

G. Utilities Element

As defined in the Municipal Land Use Law (MLUL), a utility service element analyzes the need for, and illustrates the future of water supply and distribution facilities, drainage and flood control facilities, sewage and waste treatment, solid waste disposal, and provisions for other related utilities, including storm water management. Cherry Hill Township has a comprehensive utility infrastructure that is commensurate with its status as a developed suburban community with a large residential, commercial, and industrial base. The utility infrastructure consists of public water, sanitary sewer, and storm water facilities. The Township's utility infrastructure is adequate to meet the needs of current and future residents and businesses.

Water Supply

Cherry Hill residents receive water from two purveyors, the Merchantville-Pennsauken Water Company and the New Jersey American Water Company. The dividing service area line is Haddonfield Road and begins at the boundary with Haddonfield. The service area boundary travels north along Haddonfield Road to State Highway Route 38 at which point the service line continues east on Rote 38 to the boundary with Maple Shade Township. All land to the west and north of this line are serviced by Merchantville-Pennsauken, and New Jersey American Water services all land east and south.

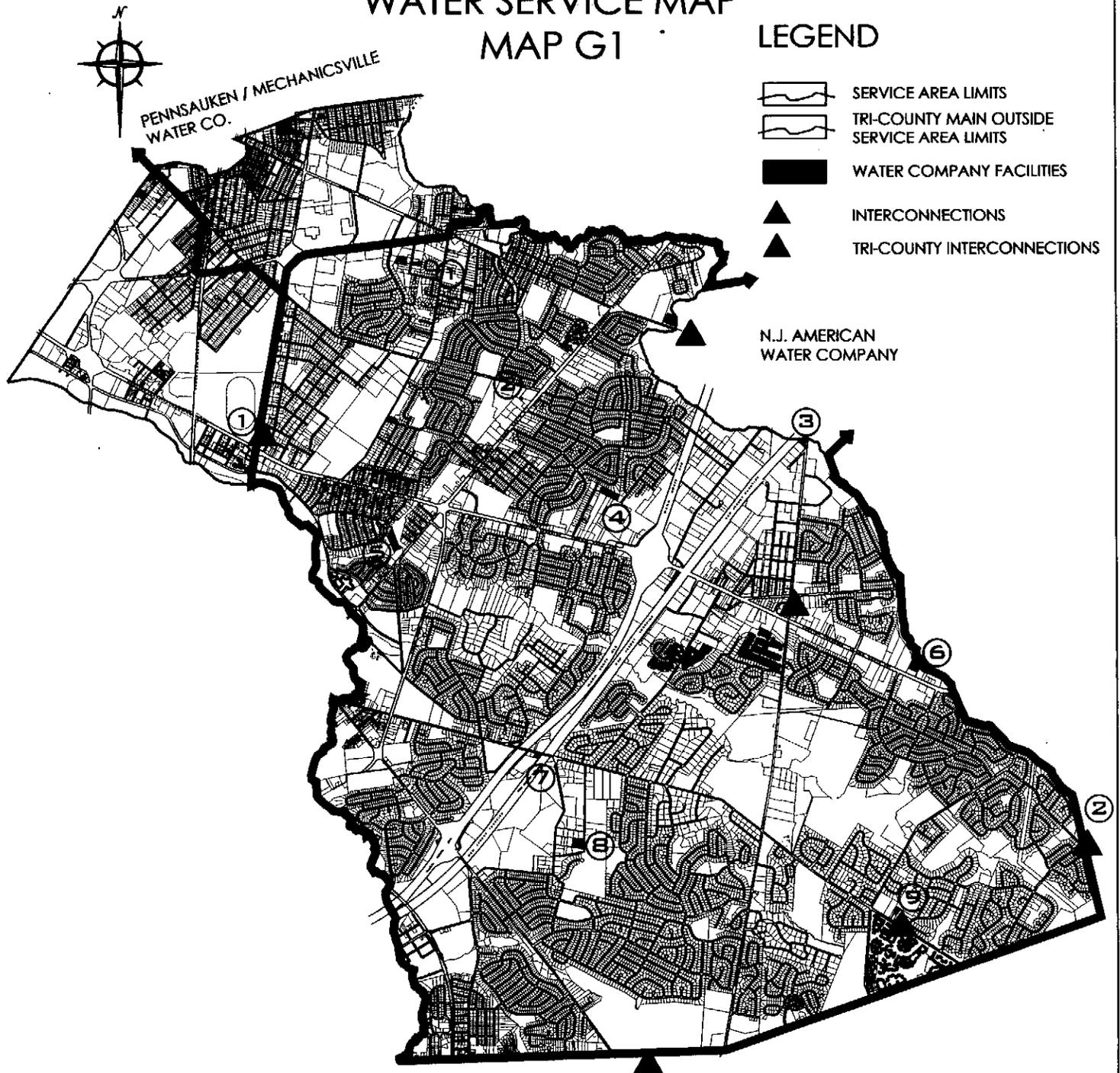
The Merchantville-Pennsauken Water Company services about 50,000 total customers and approximately 12 percent of the Township. Included in this area is the Garden State Park. The water company has stated that even with the additional flow of 491,233 gpd that the redevelopment of the park will require, they will have adequate capacity to service this portion of the Township without impacting the withdraw rates permitted under the Water Allocation Permit issued by the New Jersey Department of Environmental Protection. Merchantville-Pennsauken Water has requested that as part of the development of Garden State Park a one million gallon water tank be constructed on the property. The developers of the Park have agreed to provide this facility.

