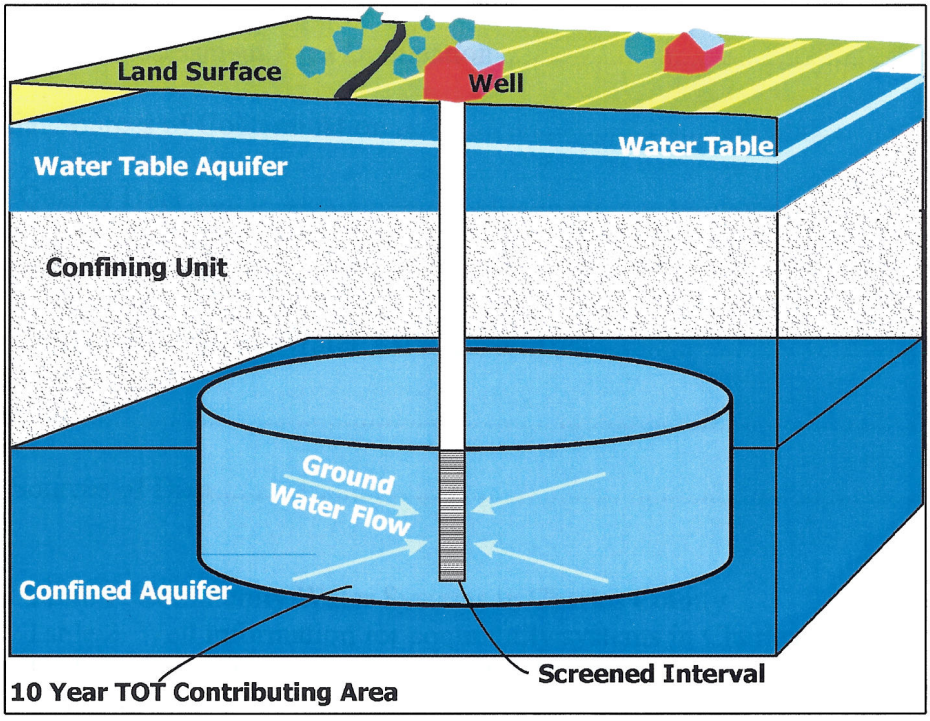
# SOURCE WATER ASSESSMENT

## FOR THE COMMUNITY WATER SYSTEMS

## IN CHARLES COUNTY, MD

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# SUMMARY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The of water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The fifty-seven community water systems included in this report are currently using 120 wells that pump water from four different confined aquifer systems. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for sources in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Maps and aerial photographs showing Source Water Assessment areas are included in this report.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the water systems are not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. Some naturally occurring contaminants do pose a risk to the water supply and have been detected in the water samples. It was determined that ten systems are susceptible to arsenic. Seventeen systems were determined to be susceptible to radiological contaminants. The susceptibility of an additional twenty-three systems to radon will depend upon the final MCL that is adopted for this contaminant.

## INTRODUCTION

The Water Supply Program has conducted a Source Water Assessment for the fifty-seven community water systems in Charles County. Charles County is located in the southern part of the State, west of the Chesapeake Bay and south of Washington, D. C. Its total population, reported in July 2001 is 125,800 (Md. Assoc. of Counties, 2001/2002). The fifty-seven community systems serve a population of approximately 82,000 of the county residents, while the remaining residents in the county obtain their water supply from individual wells. The community systems include the two incorporated municipalities of La Plata and Indian Head, twenty unincorporated areas whose water systems are owned and operated by the County Department of Utilities, thirty-three individually owned and operated systems, one State facility and one federal facility (table1). The community systems included in this report are shown in figure 1.

## WELL INFORMATION

Well information for each system was obtained from the Water Supply Program's database, site visits, well completion reports, sanitary survey inspection reports and published reports. Amongst the fifty-seven community water systems included in this report, a total of 120 wells are currently used or are backup wells, and one additional well that is in the process of being added as a supply well. Seventy-four of these wells were drilled after 1973 and should comply with Maryland's well construction regulations. The remaining forty-four wells were drilled prior to 1973, when current regulations went into effect, and may not meet the current construction standards. In addition, there are nine other wells that are out of use for various reasons and are not considered in the source water assessment delineation, but warrant mention due to their existence and proximity to production wells. Table 2 contains a summary of well information for each of the systems.

Based on site visits, most wells were in good condition and appeared to be regularly maintained, sealed and protected to insure integrity. Some of the older wells had a one-piece well cap, which may present a possible route of contamination (insects) through unscreened vents and electrical holes. This situation can be easily remedied with the installation of a new two-piece sanitary well cap to prevent contamination. Another common threat to wells observed during field inspections are unused wells in the same aquifer as the production wells. Several water systems have wells that are not in use due to screen problems, or were drilled as test wells during new well construction (table 2). As long as these wells are sealed with a tight cap, and the pumps are exercised regularly they pose little threat to the production wells. However, unused wells, with loose caps, no pumps or with no potential for use in the future should be rectified or permanently abandoned and sealed by a licensed well driller because they represent a pathway for contamination to the deep aquifer. Wells that are properly grouted and without pumps may be useful for long-term monitoring. Access to such wells should be restricted through locked caps and/or other security measures.

## HYDROGEOLOGY

Ground water flows through pores between gravel, sand and silt grains in unconsolidated sedimentary rock aquifers such as those used by the community water systems in Charles County. An aquifer is any formation that is capable of yielding a significant amount of water. The transmissivity is a measure of the amount of water an aquifer is capable of producing and is related to the hydraulic conductivity and the thickness of the aquifer. A confining layer is generally composed of fine material such as clay and silt, which transmits relatively very little water. Confined aquifers are those formations that are overlain by a confining unit. Confined aquifers are recharged from the water stored in the confining unit above and from precipitation that infiltrates into the formation where it is exposed at the surface.

Charles County lies within the Atlantic Coastal Plain physiographic province. This province, which in Maryland includes roughly the area east of Interstate 95, is underlain by unconsolidated clastic sediments of Lower Cretaceous to recent age, which thicken to the southeast so that they appear wedge-shaped. These sediments crop out in a concentric band that lies parallel to the Fall Line which marks the western boundary of the Coastal Plain. The community water systems pump water from four confined aquifers known as the Aquia, Magothy, Patapsco and Patuxent Formations. The Aquia Formation is the shallowest and youngest in age with the Patuxent Formation being the deepest and the oldest. These aquifers have been studied considerably and hydrologic, lithologic and geochemical data is available in several Maryland Geological Survey reports ((1955, 1966, 1971, 1983, 1990 and 1999). The descriptive material below is summarized from these reports and the reader is referred to them for further information.

### *Aquia Formation*

The Aquia Formation is the aquifer of use by six of the community systems. In Charles County, the top of the Aquia Formation ranges from 80 feet above sea level in the northwestern portions of the county to 300 feet below sea level in the southeastern portions of the county. The formation consists of glauconitic medium to fine-grained sand with some interbedded layers of sandy or silty clay. Its color is greenish to dark gray and it is fossiliferous in places. The thickness of the Aquia Formation ranges from 80 to 150 feet and averages about 110 feet. Transmissivity values for the aquifer range from 500 to 665 $ft^2$ /day. The Aquia Formation is overlain by the Marboro Clay which functions hydrologically as a confining layer.

### *Magothy Formation*

The Magothy Formation is the aquifer of use by eleven of the community systems. The Magothy Formation dips southeastward at 28 to 30 feet per mile. The top of the formation ranges from 100 feet below sea level northwest of Waldorf to 600 below sea level feet near Benedict. The Magothy Formation consists of medium to coarse-grained quartz sand with some associated silty clay. The sand ranges in color from light gray to blue or pink. Some dark minerals and lignitic material give it a salt and pepper appearance. In the Waldorf area the thickness of the aquifer is about 90 feet. It

thins eastward and is about 30 feet thick at Chalk Point. The average thickness of the Magothy Formation in Charles County is estimated to be about 40 feet. The transmissivity of the Magothy aquifer ranges from less than 100 $ft^2$/day near the edge of the aquifer's extent to 4000 $ft^2$ /day in eastern part of the county. The Magothy is overlain by layer of dark clay of the Mattawan Formation.

***Patapsco Formation***

The Patapsco Formation is the most widely used aquifer by the community systems in Charles County with forty-three systems pumping water from this aquifer. The Patapsco Formation is divided into the upper and lower Patapsco aquifers. The two are separated by confining layer of low permeable clay. All the thirty-six community systems are using the lower Patapsco aquifer as their source of water supply. The upper Patapsco aquifer is very silty and clayey with interbedded thin sands, and is not used much as a source of water supply except in the Waldorf area where it is known as the St. Charles Aquifer. The lower Patapsco aquifer is composed of alternating layers of fine to coarse, light gray and brown sand, and tough clay. The depth to the top of the aquifer ranges from 68 feet below sea level at Indian Head to more than 1,300 feet below sea level in the eastern part of Charles County. Aquifer thickness ranges from approximately 60 feet at Indian Head to more than 150 feet in north-central Charles County. Several systems that had wells originally described as being completed in the deeper Patuxent aquifer were reassigned to the lower Patapsco aquifer based on newly obtained test-well data in 1999. In the Waldorf area the lower Patapsco aquifer has been referred to as the La Plata aquifer system.

***Patuxent Formation***

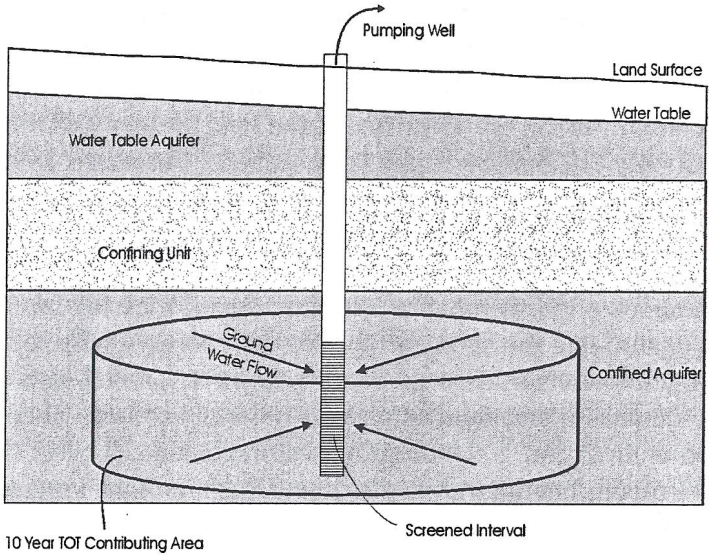
The Patuxent Formation is the deepest aquifer in Charles County. Only two community systems are currently using this aquifer. As indicated in the previous section, several community wells originally indicated as being completed in the Patuxent were reassigned to the lower Patapsco aquifer based on new well test data. The top of the aquifer varies in depth from about 400 feet below sea level at Indian Head to about 1800 feet in eastern Charles County. The Patuxent Formation is overlain by the Arundel Clay. The Arundel Clay is a dense reddish-brown low permeability clay, interbedded with thin layers of sand.

## SOURCE WATER ASSESSMENT AREA DELINEATION

For ground water systems, a Wellhead Protection Area (WHPA) is considered to be the source water assessment area for the system. The WHPAs were delineated using the methodology described in Maryland's Source Water Assessment Plan (MDE, 1999) for confined aquifers in the Coastal Plain, often referred to as the "Florida Method". The area is a radial zone of transport within the aquifer and is based on a 10-yr time of travel (TOT), the pumping rate and the screened interval(s) f the well or wells included in the WHPA, and the porosity of the aquifer (see illustration below for conceptual model). The Florida Method is a modification of Darcy's Law for radial flow to a well and the WHPA's were calculated using the following volumetric equation:

$$r = \sqrt{\frac{Qt}{\pi n H}}$$

where r = calculated fixed radius (ft)
Q = pumping rate of well (ft $^3$/yr)
t = time of travel (yr.)
n = aquifer porosity (dimensionless)
H = length of well screen (ft)




***Conceptual illustration of a zone of transport for a confined aquifer***

Table 3 gives the values used and the calculated radius for each water system's WHPA. The pumping rate (Q) used is generally the permitted daily average. If a water system has more than one well, the wells usually alternate pumpage. Therefore, the total appropriated amount was used in the calculation for each well, since, in theory each well is producing a zone of transport based on the average pumping rate. In some cases, the permitted amount was split between wells that do not alternate and are a significant distance apart, thus the permitted amount was divided amongst the wells based on pumping records for the last year.

A conservative estimate of porosity (n) of 25% was used for each of the aquifers based on published reports. The lengths of the well screens (H) were obtained from well completion reports. In the instance that there were multiple screens, the sum of the individual screen lengths was used. Using these parameters the radius was calculated wit the above equation for the WHPA delineation (table 3). Circles around each of the wells the appropriate calculated radius represents the WHPA and are shown in figure 2. The circles represent the aquifer zone of transport in the subsurface as illustrated above.

## POTENTIAL SOURCES OF CONTAMINATION

In confined aquifer settings, sources of contamination at land surface are generally not a threat unless there is a pathway for direct injection into the deeper aquifer such as through unused wells or along well casings that are not intact or have no grout seal.

Potential sources of contamination are classified as either point or non-point sources. Examples of point sources of contamination are leaking underground storage tanks, landfills, discharge permits, large-scale feeding operations, and CERCLA sites. These sites are generally associated with commercial or industrial facilities that use chemical substances that may, if inappropriately handled, contaminate ground water via a discrete point location. Non-point sources of contamination are associated with certain land use practices that may lead to ground water contamination over a larger area. All potential sources of contamination are identified at the land surface and therefore have the potential to impact only the shallow water table aquifer. Therefore, as long as there is no potential for direct injection into the deeper confined aquifers, the water supply used by the community systems should be well protected from ground water contamination.

Potential point sources of contamination are identified if they fall within the WHPA for awareness and to ensure that the deep aquifer does not become affected by unused wells or poorly constructed wells in the water supply aquifer. Table 4 lists the facilities identified from MDE databases and field surveys as potential sources of contamination ad their locations are shown in Figure 3. Underground storage tanks (USTs) sites are facilities that store petroleum/heating oil in site in underground tanks registered with MDE's Waste Management Administration. Controlled Hazardous Substance Generators (CHS) are facilities that may use or store any hazardous substance on site. Ground Water Discharge Permits (GWD) are issued by MDE's Water Management Administration for discharge of wastewater to ground water.

The contaminants associated with the types of facilities are based on generalized categories and often the potential contaminant depends on the specific chemicals and processes being used at the individual facility. The potential contaminants for an activity may not be limited to those listed in Table 4. Potential contaminants are grouped as Volatile Organic Compounds (VOC), Synthetic Organic Compounds (SOC), Heavy Metals (HM), Radionuclides (R) and Microbiological Pathogens (MP).

## WATER QUALITY DATA

Water Quality data was reviewed from the Water Supply Program's database for Safe Drinking Water Act (SDWA) contaminants. All data reported is from the finished (treated) water unless otherwise noted. The State's SWAP defines a threshold for reporting water quality data as 50% of the Maximum Contaminant Level (MCL). If a monitoring result is greater than 50% of the MCL, this report will describe the sources of such a contaminant and, if possible, locate the specific sources that are the cause of the elevated contaminant level. All data reported is from the finished (treated) water unless

otherwise noted. Table 5 summarizes the various treatment methods used at the water treatment plants for each of the fifty-seven community water systems.

A review of the monitoring data for the fifty-seven systems indicates that currently the water supplies meet the drinking water standards. Table 6 summarizes the water quality results for each of the water systems by contaminant group.

***Inorganic Compounds (IOCs) except arsenic***

A review of the data shows that two different inorganic compounds (lead and nitrate) were detected above 50% of the MCL in two different water systems (table 7a). In the case of PWSIDs 0080048 there were no more detections of the lead in subsequent samples. For PWSID 0080051, the nitrate sample result was invalidated due to error in sampling.

***Arsenic***

Arsenic was detected above 50% of the MCL in ten of the systems assessed in this report. These results were all one-time detections at these systems (table 7b). The arsenic standard was recently lowered by the U. S. Environmental Agency from) 0.05 to 0.01 mg/l. Arsenic is present in ground water in Maryland's Coastal Plain due to the natural presence of this contaminant in aquifer material. Six of these systems are pumping water from the Patapsco Formation with the other four pumping from the Aquia Formation.

***Radionuclides***

Gross alpha was reported above 50% of the MCL in sixteen of the systems assessed in this report (table 7c). Gross alpha is a measure of alpha radiation, which is emitted from certain radioactive minerals found in the aquifer sediments. The requirement for meeting the MCL of 15 pCi/L for gross alpha is that the average of four quarterly samples must be below that level. In addition, the concentration of the uranium in the sample must be deducted to accurately measure the concentration of the gross alpha. These are shown as gross alpha, adjusted, in table 7c.

Radium (226 & 228) was detected at two systems above 50% of the MCL.

Radon-222 was reported above 150 pCi/L in thirty-six community water systems (table 7c). There is currently no MCL for radon-222, however EPA has proposed an MCL of 300 pCi/L or an alternate of 4000 pCi/L for community water systems if the State has a program to address the more significant risk from radon in indoor air. The health effects of radon found at levels in ground water are negligible compared to breathing radon. Since an MCL has not been finalized, this report considers the lowest proposed MCL of 300 pCi/L, in an effort to be more conservative and protective of public health. Only one system had a radon-222 level above the lower proposed MCL. All the levels reported in table 7c are well below 50% of the higher proposed MCL of 4000 pCi/L.

***Volatile Organic Compounds (VOCs)***

A review of the data shows that the only VOC detected above 50% of the MCL was methylene chloride at two systems on October 16 and 17, 1990. These samples were invalidated since methylene chloride was detected in the laboratory blanks. Other VOCs like xylene and toluene were detected at very low levels in several systems.

***Synthetic Organic Compounds (SOCs)***

A review of the data shows that SOCs have not been detected above 50% of an MCL. Only one system had one very low level detection of PCB in 1994. Subsequent sampling showed no detects of this SOC.

