

Source Water Assessment for Non-Community Systems in Anne Arundel County

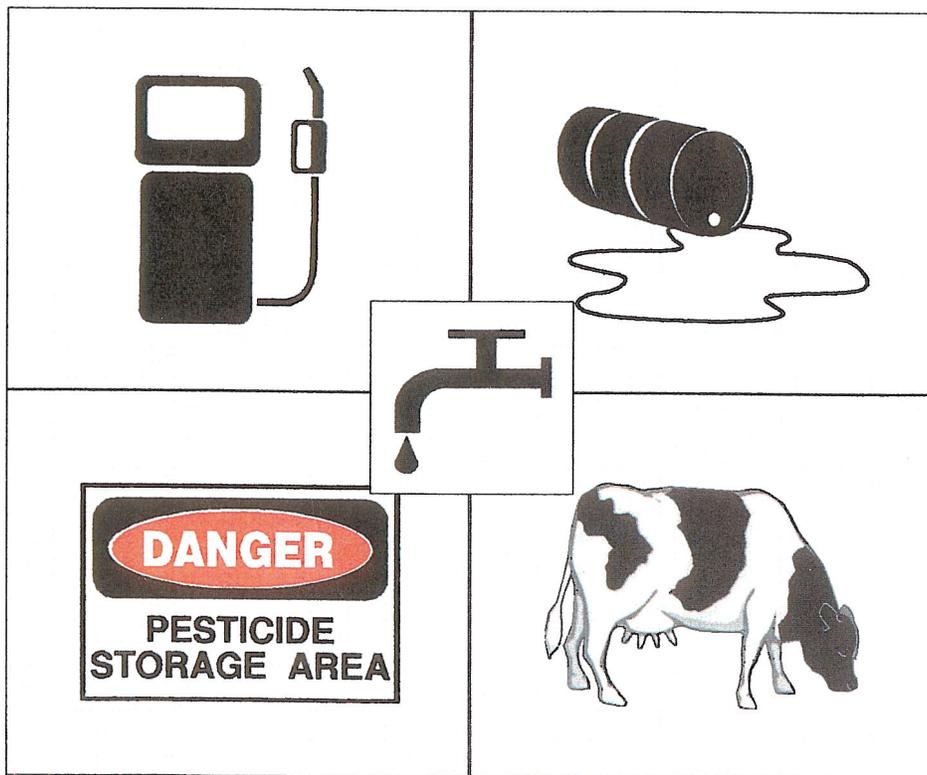


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Abstract

The Anne Arundel County Department of Health has conducted a Source Water Assessment for 441 transient and non-transient water systems in Anne Arundel 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 the source; 2) identification of potential sources of contamination; and 3) determination of the susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

Non-community systems in the county use both confined and unconfined aquifers as water sources. Unconfined aquifers, by their very nature, are at greater risk from surface contamination than are confined aquifers. Of the 491 source wells serving the non-community facilities, 190 are confined and 301 are unconfined. Naturally occurring contaminants, such as radionuclides, are not necessarily dependent on whether or not the source is confined.

Non-community well locations and potential point sources of contamination throughout the county were identified from contaminant inventory databases. Each site was located using Global Positioning Satellite (GPS) technology and was entered into the County's Geographic Information System (GIS). Assessment areas, with size and shape based on given criteria, were created around each unconfined well location. All this information, along with land use data, utility location and aerial photography, was then available as separate or combined layers within the GIS.

For each system, the Anne Arundel County Department of Health reviewed water quality results, including some taken specifically for the study. These results, along with potential contaminant information within the assessment area and well construction information, were used to determine susceptibility to a variety of contaminants. A majority of the wells in the northern portion of the county were found to be susceptible to contamination by naturally occurring radium. Microbial susceptibility, though somewhat widespread, is generally thought to be associated with well construction or well condition.

Susceptibility to nitrate and chloride contamination was also prevalent in some areas. VOC susceptibility is more specifically associated with current or former service stations. In spite of the relatively large number of wells considered as susceptible, most of the supply sources were not susceptible to surface contaminants, and it appears from site visits that proper well construction practices are being followed.