The New Jersey American Water Company is a private, investor-owned business and is the largest water utility in New Jersey. They service the majority of Cherry Hill Township. The company operates and services several pumping stations and elevated tanks throughout the community. New Jersey American Water has also stated that they can supply adequate capacity to service their portions of the Township without impacting the withdraw rates permitted under the Water Allocation Permit issued by the New Jersey Department of Environmental Protection. The location of the service area boundaries, facilities and interconnection lines are shown on the Water Service Map (**Map G1**).

CHERRY HILL TOWNSHIP

WATER SERVICE MAP MAP G1

LEGEND



WATER COMPANY FACILITIES

- ① COLOMBIA LAKES STATION
- ② DE COU ELEVATED TANK
- ③ FELLOWSHIP ROAD AND RESEVOIR AND PUMP STATION
- ④ KINGSTON PUMP STATION AND FILTER PLANT
- ⑤ ELLISBURG PUMP STATION
- ⑥ OLD ORCHARD STATION WELLS AND PUMP HOUSE
- ⑦ KRESSON ROAD ELEVATED TANK
- ⑧ BROWNING LANE STATION
- ⑨ HUTTON HILL PUMPING STATION

INTERCONNECTIONS

- ① METERED CONNECTION TO MERCHANTVILLE-PENNSAUKEN WATER CO.
- ② INTERCONNECTION WITH EVESHAM TWP. M.U.A.

Scale: 1" = 1200'

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Cherry Hill, like all communities in southern New Jersey is dependent upon subterranean well water. The quality of water and the potential for pollution are a constant concern. Although a regional concern, Cherry Hill can take steps to control the impact on the water supply. Development activity should be prohibited in any flood plain area. Best management practices may be instituted to lessen the affects of non-point source pollution. Where development is proposed, review by the Environmental Commission should include methods to mitigate the impact on an affected watershed.

Sanitary Sewer

Cherry Hill Township is part of the Camden County Wastewater Treatment System that is regulated by the Camden County Municipal Utilities Authority (CCMUA). In 1967, the Federal Water Pollution Control Act required each state to develop water quality standards to protect surface water and groundwater. The CCMUA has the responsibility and sole authority to plan for and treat wastewater within Camden County as required by the Federal Clean Water Act.

The Camden County MUA treats 58 million gallons of sewerage per day at two facilities, the Delaware No.1 Water Control Facility located in Camden, NJ and the Winslow Water Pollution Control Facility located in Winslow Township. Before regional wastewater treatment, 45 million gallons per day of inadequate treated sewerage was discharged into the lakes and streams of Camden County. Pollution of local waterways has been reduced by 90 to 95 percent since the Regional Wastewater Facility began operation.

Cherry Hill has a flow allocation as determined by the CCMUA. Development proposals are reviewed based on criteria as established by the Township and the CCMUA. Service is adequate to meet the needs of the community. To ensure compliance with state approvals and to insure adequate service Cherry Hill routinely upgrades facilities. As such, two projects have been earmarked for 2003, the upgrading of the Brandywoods and Coles Avenue pump stations.

One concern that has been expressed is the amount of allocated capacity that will be available after the redevelopment of the Garden State Park. With the redevelopment of the Park, total municipal flows may reach the allocated capacity. Overall, capacity is being reduced with the connection of each new development or home constructed in the Township.