***Microbiological Contaminants***

Routine bacteriological monitoring is conducted in the finished water for each water system on a monthly basis and measures total coliform bacteria. Since fifty-two of the water systems disinfect their water at the treatment plant, the finished water data does not give much indication of the quality of raw water directly from the well. Total coliform bacteria are not pathogenic, but are used as an indicator organism for other disease-causing microorganisms. A major breach of the system or the aquifer would likely cause a positive total coliform result despite disinfection and would require follow-up total and fecal coliform analysis. Seven water systems had positive total coliform in their routine bacteriological samples (table 8), and in three instances follow-up samples were found to have positive total coliform present. One was probably due to well location (in a pit) the other two due to breakdown in the disinfection treatment.

## SUSCEPTIBILITY ANALYSIS

The wells serving the community water systems included in Charles County pump water from confined aquifers. Confined aquifers are naturally well protected from activity on the land surface due to the confining layers that provide a barrier for water movement from the surface into the aquifer below. A properly constructed well with the casing extended to the confining layer above the aquifer and with sufficient grout should be well protected from contamination at the land surface. The only instance in which a contaminant at the surface would impact the water supply is through direct injection into the aquifer from within the WHPA. This could occur via poorly constructed wells, wells out of use that penetrate the aquifer and underground injection wells drilled into the aquifer.

Some contaminants like radionuclides and other chemical elements (eg. arsenic and iron) are naturally occurring in the aquifer and in some instances can reach concentrations that pose a risk to the water supply. In the case of confined aquifers, this is generally more problematic than contaminants at the land surface.

The susceptibility of the source water to contamination is determined for each group of contaminants based on the following criteria: 1) the presence of natural and anthropogenic contaminant sources within the WHPA, 2) water quality data, 3) well

integrity, and 4) the aquifer conditions. The susceptibility analysis is summarized for each water system in table 9.

***Inorganic Compounds (except arsenic)***

Inorganic compounds were detected only one time above 50% of the MCL in three systems. The source of the lead in Turkey Hills water supply may have been due the distribution system.

Due to the naturally protected characteristics of the confined aquifers, the water quality data, and the lack of potential sources of contamination, the community water systems are considered **not susceptible** to inorganic compounds.

***Arsenic***

Arsenic is was detected one time in ten systems at 50% of the MCL. The source of arsenic in these supplies is the natural occurrence and mobility of this contaminant in the aquifer material. A recent study of the occurrence of arsenic in the Coastal Plain aquifers indicates that the highest concentrations are found in the Aquia aquifer in several counties in the eastern shore and southern Maryland. Arsenic has also been detected at significant levels in the Patapsco aquifer. The data has not been fully interpreted, but arsenic concentration does not appear to be related to pH, specific conductance or depth to screened interval. The concentration of arsenic may be simply dependent on the amount of arsenic in the aquifer at certain locations.

Based on the natural occurrence of arsenic at certain locations within the Aquia and Pataspco aquifers, and their presence at levels at or above 50% of the MCL, ten community systems (see table 9) **are susceptible** to arsenic.

***Radionuclides***

The source of radon in ground water can be traced back to the natural occurrence of uranium in rocks. Radionuclides are present in ground water due to radioactive decay of uranium bearing minerals in the sediment that makes up the aquifer material.

Gross alpha radiation and radium were detected in sixteen and two systems respectively, at above 50% of their MCLs (table 7c).

There is currently no MCL for radon-222, however EPA has proposed an MCL of 300 pCi/L or an alternate of 400 pCi/L if the State has program to address the more significant risk from radon in indoor air. Using the more conservative lower proposed MCL, thirty-six systems had radon levels greater than 50% of 300 pCi/L. Currently, it appears that these thirty-six systems may be susceptible to radon if the lower standard is adopted.

Based on the natural occurrence of radionuclides in the aquifer and water quality data, seventeen water systems are considered **susceptible** to radiological

contaminants. If the lower proposed MCL of 300 pCi/L for radon –222 is taken in to account, forty systems **may be susceptible** to radiological contaminants.

***Volatile Organic Compounds***

Volatile organic compounds (VOCs) have not been detected at 50% of the MCL in any of the systems. Sources of VOCs are present in the WHPAs of several systems (figures 3a-3l), but the water supplies are protected from these contaminants due to the confined nature of the aquifers. Water quality data supports the protective nature of the aquifers.

Based on the above discussion, the community systems are **not susceptible** to contamination by VOCs.

***Synthetic Organic Compounds***

Synthetic organic compounds (SOCs) have not been detected in the water supplies except for one low level detection of PCB in one system. Subsequent sampling showed no detects of PCB in that system. The systems have all been issued a confined waiver for monitoring for SOCs. SOC sources are generally pesticides and herbicides and some industrial solvents. Due to the confined nature of the aquifer, these sources do not pose a threat to the water supply.

Based on lack of contaminant sources, water quality data and aquifer type, the water supplies are **not susceptible** to SOCs.

***Microbiological Contaminants***

Raw water monitoring for microbiological contaminants is not required of water systems in confined aquifers because they are considered naturally protected from sources of pathogens at the land surface. The three systems that had repeat positive total coliform, had not had any detections since 1999. Therefore, the community water systems are not susceptible to microbiological contaminants.

## MANAGEMENT OF THE SOURCE WATER ASSESSMENT AREA

With the information contained in this report, the individual community water systems in Charles County are in a position to protect their water supplies by staying aware of the areas delineated for source water protection. Specific management recommendations for consideration are listed below:

***Public Awareness and Outreach***

- The Consumer Confidence Report should report should list that this report is available to the general public through their county library, or by contacting the operator or MDE.

***Monitoring***

- Continue to monitor for all required Safe Drinking Water Act contaminants
- Annual raw water bacteriological testing is a good check on well integrity.

***Contaminant Source Inventory Updates/ Inspections/ Maintenance***

- Conduct a survey of the WHPA and inventory any potential sources of contamination, including unused wells that may not have been included in this report. Keep records of new development within the WHPA and new potential sources of contamination that may be associated with the new use.
- Work with the County Health Department to ensure that there are no unused wells within the WHPA. An improperly abandoned well can be a potential source of contamination to the aquifer.
- Water operation personnel should have a program for periodic inspections and maintenance of the supply wells and backup wells to ensure their integrity and protect the aquifer from contamination.

***Changes in Use***

- Water system owners are required to notify the MDE Water Supply Program if new wells are to be added or if they wish to increase their water useage. An increase in use or the addition of new wells may require revisions to the WHPA.

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## OTHER SOURCES OF DATA

Water Appropriation and Use Permits
Public Water Supply Sanitary Survey Inspection Reports
MDE Water Supply Program Oracle® Database
MDE Waste Management Sites Database
Department of Natural Resources Digital Orthophoto Quarter Quadrangles
USGS Topographic 7.5 Minute Quadrangles for Charles County
Maryland Office of Planning 2000 Charles County Land Use Map
Maryland Office of Planning 1995 Charles County Sewer Map

# TABLES

| FIGURE 1 ID | PUBLIC WATER SYSTEM ID (PWSID) | SYSTEM NAME | POPULATION SERVED | OWNER/OPERATOR TYPE |
|---|---|---|---|---|
| 1 | 0080002 | AVON CREST | 84 | LOCAL GOVERNMENT |
| 2 | 0080003 | BANKS O'DEE | 65 | INVESTOR/TRUST/WATER ASSOCIATION |
| 3 | 0080004 | BEANTOWN PARK- WOODLEY ROAD | 120 | LOCAL GOVERNMENT |
| 4 | 0080005 | BEL ALTON | 470 | LOCAL GOVERNMENT |
| 5 | 0080006 | BELLEWOOD WATER ASSOCIATION | 128 | INVESTOR/TRUST/WATER ASSOCIATION |
| 6 | 0080007 | BROOKWOOD ESTATES | 450 | LOCAL GOVERNMENT |
| 7 | 0080008 | CHARLES COUNTY GARDENS WATER | 240 | INVESTOR/TRUST/WATER ASSOCIATION |
| 8 | 0080009 | CLIFTON ON THE POTOMAC | 700 | LOCAL GOVERNMENT |
| 9 | 0080010 | DU MAR ESTATES WATER COMPANY | 140 | INVESTOR/TRUST/WATER ASSOCIATION |
| 10 | 0080012 | POMONKEY WATER CO. - FORD HEIGHTS | 125 | INVESTOR/TRUST/WATER ASSOCIATION |
| 11 | 0080013 | TRIMAC WATER CO. - FOREST PARK | 139 | INVESTOR/TRUST/WATER ASSOCIATION |
| 12 | 0080015 | GARDEN ESTATES CENTRAL WATER | 64 | INVESTOR/TRUST/WATER ASSOCIATION |
| 13 | 0080017 | GREEN MEADOWS WATER COMPANY | 68 | INVESTOR/TRUST/WATER ASSOCIATION |
| 14 | 0080018 | HAWTHORNE | 60 | INVESTOR/TRUST/WATER ASSOCIATION |
| 15 | 0080019 | INDEPENDENCE VILLAGE | 88 | INVESTOR/TRUST/WATER ASSOCIATION |
| 16 | 0080020 | TOWN OF INDIAN HEAD | 4100 | LOCAL GOVERNMENT |
| 17 | 0080022 | INMAN UTILITIES | 111 | INVESTOR/TRUST/WATER ASSOCIATION |
| 18 | 0080023 | JENKINS LANE | 110 | INVESTOR/TRUST/WATER ASSOCIATION |
| 19 | 0080024 | KINGS MANOR - WHITE PLAINS WATER CO, INC | 372 | INVESTOR/TRUST/WATER ASSOCIATION |
| 20 | 0080025 | TOWN OF LA PLATA | 7500 | LOCAL GOVERNMENT |
| 21 | 0080026 | LAUREL DRIVE | 50 | INVESTOR/TRUST/WATER ASSOCIATION |
| 22 | 0080027 | MATTHEWS MANOR | 40 | INVESTOR/TRUST/WATER ASSOCIATION |
| 23 | 0080028 | MARIELLEN PARK | 210 | LOCAL GOVERNMENT |
| 24 | 0080029 | MORGANTOWN WATER SUPPLY | 39 | INVESTOR/TRUST/WATER ASSOCIATION |
| 25 | 0080030 | MOUNT CARMEL WOODS | 200 | LOCAL GOVERNMENT |

***Table 1. Community Water Systems in Charles County***

| FIGURE 1 ID | PUBLIC WATER SYSTEM ID (PWSID) | SYSTEM NAME | POPULATION SERVED | OWNER/OPERATOR TYPE |
|---|---|---|---|---|
| 26 | 0080031 | NEWTOWN ESTATES | 110 | INVESTOR/TRUST/WATER ASSOCIATION |
| 27 | 0080032 | NEWTOWN VILLAGE | 250 | LOCAL GOVERNMENT |
| 28 | 0080033 | BRYANS ROAD | 2079 | LOCAL GOVERNMENT |
| 29 | 0080034 | OAK HILL ESTATES | 180 | INVESTOR/TRUST/WATER ASSOCIATION |
| 30 | 0080035 | PARKWAY SUBDIVISION WATER COMPANY | 50 | INVESTOR/TRUST/WATER ASSOCIATION |
| 31 | 0080036 | PINE HILL WATER COMPANY | 140 | INVESTOR/TRUST/WATER ASSOCIATION |
| 32 | 0080037 | POMFRET ESTATES - UTILCO, INC | 150 | INVESTOR/TRUST/WATER ASSOCIATION |
| 33 | 0080038 | POTOMAC HEIGHTS | 2000 | INVESTOR/TRUST/WATER ASSOCIATION |
| 34 | 0080040 | RED HILL WATER CO, INC | 200 | INVESTOR/TRUST/WATER ASSOCIATION |
| 35 | 0080041 | SOUTHVIEW WISE | 39 | INVESTOR/TRUST/WATER ASSOCIATION |
| 36 | 0080043 | SPRING VALLEY | 156 | LOCAL GOVERNMENT |
| 37 | 0080044 | STRAWBERRY HILLS | 900 | LOCAL GOVERNMENT |
| 38 | 0080046 | SWAN POINT | 240 | LOCAL GOVERNMENT |
| 39 | 0080048 | TURKEY HILL WATER COMPANY | 165 | INVESTOR/TRUST/WATER ASSOCIATION |
| 40 | 0080049 | WALDORF | 52000 | LOCAL GOVERNMENT |
| 41 | 0080051 | WEST WHITE PLAINS | 45 | INVESTOR/TRUST/WATER ASSOCIATION |
| 42 | 0080055 | OAKWOOD | 50 | LOCAL GOVERNMENT |
| 43 | 0080057 | ELLENWOOD | 300 | LOCAL GOVERNMENT |
| 44 | 0080058 | INDIAN HEAD DIVISION, N.S.W.C. | 3460 | FEDERAL |
| 45 | 0080059 | EUTAW FOREST | 760 | LOCAL GOVERNMENT |
| 46 | 0080060 | LAUREL BRANCH | 1305 | LOCAL GOVERNMENT |
| 47 | 0080061 | SOUTHERN MARYLAND PRE-RELEASE UNIT | 180 | STATE |
| 48 | 0080062 | BENEDICT | 378 | LOCAL GOVERNMENT |
| 49 | 0080064 | CHAPEL POINT WOODS | 150 | LOCAL GOVERNMENT |
| 50 | 0080067 | STARDUST APARTMENTS | 80 | INVESTOR/TRUST/WATER ASSOCIATION |

***Table 1 (contd). Community Water Systems in Charles County***

| FIGURE 1 ID | PUBLIC WATER SYSTEM ID (PWSID) | SYSTEM NAME | POPULATION SERVED | OWNER/OPERATOR TYPE |
|---|---|---|---|---|
| 51 | 0080068 | WHITE HOUSE MOTEL & RESTAURANT | 70 | INVESTOR/TRUST/WATER ASSOCIATION |
| 52 | 0080069 | THUNDERBIRD MOTEL | 60 | INVESTOR/TRUST/WATER ASSOCIATION |
| 53 | 0080082 | BENSVILLE | 353 | LOCAL GOVERNMENT |
| 54 | 0080205 | IDLEWOOD PARK | 320 | INVESTOR/TRUST/WATER ASSOCIATION |
| 55 | 0080206 | MARSHALL HALL MOBILE HOME PARK | 45 | INVESTOR/TRUST/WATER ASSOCIATION |
| 56 | 0080207 | WHITE PLAINS 1 M.H.P. | 100 | INVESTOR/TRUST/WATER ASSOCIATION |
| 57 | 0080208 | WHITE PLAINS 2 M.H.P. | 70 | INVESTOR/TRUST/WATER ASSOCIATION |

***Table 1 (contd). Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080002 | AVON CREST | 01 | 01 | P | AVON CREST 1 | CH1971G002 | 9100 | CH710093 | 521 | 408 | 1972 | PATAPSCO FORMATION |
| | | | 02 | P | AVON CREST 2 | CH1971G002 | 9100 | CH920725 | 605 | 400 | 1993 | PATAPSCO FORMATION |
| 0080003 | BANKS O'DEE | 01 | 01 | P | BANKS ODEE 1 | CH1987G002 | 9600 | CH812274 | 320 | 220 | 1987 | AQUIA FORMATION |
| 0080004 | BEANTOWN PARK-WOODLEY ROAD | 01 | 01 | P | BEANTOWN PARK | CH1968G008 | 13500 | CH680054 | 605 | 540 | 1968 | MAGOTHY FORMATION |
| 0080005 | BEL ALTON | 01 | 01 | P | BEL ALTON 1 | CH1974G010 | 29000 | CH730493 | 705 | 629 | 1974 | PATAPSCO FORMATION |
| | | | 02 | P | BEL ALTON 2 | CH1974G010 | 29000 | CH730215 | 708 | 304 | 1973 | PATAPSCO FORMATION |
| | | 02 | 05 | P | BEL ALTON 3R | CH1974G010 | 29000 | CH945212 | 750 | 747 | 2003 | PATAPSCO FORMATION |
| | | | 04 | P | BEL ALTON 4 | CH1974G010 | 29000 | CH811907 | 707 | 461 | 1986 | PATAPSCO FORMATION |
| 0080006 | BELLEWOOD WATER ASSOCIATION | 01 | 01 | P | BELLWOOD 1 | CH1968G005 | 9900 | CH680017 | 600 | 557 | 1967 | MAGOTHY FORMATION |
| | | | 02 | F | BELLWOOD 2 | CH1968G005 | 9900 | CH944449 | 615 | 500 | 2002 | MAGOTHY FORMATION |
| 0080007 | BROOKWOOD ESTATES | 01 | 01 | P | BROOKWOOD 2 | CH1967G009 | 10000 | CH670089 | 410 | 335 | 1967 | MAGOTHY FORMATION |
| | | 02 | 02 | P | BROOKWOOD 1R | CH1967G109 | 45000 | CH941043 | 1158 | 800 | 1996 | PATAPSCO FORMATION |
| 0080008 | CHARLES COUNTY GARDENS WATER | 01 | 01 | P | CHARLES COUNTY GARDENS 1 | CH1963G008 | 22000 | CH053687 | 491 | 483 | 1963 | MAGOTHY FORMATION |
| | | | 03 | P | CHARLES COUNTY GARDENS 3 | CH1963G008 | 22000 | CH880167 | 495 | 442 | 1989 | MAGOTHY FORMATION |

