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WATER SUPPLY FACILITIES 2006 Status Report



Montgomery County, Pennsylvania



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WATER SUPPLY FACILITIES

2006 Status Report

Prepared by the
Montgomery County Planning Commission
in 2008

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PREFACE

This report is a guide to water facilities in Montgomery County. Data was compiled from the Montgomery County 2007 Water Facilities Survey and the Pennsylvania Department of Environmental Protection's 2006 Annual Water Supply Reports. The information summarized the county as a whole and the individual water service areas. The report is followed by two appendices. Appendix A contains a glossary of terms, and Appendix B presents the results of the Water Facilities Survey by water supplier.

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INTRODUCTION

Water facilities, and the provision of potable water, are important aspects of the overall infrastructure needed to accommodate anticipated development and stimulate economic growth. In addition to water facilities, growth can be guided by centralized sewer systems and transportation facilities. A municipality can direct growth to designated areas by coordinating water, sewer, and transportation facilities with sound land use planning.

Public water suppliers, including private water companies regulated by the Public Utilities Commission, are important in maintaining a safe, reliable water supply. Public water facilities are especially important in higher-density residential developments where clustered individual on-site wells are more likely to interfere with each other, reducing reliability. In addition, many individual wells also provide more pathways for contaminants to reach and pollute the aquifers. Groundwater reliability can also be diminished when sewage systems utilizing stream discharge are provided in areas reliant upon groundwater. Since treated effluent is not returned to the groundwater as it would be with subsurface sewage disposal, there may be a long-term depletion of the aquifer. Public water systems increase reliability and, in most cases, can also be interconnected with other water systems to provide continuous access to water supply in emergency situations.

While public water facilities have many benefits, they are not without their difficulties. Public water systems that are not interconnected are isolated and have few options if water quality or quantity problems arise. Also, the extensive distribution systems used by public water suppliers provide a greater opportunity for water to be lost through leaks. Water suppliers should continue to improve their systems whenever possible and educate the public on the importance of conserving water. Furthermore, water companies and municipalities that depend upon groundwater for a majority of their water supply should consider a comprehensive wellhead protection program to reduce contamination potential.

SUMMARY OF FINDINGS

Montgomery County's growing residential population depends on both private wells and public water systems to meet their needs; however, the majority of the residents (more than 87 percent) are served by a public water system. Most of the population served by public water is concentrated within the central and eastern portions of the county, within the boroughs, and along the Route 422 corridor in the west. A significant area in the northwestern portion of the county is served by private wells and some of the fastest growing municipalities in the county are located in this area.

There are 17 large public water suppliers operating in Montgomery County. They include 10 authorities, 4 privately owned companies, and 3 municipal departments (Collegeville-Trappe Joint Public Works Department is owned by both the Borough of Collegeville and the Borough of Trappe). The 17 water suppliers are responsible for over 254,000 connections and for providing over 152 million gallons of water a day for domestic, commercial, industrial, and institutional uses in the county.

The public water suppliers in Montgomery County utilize both surface and groundwater sources. Almost 50 percent of the water withdrawn on a daily basis comes from the Schuylkill (39 percent) and Delaware (7 percent) Rivers. The other surface water sources, including Popodickon Reservoir, Trout Run Reservoir, the Perkiomen Creek, Neshaminy Creek, and Pine Run contribute 26 percent. The remaining 28 percent of the water withdrawn on a daily basis for public water supply comes from groundwater sources, including 154 wells, Kemerer Spring, Whitemarsh Spring, and the Upper Merion Reservoir. It is important to note that in addition to the water withdrawn by the large water suppliers, about 13 percent of county's residential units (particularly in the more rural portions of western and central Montgomery County) rely on individual wells. Furthermore, numerous industries, small institutions, and mobile home parks throughout the county use groundwater.

Since the last water supply update in 1998, a few changes were made to water suppliers due to consolidation or name changes. One of the systems, Citizens Utilities Water Company, was acquired by Pennsylvania American Water Company on January 24, 2001. In addition, another large water supplier, Philadelphia Suburban Corporation, officially changed its name to Aqua America, Inc. in January of 2004. It is the nation's largest publicly-traded water utility based in the United States. Aqua America began as a local water utility in Delaware County in 1886 and today provides water service for approximately 2.5 million residents in 14 states. The Pennsylvania subsidiary of the company is Aqua Pennsylvania (Aqua PA), Inc.

As demand for public water service increased, some of the water companies expanded their service territories since the last Water Facilities report in 1998. Most notable was Superior Water Company. Previously providing water service to parts of New Hanover, Douglass, Upper Pottsgrove, and satellite service to a residential development Worcester Township; Superior now serves parts of Lower Pottsgrove and Upper Frederick.

Water suppliers in the county charge customers a variety of rates for water use. The Pennsylvania Public Utilities Commission (PUC) regulates the rates that can be charged by public water purveyors under their jurisdiction and approves franchise or service areas for these water purveyors. The PUC generally does not regulate water systems owned and operated by municipalities or authorities unless the municipality directly serves customers who reside outside the municipality's corporate boundaries. Of the various rates charged, most water purveyors institute a consumption charge for gallons of water used. This charge can be a flat charge ranging from \$2.60 per 1,000 gallons used to \$6.23 per 1,000 gallons used. Other water purveyors use a prorated structure where water users are charged a flat fee for the first "x" thousand gallons of water used and then additional fees for the next "x" number of gallons used beyond that. In addition, some water purveyors charge separate consumption fees based on whether the water user is residential, commercial, or public.

Some water suppliers institute additional charges such as service fees and/or quarterly charges for the water meter. Water meter charges usually range according to the size of the water meter and fees can start between \$7.73 and \$34.50 quarterly and increase for larger meter sizes.

Water purveyors also have a variety of techniques in place to reduce unaccounted for water. Unaccounted for water is water that escapes the purveyor's system due to incidents such as pipeline leaks, main breaks, and the use of unmetered fire hydrants. The methods used by water companies to reduce unaccounted for water include:

- yearly leak detections performed on the entire system
- state of the art leak detection equipment
- valve by valve surveys of transmission mains
- monitoring pipeline stream crossing
- timely response to maintenance requests for suspected main breaks or water loss
- testing of source and commercial meters
- metering water use from fire hydrants
- meter replacement programs.

Recent droughts and water use restrictions in Southeastern Pennsylvania have increased public consideration of the importance of water conservation. Many of the water companies have instituted measures to further educate customers about water conservation. Some of these measures include bill stuffers; including information on water company webpages about water conservation and how to detect leaks; using informational display boards at public events; addressing water conservation topics in regular newsletters; providing water conservation tools such as a shower flow meter and leak detection tablets upon request; and conducting educational programs for schools, scout groups, senior groups, and other organizations throughout the service territory. Comprehensive water conservation efforts such as these are essential to maintaining an adequate and reliable supply of water.

Many of the water suppliers have interconnections with suppliers in adjacent service territories. Interconnecting water supply systems can provide a safe and consistent supply for both daily use and emergency situations. Water can be withdrawn from a source and

transferred a long distance through some systems. Systems that are not interconnected are isolated and have few options if water quality or quantity problems arise.

In addition to interconnections, water purveyors have other cooperative arrangements such as operations services contracts, maintenance agreements, manpower exchanges, and lab services. Some provide bulk water sales to other entities. For example, North Penn Water Authority currently sells bulk water to Hilltown Township Water and Sewer Authority (in Bucks County) and Graterford Prison on an as needed basis.

Some purveyors are members of the PA Water/Wastewater Agency Response Network (PAWARN) or are considering becoming a participating member. PAWARN is voluntary network through which members promote statewide emergency preparedness, disaster response and mutual aid assistance for public and private water and wastewater utilities for natural and human caused events that occur in the state. Members share emergency resources among water and wastewater agencies, allowing for a quicker response and recovery from natural or human caused disaster.