A possible solution for reducing the volume of flow going into the system is to evaluate the inflow infiltration. Inflow is the amount of storm water that invades the sanitary system through manhole covers and through residential sump pumps that are connected to the sanitary system. Infiltration is caused by groundwater intrusion in old sanitary lines that have cracked. It is recommended that the Township develop a sanitary sewer maintenance program to monitor the age and condition of the system and plan for periodic improvements. This project could be included in the Township's Capital Improvement Program.

The current sanitary sewer infrastructure and facilities map dates back to 1984. As of this writing the Township's sanitary sewer consulting engineer at Remington and Vernick is in the process of updating the facilities map. Once completed, this map

will act as a benchmark of existing conditions. In order to keep the information current, it is recommended that the Township develop an ordinance that would require the developer of each new project to submit information and a fee for the updating of this map.

Storm Water Management and Drainage

Each municipality is required to prepare a storm water management plan and a storm water control ordinance. In accordance with the NJPDES (New Jersey Pollutant Discharge Elimination System) Municipal Storm water Regulation Program, each municipality in New Jersey is required to prepare a storm water program and plan for implementation of specific permit requirements referred to as statewide basic requirements (SBRs). SBRs may also require the permittee (township) to implement related best management practices (BMPs). All SBRs and related BMPs contain minimum standards, measurable goals, and implementation schedules. All municipalities are responsible for completing the plan within 12 months of the release of the requirements by the DEP. It is anticipated that the requirements will take effect before the end of 2003. This plan is to be incorporated as part of the Master Plan if a grant for the preparation of the storm water management plan has been obtained by the Commissioner of the Environmental Protection Agency.

In 2001, the Camden County Soil Conservation District obtained a grant from Department of Environmental Protection to develop a water quality management plan for the Cooper River Watershed. Once complete, the Soil Conservation District will provide the Township with a series of recommendations consistent with state guidelines for water quality improvements to this drainage basin.

The New Jersey Department of Environmental Protection along with the New Jersey Department of Agriculture has jointly published a document entitled Storm water and Non-point Source Pollution Control, Best Management Practices Manual (December 1994). This manual was developed for Municipalities and developers as a guide to initiate "source controls" to reduce pollution in structural facilities (i.e.: detention basins and other storm water facilities).

Best Management Practices (BMPs) include schedules of activities, prohibitions of certain practices, maintenance procedures, and other management practices to prevent or reduce pollution. They also include treatment requirements, operating procedures and techniques of controlling site run-off, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. These may include a reduction in the use of pesticides and fertilizers in the landscape, finding alternatives to road salts for de-icing purposes, and educating the public concerning the proper disposal of motor oils. This manual advocates the use of "Best Management Practices" (BMPs) as the best means of minimizing the impacts of storm water and non-point source pollution. As part of the Master Plan, it is recommended that a storm water management system consistent with BMP criteria be provided for all newly created lots and/or all sites requiring site plan approval, unless the site is included in a larger development for which a comprehensive storm water management plan has been prepared. Off-tract improvements should be provided when development negatively affects existing systems.

The Department of Public Works in concert with the Department of Engineering monitor and provide maintenance to publicly owned drainage basins throughout Cherry Hill Township. In addition, these departments also oversee two large drainage areas, the Columbia Lake drainage basin and the Oriole Lake or Lakeview drainage basin. Due to siltation, the Columbia Lake siltation pond (upstream from the Columbia Lake) is in need of maintenance and is scheduled to be dredged in the upcoming year. This will result in improved drainage in this section of the community. Currently Oriole Lake is functioning properly. It is recommended that these drainage basins and others be evaluated on a regular basis.



Environmentally conscientious storm water basin design protects water quality

On-site retention and recharge of storm water should be provided on aquifer outcroppings where soils are sufficiently porous to safely allow infiltration. Suggested recharge methods include French drains, recharge swales, downspouts leading to underground recharge pits and retention basins. Storm water management design should incorporate standards for a 50-year storm and a 10-year discharge.

During the neighborhood meetings, several residents expressed concerns regarding existing storm water problems in their neighborhoods. Following is a listing of the issues and possible solutions:

- Residents of the Kingston Estates and neighborhoods that border the Pennsauken Creek have experienced flooding during heavy rains particularly during the spring rainy season. In 1996, The Township embarked on a drainage improvement plan for this section of the community. Four phases of a six-phase program have been completed. As of 2001, the drainage improvements have significantly reduced the drainage problems in this portion of the Township.

