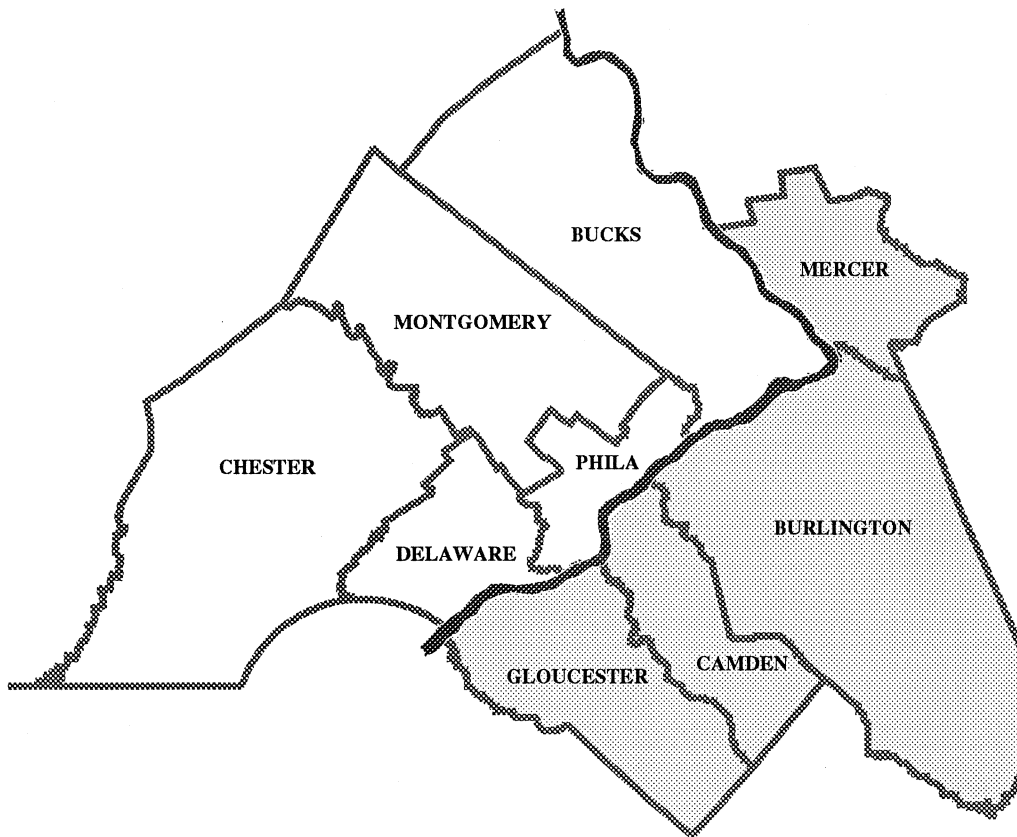


INVENTORY OF PUBLIC WATER AND SEWER FACILITIES IN SOUTHERN NJ



Prepared by:



**Delaware Valley Regional
Planning Commission**

June 1992

**INVENTORY OF PUBLIC WATER
AND SEWER FACILITIES
IN SOUTHERN NEW JERSEY**



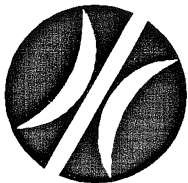
DELAWARE VALLEY REGIONAL PLANNING COMMISSION

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JUNE 1992

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Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency which provides continuing, comprehensive and coordinated planning for the orderly growth and development of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia in Pennsylvania and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. The Commission is an advisory agency which divides its planning and service functions between the Office of the Executive Director, the Office of Public Affairs, and three line Divisions: Transportation Planning, Regional Information Services Center, which includes Regional Planning Office, and Finance and Administration. DVRPC's mission for the 1990s is to emphasize technical assistance and services and to conduct high priority studies for member state and local governments, while determining and meeting the needs of the private sector.



The DVRPC logo is adapted from the official seal of the Commission and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River flowing through it. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey. The logo combines these elements to depict the areas served by DVRPC.

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

TITLE	Date Published:	1992
INVENTORY OF PUBLIC WATER AND SEWER FACILITIES IN SOUTHERN NEW JERSEY	Publication No.	92023

Geographic Area Covered:

All areas with public water and sewer services in Burlington, Camden, Gloucester and Mercer counties.

Key Words:

Inventory, public water and sewer facilities, municipalities served, permitted capacities, average daily flows, excess capacity, expansion plans.

ABSTRACT

Report provides inventory of all public water and sewer facilities including each facilities' capabilities in terms of average daily flows, permitted capacity and excess capacity. Report also includes maps of public water and sewer service areas by county at 1" to 4 miles. Individual maps must be requested separately from report. An inventory for Southeastern Pennsylvania counties is also available in Publication #92022.

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INTRODUCTION

Public water and sewer systems are two of the most important infrastructure facilities in attracting growth and development. Without an adequate public water supply and sufficient sewage treatment capacity significant development cannot take place. In the Delaware Valley nine-county region, public water and sewer service is provided at the local level by over 300 private companies, municipal departments and authorities. Securing information on the service areas, capacities and operations of these facilities has been difficult for the planners, developers and engineers who require this information for both short and long-range planning. Although regulated by both state and federal agencies, comprehensive summary information on public water and sewer facilities has previously been unavailable.

The purpose of this report, therefore, is to identify and inventory each of these water and sewer facilities. For each county, a water and sewer inventory is included which identifies the following major elements for each facility:

1. municipalities served;
2. maximum capacity;
3. average daily flows;
4. excess capacity; and
5. expansion plans, if any.

Additionally, each county report includes two maps: one showing existing and proposed water service areas and the second showing existing and proposed sewer service areas. Each map is at the scale of 1" to 4 miles and can be reproduced in black and white or color.