INTRODUCTION

The Anne Arundel County Department of Health, under contract with the Maryland Department of the Environment, Water Supply Program, conducted a Source Water Assessment of all Non-Community transient and non-transient public drinking water facilities within the County (Figure 1). Non-Community systems are generally small water systems that serve 25 or more people a day at least 60 days a year. With transient systems, those served can vary from day to day, as is found in restaurants, churches, hotels and parks. With non-transient systems, the same people may drink the water daily, as is found with large office facilities, day care centers and schools.

Water sampling requirements as established by the Environmental Protection Agency (EPA) are different for the two kinds of Non-Community systems. Transient facilities require periodic testing for only coliform bacteria, nitrate and nitrite. Non-transient facilities require periodic testing for various inorganic chemicals, pesticides, and volatile organic compounds (VOCs) in addition to coliform bacteria.

Anne Arundel County is located in the central portion of the State and is part of the Coastal Plain physiographic province. All of the County's Non-Community systems utilize water from wells drilled into the unconsolidated sediments of the local aquifers. For the purpose of this report; site type, well depth, elevation, lithology, and nitrate data were used to determine the type and size of the assessment area (if any) to be assigned to each facility.

Each of the wells of each of the water system facilities covered in this report was visited, many several times, for the purpose of data collection, sampling, contamination surveys and personal interviews. This report reflects the results of the study and is submitted as partial requirement of the conditions of the contract.

HYDROGEOLOGY

(Bolton, 1999; Hansen, 1972; Mack, 1962)

Anne Arundel County is located in the Coastal Plain Physiographic Province in the central portion of Maryland. It is underlain by southeasterly dipping beds of unconsolidated sands, gravels, silts and clays ranging in thickness from a few feet in the northwestern part of the county to over 2000 feet thick in the southeastern part. These unconsolidated sediments overlie basement rock, which is not used as a source of water in the County.

Wells in the northern part of the county have traditionally been drilled into the outcrop areas of the Patuxent, Patapsco, Magothy and Aquia Formations (Figure 2). Due to the recently discovered presence of radium in these shallow aquifers, newly constructed wells must meet a depth requirement which places them into confined aquifers, penetrating through the outcropping sediments.

The oldest of the aquifers in common use in the county is the Patuxent, which outcrops in the extreme northwestern corner of the county as well as in Howard and Baltimore counties. The lithology of the formation is variable, with water bearing-sands varying from tens of feet to over 150 feet in parts of Prince Georges County.

The Patapsco Formation is the next oldest of the county's aquifers and has been considered the most productive. Often divided into Upper and Lower aquifers, it outcrops in a band about 6 miles wide in the northern part of the county. The formation itself consists of inter-bedded silt, clay, and argillaceous- quartzose sand deposited in a fluvial and swampy environment.

The Magothy Formation, which was deposited in a fluvio-marine environment, overlies the Patapsco and consists of medium to coarse grained quartzose sand and fine gravel, inter-bedded with dark gray silts and clays. Lignite and pyrite are important accessory minerals. Although the Magothy is commonly used as an aquifer in the central and northern part of the county, the water is acidic and high in iron content.

Most wells in the southern part of the county are drilled into the Aquia Formation (also called the Aquia Greensand) which was deposited in a marine environment and consists of fine to coarse- grained sand inter-bedded with silts, clays, and indurated calcite-cemented sands and fossil beds. Glauconite and goethite make up between 20 and 50% of the formation. The water quality from the Aquia is considered excellent, though calcium carbonate content may be high.

All of the aquifers become progressively deeper to the south and east (Figure 3) and are overlain by relatively impermeable layers that result in confined ground-water conditions. The confined aquifers are replenished by infiltrating water in the recharge areas to the north and west, and to a lesser degree from water entering from the relatively impermeable layers above and below the aquifers.

GPS Equipment Description and Data Collection

Two different GPS systems were used to establish positions for this study. Each potential contaminant source was plotted utilizing the Trimble GeoExplorer 3. Since many of these potential contaminant sites had no precise feature to map, the reduced accuracy of this system (around 20 feet) was of little consequence. Nevertheless, every attempt was made to obtain as precise a position as possible.

Precise locations of each well at each Non-Community facility were obtained using the Trimble TSC1 system, which, with proper data logging and screening, increases system accuracy to under three feet.

Radium Considerations

Anne Arundel County conducted a pilot study of well water from September 1997 to March 1998. During the pilot study, naturally occurring radium was found in 22 wells in northern Anne Arundel County. Fifteen of these wells exceeded the level established by the U.S. Environmental Protection Agency for public drinking water supplies. A larger study conducted by the Maryland Department of the Environment in 1998 confirmed the presence of naturally occurring radium in groundwater in northern Anne Arundel County. Figure (4) shows the effected area of the county and gives a compilation of radium testing results.