Based on this success, it has been determined that the detention basin planned for phase five will no longer be necessary. The last two phases of the project will be completed within the next two to three years. It is recommended that the Township continue to monitor the Kingston Estates drainage improvements and the water levels along the Pennsauken Creek to assure that flooding problems have been eliminated.

- Families who reside along Kings Highway between Chapel Avenue and Church Road have questioned the need to improve the storm sewer lines located within Kings Highway. This road is controlled and maintained by the New Jersey Department of Transportation (NJDOT). It is recommended that the Township engineering department contact the DOT to determine whether improvements are necessary.
- Residents of the Cherry Hill Estates and the Kenilworth area have experienced flooding in their basements for several years and have requested that the Township develop an overall drainage plan to resolve the situation. It is recommended that the Township Engineering Department determine the need for such improvements. This project could be included within the Township's Capital Improvement Program.
- The Colwick neighborhood was designed without a storm sewer system. As a result, for years residents have complained about the inadequate surface drainage through the community. It is recommended that the Township Engineering Department determine the need for such an improvement. This project could be included in the Township's Capital Improvement Program.

Solid Waste Management

Cherry Hill Township subcontracts with a private collector to dispose of solid waste. Waste Management services the community for trash and recycling pick-up and disposal. Cherry Hill's trash is disposed of at the steam incineration plant located in Camden, NJ.

The focus of waste collection and disposal from the public's perspective is quality of service. The Township has considered the possibility of collecting and disposing of its own municipal waste. The Township may be in a position to provide better service at a cost comparable to the fees charged by a private contractor. It is recommended that a cost-benefit analysis be conducted to determine the long-term feasibility of the Township collecting and disposing of its own solid waste.

H. Recycling Element

New Jersey is the state with the highest population density in the country. We also live in a society that places a premium on disposability. These and many other factors led to a state wide solid waste crisis in New Jersey in the 1980's. As a result, the state legislature took a number of steps to address this issue. In addition to providing technical and financial assistance, the legislature amended the Municipal Land Use Law (MLUL) to require, beginning in 1987, a Recycling Element as a mandatory component of a community's master plan. Certainly, with solid waste costs reaching unprecedented levels, the efficient, cost effective reduction of the community's waste stream through recycling has become an important function of government.

Mandatory recycling began in New Jersey following the enactment of the 1987 New Jersey Statewide Mandatory Source Separation and Recycling Act. This Act created an initial statewide goal of achieving a 25 percent recycling rate of the municipal waste stream. In 1992, this recycling goal was doubled to 50 percent of the municipal waste stream with the goal for the overall waste stream to be established at 60 percent. The Department of Environmental Protection has recently raised the overall recycling goal to 65 percent.

In addition to establishing and periodically raising the recycling goals, the legislature has adopted other specific requirements for municipalities. Each community must designate a recycling coordinator, and the information concerning a given community's recycling program must be distributed at least twice a year. The collection of recyclable materials from the curbside on a repeating schedule must also be provided.

The Municipal Land Use Law in Section 40:55D-28(12) states that a recycling plan shall incorporate the State Recycling Plan goals. Further, it states that municipalities shall plan for a collection, disposition and recycling of recyclable materials within any development proposal for the construction of 50 or more units of single-family residential housing, or 25 or more units of multi-residential residential housing, and any commercial or industrial development proposals for the utilization of 1,000 square feet or more of developed land.

In accordance with the State's Mandatory Source Separation and Recycling Act and the Municipal Land Use Law, Cherry Hill coordinates its recycling efforts through the Township's Recycling Coordinator within the Department of Public Works. Cherry Hill offers scheduled residential curbside pick up for trash, commingled recyclables including glass, aluminum, tin, #1 and #2 plastics, newspapers, magazines, cardboard and yard wastes. Seasonal items such as leaves, small brush, and Christmas trees are also collected from the curb at appropriate times of the year.

A second service offered to Cherry Hill Residents is the recycling center. This facility is located at the Department of Public Works located at 1 Perina Boulevard. In addition to curbside items, automotive items such as tires, motor oil and car batteries can be brought to the public works yard. The Department of Public Works also operates a leaf composting facility know as the "Kresson Ecology Site" located off Kresson Road.