INVENTORY USES

This water and sewer inventory has several important uses. First, the inventory will serve as a data base which can be easily updated at any point in time. This data base can be easily used by the public and private sectors to quickly ascertain the status of water and sewer facilities in a given area.

Second, this inventory will be useful to counties and municipalities during development proposal reviews and in capital facilities planning. For example, when a municipality reviews a development proposal, the inventory will allow the reviewer to determine if adequate public water and sewer facilities exist to support the development. If the facilities are inadequate, the municipality can negotiate with the developer for adequate facilities

and/or include improvements to the public water and sewer systems in future budgets and capital facilities programs. Municipalities can also use the inventories to revise their planning documents to channel growth into those areas that do have adequate facilities or to limit growth in areas without adequate infrastructure.

The water and sewer inventory will also be important to DVRPC's 2020 land use and transportation planning efforts. The DVRPC's 2020 Land Use Plan will identify potential growth areas in the region. The sewer and water inventory will be useful in identifying these areas and in determining if current or proposed facilities will be adequate to support forecasted growth in the year 2020.

SOURCE OF DATA

The data for the county water and sewer inventories and maps was gathered from a variety of sources as identified on each inventory and map. Each facility was initially identified by reviewing Pennsylvania Department of Environmental Resources (DER) and New Jersey Department of Environmental Protection and Energy (DEPE) computer records of each permitted facility in the nine-county region. Those facilities which service institutions, commercial, and industrial uses were not included in the study. Each county planning commission/department was then contacted to determine if they had a county-wide inventory. Amongst the nine counties, four had done sewer facility inventories, however they all needed to be updated and four had water facility inventories, three of which needed to be updated. The remaining counties had no water or sewer inventories available.

The next step was to contact each water and sewer facility operator in those counties with no or outdated inventories. The level of information varied tremendously from one operator to the next. In general, most operators were able to provide us with the inventory information we needed. However, the mapping information was harder to obtain. Most of the service area boundaries were obtained by examining maps showing the system's pipe locations or by the facility operator's description of service area boundaries. In some cases, the counties had maps which only required a minimum amount of updating. The sewer service area maps in Burlington, Camden, and Gloucester counties were obtained from the Tri-County Water Quality Management Board which updates its maps on an ongoing basis.

Although every attempt was made to accurately map service area boundaries, these maps should not be used as the sole source in determining if a specific site lies within a water or sewer service area. The local facility operator should always be contacted for this purpose. It is also important to remember that not only do water and sewer flows fluctuate daily, but they can change substantially if one or more new developments connect into the system. The local operators also indicated expansion plans, however in many cases the dates of future expansion was undecided, depending on future demand. Therefore, this data should be updated on a continual basis.

The inventory of public water and sewer facilities is provided by county and comprises the remainder of this report. Two reports are available: 1) one which inventories the facilities in the Pennsylvania counties of Bucks, Chester, Delaware, Montgomery and Philadelphia; and 2) one which inventories the facilities in the New Jersey counties of Burlington, Camden, Gloucester and Mercer. The service area maps which accompany this report must be requested from DVRPC separately.

INVENTORY OF PUBLIC WATER SUPPLY FACILITIES

The Federal Safe Drinking Water Act authorizes states to implement and enforce a public water supply program. These programs are designed to regulate the construction, operations and maintenance of all potable water systems. In New Jersey, these programs are administered by the New Jersey Department of Environmental Protection and Energy. All water purveyors must receive permits from DEPE to operate water facilities and/or to withdraw water from groundwater or surface sources.

Although DEPE licenses these facilities, the Delaware River Basin Commission also has some regulatory authority in water diversions. The Delaware River Basin Commission (DRBC) has an adopted Water Resources Program which monitors and regulates the quality and quantity of water resources within the Delaware Basin (includes the entire nine-county region of the DVRPC).¹ One of the DRBC's program elements includes the investigation of water resource projects proposed by public and private entities. The DRBC Project Review Branch reviews applications for compliance within DRBC policy and requirements and its Comprehensive Plan. Projects reviewed by DRBC include those involving groundwater and/or surface water withdrawal, discharge to surface or groundwaters and regional wastewater treatment plans. The DRBC must issue permits for these projects along with the NJDEPE.

Within the New Jersey portion of the DVRPC region, the DRBC has identified Critical Area #2 in southern New Jersey as a groundwater problem area.

Critical Area #2

The Potomac-Raritan-Magothy (PRM) aquifer is a major source of water for the Camden Metropolitan area. Due to the tremendous amount of development that has occurred in this area, the PRM aquifer has been over-pumped resulting in declining water levels and the danger of salt infiltration. Without remedial measures the safe and dependable yield of the aquifer as a source of potable water is in jeopardy.

In 1986, the NJDEPE established Water Supply Critical Area #2 to protect the PRM aquifer. The Critical Area #2 designation encompasses 66 communities and 28 water purveyors in Camden, Gloucester and Burlington counties. The DRBC has estimated that this area will require 50 to 60 mgd to meet its water needs by 2020.

¹Delaware River Basin Commission, *Water Resources Program 1990-1991*.

To resolve the problem, those withdrawing water from the PRM aquifer must replenish the aquifer through recharge or develop alternative water sources to meet their needs. The NJDEPE has determined that alternative water sources must be found for all water needs in excess of 65% of the 1983 water usage, which has been determined to be their share of the safe and dependable yield of the PRM aquifer.

A more thorough examination of the region's water supply problems is beyond the scope of this study. Although solutions to these problems are being investigated, the problem of water supply has serious implications for future development and should be monitored.