As more people make Montgomery County their home, many water purveyors will see an increase in population, as well as the development of new nonresidential uses. In order to determine the ability of the water purveyors to satisfy the future population and nonresidential demands, a deficiency analysis was conducted in 2000 as part of the Montgomery County Comprehensive Plan. The deficiency analysis was based upon the ability of water purveyors existing dependable supply to meet future needs in 2025. It is able to provide an early indication that a water supplier may need to begin considering development of new water supply sources. A copy of the deficiency analysis can be found in the Community Facilities Plan element of the Montgomery County Comprehensive Plan.

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WATER SERVICE AREAS

The type and size of public water systems varies considerably across the county and reflects the unique development patterns of each municipality. In order to describe existing conditions and evaluate future planning, the county has been divided into seven Water Service Planning Areas (see Figure - 1). These same areas were used in the development of Montgomery County's 1979 Water Service Plan. The initial delineation of these areas was based upon the extent of existing water service, supplier franchise areas (see Figure - 2), areas supplied by common sources, and municipal boundaries. The water service area boundaries have been adjusted to take into account service area expansions by several of the water suppliers since 1979.

AREA 1: This water service area is supplied exclusively by Pottstown Borough Water Authority. The authority withdraws all of its water from the Schuylkill River and treats it at the Borough of Pottstown Water Filtration Plant in West Pottsgrove Township. The authority's average daily use in 2006 was approximately 4.2 million

gallons per day (see Figure - 3). Of the 817 new connections in the service area, most can be attributed to residential development, with almost half of those connections added in Lower Pottsgrove Township. The service area however saw decreases in the number of commercial and institutional connections since 1997.

AREA 2: This service area only includes Douglass Township and has also been reduced to reflect the expansion of Superior Water Company. The sole provider of public water service is Boyertown Borough Water Authority. The authority withdraws approximately 651,000 gallons of water per day from Popodickon Reservoir and 392,200 gallons of water per day from the Trout Run Reservoirs. The water is treated at the authority's filtration plant located in Earl Township, Berks County. The authority, including its entire service area in Berks County, has had only a slight increase (8.5 percent) in the number of connections (239 connections) since 1997.

AREA 3: This area consists of three different water suppliers using both well and surface water sources. East Greenville Borough Water Authority relies on a single well and operates a filtration plant withdrawing from the Perkiomen Creek. While Red Hill Borough Water Authority operates two wells, the authority obtains the majority of its water supply from Kemerer Spring in Lehigh County. Only the Upper Hanover Township Water Authority relies completely on groundwater. Upper Hanover Township Water Authority also relies on an interconnection with Red Hill Borough Water Authority which provides almost 400,000 gallons per day of water. The number of service connections in this area has increased by 40 percent since 1997 (see Figure - 4).

AREA 4: The two water suppliers in this area, Schwenksville Borough Water Authority and Superior Water Company, depend completely upon groundwater for water supply. Superior Water Company, operating in portions of New Hanover, Douglass, Upper Pottsgrove, and recently Upper Frederick and Lower Pottsgrove, utilizes nine wells to service 2,464 residential connections in the area. Schwenksville Borough Water Authority operates five wells, serving residential and commercial development in Lower Frederick, Perkiomen, and Schwenksville. While this service area has had the largest percentage increase in new connections since 1998 (79 percent increase), other service areas have added more than the 1,829 new connections seen in this area. Since the last Water Facilities Report, Schwenksville Borough Water Authority established an interconnection with Aqua PA and is able to purchase up to 120,000 gallons per day from the water company.

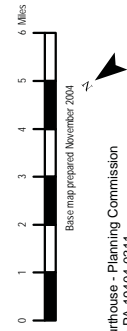
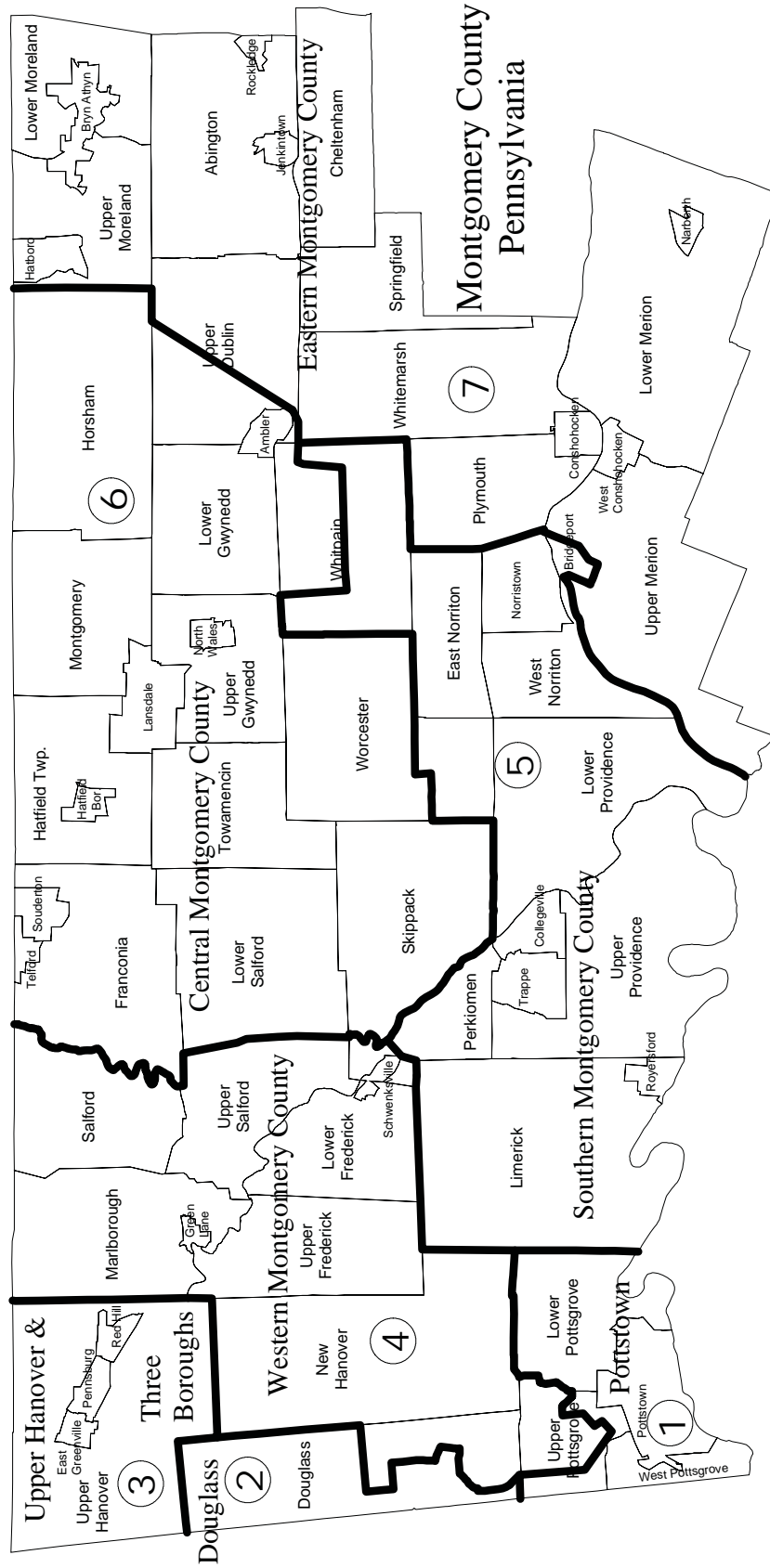
AREA 5: Pennsylvania American Water Company purchased the system previously owned by Citizens Utilities Water Company in 2001. Four other water suppliers operate in this area: Aqua PA, Phoenixville Water Department, Audubon Water Company, and Collegeville-Trappe Joint Waterworks. Pennsylvania American Water Company, Aqua PA, and Phoenixville Water Authority, withdraw from the Schuylkill River. The remaining suppliers rely solely upon groundwater. Residential and commercial growth, particularly along the Route 422 corridor, has caused a 26 percent increase in service connections, which is more than 10,000 connections,

for this area since 1997.