***Table 2. Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080009 | CLIFTON ON THE POTOMAC | 03 | 03 | P | ST. ANNES | CH1969G001 | 10000 | CH810761 | 400 | 310 | 1979 | PATAPSCO FORMATION |
| | | 02 | 04 | P | CLIFTON 2 A(NEW) | CH1983G014 | 85000 | CH942198 | 1215 | 697 | 1998 | PATAPSCO FORMATION |
| 0080010 | DU MAR ESTATES WATER COMPANY | 01 | 01 | P | DU MAR 1 | CH1968G002 | 13700 | CH680044 | 406 | 292 | 1968 | PATAPSCO FORMATION |
| 0080012 | POMONKEY WATER CO. FORD HEIGHTS | 01 | 01 | P | FORD HEIGHTS 1 | CH1960G009 | 6900 | CH720028 | 639 | 430 | 1971 | PATAPSCO FORMATION |
| 0080013 | TRIMAC WATER CO. - FOREST PARK | 01 | 03 | U | FOREST PARK 3 | CH1955G001 | 13000 | CH810325 | 580 | 421 | 1982 | MAGOTHY FORMATION |
| | | | 04 | P | FOREST PARK 4 | CH1955G001 | 13000 | CH930070 | 591 | 532 | 1994 | MAGOTHY FORMATION |
| 0080015 | GARDEN ESTATES CENTRAL WATER | 01 | 01 | U | GARDEN ESTATES 1 | CH1971G010 | 5100 | CH710061 | 320 | 300 | 1971 | PATAPSCO FORMATION |
| | | | 02 | S | GARDEN ESTATES 2 | CH1971G010 | 5100 | CH710060 | 320 | 300 | 1971 | PATAPSCO FORMATION |
| | | | 03 | P | GARDEN ESTATES 3 | CH1971G010 | 5100 | CH811119 | 675 | 424 | 1985 | PATAPSCO FORMATION |
| 0080017 | GREEN MEADOWS WATER COMPANY | 01 | 01 | P | EAST WELL (1) | CH1953G010 | 10000 | CH920365 | 605 | 565 | 1992 | PATAPSCO FORMATION |
| | | | 02 | P | WEST WELL 2 | CH1953G010 | 10000 | CH812099 | 300 | unknown | 1987 | PATAPSCO FORMATION |
| 0080018 | HAWTHORNE | 01 | 01 | P | HAWTHORNE1 | CH1966G010 | 5900 | CH660072 | 650 | 406 | 1966 | PATAPSCO FORMATION |
| 0080019 | INDEPENDENCE VILLAGE | 01 | 01 | P | INDEPENDENCE VILLAGE 1 | CH1973G006 | 6400 | CH730150 | 540 | 420 | 1973 | MAGOTHY FORMATION |
| 0080020 | TOWN OF INDIAN HEAD | 01 | 02 | S | INDIAN HEAD 2 | CH1957G003 | 338000 | CH030288 | 352 | 60 | 1958 | PATAPSCO FORMATION |
| | | 02 | 03 | P | INDIAN HEAD 3 | CH1957G003 | 338000 | CH720053 | 522 | 488 | 1971 | PATAPSCO FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080020 | TOWN OF INDIAN HEAD | 03 | 04 | P | INDIAN HEAD 4 | CH1957G003 | 338000 | CH732329 | 442 | 442 | 1979 | PATAPSCO FORMATION |
| | | 04 | 05 | P | WOODLAND VILLAGE 5 | CH1957G003 | 338000 | CH810992 | 360 | 220 | 1984 | PATAPSCO FORMATION |
| | | 05 | 06 | U | WOODLAND VILLAGE 6 | CH1957G003 | 338000 | CH028980 | 440 | 342 | 1958 | PATAPSCO FORMATION |
| 0080022 | INMAN UTILITIES | 01 | 02 | P | INMAN 2 WEST WELL | CH1954G003 | 14000 | CH016856 | 500 | 338 | 1954 | PATAPSCO FORMATION |
| | | | 03 | P | INMAN 1R EAST WELL | CH1954G003 | 14000 | CH941972 | 662 | 500 | 1998 | PATAPSCO FORMATION |
| 0080023 | JENKINS LANE | 01 | 01 | P | JENKINS LANE 1 | CH1965G008 | 14000 | unknown | 550 | unknown | 1966 | PATAPSCO FORMATION |
| | | 02 | 02 | P | JENKINS LANE 2 | CH1965G008 | 14000 | CH660043 | 622 | 434 | 1966 | PATAPSCO FORMATION |
| 0080024 | KINGS MANOR - WHITE PLAINS WATER CO, INC | 01 | 01 | S | KINGS MANOR 1 | CH1965G007 | 22000 | CH650080 | 392 | 371 | 1965 | MAGOTHY FORMATION |
| | | 02 | 02 | P | KINGS MANOR 2 | CH1965G007 | 22000 | CH690052 | 400 | 367 | 1969 | MAGOTHY FORMATION |
| 0080025 | TOWN OF LA PLATA | 01 | 01 | S | KENT 5 | CH1970G003 | 1144000 | CH034886 | 637 | 493 | 1959 | PATAPSCO FORMATION |
| | | 04 | 04 | P | RADIO 8 | CH1970G003 | 1144000 | CH730764 | 1342 | 1129 | 1975 | PATAPSCO FORMATION |
| | | 05 | 05 | P | WELL 9 | CH1970G003 | 1144000 | CH810828 | 1300 | unknown | 1984 | PATAPSCO FORMATION |
| | | 06 | 06 | P | WELL 10 (HERITAGE GREEN) | CH1970G003 | 1144000 | CH941110 | 1304 | 875 | 1997 | PATAPSCO FORMATION |
| | | 02 | 98 | U | WELL 6 | CH1970G003 | 1144000 | CH006365 | 608 | 422 | 1950 | PATAPSCO FORMATION |
| 0080026 | LAUREL DRIVE | 01 | 01 | P | LAUREL DRIVE | CH1962G002 | 3700 | CH049202 | 729 | 714 | 1962 | PATAPSCO FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080027 | MATTHEWS MANOR | 01 | 01 | P | MATHEWS MANOR WW 1 | CH1977G020 | 6200 | CH731549 | 320 | 252 | 1977 | AQUIA FORMATION |
| 0080028 | MARIELLEN PARK | 01 | 04 | P | MARIELLEN PARK 4 | CH1965G011 | 26000 | CH812421 | 564 | 422 | 1987 | PATAPSCO FORMATION |
| | | | 05 | P | MARIELLEN PARK 1A | CH1965G011 | 26000 | CH942384 | 759 | 660 | 1999 | PATAPSCO FORMATION |
| 0080029 | MORGANTOWN WATER SUPPLY | 01 | 01 | P | WELL 1 | CH1984G008 | 3900 | CH810873 | 300 | 280 | 1984 | AQUIA FORMATION |
| 0080030 | MOUNT CARMEL WOODS | 01 | 01 | P | MT CARMEL WOODS 1 | CH1966G008 | 5000 | CH660071 | 597 | 331 | 1966 | MAGOTHY FORMATION |
| | | | 02 | P | MT CARMEL WOODS 2 | CH1966G008 | 5000 | CH731137 | 400 | unknown | 1976 | MAGOTHY FORMATION |
| | | | 03 | P | MT CARMEL WOODS 3 | CH1966G108 | 23000 | CH880856 | 1278 | 1228 | 1989 | PATAPSCO FORMATION |
| 0080031 | NEWTOWN ESTATES | 01 | 01 | U | NEWTOWN ESTATES 1 | CH1972G006 | 15000 | CH730011 | 395 | 333 | 1972 | PATAPSCO FORMATION |
| | | | 02 | P | NEWTOWN ESTATES 2 | CH1972G006 | 15000 | CH881286 | 446 | 362 | 1990 | PATAPSCO FORMATION |
| 0080032 | NEWTOWN VILLAGE | 01 | 01 | P | NEWTOWN VILLAGE 1 | CH1967G002 | 14700 | CH670019 | 783 | 352 | 1966 | PATAPSCO FORMATION |
| | | | 02 | S | NEWTOWN VILLAGE 1A | CH1967G002 | 14700 | CH881393 | 781 | 540 | 1991 | PATAPSCO FORMATION |
| | | 02 | 03 | S | NEWTOWN VILLAGE 2 | CH1967G002 | 14700 | CH670020 | 777 | 346 | 1967 | PATAPSCO FORMATION |
| 0080033 | BRYANS ROAD | 03 | 03 | P | BRYANS RD 3 STANDPIPE | CH1955G003 | 273000 | CH881638 | 813 | 535 | 1991 | PATAPSCO FORMATION |
| | | | 04 | P | SOUTH HAMPTON 1 | CH1955G003 | 273000 | CH882044 | 658 | 550 | 1991 | PATAPSCO FORMATION |
| | | | 05 | P | SOUTH HAMPTON 2 | CH1995G023 | 160000 | CH940394 | 800 | 550 | 1995 | PATUXENT FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080034 | OAK HILL ESTATES | 01 | 01 | P | OAK HLLS 1 | CH1969G003 | 16000 | CH690056 | 453 | 433 | 1969 | PATAPSCO FORMATION |
| 0080035 | PARKWAY SUBDIVISION WATER COMPANY | 01 | 02 | P | PARKWAY WELL 2 | CH1964G002 | 3600 | CH812029 | 799 | 550 | 1987 | PATAPSCO FORMATION |
| 0080036 | PINE HILL WATER COMPANY | 01 | 01 | P | PINE HILLS1 | CH1971G004 | 15000 | CH720001 | 463 | 444 | 1971 | MAGOTHY FORMATION |
| 0080037 | POMFRET ESTATES - UTILCO, INC | 01 | 01 | P | POMFRET HT1 | CH1968G004 | 12700 | CH680042 | 1346 | 408 | 1968 | PATUXENT FORMATION |
| 0080038 | POTOMAC HEIGHTS | 02 | 03 | S | POTOMAC HEIGHTS 3 | CH1955G008 | 225000 | CH670051 | 540 | 381 | 1967 | PATAPSCO FORMATION |
| | | 03 | 04 | P | POTOMAC HEIGHTS 4 | CH1955G008 | 225000 | CH941402 | 544 | 380 | 1997 | PATAPSCO FORMATION |
| 0080040 | RED HILL WATER CO, INC | 01 | 01 | P | RED HILL 1 | CH1960G004 | 14000 | CH056912 | 353 | 298 | 1964 | PATAPSCO FORMATION |
| | | | 02 | P | RED HILL 2 | CH1960G004 | 14000 | CH944367 | 597 | 491 | 2003 | PATAPSCO FORMATION |
| 0080041 | SOUTHVIEW WISE | 01 | 01 | P | SOUTHVIEW WISE | CH1994G020 | 6000 | CH930261 | 297 | 255 | 1994 | PATAPSCO FORMATION |
| 0080043 | SPRING VALLEY | 01 | 01 | P | SPRING VALLEY 1 | CH1973G001 | 9600 | CH730015 | 407 | 367 | 1972 | MAGOTHY FORMATION |
| 0080044 | STRAWBERRY HILLS | 01 | 01 | P | STRAWBERRY 1 | CH1966G005 | 120000 | CH660079 | 654 | 460 | 1966 | PATAPSCO FORMATION |
| | | 02 | 02 | P | STRAWBERRY 2 | CH1966G005 | 120000 | CH720050 | 645 | 550 | 1973 | PATAPSCO FORMATION |
| 0080046 | SWAN POINT | 01 | 01 | P | SWAN POINT 1 | CH1972G002 | 60000 | CH720054 | 1100 | unknown | 1971 | PATAPSCO FORMATION |
| | | 02 | 02 | P | SWAN POINT 2 | CH1972G002 | 60000 | CH732765 | 865 | 450 | 1981 | PATAPSCO FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080048 | TURKEY HILL WATER COMPANY | 01 | 02 | S | TURKEY HILL 2 | CH1970G001 | 16000 | CH731217 | 480 | 402 | 1976 | PATAPSCO FORMATION |
| | | | 03 | P | TURKEY HILL 3 | CH1970G001 | 16000 | CH920969 | 988 | 585 | 1994 | PATAPSCO FORMATION |
| 0080049 | WALDORF | 01 | 01 | P | CLEVELAND PARK 1 | CH1976G017 | 80000 | CH731518 | 472 | 398 | 1977 | MAGOTHY FORMATION |
| | | | 14 | P | CLEVELAND PARK 14 | CH1983G412 | 800000 | CH940464 | 1405 | 980 | 1996 | PATAPSCO FORMATION |
| | | 02 | 02 | P | MATTAWOMAN | CH1970G309 | 410000 | CH042572 | 602 | 452 | 1961 | MAGOTHY FORMATION |
| | | 03 | 03 | P | WHITE OAK | CH1983G212 | 600000 | CH811195 | 1341 | 800 | 1985 | PATAPSCO FORMATION |
| | | 04 | 04 | P | ST PAUL | CH1983G012 | 600000 | CH810738 | 1427 | 1059 | 1984 | PATAPSCO FORMATION |
| | | 05 | 05 | P | PINEFIELD | CH1978G021 | 200000 | CH732423 | 705 | 482 | 1980 | MAGOTHY FORMATION |
| | | 06 | 06 | P | ST CHARLES | CH1970G709 | 568000 | CH650052 | 930 | 436 | 1965 | MAGOTHY FORMATION |
| | | 07 | 07 | P | JOHN HANSON | CH1970G609 | 475000 | CH731750 | 534 | 534 | 1978 | MAGOTHY FORMATION |
| | | 08 | 08 | P | BILLINGSLEY 1 (P WELL) | CH1983G312 | 800000 | unknown | 602 | 525 | 1983 | PATAPSCO FORMATION |
| | | | 16 | P | BILLINGSLEY 2 (M WELL) | CH1970G409 | 292000 | CH042573 | 453 | 350 | 1961 | MAGOTHY FORMATION |
| | | 09 | 09 | P | SMALLWOOD WEST | CH1983G012 | 600000 | CH811194 | 1170 | 925 | 1985 | PATAPSCO FORMATION |
| | | 10 | 10 | P | WESTWOOD DRIVE 1 (M WELL) | CH1970G509 | 365000 | CH812310 | 700 | 402 | 1987 | MAGOTHY FORMATION |
| | | | 11 | P | WESTWOOD DRIVE 2 (P WELL) | CH1983G512 | 800000 | CH943965 | 1225 | 850 | 2002 | PATAPSCO FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080049 | WALDORF | 11 | 15 | P | TOWN PLAZA | CH1970G009 | 410000 | CH700087 | 511 | 436 | 1970 | MAGOTHY FORMATION |
| | | 12 | 12 | P | PINEY CHURCH | CH1970G009 | 410000 | CH732889 | 602 | 534 | 1978 | MAGOTHY FORMATION |
| 0080051 | WEST WHITE PLAINS | 01 | 01 | P | WW PLAINS | CH1967G001 | 5000 | CH732504 | 480 | 400 | 1979 | MAGOTHY FORMATION |
| 0080055 | OAKWOOD | 01 | 01 | P | OAKWOOD 1 | CH1964G004 | 5000 | CH810894 | 1038 | 988 | 1984 | PATAPSCO FORMATION |
| 0080057 | ELLENWOOD | 01 | 01 | P | ELLENWOOD 1 | CH1975G002 | 34600 | CH920946 | 553 | 513 | 1993 | PATAPSCO FORMATION |
| | | | 02 | P | ELLENWOOD 2 | CH1975G002 | 34600 | CH731991 | 624 | 486 | 1978 | PATAPSCO FORMATION |
| 0080058 | INDIAN HEAD DIVISION, N.S.W.C. | 01 | 01 | P | A (AKA 24A) BLDG 783 | CH1971G005 | 1240000 | unknown | 350 | 228 | prior to 1973 | PATAPSCO FORMATION |
| | | 04 | 02 | P | 2A BLDG 1534 (HIGH SILICA) | CH1971G005 | 1240000 | CH720122 | 380 | 250 | 1972 | PATAPSCO FORMATION |
| | | 05 | 07 | P | 7 BLDG 128 SUMP HOUSE | CH1971G005 | 1240000 | unknown | 419 | 255 | 1915 | PATAPSCO FORMATION |
| | | 06 | 12 | P | 12 NEAR BLDG 143 | CH1971G005 | 1240000 | unknown | 390 | unknown | 1918 | PATAPSCO FORMATION |
| | | 03 | 15 | P | 15A BLDG 1893 | CH1971G005 | 1240000 | CH920116 | 310 | 190 | 1992 | PATAPSCO FORMATION |
| | | 02 | 16 | P | 16A BLDG 1728 HI SILICA | CH1971G005 | 1240000 | CH810572 | 503 | 433 | 1984 | PATAPSCO FORMATION |
| | | 03 | 17 | P | 17 BLDG 788 LOW SILICA | CH1971G005 | 1240000 | CH015753 | 452 | 185 | 1954 | PATAPSCO FORMATION |
| | | 03 | 18 | P | 18 BLDG 789 | CH1971G005 | 1240000 | CH013185 | 605 | 208 | 1954 | PATAPSCO FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080059 | EUTAW FOREST | 01 | 01 | P | EUTAW FOREST 1 | CH1978G015 | 80000 | CH732417 | 904 | 492 | 1979 | PATAPSCO FORMATION |
| | | 02 | 02 | P | EUTAW FOREST 2 | CH1978G015 | 80000 | CH732500 | 832 | 500 | 1980 | PATAPSCO FORMATION |
| | | 01 | 03 | P | EUTAW FOREST 3 | CH1978G015 | 80000 | CH731714 | 830 | 294 | 1977 | PATAPSCO FORMATION |
| 0080060 | LAUREL BRANCH | 01 | 01 | P | LAUREL BRANCH 1 | CH1977G036 | 153500 | CH732377 | 900 | 470 | 1979 | PATAPSCO FORMATION |
| | | | 03 | P | LAUREL BRANCH 3 | CH1977G036 | 153500 | CH880124 | 868 | 600 | 1989 | PATAPSCO FORMATION |
| | | | 04 | P | LAUREL BRANCH 4 | CH1977G036 | 153500 | CH880765 | 843 | 648 | 1990 | PATAPSCO FORMATION |
| 0080061 | SOUTHERN MARYLAND PRE-RELEASE UNIT | 01 | 01 | P | S MD PR 1 | CH1955G006 | 26000 | CH020334 | 510 | 498 | 1955 | AQUIA FORMATION |
| | | | 02 | P | S MD PR 2 | CH1955G006 | 26000 | CH732278 | 530 | 383 | 1979 | AQUIA FORMATION |
| 0080062 | BENEDICT | 01 | 01 | P | BENEDICT 1 | CH1980G020 | 56000 | CH732790 | 448 | 368 | 1981 | AQUIA FORMATION |
| | | 02 | 02 | P | BENEDICT 2 (ST FRANCES) | CH1980G020 | 56000 | CH811164 | 445 | 360 | 1985 | AQUIA FORMATION |
| 0080064 | CHAPEL POINT WOODS | 01 | 01 | P | CHAPEL POINT 2 | CH1976G011 | 24000 | CH731804 | 762 | 453 | 1978 | PATAPSCO FORMATION |
| | | | 02 | P | CHAPEL POINT 1 | CH1976G011 | 24000 | CH732073 | 901 | 529 | 1978 | PATAPSCO FORMATION |
| | | | 03 | P | CHAPEL POINT 3 | CH1976G011 | 24000 | CH880766 | 818 | 582 | 1989 | PATAPSCO FORMATION |
| | | | 96 | T | TEST 1 | CH1976G011 | 24000 | CH731803 | 766 | 385 | 1978 | PATAPSCO FORMATION |
| | | | 99 | T | TEST 2 | CH1976G011 | 24000 | CH813066 | 856 | 442 | 1988 | PATAPSCO FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | SOURCE ID | USE CODE | WELL NAME | WAPID | AVE GPD | WELL PERMIT NO. | WELL DEPTH (ft) | CASING DEPTH (ft) | YEAR DRILLED | AQUIFER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0080067 | STARDUST APARTMENTS | 01 | 01 | P | WELL 1 | CH1958G003 | 10000 | CH031493 | 508 | 465 | 1958 | MAGOTHY FORMATION |
| 0080068 | WHITE HOUSE MOTEL & RESTAURANT | 01 | 01 | P | MOTEL WELL | NOT KNOWN | 2000 | CH012052 | 370 | 351 | 1953 | AQUIA FORMATION |
| 0080069 | THUNDERBIRD MOTEL | 01 | 01 | P | WELL | CH1953G002 | 1700 | CH012159 | 503 | 497 | 1953 | PATAPSCO FORMATION |
| 0080082 | BENSVILLE | 02 | 01 | P | DUTTONS ADDITION 1 | CH1984G003 | 300 | CH930385 | 1054 | 1045 | 1994 | PATAPSCO FORMATION |
| | | 01 | 01 | P | WELL 1 | CH1989G032 | 299400 | CH940724 | 1070 | 885 | 1996 | PATAPSCO FORMATION |
| | | | 02 | P | WELL 2 | CH1989G032 | 299400 | CH940037 | 1057 | 880 | 1995 | PATAPSCO FORMATION |
| 0080205 | IDLEWOOD PARK | 01 | 01 | P | IDLEWOOD 1 | CH1959G001 | 5800 | CH050629 | 537 | 337 | 1963 | PATAPSCO FORMATION |
| 0080206 | MARSHALL HALL MOBILE HOME PARK | 01 | 01 | P | MARSHALL HALL 1 | unknown | unknown | CH730948 | 280 | 169 | 1975 | PATAPSCO FORMATION |
| 0080207 | WHITE PLAINS 1 M.H.P. | 01 | 01 | P | WHITE PLAINS MHP 1 (SMITTY 1) | unknown | unknown | CH036536 | 363 | 310 | 1959 | PATAPSCO FORMATION |
| 0080208 | WHITE PLAINS 2 M.H.P. | 01 | 01 | P | WHITE PLAINS MHP 2 (RHODES) | CH1959G001 | 5800 | CH033289 | 386 | 339 | 1959 | PATAPSCO FORMATION |