DEFINITION OF WATER SUPPLY DATA

Water Supplier/Municipalities Served

This column lists the name of the organization responsible for supplying the water to its customers and the municipalities within the water supplier's service area. As the service area maps show, although an entire municipality may be within a water supplier's service area, (known as a Franchise Area) only portions of that municipality may actually be supplied at the current time.

DEPE Permitted Diversion

The NJDEPE regulates the amount of water which a supplier may withdraw from groundwater and surface water sources. A permit from DEPE must be obtained for all well water and surface water withdrawals.

Domestic Population Served

This data represents the actual number of residents within the water supplier's service area who receive public water. Commercial, industrial and some institutional users are not included in this data. In some cases the domestic population may actually exceed the 1990 Census population for the municipalities within the water supplier's service area. This is due to the fact that many regional water suppliers may not be able to accurately separate domestic population by municipality or even county, since their metering systems may cross municipal and county boundaries.

Average Daily Water Use

This column represents the average daily amount of water supplied by the water supplier to its customers at the time the data was collected. This number can fluctuate widely depending on local conditions, such as time of the year, fire fighting emergencies, and the condition of the system. This data should always be updated when any water planning efforts are undertaken.

Supply Capacity

Although the NJDEPE regulates maximum water diversions, maximum withdrawals actually depend upon the capabilities of the water supplier's equipment (supply capacity cannot be higher than the DEPE permitted diversion). The quantity of water supplied cannot exceed the design capacity of the system's pumping equipment or treatment plant.

Excess Capacity

Typically a sewer or water system is said to be at capacity when 80% of its design capacity is reached. Therefore the excess capacity column is the difference between 80% of the system supply capacity and its average daily use. Since excess capacity is based on average daily use, it can fluctuate daily.

For the purposes of analyzing excess capacity, the water industry standard of 100 gallons of water per day should be used. Therefore, a three-person household requires 300 gallons of water a day. Using this approximation, a 100-unit residential subdivision requires approximately 30,000 gallons of water per day (.030 mgd).

BURLINGTON COUNTY WATER SUPPLY INVENTORY

Service Area

Burlington County lies partially within Critical Area #2 and is therefore subject to water withdrawal reductions from the PRM aquifer. Additionally, the majority of the county's land is located within the Pinelands and subject to severe development restrictions in many areas. For this reason, public water is not available in the county east of Route 206.

Those municipalities that do have public water service are located between the county's western boundary and the New Jersey Turnpike; partial service is provided south of the New Jersey Turnpike between Route 73 and Route 206. Public water service is provided to a domestic population of 310,000 which is approximately 79% of the county's entire population.

The water supply data in this report was obtained by contacting each water purveyor during the Spring of 1992.

TABLE I
BURLINGTON COUNTY
INVENTORY OF PUBLIC WATER SUPPLY FACILITIES
1992

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
BORDENTOWN CITY	3.00	13,500	1.38	4.20	1.98
Bordentown City					
Bordentown Township					
BURLINGTON CITY DEPARTMENT OF SEWER AND WATER	3.33	9,600	1.80	4.00	1.40
Burlington City					
Fieldsboro Borough (bulk sales)		180			
BURLINGTON TOWNSHIP DEPARTMENT OF PUBLIC WORKS	2.30	12,500	1.10	3.00	1.30
Burlington Township (part)					
EVESHAM TOWNSHIP MUA	4.53	32,000	2.80	5.50	1.60
Evesham Township					
FLORENCE TOWNSHIP MUA	2.00	10,000	0.95	1.94	0.60
Florence Township					
MAPLE SHADE TOWNSHIP	3.10	19,843	2.44	8.91	4.69
Maple Shade Township					
MEDFORD TOWNSHIP UTILITIES	2.29	12,145	1.36	n/a	n/a
Medford Township					
MOORESTOWN TOWNSHIP DEPT OF PUBLIC WORKS	3.85	16,000	3.75	4.00	0.00
Moorestown Township					
MOUNT HOLLY WATER (subsidiary of Elizabethtown Water)	3.62	36,000	3.14	5.50	1.26
Eastampton Township					
Hainesport Township					
Lumberton Township					
Mt. Holly Township					
Westampton Township (part)					

BURLINGTON WATER-I

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
MT. LAUREL TOWNSHIP MUA	4.00	31,180	2.60	8.00	3.80
Mt. Laurel Township					
NEW JERSEY AMERICAN WATER COMPANY	16.95	64,077	6.95	20.10	9.14
Beverly City					
Burlington Township (part)					
Cinnaminson Township					
Delanco Township					
Delran Township					
Edgewater Park Township					
Palmyra Borough					
Riverside Township					
Riverton Borough					
PEMBERTON BOROUGH WATER PLANT	0.35	1,345	0.18	0.64	0.33
Pemberton Borough					
Pemberton Township (part)					
PEMBERTON TOWNSHIP MUA	1.29	12,000	0.95	1.30	0.09
Pemberton Township					
WILLINGBORO TOWNSHIP MUA	10.33	39,000	4.20	12.00	5.40
Westampton Township (part)					
Willingboro Township					
Mt. Laurel Township (purchases 1 to 2 MGD bulk)					
WRIGHTSTOWN BOROUGH MUA	0.20	950	0.14	0.20	0.02
Wrightstown Borough					
TOTAL	61.14	310,140	33.74	79.29	31.61

SOURCE: DATA SUPPLIED BY INDIVIDUAL WATER PURVEYORS, SPRING 1992.



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992

BURLINGTON WATER-II

CAMDEN COUNTY WATER SUPPLY INVENTORY

Service Area

Most of Camden County's 37 municipalities lie entirely within an existing public water service area. Only Waterford, Winslow and Pine Valley are partially covered and Chesilhurst has no public water service.