AREA 6: The water suppliers in this service area are North Penn Water Authority, North Wales Water Authority, Ambler Borough Water Department, Horsham Township Water Authority, Telford Borough Water Authority, and Superior Water Company (service in Worcester Township). This service area is the largest in terms of municipalities served. It is also the most dependent upon groundwater. The 77 public supply wells in this area can provide almost 19 million gallons a day to the 64,823 connections. In addition to groundwater, the North Penn Water Authority and North Wales Water Authority have increased their use of Delaware River water from 13.4 million gallons a day in 1997 to 15.6 million gallons a day in 2006. Expanded use of surface water has allowed the two water authorities to close lower-yielding wells, reducing the stress on groundwater while increasing system reliability. While the three remaining water suppliers—Ambler Borough Water Department, Horsham Township Water Authority, and Telford Borough Water Authority—rely almost completely on groundwater (31 wells plus Whitemarsh Spring), all three are interconnected to a water provider with surface water supplies.

AREA 7: The largest service area in population and number of service connections is served solely by Aqua PA. While the majority of Aqua PA's water is withdrawn from surface water sources, including the Schuylkill River and Perkiomen Creek, it does operate 19 wells within Montgomery County. In addition, Aqua PA's water system in this service area is fully integrated and can take advantage of water supplies (well and surface) outside of Montgomery County, including Crum, Neshaminy, and Pickering Creeks. Finally, this area has seen modest growth (12 percent) since the 1997, due mostly to increased infill residential development.

Figure 1
Water Service Areas
Montgomery County



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Figure 2

**Water Franchise Areas
Montgomery County**

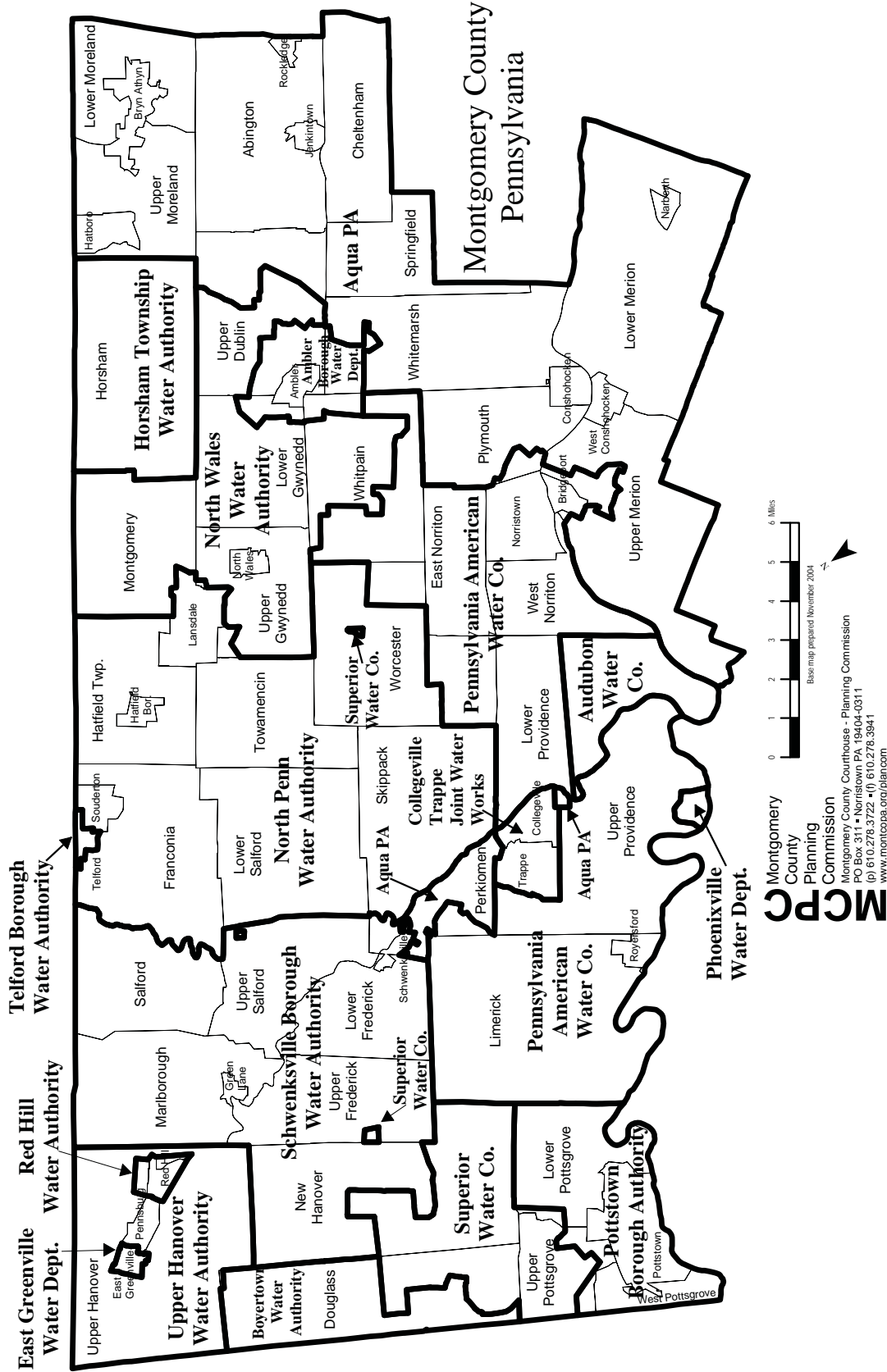


Figure 3
Montgomery County Public Water Sources and Withdrawals

Service Area	Groundwater Wells		Other Water Sources		Total Max Withdrawl	Average Daily Withdrawl	Storage Capacity
	Wells	Max Withdraw	Source	Max Withdrawl			
Area No. 1			Schuylkill River	8 MGD	8 MGD	4.18 MGD	12.7 MG
Area No. 2			Popodickon Reservoir	2 MGD	4 MGD	1.04 MGD	2.1 MG
			Trout Run Reservoir	2 MGD			
Area No. 3	7	1.22 MGD	Kemerer Spring	0.45 MGD	2.02 MGD	1.64 MGD	3.17 MG
			Perkiomen Creek	0.35 MGD			
Area No. 4	15	3.0 MGD			3.0 MGD	0.90 MGD	1.92 MG
Area No. 5	36	6.20 MGD	Schuylkill River	21.7 MGD	34.9 MGD	19.0 MGD	25.8 MG
			Schuylkill River	7 MGD			
Area No. 6	77	19.88 MGD	Delaware River	13.5 MGD	51.81 MGD	22.78 MGD	33.60 MG
			Whitemash Spring	0.43 MGD			
			Neshaminy/Pine Run	18 MGD			
Area No. 7	19	12.07 MGD	Perkiomen Creek	24 MGD	73.27 MGD*	51.15 MGD	19.88 MG
			Upper Merion Reservoir	7.2 MGD			
			Schuylkill River	30 MGD			
Total	154	42.37 MGD		134.63 MGD	177 MGD	100.69 MGD	99.17 MG

Figure 4
2006 Montgomery County Service Connections

Service Area	Residential	Commercial	Industrial	Institutional	Other	Total 2006 Connections	Total 1997 Connections	% Change 1997-2006
Area No. 1	11,395	573	107	140	61	12,276	11,459	7.13%
Area No. 2	2,800	246	29	0	8	3,054	2,815	8.49%
Area No. 3	3,956	205	42	10	3	4,216	3,126	34.87%
Area No. 4	3,858	102	0	0	182	4,142	2,313	79.07%
Area No. 5	44,458	3,291	121	172	506	48,548	38,521	26.03%
Area No. 6	60,536	2,984	752	413	138	64,823	62,750	3.30%
Area No. 7	93,482	5,517	336	728	3,905	103,968	92,750	12.09%
Total	220,485	12,918	1,387	1,463	4,803	241,027	213,734	12.77%

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Appendix A

GLOSSARY OF COMMONLY USED WATER FACILITY TERMS

Average Daily Withdrawal

The total amount of water extracted from a water source, divided by the number of pumping days.