Since March 2002 all wells drilled in the northern portion of the county must be installed to a minimum well depth and meet drinking water standards for radium. Minimum well depth is determined based on a computer model which considers distribution of radium data, well depths, property elevations, and data from deep test wells. Figure (5) shows minimum required depths (below sea level) for the effected areas.

Potential Sources of Contamination

Point Sources

As a preliminary step for this project, the Anne Arundel County Health Department obtained, from various programs within the Maryland Department of the Environment, lists of potential point sources of contamination. The lists included underground storage tank (UST) sites, former and active oil control (LUST) sites, CERCLA sites, pesticide dealers, hazardous waste generators, NPDES sites and sites permitted for general discharge. With additional local information on dump sites, sludge sites, old scavenger sites and landfills, a master list of potential point source contaminant sites, with over 1600 entries, was created. Each of these sites were visited by a county employee to map (GPS) and verify (Figure 6). All sites within assessment areas have been plotted and are displayed in the appended figures. Additional site information is available in the attached data disk.

Non-point sources

The Maryland Office of Planning's Land Use map for Anne Arundel County (Figure 6a) was used in determining non-point sources of contamination, such as agriculture and industry. This information was used primarily for determination of the most appropriate sampling sites to augment existing water quality data.

A significant portion of the county is served by on-site waste disposal systems (Figure 7). Several areas of the county have documented cases of elevated levels of nitrates in the ground water as a result of septic system discharge, leaky clay sewer pipes or farming practices. Figure (8) is a compilation of data from the wells of residential properties showing areas of elevated nitrates. This information was used in determining sampling strategy for the assessment.

Chloride contamination data was also available from previously sampled residential wells. The source of this contamination is generally considered to be either saltwater intrusion from nearby tributaries of the Chesapeake Bay or from the backwashing of ion exchange water treatment systems in areas with heavy iron or radium. Road salt storage facilities have also led to chloride problems in the past. Figure (9) shows areas of elevated chlorides.

County Well Construction Information

Well construction information, where available, was found in either Water Supply Program records or the county data base. Of the 491 wells researched, no permit data was found for 135. For each of the wells without permit data an assumption of the well construction was made based on the depths of nearby wells, water quality data and an interview with the owner/operator. It was concluded that 190 wells were completed into confined aquifers and 301 were completed into unconfined aquifers.

To make the best use of the county's GIS system, it was determined that each non-community well should be accurately located with GPS. This was accomplished during facility site visits and the positions are now a part of the facility record, which will be updated as new wells are drilled. Most of the well heads were above grade, and those with construction problems were corrected as directed.

Source Water Assessment Area Delineation

Source water assessment areas were determined by the Maryland Department of the Environment (MDE), in consultation with the U. S. Geologic Survey and provided to the Anne Arundel County Health Department. The type of assessment area assigned to each facility depends on the type of facility (transient or non-transient), whether the source well is confined or unconfined, whether or not a definite direction of ground water flow can be determined and the amount of water usage. The following scheme was used in assigning assessment areas:

Non-community transient facilities

Confined wells

- No assessment area assigned

Unconfined wells

- 1000 foot radius circle if no flow direction could be determined
- 60 degree wedge with a 1000 foot radius if flow direction was known

Non-community non-transient facilities

Confined wells

- Using more than 10,000 gallons a day. Florida Method as described in Figure 10.
- Using less than 10,000 gallons a day. 600 foot radius circle.

Unconfined wells

- Using more than 10,000 gallons a day. WHPA method (computed individually by MDE)
- Using less than 10,000 gallons a day.
1000 foot radius circle if no groundwater flow direction was determined
- 60 degree wedge with 1000 foot radius if groundwater flow direction was determined

The position of each well requiring an assessment area, the plotted assessment area, and known potential sources of contamination are displayed on aerial photographs in the appendices. Figure 10 gives examples of the shapes utilized.

Water Quality Data

Water quality data was, in part, used to determine whether a well was to be considered as confined or unconfined for the purpose of this study. For non-transient systems, water quality data was obtained from MDE's Water Supply Program. As this data often reflects results from treated water systems, information on water treatment systems was also considered. For transient systems, which are under county purview, local records from raw water samples were reviewed.