***Table 2 (contd.). Well Information for Community Water Systems in Charles County***

**WATER SUPPLY PROGRAM DATABASE FIELD NAMES:**

PWSID = Public Water System ID Number

PLANT ID = Water Treatment Plant ID Number

SOURCE ID = Unique Identifier Number for Well

USE CODE: P = Production, S = Standby, F = Future, T = Test, U = Unused

WAPID = Water Appropriation Permit Number

AVE GPD = Average Gallons Per Day (Permitted)

| PWSID | SYSTEM NAME | SOURCE NAME | Well Pumpage (Q) in gpd | Well Pumpage (Q) in $ft^3/yr$ | Screened Interval (H) in feet | Calculated Radius for WHPA in feet | Acreage of WHPA | Comments on WHPA |
|---|---|---|---|---|---|---|---|---|
| 0080002 | AVON CREST | AVON CREST 1 | 9100 | 443991.445 | 113 | 300 | 2.87 | Wells 1 and 2 circles merged |
| | | AVON CREST 2 | 9100 | 443991.445 | 162 | 200 | | |
| 0080003 | BANKS O'DEE | BANKS ODEE 1 | 9600 | 468386.579 | 20 | 600 | 25.83 | |
| 0080004 | BEANTOWN PARK- WOODLEY ROAD | BEANTOWN PARK | 13500 | 658668.627 | 65 | 400 | 11.48 | |
| 0080005 | BEL ALTON | BEL ALTON 1 | 7250 | 353729.448 | 38 | 400 | 11.48 | Wells 1 and 2 circles merged |
| | | BEL ALTON 2 | 7250 | 353729.448 | 30 | 400 | | |
| | | BEL ALTON 3R | 7250 | 353729.448 | 38 | 400 | 17.94 | Wells 3 and 4 circles merged |
| | | BEL ALTON 4 | 7250 | 353729.448 | 25 | 500 | | |
| 0080006 | BELLEWOOD WATER ASSOCIATION | BELLWOOD 1 | 9900 | 483023.66 | 20 | 600 | 25.83 | Wells 1 and 2 circles merged |
| | | BELLWOOD 2 | 9900 | 483023.66 | 20 | 600 | | |
| 0080007 | BROOKWOOD ESTATES | BROOKWOOD 2 | 10000 | 487902.687 | 75 | 300 | 6.46 | |
| | | BROOKWOOD 1R | 45000 | 2195562.09 | 202 | 400 | 11.48 | |
| 0080008 | CHARLES COUNTY GARDENS WATER | CHARLES COUNTY GARDENS 1 | 22000 | 1073385.91 | 8 | 1400 | 58.12 | Wells 1 and 3 circles merged |
| | | CHARLES COUNTY GARDENS 3 | 22000 | 1073385.91 | 20 | 900 | | |
| 0080009 | CLIFTON ON THE POTOMAC | ST. ANNES | 10000 | 487902.687 | 30 | 500 | 17.94 | |
| | | CLIFTON 2 A(NEW) | 85000 | 4147172.84 | 60 | 1000 | 71.76 | |
| 0080010 | DU MAR ESTATES WATER COMPANY | DU MAR 1 | 13700 | 668426.681 | 30 | 600 | 25.83 | |
| 0080012 | POMONKEY WATER CO. - FORD HEIGHTS | FORD HEIGHTS 1 | 6900 | 336652.854 | 21 | 500 | 17.94 | |
| 0080013 | TRIMAC WATER CO. - FOREST PARK | FOREST PARK 4 | 13000 | 634273.493 | 30 | 600 | 25.83 | |
| 0080015 | GARDEN ESTATES CENTRAL WATER | GARDEN ESTATES 2 | 5100 | 248830.37 | 20 | 400 | 11.48 | Wells 2 and 3 circles merged |
| | | GARDEN ESTATES 3 | 5100 | 248830.37 | 20 | 400 | | |

***Table 3. Parameters used for WHPA delineations***

| PWSID | SYSTEM NAME | SOURCE NAME | Well Pumpage (Q) in gpd | Well Pumpage (Q) in $ft^3/yr$ | Screened Interval (H) in feet | Calculated Radius for WHPA in feet | Acreage of WHPA | Comments on WHPA |
|---|---|---|---|---|---|---|---|---|
| 0080017 | GREEN MEADOWS WATER COMPANY | EAST WELL (1) | 10000 | 487902.687 | 20 | 600 | 25.83 | Wells 1 and 2 circles merged |
| | | WEST WELL 2 | 10000 | 487902.687 | 20 | 600 | | |
| 0080018 | HAWTHORNE | HAWTHORNE1 | 5900 | 287862.585 | 45 | 300 | 6.46 | |
| 0080019 | INDEPENDENCE VILLAGE | INDEPENDENCE VILLAGE 1 | 6400 | 312257.72 | 22 | 500 | 17.94 | |
| 0080020 | TOWN OF INDIAN HEAD | INDIAN HEAD 2 | 63544 | 3100328.83 | 20 | 1500 | 161.45 | |
| | | INDIAN HEAD 3 | 71994 | 3512606.6 | 21 | 1500 | 103.33 | Wells 3,4 and 5 circles merged |
| | | INDIAN HEAD 4 | 87880 | 4287688.81 | 50 | 1100 | | |
| | | WOODLAND VILLAGE 5 | 114582 | 5590486.57 | 50 | 1200 | | |
| 0080022 | INMAN UTILITIES | INMAN 2 WEST WELL | 14000 | 683063.762 | 20 | 700 | 35.16 | Wells 1R and 2 circles merged |
| | | INMAN 1R EAST WELL | 14000 | 683063.762 | 20 | 700 | | |
| 0080023 | JENKINS LANE | JENKINS LANE 1 | 14000 | 683063.762 | 20 | 700 | 35.16 | |
| | | JENKINS LANE 2 | 14000 | 683063.762 | 20 | 700 | 35.16 | |
| 0080024 | KINGS MANOR - WHITE PLAINS WATER CO, INC | KINGS MANOR 1 | 22000 | 1073385.91 | 21 | 900 | 58.12 | Wells 1 and 2 circles merged |
| | | KINGS MANOR 2 | 22000 | 1073385.91 | 21 | 900 | | |
| 0080025 | TOWN OF LA PLATA | KENT 5 | 136800 | 6674508.76 | 24 | 1900 | 260.35 | |
| | | RADIO 8 | 474760 | 23163668 | 41 | 2700 | 523.1 | |
| | | WELL 9 | 359216 | 17526245.2 | 35 | 2600 | 485.07 | |
| | | WELL 10 (HERITAGE GREEN) | 310024 | 15126154.3 | 30 | 2600 | 485.07 | |
| 0080026 | LAUREL DRIVE | LAUREL DRIVE | 3700 | 180523.994 | 15 | 400 | 11.48 | |
| 0080027 | MATTHEWS MANOR | MATHEWS MANOR WW 1 | 3500 | 170765.94 | 20 | 400 | 11.48 | |

***Table 3 (cont.). Parameters used for WHPA delineations***

| PWSID | SYSTEM NAME | SOURCE NAME | Well Pumpage (Q) in gpd | Well Pumpage (Q) in $ft^3/yr$ | Screened Interval (H) in feet | Calculated Radius for WHPA in feet | Acreage of WHPA | Comments on WHPA |
|---|---|---|---|---|---|---|---|---|
| 0080049 | WALDORF | PINEY CHURCH | 280000 | 13661275.2 | 80 | 1500 | 161.45 | |
| | | CLEVELAND PARK 14 | 800000 | 39032214.9 | 192 | 1700 | 207.37 | |
| | | TOWN PLAZA | 250000 | 12197567.2 | 70 | 1500 | 161.45 | |
| | | BILLINGSLEY 2 (M WELL) | 350000 | 17076594 | 60 | 2000 | 287.02 | |
| 0080051 | WEST WHITE PLAINS | WW PLAINS | 3500 | 170765.94 | 25 | 300 | 6.46 | |
| 0080055 | OAKWOOD | OAKWOOD 1 | 5000 | 243951.343 | 10 | 600 | 25.83 | |
| 0080057 | ELLENWOOD | ELLENWOOD 1 | 34600 | 1688143.3 | 40 | 800 | 76.45 | Wells 1 and 2 circles merged |
| | | ELLENWOOD 2 | 34600 | 1688143.3 | 28 | 900 | | |
| 0080058 | INDIAN HEAD DIVISION, N.S.W.C. | 2A BLDG 1534 | 155000 | 7562491.65 | 110 | 1000 | 71.76 | |
| | | 12 NEAR BLDG 143 | 155000 | 7562491.65 | 260 | 700 | 35.16 | |
| | | 15A BLDG 1893 | 155000 | 7562491.65 | 54 | 1400 | 455.17 | Wells 15A, 16A and 17A circles merged |
| | | 16A BLDG 1728 | 155000 | 7562491.65 | 47 | 1500 | | |
| | | 17 BLDG 788 | 155000 | 7562491.65 | 34 | 1700 | | |
| | | A (AKA 24A) BLDG 783 | 155000 | 7562491.65 | 28 | 1900 | 406.03 | Wells A, 7 and 18 circles merged |
| | | 7 BLDG 128 SUMP HOUSE | 155000 | 7562491.65 | 41 | 1600 | | |
| | | 18 BLDG 789 | 155000 | 7562491.65 | 94 | 1100 | | |
| 0080059 | EUTAW FOREST | EUTAW FOREST 1 | 25040 | 1221708.33 | 26 | 800 | 202.69 | Wells 1, 2 and 3 circles merged |
| | | EUTAW FOREST 2 | 17520 | 854805.507 | 23 | 700 | | |
| | | EUTAW FOREST 3 | 37440 | 1826707.66 | 10 | 1600 | | |

***Table 3 (cont.). Parameters used for WHPA delineations***

| PWSID | SYSTEM NAME | SOURCE NAME | Well Pumpage (Q) in gpd | Well Pumpage (Q) in $ft^3/yr$ | Screened Interval (H) in feet | Calculated Radius for WHPA in feet | Acreage of WHPA | Comments on WHPA |
|---|---|---|---|---|---|---|---|---|
| 0080060 | LAUREL BRANCH | LAUREL BRANCH 1 | 28705 | 1400524.66 | 42 | 700 | 95.67 | Wells 1, 3 and 4 circles merged |
| | | LAUREL BRANCH 3 | 34845 | 1700096.91 | 60 | 700 | | |
| | | LAUREL BRANCH 4 | 89950 | 4388684.67 | 65 | 1000 | | |
| 0080061 | SOUTHERN MARYLAND PRE-RELEASE UNIT | S MD PR 1 | 16848 | 822018.447 | 12 | 1000 | 71.76 | Wells 1 and 2 circles merged |
| | | S MD PR 2 | 9152 | 446528.539 | 25 | 500 | | |
| 0080062 | BENEDICT | BENEDICT 1 | 25872 | 1262301.83 | 80 | 500 | 17.94 | |
| | | BENEDICT 2 | 30128 | 1469953.21 | 80 | 500 | 17.94 | |
| 0080064 | CHAPEL POINT WOODS | CHAPEL POINT 2 | 10440 | 509370.405 | 27 | 500 | 45.92 | Wells 1 and 2 circles merged |
| | | CHAPEL POINT 1 | 13560 | 661596.043 | 15 | 800 | | |
| | | CHAPEL POINT 3 | 10440 | 509370.405 | 24 | 600 | 25.83 | |
| 0080067 | STARDUST APARTMENTS | WELL 1 | 7000 | 341531.881 | 19 | 500 | 17.94 | |
| 0080068 | WHITE HOUSE MOTEL & RESTAURANT | MOTEL WELL | 2000 | 97580.5374 | 12 | 400 | 11.48 | |
| 0080069 | THUNDERBIRD MOTEL | WELL | 1700 | 82943.4568 | 5 | 500 | 17.94 | |
| 0080082 | BENSVILLE | DUTTONS ADDITION 1 | 8000 | 390322.149 | 85 | 300 | 6.46 | |
| | | WELL 1 | 149700 | 7303903.22 | 55 | 1400 | 157.66 | Wells 1 and 2 circles merged |
| | | WELL 2 | 149700 | 7303903.22 | 55 | 1400 | | |
| 0080205 | IDLEWOOD PARK | IDLEWOOD 1 | 25000 | 1219756.72 | 50 | 600 | 25.83 | |
| 0080206 | MARSHALL HALL MOBILE HOME PARK | MARSHALL HALL 1 | 3000 | 146370.806 | 20 | 305 | 6.68 | |
| 0080207 | WHITE PLAINS 1 M.H.P. | WHITE PLAINS MHP 1 (SMITTY 1) | 3500 | 170765.94 | 15 | 400 | 11.48 | |
| 0080208 | WHITE PLAINS 2 M.H.P. | WHITE PLAINS MHP 2 (RHODES) | 5800 | 282983.558 | 10 | 700 | 35.16 | |