Elevated Tank

An elevated water storage facility that helps maintain system water pressure and eliminate the need for intermittent pumping.

Franchise Area

Awarded by the Public Utilities Commission, it is the area which a water utility maintains a monopoly on service.

Interconnection

A metered or unmetered connection between adjoining water purveyors for emergency use or purchase.

MGD

Million gallons per day.

Service Area

The area within which a water utility maintains a water distribution system. Some homes and businesses within a service area may still use private wells.

Service Connection

A single tie-in to the water system. It may be a single home, an apartment complex with multiple dwelling units, or a commercial facility. Water demand can vary greatly according to use.

Standpipe

A circular reservoir of reinforced concrete or steel constructed above ground level.

Well

A small diameter hole drilled in the surface to obtain water for public, industrial, or irrigation purposes. Wells are developed with casing, pumps, and in some cases water treatment systems.

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Appendix B

AMBLER BOROUGH WATER DEPARTMENT

Municipalities Served: Lower Gwynedd Township, Upper Dublin Township, Whitemarsh Township, Whitpain Township, Ambler Borough

Population Served: 25,000

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Ambler Borough	1,875	164	22	5	1	2,067
Lower Gwynedd	564	8	3	7	0	582
Upper Dublin	2,063	33	1	13	0	2,110
Whitemarsh	233	8	0	5	0	246
Whitpain	646	30	3	1	0	680
TOTAL	5,381	243	29	31	1	5,685

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	1,065,978 gpd	144,339 gpd	10,742 gpd	64,583 gpd	192,929 gpd	220,898 gpd

Total Average Daily Distribution = 1,699,469 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Whitemarsh Spring*	0 gallons (0 days)	432,000 gallons	3
Well #2	261,612 gallons (359 days)	612,000 gallons	6
Well #4	132,032 gallons (365 days)	144,000 gallons	2
Well #6	315,581 gallons (353 days)	432,000 gallons	8
Well #7	105,521 gallons (365 days)	180,000 gallons	7
Well #8	161,136 gallons (364 days)	360,000 gallons	5
Well #9	110,009 gallons (350 days)	144,000 gallons	9
Well #11	310,593 gallons (307 days)	324,000 gallons	4
Well #12	114,694 gallons (358 days)	180,000 gallons	1
Well #14	250,833 gallons (365 days)	360,000 gallons	3
TOTAL	1,762,011 gallons (365 days)	3,168,000 gallons	

*Whitemarsh Spring is currently down for repairs to renovate the pumping station. The Borough intends to apply for a permit from DEP in the spring of 2008. In the past, an average of 700,000 gpd has been withdrawn although in recent years this source has not been used. The quarry is fed mainly by groundwater and has a drainage area of approximately 160 acres.

-Wells #2, #6, #7, and #8 are located around the Loch Alsh Reservoir located in Upper Dublin Township between the Route 309 Expressway and Loch Alsh Avenue. The lake acts as a recharge facility to the underlying groundwater aquifer, making withdrawal rates higher than elsewhere in the service area. The water level is measured by a gage mounted on the outlet tower and production of the wells varies depending on the water level of the lake.

-Well #15 is being drilled near Ridings Way and is anticipated to begin operation in 2008.

-The Borough Water Department and the State of Pennsylvania are investigating the possibility of drilling a new well in Fort Washington State Park

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Broad Axe	Standpipe	2,000,000 gallons	1
Houston Road	Elevated tank	1,000,000 gallons	2
Loch Alsh*	Elevated tank	750,000 gallons	3

*In 2005, the Loch Alsh Standpipe was replaced with a new 750,000 gallon elevated tank.

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Aqua PA	FROM	Emergency	720,000 gallons
North Wales Water Authority*	FROM	Emergency	400,000 gallons
	To	Emergency	288,000 gallons

*The interconnection that Ambler Borough Water Department had on Hawthorne Lane with the North Wales Water Authority was removed in 2006. There is a new interconnection on Dager Road.

AQUA PENNSYLVANIA WATER COMPANY

Municipalities Served: Abington Township, Cheltenham Township, Lower Merion Township, Lower Moreland Township, Plymouth Township, Perkiomen Township, Upper Providence Township, Springfield Township, Upper Dublin Township, Upper Merion Township, Upper Moreland Township, Whitemarsh Township, Bryn Athyn Borough, Conshohocken Borough, West Conshohocken Borough, Narberth Borough, Jenkintown Borough, Rockledge Borough

Population Served: 236,020

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Main System (MontCo. only)	93,482	5,517	336	728	3,905	103,976
Perkiomen System	1,378	26	1	7	16	1,426
Cherry System (Also referred to as Perkiomen Woods)	428	7	0	0	0	435
TOTAL	95,288	5,550	337	735	3,921	105,831

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	53,949,539 gpd	25,937,290 gpd	5,322,347 gpd	1,451,627 gpd	997,252 gpd	17,164,836 gpd

Total Average Daily Distribution = 103,371,264 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal/ No. of days used in 2006	Permitted Daily Withdrawal	MCPC Number
Aiden Lair Well	151,040 gallons (273 days)	290,000 gallons	NA
Babbs Well	920,488 gallons (328 days)	1,100,000 gallons	NA
Blair Mill Road -Well A	81,369 gallons (211 days)	586,924 gallons	NA
Blair Mill Road -Well B	172,133 gallons (289 days)	586,924 gallons	NA
Blair Mill Road -Well C	333,422 gallons (364 days)	586,924 gallons	NA
Cabot Well	1,458,592 gallons (350 days)	1,730,000 gallons	NA
Cranberry Well #2	38,356 gallons (363 days)	150,000 gallons	NA
Cranberry Well #3	49,362 gallons (363 days)	50,000 gallons	NA
Cranberry Well #4	102,754 gallons (363 days)	275,000 gallons	NA
Flourtown Well	1,194,934 gallons (364 days)	1,330,000 gallons	NA
Hall Road Well	1,508,351 gallons (362 days)	1,800,000 gallons	NA
Horsham Road Well	109,865 gallons (252 days)	170,000 gallons	NA
Meyers Well	115,382 gallons (364 days)	370,000 gallons	NA
North Hills Well	582,115 gallons (350 days)	780,000 gallons	NA
Oreland Well	764,969 gallons (293 days)	1,200,000 gallons	NA
Perkiomen Woods Well	64,427 gallons (347 days)	180,000 gallons	NA
Plymouth #1 Well	115,345 gallons (326 days)	130,000 gallons	NA
Rahns Well A	37,314 gallons (357 days)	60,000 gallons	NA
South York Rd. Well	130,774 gallons (362 days)	60,000 gallons	NA
Upper Merion Well	497,121 gallons (365 days)	580,000 gallons	NA
Upper Merion Reservoir	5,961,140 gallons (365 days)	7,200,000 gallons	NA
Village Drive Well	123,385 gallons (362 days)	120,000 gallons	NA
Windsor Road Well	116,649 gallons (208 days)	230,000 gallons	NA
Perkiomen Creek	17,191,414 gallons (365 days)	24,000,000 gallons	NA
Schuylkill River	19,561,047 gallons (365 days)	30,000,000 gallons	NA
TOTAL	51,381,746 gallons (365 days)	71,790,000 gallons	

-The Upper Merion Treatment Plant has a capacity of 16,000,000 gallons per day and treats water from the Upper Merion Reservoir. The Pickering Creek Treatment Plant has a capacity of 41,000,000 gallons per day and treats water from the Perkiomen Creek and Schuylkill River, as well as the Pickering Creek in Chester County.

-Bubbling Springs well located in Plymouth Township is currently under permit review. It will produce 2 million gallons per day on a daily basis.