Since transient systems are only required to submit periodic sample results for nitrogen compounds and coliform bacteria, additional sampling, for radium, VOCs, pesticides, and viruses was conducted by the Anne Arundel County Department of Health. Results from all sources were used in the final determination of susceptibility for each site.

Water Quality Testing

Radionuclides - Each transient and non-transient system in the county's radium testing area (Figure 4) was tested for short term gross alpha particles. Raw water was sampled at all but a few facilities, and treated water was sampled where appropriate treatment was installed. A total of 211 raw water samples and 85 treated samples were collected by the county and analyzed for gross alpha by the state laboratory. In the 56 cases where results fell between 5 and 15 picocuries per liter, additional sampling for Radium 226/228 was undertaken. Results from gross alpha testing are shown in table (1).

Volatile Organic Compounds - Sixty-one sites were selected for VOC (method 524.2) sampling (Figure 11). In selecting these sites, consideration was given to geographic distribution, aquifer distribution and proximity to potential contaminant sources. Results may be found in table (2).

Inorganic Chemicals - Thirty-five sites were chosen for inorganic chemical sampling. Parameters selected for analysis include: dissolved solids, hardness, fluoride, nitrate, nitrite, total solids and turbidity. Testing sites were determined based on geographic and aquifer distribution. Results may be found in Table (2).

Heavy Metals - Water testing for heavy metals included: antimony, arsenic, barium, beryllium, cadmium, chromium, copper, mercury, nickel, selenium, silver, thallium, aluminum, calcium, magnesium, manganese, and zinc. Thirty-six sites were tested, with site selection based on geographic and aquifer distribution. None of the results showed levels above MCLs. Results may be found in table (2).

Synthetic Organic Compounds - Sixty-one wells were tested for EDB and DBCP (method 504.1) Well selection was based primarily on proximity to agricultural activities. Only one well tested positive, for EDB, at a level below the MCL. Results may be found in Table (2).

Viruses - At the request of the Maryland Department of the Environment Water Supply Program, 45 wells were tested for the presence of male specific and somatic coliphages. Sample site selection was based on proximity to areas with known elevated levels of nitrates, on sites where significant bacterial contamination had occurred and on areas served by drywell systems. Sampling was done by AAHD Sanitarians and the analysis was accomplished by Clancy Environmental Consultants, using EPA method (under consideration) 1601. No positive results were reported.

Quality control. Samples were collected and analyzed in accordance with the Water Sampling/Quality Assurance Plan submitted to the Water Supply Program prior to the commencement of sampling activity (Appendix A). In the case of viral sampling, in addition to laboratory quality assurance processes, a positive control was introduced to an unknown sample in the field and properly detected and reported by laboratory personnel.

Result notification. Owners or managers of all transient systems tested by AAHD were provided a copy of test results and an explanation, where required. MDE assumed the responsibility for notifying owners/managers of non-transient systems of results.

Susceptibility Analysis

Each non-community system, whether unconfined or confined, was evaluated with regards to its water system susceptibility (Table 4). Contaminant sources were reviewed, as were sample results for the site in question and for nearby sites. A total of 227 wells were evaluated as being susceptible to some sort of contamination (Figure 11). Susceptibility evaluations were made based on the criteria for each contaminant as listed below:

Radionuclides - The occurrence of radionuclides in the well water in the northern portion of Anne Arundel County, although depth dependent, is mostly independent of whether or not the individual well is confined or unconfined. Any well with a gross alpha reading over 15 picocuries per liter was evaluated as being susceptible to contamination by radionuclides. Wells with gross alpha measurements of 5-15 picocuries per liter were re-sampled, where possible, for radium 226/228. Those wells found to have radium 226/228 levels above 5 picocuries per liter were considered to be susceptible to contamination by radionuclides. Wells having gross alpha or radium 226/228 at or below 5 pico curies per liter were considered as not susceptible to radionuclide contamination. A total of 122 wells were found to be susceptible to radionuclide contamination (Table 4).