Water in Camden County is supplied entirely by wells which draw from the PRM aquifer. All of Camden County's municipalities lie within Critical Area #2 and are subject to water withdrawal reductions from the PRM aquifer. The largest water purveyor in Camden County is New Jersey American Water Company. This private company supplies water to 22 of Camden County's 37 municipalities and 9 of Burlington County's municipalities.

The following water supply data was obtained from the individual water purveyors during the Spring of 1992.

TABLE II
CAMDEN COUNTY
INVENTORY OF PUBLIC WATER SUPPLY FACILITIES
1992

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
BELLMAWR BOROUGH WATER & SEWER	2.07	10,000	0.92	5.20	3.24
Bellmawr Borough (part)					
BERLIN BOROUGH WATER DEPARTMENT	1.50	11,500	1.00	2.70	1.16
Berlin Borough					
Berlin Township					
BROOKLAWN BOROUGH WATER DEPARTMENT	0.52	2,500	0.03	0.80	0.61
Brooklawn Borough					
CAMDEN CITY, WATER DIVISION	22.13	50,000	16.60	16.30	0.00
Camden City (part)					
CLEMENTON WATER COMPANY	1.03	n/a	n/a	n/a	n/a
Clementon Borough (part)					
COLLINGSWOOD BOROUGH	5.17	21,000	2.20	2.40	0.00
Collingswood Borough					
Haddon Township (part)					
Woodlynne Borough					
GARDEN STATE WATER COMPANY	5.63	41,000	3.20	6.50	2.00
Gloucester Township (part)					
GLOUCESTER CITY	3.10	12,600	1.80	4.32	1.66
Gloucester City					
HADDON TOWNSHIP WATER DEPARTMENT	2.07	n/a	n/a	n/a	n/a
Haddon Township (part)					
HADDONFIELD WATER DEPARTMENT	2.15	11,628	1.21	6.72	4.17
Barrington Borough (part)					
Haddon Heights Borough (part)					
Haddon Township (part)					
Haddonfield Borough (part)					
MERCHANTVILLE-PENNSAUKEN WATER	2.00	50,000	7.00	15.00	5.00
Merchantville Borough					
Pennsauken Township					

CAMDEN WATER-I

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
NJ AMERICAN WATER COMPANY; WESTERN DIVISION-					
CAMDEN COUNTY SYSTEM ¹	56.68	228,721	27.30	63.42	23.43
Audubon Borough					
Audubon Park Borough					
Bellmawr Borough (part)					
Camden City (part)					
Cherry Hill Township (part-most)					
Clementon Borough (part)					
Gibbsboro Borough					
Gloucester Township (part)					
Haddonfield Borough (part)					
Haddon Heights Borough (part)					
Haddon Township (part)					
Hi-Nella Borough					
Laurel Springs Borough					
Lawnside Borough					
Lindenwold borough					
Magnolia Borough					
Oaklyn Borough					
Pennsauken Township (part)					
Runnemede Borough					
Somerdale Borough					
Stratford Borough					
Voorhees Township (part)					
PINE HILL MUA	1.36	10,000	1.2	1.3	0.00
Pine Hill Borough					

CAMDEN WATER-II

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
WINSLOW TOWNSHIP WATER & SEWER DEPARTMENT	4.23	21,147	1.80	4.10	1.48
Waterford Township					
Winslow Township					
TOTAL	109.64	470,096	64.26	128.76	42.75

¹Includes parts of Mount Laurel Township and Maple Shade Township in Burlington County.

SOURCE: DATA SUPPLIED BY INDIVIDUAL WATER PURVEYORS, SPRING 1992.



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992

GLOUCESTER COUNTY WATER SUPPLY INVENTORY

All of the water supplied to Gloucester County residents is from groundwater sources. Most of the county draws water from the PRM aquifer and is subject to the water withdrawal reductions imposed by regulations governing Critical Area #2.

Unlike other counties in the region, most Gloucester County municipalities have their own public water department or municipal utility authority which acts as the local water purveyor. Since the water suppliers are public entities, their franchise area includes the entire municipality. Although only a section of a municipality may currently receive public water, the public water purveyor could service the entire municipality in the future once water supply problems are resolved.

The water supply data in this report was obtained by contacting each water purveyor during the Spring of 1992.

Service Area

In Gloucester County, 17 of the county's 24 municipalities are partially served by public water. As the map shows, only the eastern municipalities along Route 45 and the Route 55 corridor are served in their entirety. Approximately 85% of the county's total population receives public water. The following municipalities have no public water service:

East Greenwich Township
Elk Township
Franklin Township
Greenwich Township

South Harrison Township
West Deptford Township
Woolwich Township

Although future service may be provided to these areas, no specific plans exist at this time.