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Barren Hill	Reservoir	5,000,000 gallons	NA
Cranberry	Standpipe	1,500,000 gallons	NA
Cynwyd	Standpipe	790,000 gallons	NA
Gladwyne	Reservoir	3,000,000 gallons	NA
Hillside (front)	Standpipe	938,000 gallons	NA
Hillside (rear)	Standpipe	938,000 gallons	NA
Hillside	Standpipe	10,000 gallons	NA
Lamott	Standpipe	865,000 gallons	NA
Maple Glen	Reservoir	2,000,000 gallons	NA
Moreland	Standpipe	1,480,000 gallons	NA
Perkiomen Woods	Reservoir	250,000 gallons	NA
Plymouth	Standpipe	200,000 gallons	NA
Rahns	Standpipe	150,000 gallons	NA
Simpson	Reservoir	300,000 gallons	NA
Summit Ave	Standpipe	960,000 gallons	NA
Upper Moreland	Reservoir	200,000 gallons	NA
Willow Grove	Standpipe	300,000 gallons	NA
Wyndmoor	Standpipe	1,400,000 gallons	NA

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Ambler Borough Water Company	Both	Emergency	N/A
Bucks County WSA	FROM	Permanent	7,500,000
	TO		NA
North Wales Water Authority	TO	Permanent	N/A
Horsham Township Water Authority	TO	Emergency	700,000
Pennsylvania American Water Company	TO	Emergency	N/A
Philadelphia Water Department - Miquon	FROM	Permanent	N/A
Philadelphia Water Department - Cheltenham	TO	Permanent	2,500,000
Schwenksville Borough Authority	TO	Permanent	250,000
Warminster Municipal Authority	TO	Permanent	N/A

AUDUBON WATER COMPANY

Municipalities Served: Lower Providence Township

Population Served: 9,150

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Entire System	2,535	167	0	3	0	2,705

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	463,370 gpd	296,389 gpd	0	5,610 gpd	105,779 gpd	131,289 gpd

Total Average Daily Distribution = 1,002,437 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well VFCC # 1	89,193 gallons (295 days)	216,000 gallons	8
Well VFCC # 2	146,838 gallons (364 days)	396,000 gallons	10
Well VFCC # 3	60,438 gallons (365 days)	216,000 gallons	11
Well VFCC # 4	82,562 gallons (354 days)	216,000 gallons	9
Well AWC # 1	121,055 gallons (364 days)	230,000 gallons	6
Well AWC # 5	94,188 gallons (96 days)	216,000 gallons	7
Well AWC # 6	152,654 gallons (364 days)	216,000 gallons	2
Well AWC # 9	237,005 gallons (365 days)	360,000 gallons	3
Well AWC # 10	38,876 gallons (113 days)	72,000 gallons	1
Well AWC # 13	80,377 gallons (159 days)	216,000 gallons	4
Well AP # 1	13,528 gallons (125 days)	50,000 gallons	5
Well VFT # 1	11,789 gallons (365 days)	43,200 gallons	12
Well VFT # 2	23,129 gallons (365 days)	51,840 gallons	13
Well VFT # 3	19,326 gallons (365 days)	44,640 gallons	14
TOTAL	1,170,958 gallons (365 days)	2,543,680 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Featherbed Tank #1	Standpipe	188,000 gallons	3
Featherbed Tank #2	Standpipe	500,000 gallons	4
VFCC Elevated Storage	Elevated Tank	250,000 gallons	5
Level Road #1	Standpipe	200,000 gallons	1
Level Road #2	Standpipe	400,000 gallons	2

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
PA American Water Company	FROM	Permanent	500,000 gallons
	TO	Permanent	250,000 gallons

BOYERTOWN WATER AUTHORITY

Municipalities Served: Douglass Township, Boyertown Borough

Population Served: 8,000

Service Connections:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Entire System	2,800	246	29	0	8	3,083

Average Daily Usage:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	397,890 gpd	151,200 gpd	71,130 gpd	0	12,870 gpd	18,000 gpd

Total Average Daily Distribution = 651,090 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Popodickon Reservoir	651,090 gallons (365 days)	2,000,000 gallons	<i>Berks County</i>
Trout Run Reservoirs	392,200 gallons (365 days)	2,000,000 gallons	<i>Berks County</i>
TOTAL	1,043,290 gallons (365 days)	4,000,000 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Cannon Hill (2)	Standpipe	2,000,000 gallons	Berks County
Brookview Elevated Tank	Standpipe	100,000 gallons	Berks County

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
NONE			

COLLEGEVILLE/TRAPPE JOINT PUBLIC WORKS

Municipalities Served: Collegeville Borough, Trappe Borough

Population Served: 8,500

Service Connections:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Collegeville	1,161	111	5	34	20	1,331
Trappe	1,341	57	6	5	21	1,430
TOTAL	2,502	168	11	39	41	2,761

Average Daily Usage:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	438,236 gpd	28,437 gpd	15,920 gpd	85,465 gpd	16,617 gpd	93,901 gpd

Total Water Usage = 678,576 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well Field (Wells 1, 3, 4, and 7)	201,826 gallons (365 days)	350,000 gallons	6, 7, 8, and 5
Well #5	85,583 gallons (365 days)	140,000 gallons	1
Well #6	0 gallons	140,000 gallons	3
Well #8	88,284 gallons (365 days)	140,000 gallons	4
Well #9	0 gallons	110,000 gallons	11
Well #10	90,546 gallons (365 days)	140,000 gallons	2
Well #11	42,580 gallons (365 days)	110,000 gallons	10
Well #12	79,654 gallons (365 days)	140,000 gallons	12
Well #14	90,103 gallons (365 days)	140,000 gallons	9
TOTAL	687,576 gallons (365 days)	1,410,000 gallons	

-Two additional wells are permitted and will be constructed within the next five years.

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Collegeville Tank	Elevated Tank	750,000 gallons	2
Trappe Tank	Elevated Tank	400,000 gallons	1

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
NONE			

EAST GREENVILLE BOROUGH WATER AUTHORITY

Municipalities Served: East Greenville Borough

Population Served: 3,100

Service Connections:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Entire System	1083	52	22	0	0	1,157

Average Daily Usage:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	149,978 gpd	15,370 gpd	14,301 gpd	0 gpd	0 gpd	60,538 gpd

Total Water Usage = 240,187 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well # 1	155,000 gallons	300,000 gallons	1
Perkiomen Creek	240,000 gallons	350,000 gallons	1
TOTAL	395,000 gallons	650,000 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
East Greenville Water Department	Elevated Tank	750,000 gallons	1

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Upper Hanover Township Water Authority	FROM	Emergency	200,000 gallons
	TO	Emergency	300,000 gallons

HORSHAM TOWNSHIP WATER AUTHORITY

Municipalities Served: Horsham Township

Population Served: 22,779

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Horsham	7,028	276	49	48	114	7,515

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	1,549,504 gpd	331,839 gpd	270,790 gpd	115,268 gpd	14,795 gpd	117,073 gpd

Total Average Daily Distribution = 2,399,269 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well # 1	47,070 gallons (365 days)	59,000 gallons	11
Well # 2	146,889 gallons (292 days)	198,000 gallons	13
Well # 3	76,705 gallons (365 days)	99,000 gallons	1
Well # 4	188,430 gallons (365 days)	188,000 gallons	7
Well # 6	58,833 gallons (340 days)	163,000 gallons	8
Well # 7	140,933 gallons (120 days)	287,000 gallons	2
Well # 9	57,524 gallons (365 days)	99,000 gallons	12
Well # 10	82,409 gallons (365 days)	94,000 gallons	10
Well # 17	94,910 gallons (365 days)	198,000 gallons	6
Well # 19	344,374 gallons (365 days)	675,000 gallons	3
Well # 20	169,862 gallons (365 days)	297,000 gallons	14
Well # 21	167,932 gallons (251 days)	480,000 gallons	5
Well # 22	284,688 gallons (306 days)	391,000 gallons	15
Well # 26	175,304 gallons (365 days)	490,000 gallons	9
Well # 40	0 gallons	NA	4
TOTAL	2,035,863 gallons (365 days)	3,718,000 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Maple Avenue	Elevated Tank	250,000 gallons	4
Witmer Road	Elevated Tank	1,000,000 gallons	5
Herman Road	Elevated Tank	1,000,000 gallons	3
Cedar Hill	Elevated Tank	1,000,000 gallons	2
Lower State Road	Elevated Tank	NA	1

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Warminster Municipal Authority	Both	Emergency	0 gallons
Aqua PA (Hatboro)	Both	Emergency	900,000 gallons
North Wales Water Authority	Both	Emergency	1,440,000

NORTH PENN WATER AUTHORITY

Municipalities Served: Franconia Township, Hatfield Township, Lower Salford Township, Montgomery Township, Skippack Township, Towamencin Township, Upper Gwynedd Township, Upper Salford Township, Worcester Township, Hatfield Borough, Lansdale Borough, Souderton Borough, Telford Borough (Montgomery County). Hilltown Township, New Britain Township, New Britain Borough (Bucks County).