Cherry Hill recycles 63% of its waste stream, saving taxpayers \$1.6 million annually in disposal costs! This statistic shows a strong commitment by the citizens of Cherry Hill to the recycling goal established by the State of New Jersey. Secondly, it demonstrates that the tools necessary to achieve the recycling mandate have been received and have been accepted by the residents of Cherry Hill. Lastly, the amount of recycling is a reflection on the employees who manage and operate the recycling operation for the municipality.

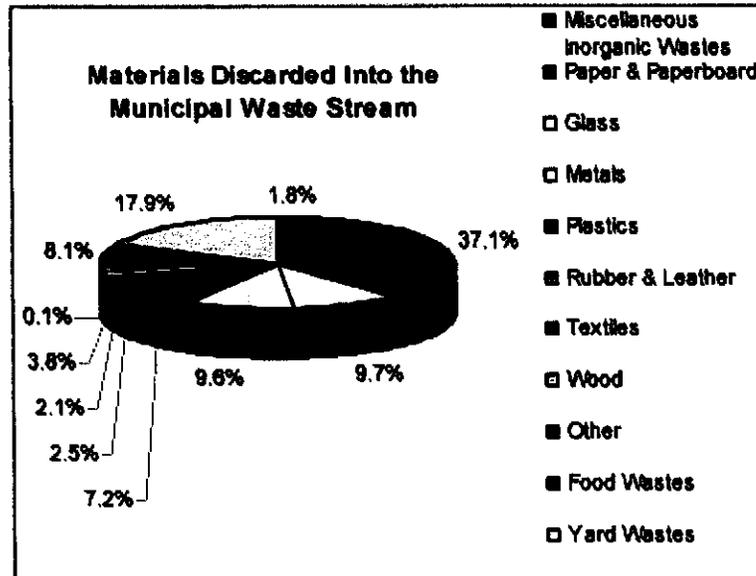


Figure H1
Cherry Hill Recycling - 2001

Recommendations

Recycling not only saves tax dollars, it also promotes efficient re-use of post consumer wastes and can play a role in easing the demand for landfill capacity. One area that deserves greater attention and emphasis is the promotion of recycling in our office, institutional and commercial centers. Areas for collection of refuse and recyclables, as well as ample space for collection vehicles to maneuver are to be delineated on each site. The program should require licensed companies to collect the recyclable materials. These may or may not be the same companies that collect the trash. The licensing of private haulers should consider how the material is to be collected, the collection schedules, the method of sorting the materials, how the materials will be transported to reclamation centers, and the submission of periodic reports to the recycling coordinator that documents the amount of each recycled item. In addition, it is recommended that builders seeking certificate of occupancy should be required to provide receipts demonstrating that construction waste material debris and tree stumps were recycled.

A second avenue to follow involves placing greater emphasis and resources in the promotion of the recycling program. This can be implemented a number of ways. Efforts such as the placement of recycling information on the Cherry Hill web page demonstrate the community's commitment to increasing the volume of recycled materials. Periodic reminders in Township mailings are another way

of maintaining awareness among the citizenry and the new residents regarding the importance of their recycling efforts. Establishing programs with the Cherry Hill Schools to educate and inform students of both the need and benefits of a successful recycling program is yet another way of keeping the citizens of Cherry Hill focused on recycling. Lastly, the Department of Environmental Protection has recently estimated that at least 25% of the business community does not recycle. Efforts to induce the business community to recycle may substantially increase the overall percentage of the collected waste stream.

Under the mandatory recycling program, municipalities are required to provide residents with recycling containers. Since this is a direct cost of development, it is recommended that the developer be required to provide the container for each new homeowner in the development. It is also recommended that during the development review process, multi-residential developments be required to provide sufficient areas for recycling containers.

Presently, the Township parks, athletic fields, and the school recreation facilities do not have recycling drop off barrels or bins. Currently, the people who are using the parks and athletic facilities are expected to take their recycling materials home. Obviously, this has led to commingling of trash and recyclable materials in the trash bins at these facilities. It is recommended that the more heavily used parks and athletic fields be supplied with recycling bins at easy to use locations. Based on the amount of material collected, a decision can be made to expand the program to all Township parks and recreational facilities.

As a way of implementing the above recommendations and lessening the cost of expanding the current program, it is recommended that grants be sought through the Clean Communities Program. The Township's successful recycling program will continue to grow in importance as the cost of solid waste disposal increases.



All residents contribute to reducing the solid waste stream by recycling



Cherry Hill Municipal Building