TABLE III
GLOUCESTER COUNTY
INVENTORY OF PUBLIC WATER SUPPLY FACILITIES
1992

WATER SUPPLIER & Municipalities Served	DEFE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
CLAYTON BOROUGH	0.92	5,500	0.59	1.44	0.56
Clayton Borough					
DEPTFORD TOWNSHIP MUA	4.10	25,000	2.00	6.00	2.80
Deptford Township (part)					
EAST GREENWICH TOWNSHIP WATER DEPARTMENT	1.00	3,800	0.60	2.10	1.08
East Greenwich Township					
GLASSBORO BOROUGH WATER DEPARTMENT	3.43	15,000	2.20	4.80	1.64
Glassboro Borough					
GREENWICH TOWNSHIP	1.56	5,100	0.73	3.38	1.97
Greenwich Township					
SOUTH JERSEY WATER SUPPLY COMPANY	0.37	2,607	0.31	0.68	0.23
Harrison Township-Mullica Hill					
PENNSGROVE/LOGAN WELLS WATER SUPPLY COMPANY	1.72	n/a	0.50	0.75	0.10
Logan Township (part)					
MANTUA TOWNSHIP MUA	1.23	9,000	0.74	2.25	1.06
Mantua Township					
MONROE MUA	2.77	19,800	1.30	3.00	1.10
Monroe Township					
NATIONAL PARK BOROUGH	0.67	3,552	0.32	1.44	0.83
National Park Borough					
NEWFIELD BOROUGH	1.21	1,800	0.25	1.50	0.95
Newfield Borough					
PAULSBORO BOROUGH	2.07	6,500	0.90	2.80	1.34
Paulsboro Borough					
PITMAN BOROUGH	1.67	9,500	0.88	3.46	1.89
Pitman Borough					
SWEDESBORO BOROUGH WATER	0.5	2,400	0.25	1.00	0.55
Swedesboro Borough					

GLOUCESTER WATER-I

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
WASHINGTON TOWNSHIP MUA	6.77	42,000	3.70	8.20	2.86
Washington Township					
WENONAH WATER DEPARTMENT	0.52	2,331	0.15	1.00	0.65
Wenonah Borough (part)					
WEST DEPTFORD WATER DEPARTMENT	3.62	19,000	2.88	6.00	1.92
West Deptford Township					
WESTVILLE BOROUGH PUBLIC WORKS	1.25	7,000	0.55	2.30	1.29
Westville Borough					
WOODBURY CITY WATER DEPARTMENT	1.92	12,118	0.19	n/a	n/a
Woodbury City					
Wenonah Borough (part)					
Deptford Township (part)					
West Deptford Township (part)					
Woodbury Heights Borough (part)					
WOODBURY HEIGHTS BOROUGH	n/a	3,500	0.26	1.44	0.89
Woodbury Heights Borough (part)					
TOTAL	37.30	195,508	19.30	53.54	23.71

SOURCE: DATA SUPPLIED BY INDIVIDUAL WATER PURVEYORS, SPRING 1992.



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992

MERCER COUNTY WATER SUPPLY INVENTORY

Public water in Mercer County is supplied by nine water purveyors, most of which are municipal water companies. Water is supplied to a domestic population of 303,000, which is approximately 93% of the county's total population.

Service Area

As the accompanying map shows, all of Mercer County's 13 municipalities have at least partial public water service. However, most of the service (and the population) is concentrated in the areas surrounding Trenton and Princeton. Service in the northwestern section of the county (Hopewell Township) is minimal.

TABLE IV
MERCER COUNTY
INVENTORY OF PUBLIC WATER SUPPLY FACILITIES
1992

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
EAST WINDSOR MUA	3.62	25,000	2.58	5.50	1.82
East Windsor Township					
ELIZABETHTOWN WATER COMPANY	13.62	n/a	11.98	n/a	n/a
Lawrence Township (part)					
Princeton Borough					
Princeton Township					
West Windsor Township					
GARDEN STATE WATER COMPANY	5.49	34,631	2.77	7.70	3.39
Chesterfield Township (Burlington County, part)					
Hamilton Township (part)					
Washington Township					
HIGHTSTOWN BOROUGH WATER DEPARTMENT	1.44	5,000	1.42	1.50	0.00
Hightstown Borough					
HOPEWELL BOROUGH WATER DEPARTMENT	0.30	1,968	0.20	0.45	0.16
Hopewell Borough					
HOPEWELL TOWNSHIP WATER & SEWER	n/a	40	0.02	n/a	n/a
Hopewell Township (part)					
LAWRENCEVILLE WATER COMPANY	0.72	8,769	0.25	0.30	0.00
Lawrenceville Township (part)					
PENNINGTON BOROUGH WATER WORKS	0.35	2,500	0.29	0.35	0.00
Pennington Borough					

MERCER WATER-I

WATER SUPPLIER & Municipalities Served	DEPE PERMITTED DIVERSION (MGD)	DOMESTIC POPULATION SERVED	AVERAGE DAILY WATER USE (MGD)	SYSTEM SUPPLY CAPACITY (MGD)	EXCESS CAPACITY (MGD)
TRENTON CITY WATER WORKS	50.00	225,000	32.00	45.00	4.00
City of Trenton					
Ewing Township					
Hamilton Township (part)					
Hopewell Township (part)					
TOTAL	75.54	302,908	51.51	60.80	9.37

SOURCE: DATA SUPPLIED BY MERCER COUNTY PLANNING DEPARTMENT AND INDIVIDUAL WATER PURVEYORS, SPRING 1992.



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992

MERCER WATER-II

INVENTORY OF PUBLIC SEWAGE TREATMENT FACILITIES

Large scale development cannot take place without adequate public sewage facilities. The coordination of land use and public sewage facilities is an important element of growth management. In New Jersey, this coordination process takes place through the Tri-County 208 Water Quality Management Plan.

NEW JERSEY TRI-COUNTY 208 WATER QUALITY MANAGEMENT PLAN

The Clean Water Act was passed in 1972 (Federal Water Pollution Control Act Amendments) with the long range goal of eliminating all pollutant discharges into bodies of water. Section 208 of the Clean Water Act requires water quality management plans to be designed and implemented for designated areas. The Tri-County Water Quality Management Board oversees and implements the 208 Plan for Burlington, Camden, and Gloucester counties (a separate 208 Plan exists for Mercer County). The 208 Plan identifies problem areas within the three counties and recommends a course of action to rectify the problems. As shown on the maps, the Plan also identifies existing and proposed sewer service areas. All development proposals which require public sewage disposal must be within the designated service areas.