***Table 3 (cont.). Parameters used for WHPA delineations***

| ID* | Type | Facility Name | Address | Reference Location* | WHPA System Name | Potential Contaminants | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | UST | Shiloh United Methodist Church | 7305 Indian Head Hwy | Figure 3a | Inman Utilities | VOC | 1 tank |
| 2 | UST | Gospel Union Church of Christ | 7380 Indian Head Hwy | Figure 3a | Inman Utilities | VOC | 1 tank |
| 3 | UST | Potomac HeightsMutual Home Owners Assoc. | 200 Cedar Lane | Figure 3b | Potomac Heights | VOC | 1 tank |
| 4 | UST | Smallwood Middle School | 4990 Indian Head Hwy | Figure 3b | Potomac Heights | VOC | 1 tank |
| 5 | UST | Glymont Texaco # 064 | 5105 Indian Head Hwy | Figure 3b | Potomac Heights | VOC | 5 tanks |
| 6 | UST | Indian Head United Methodist Church | 19 Mattingly Ave | Figure 3c | Indian Head | VOC | 1 tank |
| 7 | UST | Indian Head VFD | 4095 Indian Head Hwy | Figure 3c | Indian Head | VOC | 1 tank |
| 8 | UST | Church of Nazrene | 39 Raymond Ave | Figure 3c | Indian Head | VOC | 1 tank |
| 9 | UST | Indian Head Elementary School | 4200 Indian Head Hwy | Figure 3c | Indian Head | VOC | 1 tank |
| 10 | CHS | Southern Maryand Apparelmaster | 1021 N. Strauss Rd | Figure 3c | Indian Head | VOC | |
| 11 | CHS | McWilliams Ford Ltd. | 1012 N. Strauss Rd | Figure 3c | Indian Head | VOC, HM | |
| 12 | CHS | Town Cleaners | 1000 N. Strauss Rd | Figure 3c | Indian Head | VOC | |
| 13 | CHS | Charles County Autobody | Indian Head Hwy | Figure 3c | Indian Head | VOC, HM | |
| 14 | CHS | Gayans Body Shop | Indian Head Hwy | Figure 3c | Indian Head | VOC, HM | |
| 15 | UST | Indian Head Sunoco | 4615 Indian Head Hwy | Figure 3c | Indian Head | VOC | 6 tanks |
| 16 | UST | Pinefield Quick Stop | 2030 Crain Hwy | Figure 3d | Waldorf | VOC | 5 tanks |
| 17 | UST | Exxon # 27884 | 2055 Crain Hwy | Figure 3d | Waldorf | VOC | 9 tanks |
| 18 | CHS | Pinefield Cleaners | Route 301 and Mattawoman Rd | Figure 3d | Waldorf | VOC | |
| 19 | CHS | Plaza Cleaners | Pinefield Shopping Ctr. | Figure 3d | Waldorf | VOC | |
| 20 | UST | Waldorf Motel | 2125 Crain Hwy | Figure 3d | Waldorf | VOC | 2 tanks |
| 21 | UST | Maryland State Police | 2160 Old Washington Rd | Figure 3d | Waldorf | VOC | 1 tank |
| 22 | UST | Thorton Shopping Ctr | 2222 Crain Hwy # 2224 | Figure 3d | Waldorf | VOC | 2 tanks |
| 23 | CHS | Waldorf Signs, Inc | Hwy 925 | Figure 3d | Waldorf | VOC, SOC | |
| 24 | UST | Stardust Apartments | 2755 Crain Hwy | Figure 3e | Stardust Apts | VOC | 2 tanks |
| 25 | UST | Q-Card | 12090 Acton Ln | Figure 3e | Waldorf | VOC | 3 tanks |
| 26 | UST | John Hanson Middle School | 12350 Vivian Adams Rd | Figure 3e | Waldorf | VOC | 2 tanks |
| 27 | CHS | Sears Auto | 1150 Smallwood Dr | Figure 3f | Waldorf | VOC, HM | |
| 28 | UST | BJ's Wholesale Club, Inc. | 1000 St. Nicholas Dr | Figure 3f | Waldorf | VOC | 3 tanks |
| 29 | UST | AT & T | 3652 Old Washington Rd. | Figure 3f | Waldorf | VOC | 1 tank |

***Table 4. Potential Contaminant Point Sources Within WHPAs.***

* See referenced figure for location

| ID* | Type | Facility Name | Address | Reference Location* | WHPA System Name | Potential Contaminants | Remarks |
|---|---|---|---|---|---|---|---|
| 30 | UST | Waldorf Tri-County Youth Services Bureau | 75 Industrial Drive | Figure 3f | Waldorf | VOC | 1 tank |
| 31 | UST | Wawa Food Market # 565 | 4210 Crain Hwy | Figure 3f | Waldorf | VOC | 3 tanks |
| 32 | UST | Bannister Neighborhoood Assoc | 1001 Armstrong | Figure 3g | Waldorf | VOC | 1 tank |
| 33 | UST | Eva Turner Elementary School | 1000 Bannister Circle | Figure 3g | Waldorf | VOC | 1 tank |
| 34 | UST | St. Paul's Episcopal Church | 4535 Piney Church Rd | Figure 3g | Waldorf | VOC | 1 tank |
| 35 | UST | Waldorf Moose 1709 | 4765 Crain Hwy | Figure 3h | Kings Manor | VOC | 1 tank |
| 36 | CHS | Gilroy Towing Service | Crain Hwy & Smitty Dr. | Figure 3h | West White Plains 1 MHP | VOC | |
| 37 | UST | Express Fuel | Crain Hwy & Smitty Dr. | Figure 3h | West White Plains 1 MHP | VOC | Several tanks |
| 38 | CHS | Judy Cleaners | La Plata Village Shopping Ctr | Figure 3i | La Plata | VOC | |
| 39 | UST | Wawa Food Market | Crain Hwy & Heritage Green Pkwy | Figure 3i | La Plata | VOC | Several tanks |
| 40 | UST | Amoco Service Station #966 | 5995 Crain Hwy | Figure 3i | La Plata | VOC | 8 tanks |
| 41 | UST | Parkway Building | 6005 Crain Hwy | Figure 3i | La Plata | VOC | 1 tank |
| 42 | UST | Charles County Govt. Bldg. | Baltimore St. @ Washington Ave | Figure 3i | La Plata | VOC | 2 tanks |
| 43 | UST | Mitchell Home Center | 6 St. Mary's Ave | Figure 3i | La Plata | VOC | 1 tank |
| 44 | UST | Baldus Real Estate | 101 E. Charles St. | Figure 3i | La Plata | VOC | 1 tank |
| 45 | UST | Board of Education | 100 Kent Ave | Figure 3i | La Plata | VOC | 1 tank |
| 46 | UST | Bank of Southern Maryland | 304 E. Charles St. | Figure 3i | La Plata | VOC | 1 tank |
| 47 | UST | Charles Co. Social Services Bldg | 8 Kent Ave | Figure 3i | La Plata | VOC | 1 tank |
| 48 | UST | Carrico Bldg Inc. | 303 E. Charles St. | Figure 3i | La Plata | VOC | 1 tank |
| 49 | UST | Shell/ Dash In | 308 E. Charles St | Figure 3i | La Plata | VOC | Several tanks |
| 50 | UST | La Plata Library | 2 Garrett Ave | Figure 3i | La Plata | VOC | 2 tanks |
| 51 | CHS | Physicians Memorial Hospital | 701 E. Charles St | Figure 3i | La Plata | VOC, R | |
| 52 | UST | La Plata Town Hall | 5 Garrett Ave | Figure 3i | La Plata | VOC | 1 tank |
| 53 | UST | Charles Co Public Schools Maintenance Shop | 5965 Radio Station Rd | Figure 3j | La Plata | VOC | 2 tanks |
| 54 | UST | F.B. Gwyn Education Center | 5998 Radio Station Rd | Figure 3j | La Plata | VOC | 1 tank |
| 55 | UST | La Plata High School | 5035 Radio Station Rd | Figure 3j | La Plata | VOC | 1 tank |
| 56 | GWD | Southern MD Pre-Release Unit | Oaks Rd @ Carrico Mills Rd | Figure 3k | Southern MD Pre-Release Unit | NN, MP | |

***Table 4 (contd). Potential Contaminant Point Sources Within WHPAs.***

* See referenced figure for location

**Contaminant Type:** UST- Underground Storage Tank; CHS - Controlled Hazardous Substance; GWD - Ground Water Discharge

| PWSID | PWS NAME | PLANT ID | TREATMENT METHOD | PURPOSE |
|---|---|---|---|---|
| 0080002 | AVON CREST | 01 | SODIUM HYPOCHLORINATION, POST | DISINFECTION |
| 0080003 | BANKS O'DEE | 01 | NO TREATMENT | NO TREATMENT |
| 0080004 | BEANTOWN PARK-WOODLEY ROAD | 01 | SODIUM HYPOCHLORINATION, PRE | DISINFECTION |
| 0080005 | BEL ALTON | 01 | SODIUM HYPOCHLORINATION, POST | DISINFECTION |
| | | 02 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080006 | BELLEWOOD WATER ASSOCIATION | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| | | | FILTRATION, GREENSAND | IRON REMOVAL |
| 0080007 | BROOKWOOD ESTATES | 01 | SEQUESTRATION | IRON REMOVAL |
| | | | HYPOCHLORINATION, POST | DISINFECTION |
| | | 02 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080008 | CHARLES COUNTY GARDENS WATER | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080009 | CLIFTON ON THE POTOMAC | 01 | ABANDONED | NONE |
| | | 02 | SODIUM HYPOCHLORINATION, POST | DISINFECTION |
| | | 03 | SODIUM HYPOCHLORINATION, POST | DISINFECTION |
| 0080010 | DU MAR ESTATES WATER COMPANY | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080012 | POMONKEY WATER CO. - FORD HEIGHTS | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| 0080012 | POMONKEY WATER CO. - FORD HEIGHTS | 01 | SEQUESTRATION | IRON REMOVAL |
| 0080013 | TRIMAC WATER CO. - FOREST PARK | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080015 | GARDEN ESTATES CENTRAL WATER | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080017 | GREEN MEADOWS WATER COMPANY | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080018 | HAWTHORNE | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080019 | INDEPENDENCE VILLAGE | 01 | HYPOCHLORINATION, POST | DISINFECTION |

***Table 5. Treatment Methods for Community Water Systems in Charles County***

| PWSID | PWS NAME | PLANT ID | TREATMENT METHOD | PURPOSE |
|---|---|---|---|---|
| 0080020 | TOWN OF INDIAN HEAD | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 02 | GASEOUS CHLORINATION, POST | DISINFECTION |
| | | 03 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 04 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 05 | INACTIVE | |
| | | 06 | INACTIVE | |
| 0080022 | INMAN UTILITIES | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080023 | JENKINS LANE | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 02 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080024 | KINGS MANOR - WHITE PLAINS WATER CO, INC | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 02 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080025 | TOWN OF LA PLATA | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 02 | INACTIVE | |
| | | 03 | INACTIVE | |
| | | 04 | HYPOCHLORINATION, PRE | DISINFECTION |
| | | 05 | HYPOCHLORINATION, PRE | DISINFECTION |
| | | 06 | NO TREATMENT | NO TREATMENT |
| 0080026 | LAUREL DRIVE | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080027 | MATTHEWS MANOR | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| 0080028 | MARIELLEN PARK | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080029 | MORGANTOWN WATER SUPPLY | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| 0080030 | MOUNT CARMEL WOODS | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080031 | NEWTOWN ESTATES | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| 0080032 | NEWTOWN VILLAGE | 01 | SODIUM HYPOCHLORINATION, PRE | DISINFECTION |
| | | 02 | SODIUM HYPOCHLORINATION, PRE | DISINFECTION |

***Table 5 (cont.). Treatment Methods for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | IOCs (except arsenic) | | Arsenic | | Radionuclides | | VOCs | | SOCs | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL |
| 0080002 | AVON CREST | 01 | 14 | 0 | 5 | 0 | 4 | 1 | 5 | 0 | 0 | 0 |
| 0080003 | BANKS O'DEE | 01 | 12 | 0 | 5 | 1 | 5 | 1 | 3 | 0 | 0 | 0 |
| 0080004 | BEANTOWN PARK- WOODLEY ROAD | 01 | 13 | 0 | 5 | 0 | 5 | 0 | 3 | 0 | 0 | 0 |
| 0080005 | BEL ALTON | 01 | 12 | 0 | 5 | 0 | 3 | 1 | 4 | 0 | 0 | 0 |
| | | 02 | 12 | 0 | 3 | 0 | 4 | 1 | 3 | 0 | 0 | 0 |
| 0080006 | BELLEWOOD WATER ASSOCIATION | 01 | 12 | 0 | 6 | 0 | 6 | 1 | 4 | 0 | 0 | 0 |
| 0080007 | BROOKWOOD ESTATES | 01 | 11 | 0 | 3 | 0 | 4 | 2 | 6 | 0 | 0 | 0 |
| | | 01 | 10 | 0 | 4 | 0 | 3 | 1 | 10 | 0 | 0 | 0 |
| 0080008 | CHARLES COUNTY GARDENS WATER | 01 | 13 | 0 | 5 | 0 | 4 | 0 | 6 | 0 | 0 | 0 |
| 0080009 | CLIFTON ON THE POTOMAC | 01 | 8 | 0 | 2 | 0 | 3 | 1 | 3 | 0 | 0 | 0 |
| | | 02 | 7 | 0 | 1 | 0 | 3 | 1 | 5 | 0 | 0 | 0 |
| | | 03 | 10 | 0 | 4 | 0 | 3 | 1 | 4 | 0 | 0 | 0 |
| 0080010 | DU MAR ESTATES WATER COMPANY | 01 | 11 | 0 | 3 | 0 | 4 | 0 | 5 | 0 | 0 | 0 |
| 0080012 | POMONKEY WATER CO. - FORD HEIGHTS | 01 | 12 | 0 | 5 | 1 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080013 | TRIMAC WATER CO. - FOREST PARK | 01 | 7 | 0 | 3 | 0 | 5 | 0 | 6 | 0 | 1 | 0 |
| 0080015 | GARDEN ESTATES CENTRAL WATER | 01 | 12 | 0 | 4 | 0 | 3 | 1 | 6 | 0 | 1 | 0 |
| 0080017 | GREEN MEADOWS WATER COMPANY | 01 | 12 | 0 | 3 | 0 | 5 | 0 | 5 | 0 | 1 | 0 |
| 0080018 | HAWTHORNE | 01 | 11 | 0 | 4 | 0 | 4 | 1 | 3 | 0 | 0 | 0 |
| 0080019 | INDEPENDENCE VILLAGE | 01 | 11 | 0 | 5 | 0 | 4 | 1 | 4 | 0 | 0 | 0 |
| 0080020 | TOWN OF INDIAN HEAD | 01 | 10 | 0 | 4 | 0 | 5 | 1 | 6 | 0 | 0 | 0 |
| | | 02 | 10 | 0 | 3 | 0 | 3 | 1 | 2 | 0 | 0 | 0 |
| | | 03 | 10 | 0 | 3 | 0 | 3 | 1 | 5 | 0 | 0 | 0 |
| | | 04 | 10 | 0 | 3 | 0 | 3 | 3 | 5 | 0 | 0 | 0 |
| | | 05 | 4 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| 0080022 | INMAN UTILITIES | 01 | 11 | 0 | 4 | 0 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080023 | JENKINS LANE | 01 | 13 | 0 | 5 | 1 | 4 | 0 | 4 | 0 | 2 | 0 |
| | | 02 | 12 | 0 | 3 | 1 | 3 | 0 | 3 | 0 | 2 | 0 |
| 0080024 | KINGS MANOR - WHITE PLAINS WATER CO, INC | 01 | 6 | 0 | 3 | 0 | 3 | 0 | 5 | 0 | 1 | 0 |
| | | 02 | 11 | 0 | 1 | 0 | 3 | 0 | 5 | 0 | 1 | 0 |

***Table 6. Summary of Water Quality Results***

| PWSID | SYSTEM NAME | PLANT ID | IOCs (except arsenic) | | Arsenic | | Radionuclides | | VOCs | | SOCs | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL |
| 0080025 | TOWN OF LA PLATA | 01 | 10 | 0 | 2 | 0 | 4 | 1 | 4 | 0 | 0 | 0 |
| | | 02 | 10 | 0 | 3 | 0 | 4 | 1 | 5 | 0 | 0 | 0 |
| | | 03 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| | | 04 | 10 | 0 | 2 | 0 | 4 | 2 | 7 | 0 | 0 | 0 |
| | | 05 | 11 | 0 | 2 | 0 | 4 | 2 | 7 | 0 | 0 | 0 |
| | | 06 | 6 | 0 | 2 | 0 | 2 | 2 | 7 | 0 | 1 | 0 |
| 0080026 | LAUREL DRIVE | 01 | 12 | 0 | 5 | 1 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080027 | MATTHEWS MANOR | 01 | 11 | 0 | 5 | 0 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080028 | MARIELLEN PARK | 01 | 12 | 0 | 6 | 1 | 5 | 1 | 8 | 0 | 1 | 0 |
| 0080029 | MORGANTOWN WATER SUPPLY | 01 | 13 | 0 | 4 | 1 | 4 | 1 | 5 | 0 | 1 | 0 |
| 0080030 | MOUNT CARMEL WOODS | 01 | 11 | 0 | 4 | 0 | 6 | 3 | 6 | 0 | 0 | 0 |
| 0080031 | NEWTOWN ESTATES | 01 | 11 | 0 | 4 | 0 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080032 | NEWTOWN VILLAGE | 01 | 14 | 0 | 5 | 1 | 4 | 1 | 3 | 0 | 0 | 0 |
| | | 02 | 9 | 0 | 1 | 1 | 0 | 0 | 4 | 0 | 0 | 0 |
| 0080033 | BRYANS ROAD | 03 | 10 | 0 | 4 | 0 | 6 | 2 | 2 | 0 | 0 | 0 |
| 0080034 | OAK HILL ESTATES | 01 | 12 | 0 | 4 | 0 | 5 | 1 | 6 | 0 | 1 | 0 |
| 0080035 | PARKWAY SUBDIVISION WATER COMPANY | 01 | 11 | 0 | 5 | 0 | 5 | 1 | 6 | 0 | 1 | 0 |
| 0080036 | PINE HILL WATER COMPANY | 01 | 12 | 0 | 5 | 0 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080037 | POMFRET ESTATES - UTILCO, INC | 01 | 12 | 0 | 4 | 0 | 4 | 1 | 4 | 0 | 0 | 0 |
| 0080038 | POTOMAC HEIGHTS | 02 | 10 | 0 | 2 | 0 | 4 | 1 | 2 | 0 | 0 | 0 |
| | | 03 | 5 | 0 | 2 | 0 | 3 | 1 | 7 | 0 | 1 | 0 |
| 0080040 | RED HILL WATER CO, INC | 01 | 12 | 0 | 5 | 0 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080041 | SOUTHVIEW WISE | 01 | 12 | 0 | 5 | 0 | 5 | 1 | 6 | 0 | 0 | 0 |
| 0080043 | SPRING VALLEY | 01 | 12 | 0 | 5 | 0 | 3 | 1 | 6 | 0 | 0 | 0 |
| 0080044 | STRAWBERRY HILLS | 01 | 11 | 0 | 5 | 0 | 4 | 0 | 6 | 0 | 0 | 0 |
| | | 02 | 11 | 0 | 3 | 0 | 3 | 1 | 6 | 0 | 0 | 0 |
| 0080046 | SWAN POINT | 01 | 13 | 0 | 4 | 1 | 4 | 0 | 6 | 0 | 0 | 0 |
| | | 02 | 6 | 0 | 3 | 1 | 3 | 0 | 1 | 0 | 0 | 0 |
| 0080048 | TURKEY HILL WATER COMPANY | 01 | 11 | 1 | 4 | 0 | 4 | 2 | 6 | 0 | 2 | 0 |

