	9.2	100
Passaic	Wayne Township	12.9	51.3
Passaic	West Milford Township	72.4	90.4
Sussex	Hardyston Township	6.8	21
Sussex	Vernon Township	10.3	14.6
	Total area:	237.9	

Table 1.1.2
Major Subwatersheds of WMA3

Major Subwatershed	Area in NJ – Sq. Mi.	Area in NY–Sq. Mi.	Total Sq. Mi.
Wanaque	79	36	115
Pequannock	87	-	87
Ramapo	48	104	152
Pompton	24	-	24
Total	238	140	378

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