A sewage service area cannot be expanded or a new one developed if it is not in conformance with the 208 Plan. All Plan changes or additions must be approved by the Tri-County Water Quality Management Board. Additionally, the NJDEPE must approve all 208 Plan amendments. The NJDEPE must also issue permits for the construction, improvement or re-rating of wastewater treatment plants.

DEFINITION OF SEWAGE TREATMENT DATA

Sewage Treatment Facility/Municipalities Served

This column lists the name of the facility responsible for sewage treatment and the municipalities it services. Unlike water service (franchise) areas, sewer service areas are specific locations which comply with an Act 537 Plan in Pennsylvania or a 208 Plan in New Jersey.

DEPE Rated Capacity

Each wastewater treatment facility must receive a permit from DEPE in New Jersey to operate. This permit regulates the quantity of sewage which can be treated and the quality of the effluent which can be discharged into local bodies of water.

Excess Capacity

Typically a sewer system is said to be at capacity when 80% of its design capacity is reached. With many sewage treatment systems in this inventory, the excess capacity is calculated as the difference between 80% of the system's supply capacity and its average daily use. However, if a specific excess capacity was identified by the sewage treatment facility operator, that figure was used even if it was not based on 80% of design capacity. The source of the excess capacity data is noted for each facility.

In general, the average dwelling unit generates approximately 250 gallons of wastewater a day. Using this general rule-of-thumb, a sewage treatment facility would need an excess capacity of 25,000 gallons per day (.025 mgd) to treat a 100-unit residential development.

Expansion Plans

The data on expansion plans includes only those improvements which would increase the capacity of the sewage treatment facility. This column does not include information on improvements to the local sewer system or modifications which would improve a system's efficiency or the quality of its effluents.

BURLINGTON COUNTY SEWAGE TREATMENT FACILITIES INVENTORY

Most of Burlington County's residents west of the New Jersey Turnpike are part of an existing sewer service area. Sewer Service west of the New Jersey Turnpike is limited to a few of the older towns such as Mt. Holly, Wrightstown and Pemberton and is non-existent in the following ten communities:

Bass Township
Chesterfield Township
Fieldsboro Borough
New Hanover Township
North Hanover Township

Shamong Township
Springfield Township
Tabernacle Township
Washington Township
Woodland Township

Several other municipalities, such as Mansfield and Southampton have small package plants which service one or two developments. Additionally, some municipalities, such as Mt. Holly, may not lie entirely within a sewer service area, although they appear to on the map. In some cases, precise boundaries were not available, or in the case of Mt. Holly, the municipality did not differentiate between existing and proposed service.

The Burlington County Sewer Service map was obtained from the Tri-County Water Quality Management Board (staffed by DVRPC) and is updated on a continuing basis through the Tri-County 208 planning process. The data on the following the sewage facilities inventory was obtained by contacting each sewage treatment facility during the Spring of 1992.

TABLE V
BURLINGTON COUNTY
INVENTORY OF PUBLIC SEWAGE TREATMENT FACILITIES
1992

SEWAGE TREATMENT FACILITY & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MGD)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
BEVERLY SEWAGE TREATMENT PLANT Beverly City	1.00	0.40	0.50 ²	
BORDENTOWN SEWERAGE AUTHORITY Bordentown City	3.00	1.80	1.20 ²	
BORDENTOWN Township				
BURLINGTON CITY SEWAGE TREATMENT PLANT Burlington City	3.20	1.50	1.70 ²	2.7 MGD plant opens in July '92
Burlington Township (part)				
BURLINGTON TOWNSHIP MAIN SEWAGE TREATMENT PLANT Burlington Township (part)	1.65	1.20	0.00 ²	Expansion in 1993
CINNAMINSON SEWERAGE AUTHORITY Cinnaminson Township	2.00	1.50	0.10	Upgrading to 2.2 MGD in 1993
DELRAN SEWERAGE AUTHORITY Delran Township (part)	1.50	1.40	0.00 ²	
MOUNT HOLLY SEWAGE AUTHORITY Eastampton Township	5.00	2.40	2.60 ²	
Hainesport Township				
Lumberton Township				
Mount Holly Township				
Westampton Township (part)				
(Portion of NJ Tpke)				
EVESHAM TOWNSHIP MUNICIPAL UTILITY AUTHORITY Evesham Township	4.40	3.20	2.43	
1. Woodstream STP	1.50	1.10	0.35 ²	Upgrade & expansion under study
2. Elmwood STP	2.30	1.65	1.98 ²	
3. Third STP	0.60	0.45	0.10 ²	
FLORENCE TOWNSHIP MUNICIPAL AUTHORITY Florence Township	1.50	0.72	0.78 ²	

BURLINGTON SEWER-I

SEWAGE TREATMENT FACILITY & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MGD)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
HAMPTON LAKES WATER & SEWER COMPANY	n/a	n/a	n/a	
Southampton Township (part)				
HOMESTEAD SEWAGE TREATMENT COMPANY	0.25	0.92	0.16 ²	
Mansfield Township				
MAPLE SHADE TOWNSHIP (STP2)	3.40	2.80	0.50 ²	
Maple Shade Township				
MEDFORD TOWNSHIP MUNICIPAL UTILITIES	1.75	1.20	0.20	
Medford Township				
MEDFORD LAKES WASTEWATER TREATMENT PLANT	0.55	0.40	0.15 ²	
Medford Lakes Borough				
MOORESTOWN TOWNSHIP SEWAGE TREATMENT PLANT	2.50	2.20	0.00	Expansion planned; no data available
Moorestown Township				
MOUNT LAUREL TOWNSHIP MUNICIPAL AUTHORITY	4.00	3.20	0.80 ²	In early planning stages
Mount Laurel Township				
PALMYRA MUNICIPAL SEWER PLANT	1.05	0.52	0.53 ²	
Palmyra Borough				
PEMBERTON TOWNSHIP MUNICIPAL UTILITY AUTHORITY	2.50	1.80	0.70 ²	
Pemberton Borough				
Pemberton Township				
RIVERSIDE SEWAGE AUTHORITY	1.00	0.85	0.00 ²	Plan to upgrade in two years
Delran Township (part)				
Riverside Township				
RIVERTON BOROUGH SEWER DEPARTMENT	0.22	0.18	0.00	
Riverton Borough				
WILLINGBORO MUNICIPAL AUTHORITY	4.81	4.42	0.80 ²	Expanding to 5.2MGD in 8/92
Edgewater Park				
Westampton Township (part)				
Willingboro Township				