Surface source contaminants - Wells serving both transient and non-transient non-community systems in the county all draw their water from the unconsolidated sedimentary aquifers previously described. The wells deriving their water from confined aquifers are, if properly constructed, protected from surface contamination and should not be considered susceptible to surface contaminants. Wells drawing their water from unconfined aquifers may be subject to contamination from surface sources, and therefore have an increased risk of being susceptible. A limited number of wells drilled into confined aquifers have been evaluated as susceptible to surface contamination based solely on having a recent record of VOC or bacterial contamination, or being located on a current or previous LUST site. Although these wells could have been re-classified as unconfined, a decision was made not to do so.

Heavy metal and inorganic compound susceptibility

Only two systems were considered susceptible to contamination by heavy metals, though several had elevated levels of lead and/or copper (attributed to distribution systems).

Of the other inorganic compounds tested for, only nitrate, nitrite and turbidity have primary MCLs. No wells were found to have nitrites above the MCL. A number of wells, however, had significantly elevated levels of nitrates. Those wells with nitrate levels approaching or exceeding 5 ppm were considered as susceptible and are included in Table (4). A total of 83 wells were considered to be susceptible to nitrate contamination. Of these, 13 had levels exceeding the MCL.

Although Chlorides have only a secondary MCL, wells with Chloride levels above 100 ppm were considered as susceptible to surface contamination. For sites where no specific chloride data was available, data from residential sites within the assessment area were considered. A total of 13 wells were evaluated as susceptible to chloride contamination (Table 4).

Microbiological Contaminant Susceptibility

As a matter of course, wells that had 25% or higher coliform failure rate over the last several years were considered to be susceptible to microbial contamination. It is expected, however, that the overwhelming causes of this contamination are associated with either poor well construction or dirty distribution systems. In most cases required chlorination of the well and distribution system has rectified the problem in the short term. There is no evidence that on-site septic systems or contaminated aquifers are responsible for the coliform contamination witnessed. A total of 54 sites were considered to be susceptible to microbial contamination

(Table 4).

Volatile Organic Compounds and Pesticides

Any facility that tested positive for pesticides or VOCs (other than chlorination by-products) was considered as susceptible to contamination, no matter what the level of detection. Wells on or near active or former LUST sites were also considered as susceptible. A total of 80 wells were evaluated as susceptible to contamination by VOCs. This number reflects the increase in gas stations that have been converted to food marts. Eighteen wells were evaluated as being susceptible to pesticide contamination, most of these based on relatively insignificant historic detections.

Summary and recommendations for protecting water supplies

Key findings

- This report identified 122 transient and non-transient non-community water systems that are contaminated with levels of naturally occurring radionuclides above the EPA established MCLs
- Based on the evaluation criteria for microbial susceptibility a large number of wells were evaluated as susceptible to microbial contamination. Since the local aquifers are generally regarded as effective percolating cleansers, and few cases of fecal contamination were found, the causes of microbial contamination are most likely well construction and distribution sanitation problems.
- Nitrate contamination continues to be a significant problem in the county, with on-site waste disposal and agricultural activity the main culprits.
- VOC contamination continues to be a concern in the county, despite previous tank removal programs.

Recommendations for Individual Water System Operators

- ❖ Systems with radionuclide contamination should consider installation of appropriate water treatment for contaminant reduction.
- ❖ Positive Coliform results should be thoroughly investigated, and corrective action initiated so as to preclude future problems.
- ❖ Vermin-proof well caps should be installed on wells that do not have them. Caulking of the electrical conduit will also assist in preventing insect-based contamination.

- ❖ Persistent problem wells should have the pitless adapter inspected and replaced as necessary.
- ❖ Water systems for seasonal facilities should be flushed and chlorinated prior to the opening of each season.
- ❖ Wells in exposed areas should be adequately marked and protected by physical barriers where appropriate.
- ❖ Any work conducted on a well or water distribution system should be followed by disinfection of the entire system.
- ❖ Wells identified as susceptible to VOC contamination should be tested for VOCs on a periodic basis.
- ❖ Well owners should become knowledgeable about their water supply system so that they can recognize potential problems as they arise.

Recommendations for Government Officials

- * Continue regular inspection, testing and oversight of non-community facilities, with emphasis on those deemed as susceptible to surface contamination.
- * Develop policy requiring water treatment for all non-community facilities where test results indicate that radionuclides exceed the MCL. Pre and post-treatment testing to be done through private laboratories, with results sent to AAHD.
- * Encourage efforts to reduce nitrogen loading of the groundwater, especially in regard to on-site waste disposal systems.
- * Establish a statewide policy with regards to saline waste water from ion-exchange water treatment units used to remove radium and other metals from well water.
- * Require radionuclide sampling for all new non-community facilities within the radium testing area. This is already required for new wells.
- * Expand VOC sampling programs to include privately funded periodic testing of transient systems considered as susceptible.
- * Consider areas of high susceptibility when planning for expansion of community water and sewer systems.