***Table 6 (contd). Summary of Water Quality Results***

| PWSID | SYSTEM NAME | PLANT ID | IOCs (except arsenic) | | Arsenic | | Radionuclides | | VOCs | | SOCs | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL |
| 0080049 | WALDORF | 01 | 14 | 0 | 7 | 0 | 3 | 1 | 4 | 0 | 1 | 0 |
| | | 02 | 12 | 1 | 5 | 0 | 3 | 0 | 5 | 0 | 2 | 0 |
| | | 03 | 10 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 2 | 0 |
| | | 04 | 10 | 0 | 4 | 0 | 4 | 4 | 4 | 0 | 2 | 0 |
| | | 05 | 10 | 0 | 6 | 0 | 3 | 0 | 4 | 1* | 2 | 0 |
| | | 06 | 11 | 0 | 5 | 0 | 3 | 0 | 3 | 0 | 2 | 0 |
| | | 07 | 11 | 0 | 5 | 0 | 3 | 3 | 5 | 1* | 2 | 0 |
| | | 08 | 11 | 0 | 4 | 0 | 1 | 0 | 5 | 0 | 1 | 0 |
| | | 09 | 11 | 0 | 5 | 0 | 3 | 1 | 6 | 0 | 1 | 0 |
| | | 10 | 11 | 0 | 5 | 0 | 3 | 0 | 4 | 0 | 1 | 0 |
| | | 11 | 7 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| | | 12 | 11 | 0 | 5 | 0 | 2 | 2 | 5 | 0 | 1 | 0 |
| 0080051 | WEST WHITE PLAINS | 01 | 15 | 1 | 5 | 0 | 4 | 0 | 5 | 0 | 0 | 0 |
| 0080055 | OAKWOOD | 01 | 11 | 0 | 4 | 0 | 4 | 0 | 8 | 0 | 0 | 0 |
| 0080057 | ELLENWOOD | 01 | 11 | 0 | 4 | 0 | 4 | 0 | 6 | 0 | 1 | 0 |
| | | 02 | 3 | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| 0080058 | INDIAN HEAD DIVISION, N.S.W.C. | 01 | 11 | 0 | 4 | 0 | 7 | 1 | 3 | 1* | 2 | 0 |
| | | 02 | 10 | 0 | 4 | 0 | 3 | 3 | 3 | 1* | 3 | 0 |
| | | 03 | 24 | 0 | 5 | 0 | 4 | 2 | 5 | 3* | 3 | 0 |
| | | 04 | 8 | 0 | 3 | 0 | 4 | 0 | 3 | 1* | 2 | 0 |
| | | 05 | 10 | 0 | 3 | 0 | 2 | 0 | 4 | 2* | 2 | 0 |
| | | 06 | 8 | 0 | 3 | 0 | 4 | 1 | 3 | 1* | 2 | 0 |
| 0080059 | EUTAW FOREST | 01 | 10 | 0 | 4 | 0 | 4 | 2 | 1 | 0 | 0 | 0 |
| | | 02 | 9 | 0 | 4 | 0 | 3 | 1 | 4 | 0 | 0 | 0 |
| 0080060 | LAUREL BRANCH | 01 | 10 | 0 | 5 | 0 | 4 | 0 | 4 | 0 | 0 | 0 |
| 0080061 | SOUTHERN MARYLAND PRE-RELEASE UNIT | 01 | 17 | 0 | 7 | 0 | 4 | 3 | 3 | 0 | 0 | 0 |
| 0080062 | BENEDICT | 01 | 12 | 0 | 4 | 1 | 4 | 0 | 6 | 0 | 0 | 0 |
| | | 02 | 10 | 0 | 3 | 1 | 3 | 0 | 5 | 0 | 0 | 0 |

***Table 6 (contd). Summary of Water Quality Results***

*Samples for methylene chloride invalid because of presence in lab blanks

| PWSID | SYSTEM NAME | PLANT ID | IOCs (except arsenic) | | Arsenic | | Radionuclides | | VOCs | | SOCs | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL | No. of samples | No. of samples > 50% MCL |
| 0080064 | CHAPEL POINT WOODS | 01 | 12 | 0 | 4 | 1 | 5 | 5 | 6 | 0 | 0 | 0 |
| 0080067 | STARDUST APARTMENTS | 01 | 11 | 0 | 4 | 0 | 4 | 0 | 5 | 0 | 0 | 0 |
| 0080068 | WHITE HOUSE MOTEL & RESTAURANT | 01 | 12 | 0 | 3 | 0 | 3 | 0 | 4 | 0 | 1 | 0 |
| 0080069 | THUNDERBIRD MOTEL | 01 | 11 | 0 | 4 | 0 | 3 | 0 | 5 | 0 | 1 | 0 |
| 0080082 | BENSVILLE | 02* | 9 | 0 | 5 | 0 | 5 | 0 | 10 | 0 | 1 | 0 |
| | | 01 | 9 | 0 | 4 | 0 | 5 | 0 | 6 | 0 | 1 | 0 |
| 0080205 | IDLEWOOD PARK | 01 | 11 | 0 | 3 | 0 | 3 | 1 | 4 | 0 | 0 | 0 |
| 0080206 | MARSHALL HALL MOBILE HOME PARK | 01 | 13 | 0 | 4 | 0 | 4 | 1 | 4 | 0 | 0 | 0 |
| 0080207 | WHITE PLAINS 1 M.H.P. | 01 | 11 | 0 | 5 | 0 | 4 | 1 | 6 | 0 | 0 | 0 |
| 0080208 | WHITE PLAINS 2 M.H.P. | 01 | 13 | 0 | 5 | 0 | 5 | 1 | 6 | 0 | 0 | 0 |

***Table 6 (contd). Summary of Water Quality Results***

*formerly Dutton's Addition

| PWSID | PWS NAME | PLANT ID | TREATMENT METHOD | PURPOSE |
|---|---|---|---|---|
| 0080033 | BRYANS ROAD | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| | | 02 | CALCIUM TABLET FEEDER | DISINFECTION |
| | | 03 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080034 | OAK HILL ESTATES | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 01 | SEQUESTRATION | IRON REMOVAL |
| 0080035 | PARKWAY SUBDIVISION WATER COMPANY | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080036 | PINE HILL WATER COMPANY | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080037 | POMFRET ESTATES - UTILCO, INC | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080038 | POTOMAC HEIGHTS | 02 | HYPOCHLORINATION, POST | DISINFECTION |
| | | 03 | NO TREATMENT | NO TREATMENT |
| 0080040 | RED HILL WATER CO, INC | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080041 | SOUTHVIEW WISE | 01 | NO TREATMENT | NO TREATMENT |
| 0080043 | SPRING VALLEY | 01 | SEQUESTRATION | IRON REMOVAL |
| 0080043 | SPRING VALLEY | 01 | SODIUM HYPOCHLORINATION, PRE | DISINFECTION |
| 0080044 | STRAWBERRY HILLS | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| | | 02 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080046 | SWAN POINT | 02 | CALCIUM TABLET FEEDER | DISINFECTION |
| | | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080048 | TURKEY HILL WATER COMPANY | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080049 | WALDORF | 01 | pH ADJUSTMENT | CORROSION CONTROL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080049 | WALDORF | 02 | SEQUESTRATION | IRON REMOVAL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |

***Table 5 (cont.). Treatment Methods for Community Water Systems in Charles County***

| PWSID | PWS NAME | PLANT ID | TREATMENT METHOD | PURPOSE |
|---|---|---|---|---|
| 0080049 | WALDORF | 03 | SEQUESTRATION | IRON REMOVAL |
| | | | pH ADJUSTMENT | CORROSION CONTROL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080049 | WALDORF | 04 | SEQUESTRATION | IRON REMOVAL |
| | | | pH ADJUSTMENT | CORROSION CONTROL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080049 | WALDORF | 05 | SEQUESTRATION | IRON REMOVAL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080049 | WALDORF | 06 | SEQUESTRATION | IRON REMOVAL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080049 | WALDORF | 07 | SEQUESTRATION | IRON REMOVAL |
| | | | CALCIUM TABLET FEEDER | IRON REMOVAL |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080049 | WALDORF | 08 | SEQUESTRATION | IRON REMOVAL |
| | | | pH ADJUSTMENT | CORROSION CONTROL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080049 | WALDORF | 09 | SEQUESTRATION | IRON REMOVAL |
| | | | pH ADJUSTMENT | CORROSION CONTROL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080049 | WALDORF | 10 | SEQUESTRATION | IRON REMOVAL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |

***Table 5 (cont.). Treatment Methods for Community Water Systems in Charles County***

| PWSID | PWS NAME | PLANT ID | TREATMENT METHOD | PURPOSE |
|---|---|---|---|---|
| 0080049 | WALDORF | 11 | SEQUESTRATION | IRON REMOVAL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080049 | WALDORF | 12 | SEQUESTRATION | IRON REMOVAL |
| | | | CALCIUM TABLET FEEDER | DISINFECTION |
| | | | FLUORIDATION | ADDITION OF FLUORIDE |
| 0080051 | WEST WHITE PLAINS | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| 0080055 | OAKWOOD | 01 | SODIUM HYPOCHLORINATION, PRE | DISINFECTION |
| 0080057 | ELLENWOOD | 01 | SODIUM HYPOCHLORINATION, PRE | DISINFECTION |
| 0080058 | INDIAN HEAD DIVISION, N.S.W.C. | 01 | GASEOUS CHLORINATION, POST | DISINFECTION |
| | | 02 | GASEOUS CHLORINATION, POST | DISINFECTION |
| | | 03 | GASEOUS CHLORINATION, POST | DISINFECTION |
| | | 04 | GASEOUS CHLORINATION, POST | DISINFECTION |
| | | 05 | GASEOUS CHLORINATION, POST | DISINFECTION |
| | | 06 | GASEOUS CHLORINATION, POST | DISINFECTION |
| 0080059 | EUTAW FOREST | 01 | CALCIUM TABLET FEEDER, POST | DISINFECTION |
| | | | CALCIUM TABLET FEEDER, PRE | DISINFECTION |
| | | 02 | SODIUM HYPOCHLORINATION, PRE | DISINFECTION |
| 0080060 | LAUREL BRANCH | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080061 | SOUTHERN MARYLAND PRE-RELEASE UNIT | 01 | GASEOUS CHLORINATION, PRE | DISINFECTION |
| | | | GASEOUS CHLORINATION, POST | DISINFECTION |
| | | | FILTRATION, PRESSURE SAND | IRON REMOVAL |
| | | | ION EXCHANGE | IRON / INORGANICS REMOVAL |
| 0080062 | BENEDICT | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| | | 02 | CALCIUM TABLET FEEDER | DISINFECTION |

***Table 5 (cont.). Treatment Methods for Community Water Systems in Charles County***

| PWSID | PWS NAME | PLANT ID | TREATMENT METHOD | PURPOSE |
|---|---|---|---|---|
| 0080064 | CHAPEL POINT WOODS | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080067 | STARDUST APARTMENTS | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| 0080068 | WHITE HOUSE MOTEL & RESTAURANT | 01 | NO TREATMENT | NO TREATMENT |
| 0080069 | THUNDERBIRD MOTEL | 01 | NO TREATMENT | NO TREATMENT |
| 0080081 | DUTTONS ADDITION | 01 | SODIUM HYPOCHLORINATION, POST | DISINFECTION |
| 0080082 | BENSVILLE | 01 | CALCIUM TABLET FEEDER | DISINFECTION |
| 0080205 | IDLEWOOD PARK | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| | | | SEQUESTRATION | IRON REMOVAL |
| 0080206 | MARSHALL HALL MOBILE HOME PARK | 01 | HYPOCHLORINATION, POST | DISINFECTION |
| 0080207 | WHITE PLAINS 1 M.H.P. | 01 | HYPOCHLORINATION, PRE | DISINFECTION |
| 0080208 | WHITE PLAINS 2 M.H.P. | 01 | HYPOCHLORINATION, PRE | DISINFECTION |

***Table 5 (cont.). Treatment Methods for Community Water Systems in Charles County***

| PWSID | SYSTEM NAME | PLANT ID | CONTAMINANT NAME | MCL (mg/L) | SAMPLE DATE | RESULT (mg/L) |
|---|---|---|---|---|---|---|
| 0080048 | TURKEY HILL WATER COMPANY | 01 | LEAD | 0.015 | 9-Mar-94 | 0.009 |
| 0080051 | WEST WHITE PLAINS | 01 | NITRATE* | 10 | 14-Feb-96 | 7.06 |

***Table 7a. Results of Inorganic Compounds above 50% of their MCL***

* Sample invalidated

| PWSID | SYSTEM NAME | PLANT ID | CONTAMINANT NAME | MCL (mg/L) | SAMPLE DATE | RESULT (mg/L) |
|---|---|---|---|---|---|---|
| 0080003 | BANKS O'DEE | 01 | ARSENIC | 0.01 | 29-Oct-02 | 0.006 |
| 0080012 | POMONKEY WATER COMPANY | 01 | ARSENIC | 0.01 | 28-Oct-02 | 0.006 |
| 0080023 | JENKINS LANE | 01 | ARSENIC | 0.01 | 31-Oct-01 | 0.006 |
| | | 02 | ARSENIC | 0.01 | 31-Oct-01 | 0.006 |
| 0080026 | LAUREL DRIVE | 01 | ARSENIC | 0.01 | 31-Oct-01 | 0.006 |
| | | 01 | ARSENIC | 0.01 | 31-Oct-01 | 0.006 |
| 0080028 | MARIELLEN PARK | 01 | ARSENIC | 0.01 | 30-Dec-97 | 0.006 |
| 0080029 | MORGANTOWN WATER SUPPLY | 01 | ARSENIC | 0.01 | 11-Jul-01 | 0.01 |
| 0080032 | NEWTOWN VILLAGE | 01 | ARSENIC | 0.01 | 30-Dec-97 | 0.006 |
| | | 02 | ARSENIC | 0.01 | 30-Dec-97 | 0.006 |
| 0080046 | SWAN POINT | 01 | ARSENIC | 0.01 | 30-Dec-97 | 0.006 |
| | | 02 | ARSENIC | 0.01 | 30-Dec-97 | 0.006 |
| 0080062 | BENEDICT | 01 | ARSENIC | 0.01 | 10-Dec-95 | 0.007 |
| | | 02 | ARSENIC | 0.01 | 10-Dec-95 | 0.007 |
| 0080064 | CHAPEL POINT | 01 | ARSENIC | 0.01 | 30-Dec-97 | 0.006 |

***Table 7b. Arsenic results above 50% of the MCL***

| PWSID | SYSTEM NAME | PLANT ID | CONTAMINANT NAME | MCL (pCi/L) | SAMPLE DATE | RESULT (pCi/L) |
|---|---|---|---|---|---|---|
| 0080002 | AVON CREST | 01 | RADON-222 | 300/4000* | 8-Jan-98 | 240 |
| 0080003 | BANKS O'DEE | 01 | RADON-222 | 300/4000* | 16-Nov-98 | 155 |
| 0080005 | BEL ALTON | 01 | GROSS ALPHA | 15 | 24-Oct-02 | 13 |
| | | 02 | RADON-222 | 300/4000* | 19-Mar-98 | 200 |
| 0080006 | BELLEWOOD WATER ASSOCIATION | 01 | GROSS ALPHA | 15 | 10-Sep-02 | 8 |
| 0080007 | BROOKWOOD ESTATES | 01 | GROSS ALPHA | 15 | 10-Oct-02 | 8 |
| | | 01 | RADON-222 | 300/4000* | 8-Jan-98 | 210 |
| | | 02 | RADON-222 | 300/4000* | 2-Feb-98 | 210 |
| 0080009 | CLIFTON ON THE POTOMAC | 01 | RADON-222 | 300/4000* | 19-Mar-98 | 160 |
| | | 02 | GROSS ALPHA | 15 | 27-Aug-02 | 10 |
| | | 03 | RADON-222 | 300/4000* | 19-Mar-98 | 200 |
| 0080012 | POMONKEY WATER CO. - FORD HEIGHTS | 01 | RADON-222 | 300/4000* | 2-Feb-98 | 250 |
| 0080015 | GARDEN ESTATES CENTRAL WATER | 01 | RADON-222 | 300/4000* | 21-Jan-99 | 235 |
| 0080018 | HAWTHORNE | 01 | RADON-222 | 300/4000* | 12-Nov-98 | 155 |
| 0080019 | INDEPENDENCE VILLAGE | 01 | RADON-222 | 300/4000* | 8-Oct-98 | 195 |
| 0080020 | TOWN OF INDIAN HEAD | 01 | RADON-222 | 300/4000* | 11-Feb-98 | 220 |
| | | 02 | RADON-222 | 300/4000* | 11-Feb-98 | 295 |
| | | 03 | RADON-222 | 300/4000* | 11-Feb-98 | 270 |
| | | 04 | GROSS ALPHA | 15 | 11-Feb-98 | 8 |
| | | 04 | GROSS ALPHA | 15 | 28-Oct-02 | 13 |
| | | 04 | RADON-222 | 300/4000* | 11-Feb-98 | 250 |
| 0080022 | INMAN UTILITIES | 01 | RADON-222 | 300/4000* | 22-Oct-98 | 190 |
| 0080025 | TOWN OF LA PLATA | 01 | RADON-222 | 300/4000* | 18-Feb-98 | 325 |
| | | 02 | RADON-222 | 300/4000* | 18-Feb-98 | 210 |
| | | 04 | RADON-222 | 300/4000* | 17-May-94 | 210 |
| | | 04 | RADON-222 | 300/4000* | 15-Feb-98 | 235 |
| | | 05 | RADON-222 | 300/4000* | 17-May-94 | 210 |
| | | 05 | RADON-222 | 300/4000* | 18-Feb-98 | 195 |
| | | 06 | GROSS ALPHA | 15 | 10-Oct-02 | 11 |
| | | 06 | RADON-222 | 300/4000* | 16-Mar-00 | 160 |
| 0080026 | LAUREL DRIVE | 01 | RADON-222 | 300/4000* | 9-Jul-98 | 225 |
| 0080027 | MATTHEWS MANOR | 01 | RADON-222 | 300/4000* | 20-Aug-98 | 195 |
| 0080028 | MARIELLEN PARK | 01 | RADON-222 | 300/4000* | 28-May-98 | 255 |
| 0080029 | MORGANTOWN WATER SUPPLY | 01 | RADON-222 | 300/4000* | 20-Aug-98 | 295 |
| 0080030 | MOUNT CARMEL WOODS | 01 | GROSS ALPHA | 15 | 30-Oct-02 | 18 |
| | | 01 | RADON-222 | 300/4000* | 20-Aug-98 | 230 |
| | | 01 | GROSS ALPHA, ADJUSTED | 15 | 30-Oct-02 | 16.7 |
| 0080031 | NEWTOWN ESTATES | 01 | RADON-222 | 300/4000* | 16-Nov-98 | 175 |
| 0080032 | NEWTOWN VILLAGE | 01 | RADON-222 | 300/4000* | 28-May-98 | 210 |
| 0080033 | BRYANS ROAD | 04 | RADON-222 | 300/4000* | 24-Feb-98 | 190 |
| | | 04 | RADON-222 | 300/4000* | 24-Feb-98 | 500 |
| 0080034 | OAK HILL ESTATES | 01 | GROSS ALPHA | 15 | 30-Oct-02 | 14 |
| 0080035 | PARKWAY SUBDIVISION WATER COMPANY | 01 | RADON-222 | 300/4000* | 28-May-98 | 625 |
| 0080036 | PINE HILL WATER COMPANY | 01 | RADON-222 | 300/4000* | 9-Nov-98 | 160 |
| 0080037 | POMFRET ESTATES - UTILCO, INC | 01 | GROSS ALPHA | 15 | 7-Nov-02 | 12 |
| | | 01 | RADON-222 | 300/4000* | 8-Jan-98 | 230 |
| 0080038 | POTOMAC HEIGHTS | 02 | RADON-222 | 300/4000* | 9-Jul-98 | 205 |
| | | 03 | RADON-222 | 300/4000* | 27-Jan-99 | 230 |