Population Served: 76,261

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Lansdale	4,771	397	75	33	0	5,276
Souderton	2,009	157	5	12	0	2,183
Hatfield Township	3,962	402	132	19	0	4,515
Towamencin	4,364	163	41	43	0	4,611
Franconia	2,894	61	39	19	0	3,013
Lower Salford	3,172	101	29	36	0	3,338
Worcester	1,208	29	3	8	0	1,248
Upper Gwynedd	241	10	0	2	0	253
Montgomery	66	5	0	1	0	72
Skippack	2,557	42	6	17	0	2,622
Hatfield Borough	911	59	16	10	0	996
Telford Borough	1	0	0	1	0	2
Hilltown Township (Bucks)	112	89	6	8	0	215
New Britain Borough (Bucks)	205	44	0	4	0	253
New Britain Township (Bucks)	673	36	8	4	0	721
TOTAL	27,148	1,606	360	217	0	29,331

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	5,876,070 gpd	945,957 gpd	932,661 gpd	170,849 gpd	0 gpd	956,079 gpd

Total Average Daily Distribution = 8,881,616 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Forest Park (Delaware River)	7,380,999 gallons (365 days)	13,500,000 gallons	<i>Bucks County</i>
Well NP-2 (non-operating)	0 gallons	NA	2 (non-operating)
Well NP-4	0 gallons	144,000 gallons	16
Well NP-5	107,400 gallons (10 days)	360,000 gallons	15
Well NP-12 (non-operating)	0 gallons	172,800 gallons	6 (non-operating)
Well NP-14	72,046 gallons (134 days)	432,000 gallons	13
Well NP-15 (non-operating)	0 gallons	NA	3 (non-operating)
Well NP-17	189,283 gallons (304 days)	576,000 gallons	19
Well NP-20 (non-operating)	0 gallons	288,000 gallons	1 (non-operating)
Well NP-26	71,244 gallons (351 days)	216,000 gallons	1
Well NP-29	0 gallons	216,000 gallons	<i>Out of County</i>
Well NP-30	0 gallons	216,000 gallons	<i>Out of County</i>
Well NP-31	65,826 gallons (213 days)	216,000 gallons	14
Well NP-33	74,062 gallons (162 days)	216,000 gallons	18
Well NP-34	71,699 gallons (344 days)	211,000 gallons	21
Well NP-39	111,865 gallons (352 days)	360,000 gallons	20
Well NP-48	0 gallons	220,000 gallons	2
Well NP-61	112,524 gallons (362 days)	288,000 gallons	10
Well NP-68 (non-operating)	0 gallons	100,000 gallons	5 (non-operating)
Well NP-69	38,464 gallons (358 days)	144,000 gallons	4
Well L-9 (non-operating)	0 gallons	144,000 gallons	7 (non-operating)
Well L-14 (non-operating)	0 gallons	111,000 gallons	9 (non-operating)
Well L-17	85,581 gallons (350 days)	116,000 gallons	12
Well L-18 (non-operating)	0 gallons	193,000 gallons	8 (non-operating)
Well L-19	207,654 gallons (364 days)	72,000 gallons	11
Well L-22	159,301 gallons (297 days)	165,600 gallons	12
Well L-23	31,613 gallons (364 days)	36,000 gallons	17
Well S-10	0 gallons	75,000 gallons	3
Well H-4	38,239 gallons (168 days)	100,800 gallons	5
Well H-6 (on-operating)	0 gallons	150,000 gallons	4 (non-operating)
Well H-8	58,246 gallons (352 days)	150,000 gallons	7
Well H-10	0 gallons	300,000 gallons	8
Well H-12	141,042 gallons (316 days)	225,000 gallons	6
Well NB-31	173,052 gallons (354 days)	345,600 gallons	<i>Out of County</i>
Well NB-32	63,365 gallons (196 days)	146,880 gallons	<i>Out of County</i>
TOTAL	8,881,616 gallons	19,934,000 gallons	

Raw water from the Delaware River is treated at the Forest Park Treatment Plant, owned jointly with North Wales Water Authority. Plant was recently expanded and upgraded.

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Souderton	Standpipe	1,000,000 gallons	1
Lansdale Elevated	Elevated Tank	2,000,000 gallons	3
Hillcrest	Standpipe	1,250,000 gallons	4
Old Morris Tank	Standpipe	2,500,000 gallons	5
Hatfield No. 1	Concrete	750,000 gallons	2
Hilltown Tank no.1	Standpipe	1,500,000 gallons	<i>Bucks County</i>
Hilltown Tank no.2	Standpipe	1,500,000 gallons	<i>Bucks County</i>

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
North Wales Water Authority	FROM	Emergency	36,000 gal/day
PA American Water Co. (Norristown)	FROM	Permanent	2,000,000 gal/day
PA American Water Company (Skippack)	BOTH	Permanent	2,000,000 gal/day
Telford Borough Water Authority	TO	Emergency	100,000 gal/day
Superior Water Company	TO	Emergency	As Needed
Graterford Correctional Facility	TO	Permanent	1,000,000 gal/day
Doylestown Twp Authority	TO	Permanent	As Needed
Hilltown Interconnection	TO	Permanent	1,000,000 gal/day

NORTH WALES WATER AUTHORITY

Municipalities Served: Lower Gwynedd Township, Montgomery Township, Upper Dublin Township, Upper Gwynedd Township, Whitpain Township, North Wales Borough

Population Served: 63,172

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Entire System	21,716	1,032	326	133	21	23,228

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	4,516,286 gpd	825,065 gpd	1,477,174 gpd	117,657 gpd	1,850,728 gpd	1,046,990 gpd

Total Average Daily Distribution = 9,833,600 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Neshaminy/Pine Run	8,229,515 gallons	18,000,000 gallons	<i>Bucks County</i>
Well #1	6,265 gallons	210,000 gallons	10
Well #4	9,630 gallons	316,000 gallons	9
Clear Well	620,594 gallons	1,800,000 gallons	4,5, 6, 7, and 8
Well #17	3,551 gallons	108,000 gallons	2
Well #21	98,358 gallons	144,000 gallons	3
Well #22	13,845 gallons	216,000 gallons	1
Well #25	21,654 gallons	230,000 gallons	11
Well #31	8,638 gallons	316,000 gallons	13
Well #34	13,695 gallons	200,000 gallons	12
TOTAL	9,025,745 gallons	21,540,000 gallons	

-Raw water from the Neshaminy/Pine Run is treated at the Forest Park Treatment Plant, owned jointly with North Penn Water Authority. The Forest Park Treatment Plant was recently expanded and upgraded.