BURLINGTON SEWER-II

SEWAGE TREATMENT FACILITY & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MGD)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
WRIGHTSTOWN MUNICIPAL AUTHORITY Wrightstown Township	0.20	0.14	0.00 ²	New plant to open 10/92
TOTAL	45.48	32.75	13.15	

¹Excess capacity was determined by subtracting current flow from 80% of DEPE rated capacity unless noted that plant operator supplied data (see text).

²Sewage treatment plant operator supplied data.

SOURCE: OPERATORS OF INDIVIDUAL SEWAGE TREATMENT FACILITIES, SPRING 1992



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992

CAMDEN COUNTY SEWAGE TREATMENT FACILITIES INVENTORY

The Camden County Municipal Utility Authority (CCMUA) is the agency responsible for the regional planning and treatment of wastewater from Camden County's 37 municipalities. The CCMUA's wastewater treatment plant began service in 1987 and 34 of the municipalities have gradually been connected to the system.

The CCMUA treatment plant is located in Camden City and currently has the capacity to treat 80 million gallons daily (mgd) of wastewater with the potential to be expanded to 90 mgd. Currently the facility operates at 55 mgd with approximately six to seven mgd committed to unbuilt projects.

Unlike many other regional systems, the CCMUA has not established a maximum treatment capacity for each municipality. Rather, the system's capacity is based on the municipalities' estimated need as stated in the Tri-County Water Quality Management Plan (see column labeled "Expansion Plans"). In addition to owning and operating the treatment facility, CCMUA also operates many of the pumping stations and interceptors which transport the wastewater from the municipalities to the plant in Camden City. However, each municipality owns, operates and maintains the sewer network which collects the wastewater from the point of origination through the collector system to the CCMUA interceptor. Although each municipality is part of the CCMUA system it is possible that it does not have its own internal sewer system or the municipal system does not have the capacity to transport the total wastewater needs shown on the table.

Most of Camden County's municipalities lie within CCMUA's existing service area. However, the Pinelands communities of Chesilhurst, Waterford and Winslow have only limited areas which may be sewered in the near future.

TABLE VI
CAMDEN COUNTY
INVENTORY OF PUBLIC SEWAGE TREATMENT FACILITIES
1992

SEWAGE TREATMENT FACILITY & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MDG)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
CAMDEN COUNTY MUNICIPAL UTILITY AUTHORITY PLANT	80.00	55.00 ²	9.00	Possible re-rating to: 90.00 MGD
Audubon Borough		1.33		1.35 MGD
Audubon Park Borough		0.06		0.07 MGD
Barrington Borough		0.90		0.92 MGD
Bellmawr Borough		3.50		3.55 MGD
Berlin Borough		1.10		1.30 MGD
Berlin Township		0.06		0.65 MGD
Brooklawn Borough		0.30		0.32 MGD
Camden City		20.00		26.60 MGD
Cherry Hill Township		13.00		14.50 MGD
Chesilhurst Borough ³		0.00		0.26 MGD
Clementon Borough		0.55		0.60 MGD
Collingswood Borough		2.00		2.02 MGD
Gibbsboro Borough		0.15		0.50 MGD
Gloucester Township		6.00		7.00 MGD
Gloucester City		1.50		2.00 MGD
Haddon Township		1.60		1.64 MGD
Haddonfield Borough		1.25		1.27 MGD
Haddon Heights Borough		0.60		0.62 MGD
Hi-Nella Borough		w/Stratford		
Laurel Springs Borough		w/Lindenwold		
Lawnside Borough		0.30		0.32 MGD
Lindenwold Borough		2.20		2.40 MGD
Magnolia Borough		0.40		0.44 MGD
Merchantville Borough		w/Pennsauken		
Mount Ephraim Borough		0.60		0.64 MGD
Oaklyn Borough		0.50		0.54 MGD
Pennsauken Township		3.60		4.25 MGD
Pine Hill Borough		0.52		0.80 MGD
Pine Valley Borough		all septic		0.01 MGD

CAMDEN SEWER-I

SEWAGE TREATMENT FACILITY & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MDG)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
CAMDEN COUNTY MUA PLANT (CONT.)				
Runnemede Borough		1.50		1.60 MGD
Somerdale Borough		0.50		0.53 MGD
Stratford Borough		1.00		1.04 MGD
Tavistock Borough		w/Haddonfield		
Voorhees Township				3.00 MGD
Waterford Township (part) ³		0.00		0.63 MGD
Winslow Township (Sicklerville) ³		0.00		1.70 MGD
Woodlynne Borough		0.32		0.35 MGD
WINSLOW TOWNSHIP WASTEWATER TREATMENT PLANT	1.65	1.40	0.00	To be connected to Camden County MUA system
Chesilhurst Borough				
Waterford Township (part)				
Winslow Township (part)				
TOTAL	81.65	56.40	9.00	

¹Excess capacity was determined by subtracting current flow from 80% of DEPE rated capacity unless noted that plant operator supplied data (see text).
²6 to 7 MGD are reserved by developers for projects not yet built.