***Table 7c. Results of Radionucides above 50% of their MCL***

* Proposed MCLs.

| PWSID | SYSTEM NAME | PLANT ID | CONTAMINANT NAME | MCL (pCi/L) | SAMPLE DATE | RESULT (pCi/L) |
|---|---|---|---|---|---|---|
| 0080040 | RED HILL WATER CO, INC | 01 | RADON-222 | 300/4000* | 9-Jul-98 | 230 |
| 0080041 | SOUTHVIEW WISE | 01 | RADON-222 | 300/4000* | 20-Aug-98 | 285 |
| 0080043 | SPRING VALLEY | 01 | GROSS ALPHA | 15 | 10-Oct-02 | 11 |
| 0080044 | STRAWBERRY HILLS | 02 | RADON-222 | 300/4000* | 2-Sep-98 | 155 |
| 0080048 | TURKEY HILL WATER COMPANY | 01 | GROSS ALPHA | 15 | 30-Oct-02 | 8 |
| | | 01 | RADON-222 | 300/4000* | 30-Dec-98 | 225 |
| 0080049 | WALDORF | 01 | RADON-222 | 300/4000* | 7-Oct-02 | 285 |
| | | 04 | GROSS ALPHA | 15 | 29-Oct-98 | 8 |
| | | 04 | GROSS ALPHA | 15 | 16-Oct-02 | 16 |
| | | 04 | COMBINED RADIUM (226 & 228) | 5 | 16-Oct-02 | 2.5 |
| | | 04 | GROSS ALPHA, ADJUSTED | 15 | 16-Oct-02 | 14.5 |
| | | 07 | GROSS ALPHA | 15 | 7-Oct-02 | 8 |
| | | 07 | RADON-222 | 300/4000* | 5-Mar-98 | 245 |
| | | 07 | COMBINED RADIUM (226 & 228) | 5 | 7-Oct-02 | 2.7 |
| | | 09 | RADON-222 | 300/4000* | 5-Mar-98 | 220 |
| | | 12 | RADON-222 | 300/4000* | 5-Mar-98 | 200 |
| | | 12 | COMBINED RADIUM (226 & 228) | 5 | 7-Oct-02 | 2.5 |
| 0080058 | INDIAN HEAD DIVISION, N.S.W.C. | 01 | RADON-222 | 300/4000* | 27-Aug-98 | 200 |
| | | 02 | GROSS ALPHA | 15 | 23-Oct-02 | 13 |
| | | 02 | RADON-222 | 300/4000* | 13-Jan-98 | 225 |
| | | 02 | RADON-222 | 300/4000* | 13-Jan-98 | 225 |
| | | 03 | RADON-222 | 300/4000* | 13-Jan-98 | 240 |
| | | 03 | RADON-222 | 300/4000* | 13-Jan-98 | 240 |
| | | 04 | RADON-222 | 300/4000* | 23-Oct-02 | 195 |
| | | 06 | RADON-222 | 300/4000* | 27-Aug-98 | 150 |
| 0080059 | EUTAW FOREST | 01 | GROSS ALPHA | 15 | 13-Nov-02 | 13 |
| | | 01 | RADON-222 | 300/4000* | 2-Sep-98 | 165 |
| | | 02 | RADON-222 | 300/4000* | 2-Sep-98 | 270 |
| 0080061 | SOUTHERN MARYLAND PRE-RELEASE UNIT | 01 | RADON-222 | 300/4000* | 8-Oct-98 | 200 |
| | | 01 | COMBINED RADIUM (226 & 228) | 5 | 20-Sep-02 | 4.01 |
| | | 01 | RADIUM-226 | 5 | 20-Sep-02 | 4.01 |
| 0080064 | CHAPEL POINT WOODS | 00 | GROSS ALPHA | 15 | 4-Nov-92 | 8 |
| | | 00 | GROSS ALPHA | 15 | 15-Nov-94 | 18 |
| | | 01 | GROSS ALPHA | 15 | 12-Nov-98 | 20 |
| | | 01 | GROSS ALPHA | 15 | 3-Feb-99 | 8 |
| | | 01 | RADON-222 | 300/4000* | 12-Nov-98 | 230 |
| 0080205 | IDLEWOOD PARK | 01 | GROSS ALPHA | 15 | 22-Oct-02 | 8 |
| 0080206 | MARSHALL HALL MOBILE HOME PARK | 01 | RADON-222 | 300/4000* | 27-Aug-98 | 205 |
| 0080207 | WHITE PLAINS 1 M.H.P. | 01 | RADON-222 | 300/4000* | 23-Jul-98 | 170 |
| 0080208 | WHITE PLAINS 2 M.H.P. | 01 | RADON-222 | 300/4000* | 23-Jul-98 | 160 |

***Table 7c. (contd.) Results of Radionucides above 50% of their MCL***

* Proposed MCLs.

| PWSID | SYSTEM NAME | No. of Samples | No of Postive Samples | Disinfection Treatment? |
|---|---|---|---|---|
| 0080002 | AVON CREST | 74 | 0 | Yes |
| 0080003 | BANKS O'DEE | 72 | 0 | No |
| 0080004 | BEANTOWN PARK- WOODLEY ROAD | 73 | 0 | Yes |
| 0080005 | BEL ALTON | 74 | 0 | Yes |
| 0080006 | BELLEWOOD WATER ASSOCIATION | 72 | 0 | Yes |
| 0080007 | BROOKWOOD ESTATES | 72 | 0 | Yes |
| 0080008 | CHARLES COUNTY GARDENS WATER | 72 | 0 | Yes |
| 0080009 | CLIFTON ON THE POTOMAC | 74 | 0 | Yes |
| 0080010 | DU MAR ESTATES WATER COMPANY | 73 | 0 | Yes |
| 0080012 | POMONKEY WATER CO. - FORD HEIGHTS | 72 | 1 | Yes |
| 0080013 | TRIMAC WATER CO. - FOREST PARK | 71 | 0 | Yes |
| 0080015 | GARDEN ESTATES CENTRAL WATER | 73 | 0 | Yes |
| 0080017 | GREEN MEADOWS WATER COMPANY | 71 | 0 | Yes |
| 0080018 | HAWTHORNE | 72 | 0 | Yes |
| 0080019 | INDEPENDENCE VILLAGE | 69 | 2 | Yes |
| 0080020 | TOWN OF INDIAN HEAD | 72 | 0 | Yes |
| 0080022 | INMAN UTILITIES | 71 | 0 | Yes |
| 0080023 | JENKINS LANE | 72 | 0 | Yes |
| 0080024 | KINGS MANOR - WHITE PLAINS WATER CO, INC. | 71 | 0 | Yes |
| 0080025 | TOWN OF LA PLATA | 69 | 6 | Yes |
| 0080026 | LAUREL DRIVE | 72 | 0 | Yes |
| 0080027 | MATTHEWS MANOR | 73 | 2 | Yes |
| 0080028 | MARIELLEN PARK | 74 | O | Yes |
| 0080029 | MORGANTOWN WATER SUPPLY | 71 | 3 | Yes |
| 0080030 | MOUNT CARMEL WOODS | 74 | 0 | Yes |
| 0080031 | NEWTOWN ESTATES | 72 | 0 | Yes |
| 0080032 | NEWTOWN VILLAGE | 74 | 0 | Yes |
| 0080033 | BRYANS ROAD | 74 | 0 | Yes |
| 0080034 | OAK HILL ESTATES | 71 | 0 | Yes |
| 0080035 | PARKWAY SUBDIVISION WATER COMPANY | 70 | 3 | Yes |
| 0080036 | PINE HILL WATER COMPANY | 72 | 0 | Yes |
| 0080037 | POMFRET ESTATES - UTILCO, INC | 72 | 0 | Yes |
| 0080038 | POTOMAC HEIGHTS | 70 | 4 | Yes |
| 0080040 | RED HILL WATER CO, INC | 70 | 0 | Yes |
| 0080041 | SOUTHVIEW WISE | 72 | 1 | No |
| 0080043 | SPRING VALLEY | 74 | 0 | Yes |
| 0080044 | STRAWBERRY HILLS | 74 | 0 | Yes |
| 0080046 | SWAN POINT | 74 | 0 | Yes |
| 0080048 | TURKEY HILL WATER COMPANY | 73 | 0 | Yes |
| 0080049 | WALDORF | 74 | 0 | Yes |
| 0080051 | WEST WHITE PLAINS | 73 | 0 | Yes |
| 0080055 | OAKWOOD | 74 | 0 | Yes |
| 0080057 | ELLENWOOD | 74 | 0 | Yes |

***Table 8. Routine Bacteriological Monitoring Results from System Distribution***

| PWSID | SYSTEM NAME | Is the Water System Susceptible to.... | | | | | |
|---|---|---|---|---|---|---|---|
| | | Inorganic Compounds (except arsenic) | Arsenic | Radionuclides | Volatile Organic Compounds | Synthetic Organic Compounds | Microbiological Contaminants |
| 0080036 | PINE HILL WATER COMPANY | NO | NO | YES* | NO | NO | NO |
| 0080037 | POMFRET ESTATES - UTILCO, INC | NO | NO | YES | NO | NO | NO |
| 0080038 | POTOMAC HEIGHTS | NO | NO | YES* | NO | NO | NO |
| 0080040 | RED HILL WATER CO, INC | NO | NO | YES* | NO | NO | NO |
| 0080041 | SOUTHVIEW WISE | NO | NO | YES* | NO | NO | NO |
| 0080043 | SPRING VALLEY | NO | NO | YES | NO | NO | NO |
| 0080044 | STRAWBERRY HILLS | NO | NO | YES* | NO | NO | NO |
| 0080046 | SWAN POINT | NO | YES | NO | NO | NO | NO |
| 0080048 | TURKEY HILL WATER COMPANY | NO | NO | YES | NO | NO | NO |
| 0080049 | WALDORF | NO | NO | YES | NO | NO | NO |
| 0080051 | WEST WHITE PLAINS | NO | NO | NO | NO | NO | NO |
| 0080055 | OAKWOOD | NO | NO | NO | NO | NO | NO |
| 0080057 | ELLENWOOD | NO | NO | NO | NO | NO | NO |
| 0080058 | INDIAN HEAD DIVISION, N.S.W.C. | NO | NO | YES | NO | NO | NO |
| 0080059 | EUTAW FOREST | NO | NO | YES | NO | NO | NO |
| 0080060 | LAUREL BRANCH | NO | NO | NO | NO | NO | NO |
| 0080061 | SOUTHERN MARYLAND PRE-RELEASE UNIT | NO | NO | YES | NO | NO | NO |
| 0080062 | BENEDICT | NO | YES | NO | NO | NO | NO |
| 0080064 | CHAPEL POINT WOODS | NO | YES | YES | NO | NO | NO |
| 0080067 | STARDUST APARTMENTS | NO | NO | NO | NO | NO | NO |
| 0080068 | WHITE HOUSE MOTEL & RESTAURANT | NO | NO | NO | NO | NO | NO |
| 0080069 | THUNDERBIRD MOTEL | NO | NO | NO | NO | NO | NO |
| 0080082 | BENSVILLE | NO | NO | NO | NO | NO | NO |
| 0080205 | IDLEWOOD PARK | NO | NO | YES | NO | NO | NO |
| 0080206 | MARSHALL HALL MOBILE HOME PARK | NO | NO | YES* | NO | NO | NO |
| 0080207 | WHITE PLAINS 1 M.H.P. | NO | NO | YES* | NO | NO | NO |
| 0080208 | WHITE PLAINS 2 M.H.P. | NO | NO | YES* | NO | NO | NO |

***Table 9. Susceptibility Analysis Summary***

* Based on the lower proposed MCL of 300 pCi/L for Radon-222

# FIGURES

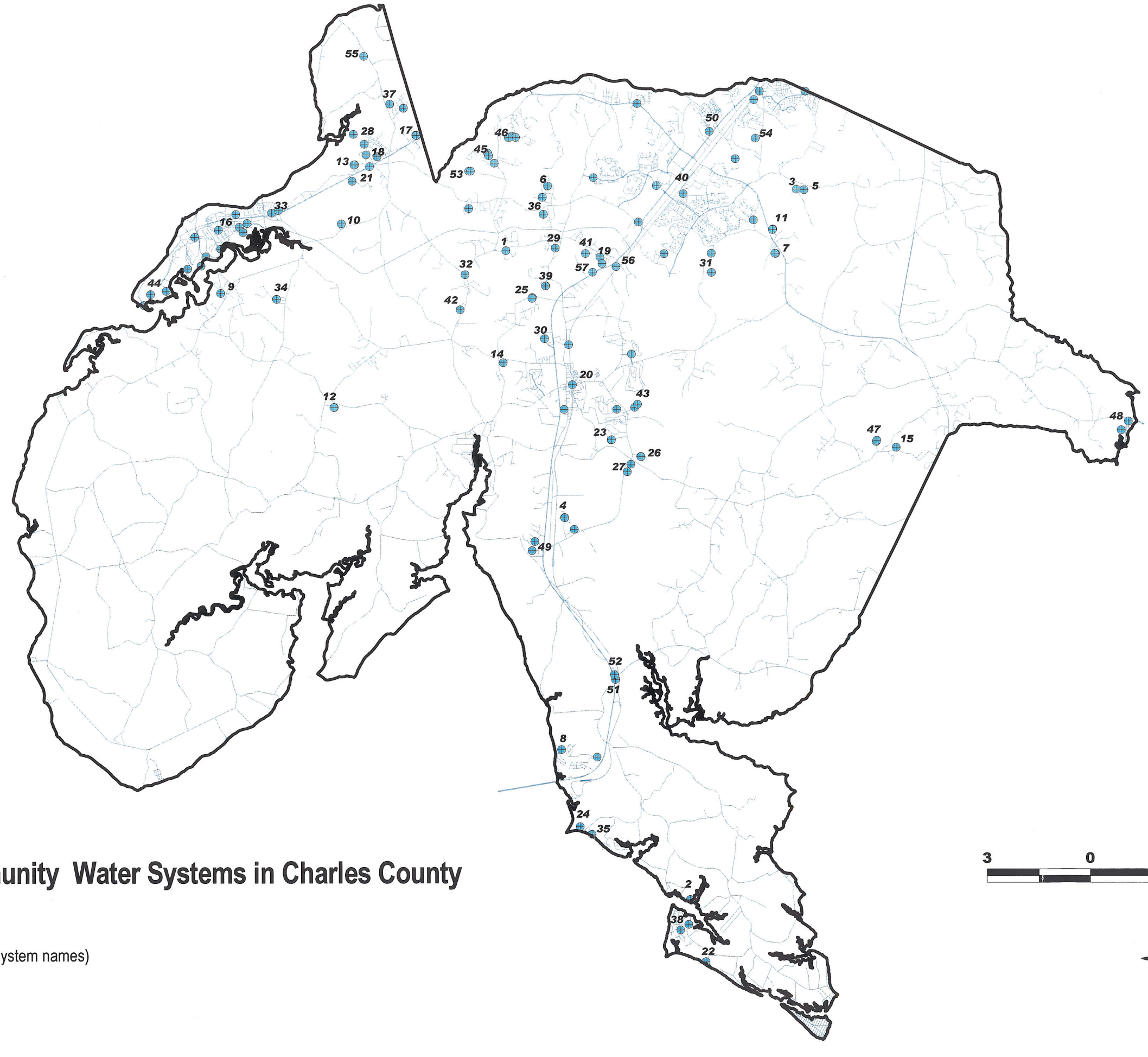


**Figure 1. Community Water Systems in Charles County**

(see table 1 for system names)