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Highlands	Hydropillar	4,100,000 gallons	<i>Bucks Co.</i>
Montgomery Ground Storage	Standpipe	3,000,000 gallons	1
North Wales No. 1	Standpipe	2,000,000 gallons	3
North Wales No. 2	Standpipe	1,000,000 gallons	4
Blue Bell	Standpipe	1,000,000 gallons	6
Upper Dublin	Standpipe	700,000 gallons	5
Susquehanna Road	Standpipe	400,000 gallons	7
Maryland Drive	Standpipe	400,000 gallons	8
Montgomeryville	Hydropillar	1,500,000 gallons	2

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Doylestown Township	TO	Permanent	N/A
Warrington Township	TO	Permanent	N/A
Warminster Township	TO	Permanent	N/A
Chalfont (Aqua America)	BOTH	Emergency	0
Pennsylvania American Water Company	FROM	Emergency	1,000,000 gallons
	TO	Emergency	200,000 gallons
Philadelphia Suburban Water Company	FROM	Permanent	500,000 gallons
North Penn Water Authority	TO	Emergency	800,000 gallons
Pennsylvania American Water Company	TO	Permanent	150,000 gallons
Ambler Borough Water Authority	BOTH	Emergency	400,000 gallons
Ambler Borough Water Authority	FROM	Emergency	400,000 gallons
Philadelphia Suburban Water Company	FROM	Permanent	500,000 gallons
Philadelphia Suburban Water Company	FROM	Emergency	800,000 gallons
North Penn Water Authority	TO	Permanent	800,000 gallons

PENNSYLVANIA AMERICAN WATER COMPANY

Municipalities Served: West Norriton Township, East Norriton Township, Lower Providence Township, Perkiomen, Plymouth Township, Skippack Township, Upper Merion Township, Whitpain Township, Worcester Township, Whitemarsh Township, Limerick Township, Lower Pottsgrove Township, Upper Providence Township, Royersford Borough, Norristown Borough, Bridgeport Borough (Montgomery County). East Coventry Township, East Pikeland Township, East Vincent Township, Spring City Borough (Chester County).

Population Served: 131,985

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Bridgeport	1,549	170	7	9	8	1,743
East Coventry (Chester)	448	49	0	0	3	500
East Norriton	4,203	271	3	14	36	4,527
East Pikeland (Chester)	1,104	62	2	1	23	1,192
East Vincent (Chester)	664	57	0	0	11	732
Limerick	3,677	325	8	0	104	4,114
Lower Pottsgrove	12	1	0	0	0	13
Lower Providence	3,405	151	2	20	24	3,602
Norristown	8,393	947	33	36	53	9,462
Perkiomen	773	6	0	0	0	779
Plymouth	452	49	9	4	5	519
Royersford	1,306	177	16	0	20	1,519
Skippack	0	0	0	0	1	1
Spring City (Chester Co.)	888	151	10	0	7	1,056
Upper Merion	906	80	9	6	17	1,018
Upper Providence	4,392	113	9	1	61	4,576
West Norriton	4,586	349	10	17	47	5,009
Whitemarsh	3	0	0	0	1	4
Whitpain	3,194	242	3	9	68	3,516
Worcester	502	17	0	3	3	525
TOTAL	40,457	4,217	121	120	492	44,407

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other*	Unaccounted for Water
Entire System	6,536,495 gpd	3,376,566 gpd	583,287 gpd	507,729 gpd	435,461 gpd	3,456,158 gpd

Total Average Daily Distribution is 14,895,696 gallons per day.

*Other includes bulk sale water to other public water providers.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Schuylkill River	13,591,311 gallons (365 days)	21,700,000 gallons	NA
Well #201 (Bridge Well)	0 gallons (365 days)	65,000 gallons	NA
Well #202 (Evansburg Well)	0 gallons (365 days)	17,000 gallons	NA
Well #203 (inactive) (Evansburg Well)	0 gallons (365 days)	34,000 gallons	NA
Well #204 (inactive) (Evansburg Well)	0 gallons (365 days)	100,000 gallons	NA
Well #1	176,926 gallons (365 days)	360,000 gallons	NA
Well #3	264,119 gallons (307 days)	432,000 gallons	NA
Well #4	430,190 gallons (342 days)	936,000 gallons	<i>Chester County</i>
TOTAL	11,462,546 gallons (365 days)	23,644,000 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Dekalb #1	Standpipe	2,200,000 gallons	NA
Dekalb #2	Standpipe	2,200,000 gallons	NA
East Norriton	Standpipe	1,500,000 gallons	NA
West Norriton	Standpipe	300,000 gallons	NA
Church Road	Elevated Tank	900,000 gallons	NA
Curren Terrace	Elevated Tank	222,000 gallons	NA
Evansburg	Standpipe	416,000 gallons	NA
Limerick Storage Tank	Reservoir	1,000,000 gallons	NA
Mingo Storage Tank	Reservoir	400,000 gallons	NA
Black Rock Road Tank 1	Standpipe	1,500,000 gallons	NA
Black Rock Road Tank 2	Standpipe	1,500,000 gallons	NA

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Aqua PA	FROM	Permanent	1,000,000 gallons
	TO		250,000 gallons
Audubon Water Company	TO	Permanent	500,000 gallons
North Penn Water Authority	FROM	Permanent	1,000,000 gallons
	TO		1,000,000 gallons
North Wales Water Authority	FROM	Permanent	2,000,000 gallons
	TO		2,000,000 gallons
Phoenixville Borough Water Authority	FROM	Permanent	1,000,000 gallons

PHOENIXVILLE WATER DEPARTMENT

Municipalities Served: Upper Providence Township (Montgomery County). East Pike-land Township, Phoenixville Borough (Chester County).

Population Served: 16,438

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Connections within Montgomery County	262	25	0	4	1	292
Out of County Connections	5,044	355	19	35	15	5,468
TOTAL	5,306	380	19	39	16	5,760

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	923,973 gpd	250,965 gpd	44,553 gpd	7,427 gpd	259,361 gpd	NA

Total Average Daily Distribution = 1,486,279 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Schuylkill River	2,500,000 gallons (365 days)	7,000,000	NA

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Phoenixville (Reservoir Park)	Reservoir	8,000,000 gallons	Chester County
Lane Avenue	Standpipe	1,100,000 gallons	Chester County

Interconnections:

Water Company	Direction	Type of Use	Quantity Purchased
Aqua PA	FROM	Emergency	54,400 gpd

POTTSTOWN WATER AUTHORITY

Municipalities Served: Lower Pottsgrove Township, Upper Pottsgrove Township, West Pottsgrove Township, Pottstown Borough (Montgomery County). North Coventry Township (Chester County). Douglass Township (Berks County).

Population Served: 33,500

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Lower Pottsgrove	1,915	64	2	18	4	2,003
Pottstown Borough	8,100	396	77	105	57	8,735
Upper Pottsgrove	270	25	0	5	0	300
West Pottsgrove	1,110	88	28	12	0	1,238
TOTAL	11,395	573	107	140	61	12,276

-There is also one bulk sale connection into Chester County, supplying multiple land use types. Additionally, two commercial customers in Douglass Township, Berks County were connected in 2006.

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	3,674,763 gpd	184,822 gpd	34,341 gpd	45,117 gpd	9,788 gpd	222,298 gpd

Total Average Daily Distribution = 4,181,129 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Schuylkill River	4,181,128 gallons (1 day)	8,000,000	NA

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Berks Street (Stowe)	Reservoir	8,000,000 gallons	1
Washington Hill	Tank	2,500,000 gallons	4
Jackson Street	Tank	500,000 gallons	3
Willow Street	Tank	500,000 gallons	2
K-Mart	Tank	200,000 gallons	5
Pleasant View Road	Tank	1,000,000 gallons	6

-Another tank has been constructed in Lower Pottsgrove but not yet connected to the distribution system. This is waiting for coordination with planned developments in the area.

-Plans are currently being prepared to abandon Stowe Reservoir (No. 1) and construct a new tank adjacent to the Washington Hill Tank (No. 4).

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
North Coventry Twp (Chester)	TO	Permanent	225,000 gpd

-A main extension has recently been built on Farmington Avenue to the abutting Superior Water Company. It has a booster station capable of providing bulk water to Superior if requested.

RED HILL BOROUGH WATER AUTHORITY

Municipalities Served: Upper Hanover Township, Red Hill Borough (Montgomery County). Hereford Township (Berks County). Upper Milford Township (Lehigh County).