³Not previously connected into Camden County MUA system. Expected connection in fall of 1993.

SOURCE: CAMDEN COUNTY MUNICIPAL UTILITY AUTHORITY, SPRING 1992.



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992

GLOUCESTER COUNTY SEWAGE TREATMENT FACILITIES INVENTORY

The Gloucester County Utility Authority (GCUA) provides sewer service to 16 of Gloucester County's 24 municipalities, most of which are located within the northeastern section of the county. The GCUA's service area includes approximately 75% of Gloucester County's population and approximately 60% of the county's land mass.

The wastewater treatment facility was recently expanded to 24 mgd and is seeking a re-rating to 27 mgd to accommodate anticipated new development, particularly along the Route 55 Corridor. However, even with the re-rating, GCUA may not have sufficient capacity to meet the sewage treatment needs of all new development.

TABLE VII
GLOUCESTER COUNTY
INVENTORY OF PUBLIC SEWAGE TREATMENT FACILITIES
1992

SEWAGE TREATMENT FACILITY & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MGD)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
GLOUCESTER COUNTY UTILITY AUTHORITY	24.10	18.00	2.00²	Re-rating to 27 MGD pending
Clayton Borough		0.56		
Deptford Township		2.39		
East Greenwich Township		0.07		
Elk Township		0.00		
Glassboro Borough		1.69		
Mantua Township		0.45		
Monroe Township		1.24		
National Park Borough		0.22		
Paulsboro Borough		0.53		
Pitman Borough		0.98		
Washington Township		2.99		
Wenonah Borough		0.19		
West Deptford Township		2.45		
Westville Borough		0.29		
Woodbury City		1.83		
Woodbury Heights Borough		0.49		
LOGAN TOWNSHIP MUNICIPAL AUTHORITY SEWAGE TREATMENT PLANT	1.00		0.02²	Re-rating to 2.00 MGD pending
Logan Township		0.47		
Woolwich Township (part)				

GLOUCESTER SEWER-I

SEWAGE TREATMENT FACILITY & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MGD)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
HARRISON TOWNSHIP MULLICA HILL SEWAGE TREATMENT PLANT Harrison Township	0.40	0.18	0.00 ²	
SWEDESBORO MUNICIPAL TREATMENT PLANT Swedesboro Borough	0.35	0.17	0.00 ²	
TOTAL	25.85	18.82	2.02	

¹Excess capacity was determined by subtracting current flow from 80% of DEPE rated capacity unless noted that plant operator supplied data (see text).

²Sewage treatment plant operator supplied data.

SOURCE: OPERATORS OF INDIVIDUAL SEWAGE TREATMENT FACILITIES, SPRING 1992



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992

GLOUCESTER SEWER-II

MERCER COUNTY SEWAGE TREATMENT FACILITIES INVENTORY

Sewer Service is at least partially provided in all Mercer County municipalities. Only the northern area of the county in Hopewell Township and parts of West Windsor, East Windsor, Washington and Hamilton do not have existing service.

Eight sewage facilities provide service in Mercer County. Most provide treatment to more than one municipality.

TABLE VIII
MERCER COUNTY
INVENTORY OF PUBLIC SEWAGE TREATMENT FACILITIES
1992

SEWAGE TREATMENT PLANT & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MGD)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
EWING-LAWRENCE SEWAGE AUTHORITY	16.00	7.45	6.95 ²	
Ewing Township				
Hopewell Township (part)				
Lawrence Township				
EAST WINDSOR TOWNSHIP MUNICIPAL UTILITY AUTHORITY	3.35	2.19	1.00 ²	Proposed 1.15 MGD satellite plant
East Windsor Township (part)				
Hightstown Borough (part)				
HAMILTON TOWNSHIP DEPARTMENT OF WATER POLLUTION CONTROL	16.00	9.43	6.00 ²	
Hamilton Township		8.98		
Washington Township		0.45		
HIGHTSTOWN BOROUGH SEWAGE TREATMENT PLANT	1.00	0.62	0.33 ²	
East Windsor Township (part)				
Hightstown Borough				
STONY BROOK REGIONAL SEWAGE AUTHORITY-RIVER ROAD	11.70	7.84	1.52	
Plainsboro Township (Middlesex County)		n/a		
Princeton Borough & Township		3.60		
South Brunswick Township		2.72		
West Windsor Township		1.52		
STONY BROOK REGIONAL SEWAGE AUTHORITY-HOPEWELL	0.30	0.18	0.00 ²	
Hopewell Borough				
Hopewell Township (part)				
STONEY BROOK REGIONAL SEWER AUTHORITY-PENNINGTON	0.30	0.23	0.00 ²	
Hopewell Township (part)				
Pennington Borough				

SEWAGE TREATMENT PLANT & Municipalities Served	DEPE RATED CAPACITY (MGD)	CURRENT FLOW (MGD)	EXCESS CAPACITY ¹ (MGD)	EXPANSION PLANS
CITY OF TRENTON SEWAGE TREATMENT PLANT City of Trenton	20.00	14.67	4.00 ²	
TOTAL	68.65	42.61	19.80	

¹Excess capacity was determined by subtracting current flow from 80% of DEPE rated capacity unless noted that plant operator supplied data (see text).
²Sewage treatment plant operator supplied data.

SOURCE: MERCER COUNTY PLANNING DEPARTMENT, MARCH 1992; OPERATORS OF SEWAGE TREATMENT FACILITIES, SPRING 1992.
 DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992



DELAWARE VALLEY REGIONAL PLANNING COMMISSION, JUNE 1992