3 0 3 6 Miles

N

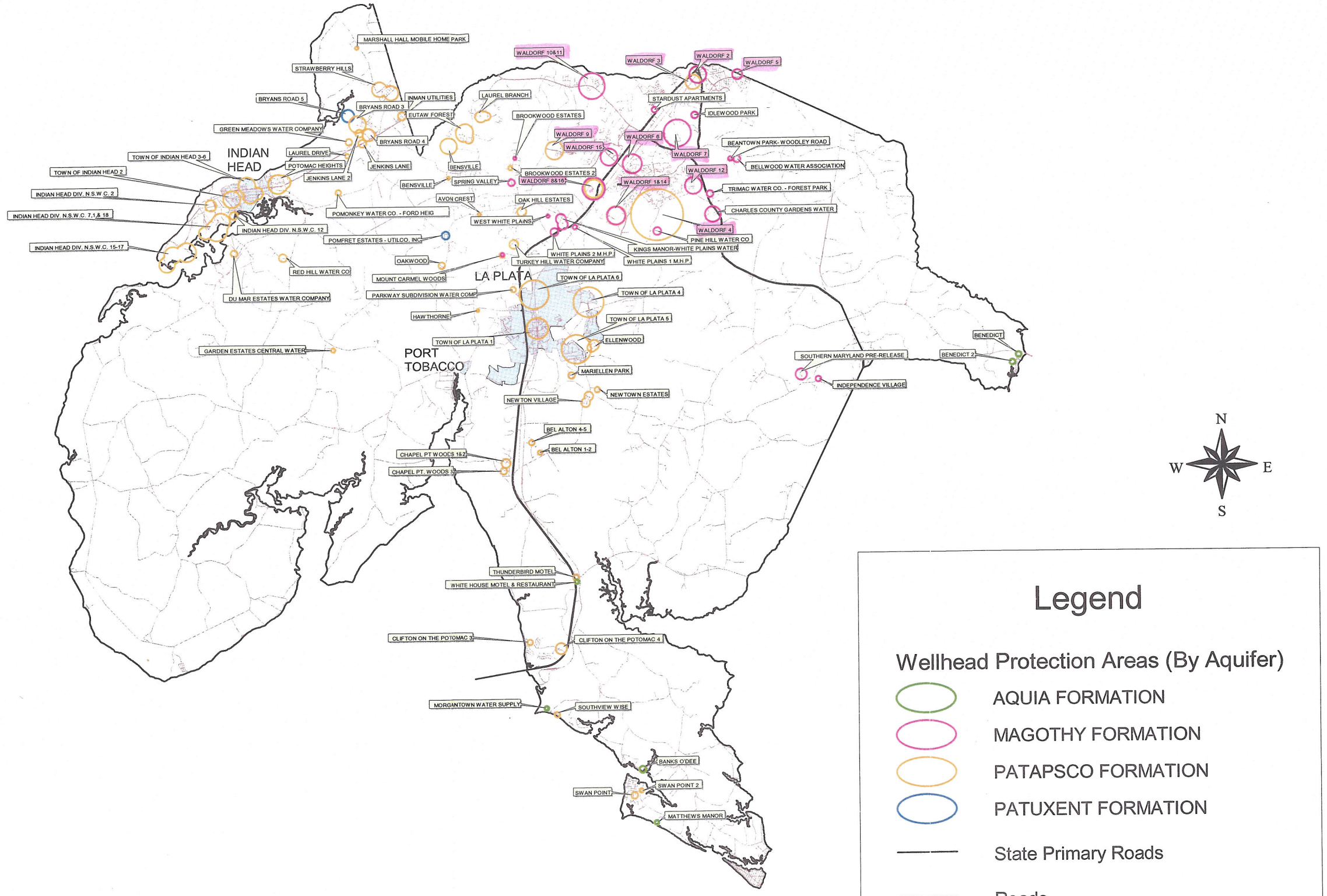


**Figure 2. Community Water System**
**Wellhead Protection Areas in Charles County, MD**

# APPENDIX

## Table 1.—Generalized subsurface stratigraphy of the Waldorf area, Charles County, Maryland

| Erathem | System | Series | European stage | Group | Formation [1/] | Lithology | Aquifers and hydrologic properties | Formation thickness (feet) |
|---|---|---|---|---|---|---|---|---|
| Cenozoic | Tertiary | Pliocene ? Miocene | Upper | | Upland Deposits (Western Shore) | Orange-tan medium to coarse sand and gravel; silts and clays. | The surficial aquifer; can provide small amounts of water. | 20-50 |
| | | | Middle to Lower | Chesapeake | Calvert Formation | Brownish-green clays and clayey silts. | Leaky confining unit. | 90-100 |
| | | Eocene | Middle to Lower | Pamunkey | Nanjemoy Formation | Medium to dark greenish-black, silty clays and some fine clayey sands; glauconitic | Leaky confining unit. | 90-125 |
| | | ? | ? | | Marlboro Clay | Medium reddish-brown and light gray clays. | Confining unit. | 15-30 |
| | | Paleocene | Upper | | Aquia Formation | Greenish-black, glauconitic, silty clays and fine sands. Some glauconitic, fine to medium sands. Fossiliferous. | The Aquia aquifer and leaky confining units. | 100-140 |
| | | | Lower | | Brightseat Formation | Greenish-gray, fine, clayey, silts and sands, glauconitic. | Leaky confining unit. | 0?-15 |
| Mesozoic | Cretaceous | Upper | Maestrichtian | | Severn Formation | Gray, medium to coarse, clean quartzose sands. Some dark and light gray silty clays. Glauconite bearing at some localities. | The Monmouth aquifer; part of the Waldorf aquifer system. Also forms a leaky confining unit. | 0-70 |
| | | | Lower Campanian to Santonian | | Magothy Formation | Gray, fine to coarse, clean, quartzose sands with some small gravel. Some light gray clays. | The Magothy aquifer. Part of the Waldorf aquifer system. | 0-95 |
| | | ? | Cenomanian | Potomac | Patapsco Formation | Grayish tan to brownish gray fine to coarse, clean to clayey, and silty sands; and hard, variegated, red, gray and brown clays. | The St. Charles aquifer, part of the Waldorf aquifer system. The White Plains aquifer. The La Plata aquifer system. Also forms leaky and tight confining units. | 800-900 |
| | | Lower | Albian | | Arundel Formation | Variegated red, gray and brown, hard and tight clays. Some silty and fine sandy lenses. | Effective and widespread confining unit. | 200-260 |
| | | | Lower Albian to Barremian | | Patuxent Formation | Gray and tan, fine to coarse sands; and hard variegated, red brown, and gray clays. | The Patuxent aquifer system | 220-350 |
| | Jurassic (?) Triassic (?) | | | Newark (Super group) | | Consolidated red shales, sandstones, and conglomerates. | None | 0 -? |
| Paleozoic | | | | Wissahickon (?) | | Crystalline metamorphics, chlorite schists, and gneisses. | None | ? |

From M.G.S. R.I. No. 53

# EXECUTIVE SUMMARY
# AVON CREST

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Avon Crest water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Avon Crest water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Avon Crest water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# BANKS O'DEE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Bank's O'Dee water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Bank's O'Dee water system is currently using one well that pumps water from the Aquia Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Banks O'Dee water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# BEANTOWN PARK-WOODLEY ROAD

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Beantown Park-Woodley Road water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Beantown Park-Woodley Road water system is currently using one well that pumps water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Beantown Park-Woodley Road water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# BEL ALTON

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Bel Alton water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Bel Alton water system is currently using four wells that pump water from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Bel Alton water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# BELLEWOOD WATER ASSOCIATION

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Bellewood Water Association water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Bellewood Water Association water system is currently using three wells that pump water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. . It was determined that the Bellwood Water Association water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# BROOKWOOD ESTATES

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Brookwood Estates water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Brookwood Estates water system is currently using two wells that pump water from the Magothy and the Patapsco Formations, respectively. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Brookwood Estates water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# CHARLES COUNTY GARDENS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Charles County Gardens water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Charles County Gardens water system is currently using two wells that pump water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that Charles County Gardens water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# CLIFTON-ON –THE-POTAMAC

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Clifton-on-the-Potomac water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Clifton-on-the-Potomac water system is currently using two wells that pump water from the Patapsco Formations. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Clifton-on-the-Potomac water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# DU MAR ESTATES

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Du Mar Estates water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Du Mar Estates water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Du Mar water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# POMONKEY WATER COMPANY- FORD HEIGHTS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Pomonkey Water Company – Ford Heights water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Pomonkey Water Company – Ford Heights water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Pomonkey Water Company – Ford Heights water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible of arsenic, a naturally occurring element in the aquifer sediments. The susceptibility of the supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted of that contaminant.

# EXECUTIVE SUMMARY
# TRIMAC WATER COMPANY- FOREST PARK

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Trimac Water Company – Forest Park water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Trimac Water Company – Forest Park water system is currently using one well that pumps water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Trimac Water Company – Forest Park water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# GARDEN ESTATES CENTRAL WATER

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Garden Estates Central water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Garden Estates Central water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Garden Estates Central water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# GREEN MEADOWS WATER COMPANY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Green Meadows Water Company water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Green Meadows Water Company water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Green Meadows Water Company water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# HAWATHORNE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Hawthorne water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Hawthorne water system is currently using one well that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Hawthorne water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# INDEPENDENCE VILLAGE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Independence Village water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Independence Village water system is currently using one well that pump water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Independence Village water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# TOWN OF INDIAN HEAD

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Town of Indian Head water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Town of Indian Head water system is currently using four wells that pump water from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems, and Figure 3c the potential point sources of contamination specific to the Town Indian Head's water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Town of Indian Head water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# INMAN UTILIES

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Inman Utilities water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Inman Utilities water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems, and Figure 3a the potential point sources of contamination specific to the Inman Utilities water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Inman Utilities water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# JENKINS LANE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Jenkins Lane water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Jenkins Lane water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Jenkins Lane water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to arsenic, a naturally occurring element found in the aquifer sediments.

# EXECUTIVE SUMMARY
# KINGS MANOR-WHITE PLAINS WATER COMPANY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Kings Manor-White Plains water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Kings Manor-White Plains water system is currently using two wells that pump water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Kings Manor-White Plains water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# TOWN OF LA PLATA

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Town of La Plata water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Town of La Plata water system is currently using four wells that pump water from the Patapasco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems and figures 3j and k show potential contaminant sources specific to the Town of La Plata water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Town of La Plata water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# LAUREL DRIVE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Laurel Drive water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Laurel Drive water system is currently using one well that pumps water from the Patapasco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Laurel Drive water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to arsenic, a naturally occurring element, found in the aquifer sediments. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adapted for this contaminant.

# EXECUTIVE SUMMARY
# MATHEWS MANOR

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Mathews Manor water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Mathews Manor water system is currently using one well that pumps water from the Aquia Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Mathews Manor water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adapted for this contaminant.

# EXECUTIVE SUMMARY
# MARIELLEN PARK

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Mariellen Park water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Mariellen Park water system is currently using two wells that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Mathews Manor water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to arsenic, a naturally occurring element found in the aquifer sediments. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adapted for this contaminant.

# EXECUTIVE SUMMARY
# MORGANTOWN WATER SUPPLY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Morgantown water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Morgantown water system is currently using one well that pumps water from the Aquia Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Morgantown Manor water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to arsenic, a naturally occurring element found in the aquifer sediments. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adapted for this contaminant.

# EXECUTIVE SUMMARY
# MOUNT CARMEL WOODS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Mount Carmel Woods water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Mount Carmel Woods water system is currently using one well that pumps water from the Patapsoc Formation and two wells that pump water from the Magothy Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Mount Carmel Woods water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# NEWTOWN ESTATES

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Newtown Estates water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Newtown Estates water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Newtown Estates water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# NEWTOWN VILLAGE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Newtown Village water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Newtown Village water system is currently using three wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Newtown Village water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to arsenic, a naturally occurring element found in the aquifer sediments. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# BRYANS ROAD

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Bryans Road water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Bryans Road water system is currently using two wells that pump water from the Patapsco Formation and one from the Patuxent Formation. A second Patuxent well was recently drilled, but is not in service yet. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Bryans Road water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# OAK HILL ESTATES

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Oak Hill Estates water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Oak Hill Estates water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Oak Hill Estates water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# PARKWAY SUBDIVISION WATER COMPANY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Parkway Subdivision Water Company water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Parkway Subdivision Water Company water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Parkway Subdivision Water Company water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend on the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# PINE HILL WATER COMPANY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Pine Hill Water Company water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Pine Hill Water Company water system is currently using one well that pumps water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Pine Hill Water Company water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend on the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# POMFRET ESTATES –UTILCO, INC.

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Pomfret Estates – Utilco, Inc. water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Pomfret Estates – Utilco, Inc. water system is currently using one well that pumps water from the Patuxent Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Pomfret Estates - Utilco water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# POTOMAC HEIGHTS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Potomac Heights water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Potomac Heights water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems and Figure 3b shows potential contaminant sources specific to the Potomac Heights water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Potomac Heights water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# RED HILL WATER COMPANY, INC.

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Red Hill Water Company, Inc. water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Red Hill Water Company, Inc. water system is currently using two wells that pump water from the Patapsco Formation. A new well drilled recently has not been yet been connected to the system. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Red Hill Water Company, Inc. water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# SOUTHVIEW WISE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Southview Wise water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Southview Wise water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Southview Wise water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# SPRING VALLEY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Spring Valley water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Spring Valley water system is currently using one well that pumps water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Spring Valley water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# STRAWBERRY HILLS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Strawberry Hills water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Strawberry Hills water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Strawberry Hills water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL for that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# SWAN POINT

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Swan Point water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Swan Point water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Swan Point water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to arsenic, a naturally occurring element in the aquifer sediments.

# EXECUTIVE SUMMARY
# TURKEY HILL WATER COMPANY

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Turkey Hill water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Turkey Hill water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Turkey Hill water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# WALDORF

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Waldorf water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Waldorf water system is currently using nine wells that pump water from the Magothy Formation and six wells from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems and figures 3f-h show potential contaminant sources specific to the Waldorf water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Waldorf water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# WEST WHITE PLAINS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the West White Plains water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The West White Plains water system is currently using one well that pumps water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the West White Plains water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# OAKWOOD

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Oakwood water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Oakwood water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Oakwood water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# ELLENWOOD

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Ellenwood water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Ellenwood water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Ellenwood water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# INDIAN HEAD DIVISION, N.S.W.C.

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Indian Head Division, N.S.W.C. water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Indian Head Division, N.S.W.C. water system is currently using eight wells that pump water from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Indian Head Division, N.S.W.C. water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# EUTAW FOREST

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Eutaw Forest water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Eutaw Forest water system is currently using three wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Eutaw Forest water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# LAUREL BRANCH

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Laurel Branch water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Laurel Branch water system is currently using three wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Laurel Branch water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# SOUTHERN MARYLAND PRE-RELEASE UNIT

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Southern Maryland Pre-Release Unit water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Southern Maryland Pre-Release Unit water system is currently using three wells that pump water from the Aquia Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems and figure 31 shows potential contaminant sources specific to the Southern Maryland Pre-Release Unit water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Southern Maryland Pre-Release Unit water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# BENEDICT

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Benedict water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Benedict water system is currently using two wells that pump water from the Aquia Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Benedict water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to arsenic, a naturally occurring element that is found in the aquifer sediments.

# EXECUTIVE SUMMARY
# CHAPEL POINT WOODS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Chapel Point Woods water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Chapel Point Woods water system is currently using three wells that pump water from the Patapsco Formation. The Source Water Assessment areas were delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Chapel Point Woods water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants and arsenic.

# EXECUTIVE SUMMARY
# STARDUST APARTMENTS

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Stardust Apartments water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Stardust Apartments water system is currently using one well that pumps water from the Magothy Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems and figure 3e shows potential contaminant sources specific to the Stardust Apartments water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Stardust Apartments water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# WHITE HOUSE MOTEL & RESTAURANT

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the White House Motel & Restaurant water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The White House Motel & Restaurant water system is currently using one well that pumps water from the Aquia Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the White House Motel & Restaurant water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# THUNDERBIRD MOTEL

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Thunderbird Motel water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Thunderbird Motel water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Thunderbird Motel water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# BENSVILLE

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Bensville water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Bensville water system is currently using two wells that pump water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Bensville water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

# EXECUTIVE SUMMARY
# IDLEWOOD PARK

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Idlewood Park water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Idlewood Park water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Idlewood Park water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply was determined to be susceptible to naturally occurring radiological contaminants.

# EXECUTIVE SUMMARY
# MARSHALL HALL MOBILE HOME PARK

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the Marshall Hall Mobile Home Park water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Marshall Hall Mobile Home Park water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Marshall Hall Mobile Home Park water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# WHITE PLAINS 1 MOBILE HOME PARK

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the White Plains 1 Mobile Home Park water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The White Plains 1 Mobile Home Park water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems and figure 3i shows potential contaminant sources specific to the White Plains 1 Mobile Home Park water supply.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the White Plains 1 Mobile Home Park water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

# EXECUTIVE SUMMARY
# WHITE PLAINS 2 MOBILE HOME PARK

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for fifty-seven community water systems in Charles County, including the White Plains 2 Mobile Home Park water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply to contamination. Recommendations for protecting the drinking water supplies conclude this report.

The water supply sources of the community systems in Charles County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The White Plains 2 Mobile Home Park water system is currently using one well that pumps water from the Patapsco Formation. The Source Water Assessment area was delineated by the WSP using U.S. EPA approved methods specifically designed for supplies in confined aquifers.

Potential point sources of contamination were researched and identified within the assessment areas from field inspections, contaminant and well inventory databases, and land use maps. Well information and water quality data were also reviewed. Figure 2 shows the Source Water Assessment areas for all the water systems.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the White Plains 2 Mobile Home Park water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.