Population Served: 2,835

Service Connections:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Red Hill	1,005	37	12	6	2	1,062
Upper Hanover	45	2	0	0	0	47
Hereford (Berks)	40	40	0	0	0	80
Upper Milford (Lehigh)	10	10	0	0	0	20
TOTAL	1,100	89	12	6	2	1,209

Average Daily Usage:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	142,451 gpd	13,236 gpd	4,121 gpd	5,595 gpd	484,027 gpd	46,597 gpd

Total Water Usage = 696,027 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well #2	49,356 gallons (356 days)	120,000 gallons	1
Well #3	76,773 gallons (353 days)	150,000 gallons	2
Kemerer Spring	573,000 gallons (365 days)	450,000 gallons	<i>Lehigh County</i>
TOTAL	699,129 gallons (365 days)	720,000 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Red Hill Tank	Elevated Tank	150,000 gallons	1
Kemmer Rd. Spring	Reservoir	500,000 gallons	<i>Lehigh County</i>

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
East Greenville Borough Water Authority	BOTH	Emergency	N/A
Upper Hanover Township Water Authority	TO	Permanent	375,000 gallons
	FROM	Emergency	310,000 gallons

SCHWENKSVILLE BOROUGH WATER AUTHORITY

Municipalities Served: Lower Frederick Township, Perkiomen Township, Schwenksville Borough.

Population Served: 5,200

Service Connections:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Lower Frederick	1,095	22	0	0	0	1,117
Perkiomen	262	2	0	0	0	264
Schwenksville	331	41	0	0	0	372
TOTAL	1,688	65	0	0	0	1,753

Average Daily Usage:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	342,236 gpd	15,026 gpd	0	0	0	11,860 gpd

Average Water Usage = 369,122 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well #3	38,776 gallons (365 days)	49,000 gallons	4
Well #4	49,516 gallons (365 days)	64,000 gallons	3
Well #5	119,803 gallons (365 days)	252,000 gallons	5
Well #7	63,984 gallons (363 days)	288,000 gallons	2
Well #9	46,765 gallons (358 days)	100,000 gallons	1
TOTAL	318,884 gallons (365 days)	753,000 gallons	

-The Authority is currently exploring new areas to drill a test well so that another production well can be placed online.

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Standpipe	Standpipe	250,000 gallons	4
Standpipe	Standpipe	250,000 gallons	3
Standpipe	Standpipe	100,000 gallons	5
Standpipe	Standpipe	250,000 gallons	2
Standpipe	Standpipe	100,000 gallons	1

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Aqua PA	FROM	Permanent	120,000 gpd

SUPERIOR WATER COMPANY

Municipalities Served: Douglass Township, New Hanover Township, Upper Frederick Township, Upper Pottsgrove Township, Lower Pottsgrove Township, Worcester Township

Population Served: 8,370

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Douglass	631	1	0	0	0	632
New Hanover	1,208	1	0	0	0	1,209
Upper Frederick	46	2	0	0	0	46
Upper Pottsgrove	566	0	0	0	0	566
Lower Pottsgrove	13	0	0	0	0	13
Worcester	177	0	0	0	0	177
TOTAL	2,641	2	0	0	0	2,643

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	383,715 gpd	8,440	0	0	0	64,929 gpd

Total Average Daily Distribution = 457,084 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well # 1	56,600 gallons (364 days)	288,000 gallons	4
Well # 2	45,200 gallons (92 days)	288,000 gallons	3
Well # 4	155,800 gallons (272 days)	300,000 gallons	6
Well # 5	43,000 gallons (361 days)	72,000 gallons	5
Well # 8	99,870 gallons (365 days)	288,000 gallons	1
Well #10	82,100 gallons (352 days)	308,000 gallons	2
Well #11 (Worcester Township)	63,200 gallons (360 days)	288,000 gallons	7
Ivy Ridge No. 1	5,000 gallons (365 days)	147,000 gallons	8
Ivy Ridge No. 2	5,000 gallons (365 days)	165,600 gallons	9
Center Point Farm No. 1	24,700 gallons (360 days)	72,000 gallons	10
TOTAL	580,470 gallons	2,216,600 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Lohmiller	Concrete Ground	307,000 gallons	N/A
Winding Creek	Concrete Ground	254,000 gallons	N/A
Hunters Run	Concrete Ground	407,000 gallons	N/A

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
North Penn Water Authority	Both	Emergency	As needed

TELFORD BOROUGH WATER AUTHORITY

Municipalities Served: Franconia Township, Telford Borough, Souderton Borough (Montgomery County). Hilltown Township (Bucks County). West Rockhill Townships (Bucks County).

Population Served: 8,400

Service Connections:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Telford (Montgomery)	1,446	56	25	0	8	1,535
Telford (Bucks)	0	0	0	0	0	0
Franconia	56	5	1	0	2	64
Hilltown (Bucks)	634	67	35	0	1	737
Souderton	22	2	1	0	0	25
West Rockhill (Bucks)	361	13	26	0	0	400
TOTAL	2,519	143	88	0	11	2,761

Average Daily Usage:

Service Area / Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	414,107 gpd	80,595 gpd	44,804 gpd	0 gpd	1,183 gpd	59,111 gpd

Total Average Daily Distribution = 599,800 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well # 1	104,638 gallons (365 days)	288,000 gallons	1
Well # 2	Not in Service	288,000 gallons	N/A
Well # 3	152,873 gallons (365 days)	316,800 gallons	<i>Bucks County</i>
Well # 4	78,211 gallons (204 days)	787,680 gallons	<i>Bucks County</i>
Well # 5	197,658 gallons (365 days)	403,200 gallons	<i>Bucks County</i>
Well # 6	81,814 gallons (361 days)	423,000 gallons	<i>Bucks County</i>
Well # 7	36,461 gallons (217 days)	N/A	<i>Bucks County</i>
TOTAL	651,655 gallons	2,506,680 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
West Rockhill Twp.	Standpipe	1,500,000 gallons	Bucks County
Hilltown Twp.	Tank	500,000 gallons	Bucks County

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Hilltown Twp. WSA	Both	Permanent	500,000 gallons
North Penn Water Authority*	Both	Emergency	250,000 gallons

*Recently upgraded from a 4 inch pipe to an 8 inch pipe

UPPER HANOVER TOWNSHIP WATER AUTHORITY

Municipalities Served: Upper Hanover Township, Pennsburg Borough (Montgomery County).

Hereford Township (Berks County).

Population Served: 5,660

Service Connections:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Total
Pennsburg	1219	2	0	1	0	1,222
Upper Hanover	604	112	8	3	1	728
Hereford Township (Berks)	43	12	12	1	1	69
TOTAL	1,866	126	20	5	2	2,019

Average Daily Usage:

Municipality	Domestic	Commercial	Industrial	Institutional	Other	Unaccounted for Water
Entire System	350,093 gpd	56,707 gpd	250,504 gpd	2,474 gpd	90,500 gpd	78,865 gpd

Total Water Usage = 829,143 gallons per day.

Primary Water Supply:

Source	Average Daily Withdrawal	Permitted Daily Withdrawal	MCPC Number
Well #1	147,000 gallons (108 days)	108,000 gallons	<i>Berks County</i>
Well #2	156,000 gallons (154 days)	102,000 gallons	<i>Berks County</i>
Well #3	72,000 gallons (358 days)	120,000 gallons	2
Well #4	174,000 gallons (348 days)	324,000 gallons	1
Red Hill Interconnection	393,527 gallons (365 days)	450,000 gallons	<i>Berks County</i>
TOTAL	942,527 gallons (365 days)	1,104,000 gallons	

Storage Facilities:

Name/Location	Type	Capacity	MCPC Number
Pennsburg	Standpipe	337,000 gallons	3
Pennsburg	Standpipe	337,000 gallons	2
Buck Road	Standpipe	250,000 gallons	4
Buck Road	Standpipe	250,000 gallons	5
Church Road	Standpipe	600,000 gallons	1

Interconnections:

Water Company	Direction	Type of Use	Quantity Available
Red Hill Borough Water Authority	FROM	Permanent	350,000 gallons