Executive Summary
Chesapeake School Complex
PWSID # 102003

The Anne Arundel County Department of Health (AAHD) has conducted a Source Water Assessment for 441 Non-Community drinking water systems in the County, including the Chesapeake School Complex, which has a groundwater appropriations permit for use of over 10,000 gallons of water a day. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are:

1. Delineation of the area that contributes water to the source.
2. Identification of potential sources of contamination.
3. Determination of the susceptibility of the water supply to contamination.

Recommendations for protecting the drinking water supply for this and other facilities are included in this report.

The sources of water supply wells in Anne Arundel County are confined and unconfined, unconsolidated sand and gravel beds, which may be up to several hundred feet thick and are interspersed with variable thickness of silts and clays. The Chesapeake School Complex water system, located on Ventnor Drive in Pasadena, MD is currently using one well that draws water from the Lower Patapsco aquifer. The source water assessment areas for the complex were delineated by AAHD using the EPA approved Florida Method described elsewhere in this report.

Point sources of contamination were identified within the assessment area from contaminant inventory databases and field inspections. The Maryland Office of Planning's 1997 Land Use Map for Anne Arundel County was used with local knowledge to identify non-point sources of contamination. Figures (13) and (14) show land use, potential sources of contamination, the computed assessment areas (one and ten years) and an aerial perspective.

The susceptibility analysis is based on a review of the existing water quality data for the water system, the presence of potential sources of contamination in the individual assessment area, well integrity and the inherent vulnerability of the aquifer. It was determined that the Chesapeake School Complex is not susceptible to contamination.

Executive Summary
Northrop Grumman
PWSID # 1020037

The Anne Arundel County Department of Health (AAHD) has conducted a Source Water Assessment for 441 small systems in Anne Arundel County including Northrop Grumman - Oceanic Division which has a Groundwater Appropriation permit for use of over 10,000 gallons of water per day. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are:

1. Delineation of the area that contributes water to the source.
2. Identification of potential sources of contamination.
3. Determination of the susceptibility of the water supply to contamination.

Recommendations for protecting the drinking water supply are included in this report

The sources of water supply wells in Anne Arundel County are confined and unconfined, unconsolidated sand and gravel beds, which may be up to several hundred feet thick, and are interspersed with variable thicknesses of silts and clays. The Northrup Grumman system, located at 897 Oceanic Drive in Annapolis, Maryland is currently using 2 wells that draw water from the Upper Patapsco aquifer. The source water assessment areas were delineated by AAHD using EPA's approved Florida Method, described later in this report.

Point sources of contamination were identified within the assessment area from contaminant inventory databases and field inspections. The Maryland Office of Planning's 1997 Land Use Map for Anne Arundel County was used with local knowledge to identify non-point sources of contamination. Figures (15) and (16) show land use, potential sources of contamination, the computed assessment areas (one and ten years) and an aerial perspective.

The susceptibility analysis is based on a review of the existing water quality data for the water system, the presence of potential sources of contamination in the individual assessment area, well integrity and the inherent vulnerability of the aquifer. It was determined that the Northrup Grumman-Oceanic facility is not susceptible to contamination.

Executive Summary
Ridgeview Plaza
PWSID #1020082

The Anne Arundel County Department of Health (AAHD) has conducted a Source Water Assessment for 441 Non-Community drinking water systems in the County, including Ridgeview Plaza, which has a groundwater appropriations permit for use of over 10,000 gallons of water a day. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are:

1. Delineation of the area that contributes water to the source.
2. Identification of potential sources of contamination.
3. Determination of the susceptibility of the water supply to contamination.

Recommendations for protecting the drinking water supply for this and other facilities are included in this report.

The sources of water supply wells in Anne Arundel County are confined and unconfined, unconsolidated sand and gravel beds, which may be up to several hundred feet thick and are interspersed with variable thickness of silts and clays. The Ridgeview Plaza water system, located at 2567 Old Annapolis Road in Jessup, Maryland is currently using two wells that draw water from the Patuxent aquifer. The Source Water Assessment Areas were delineated by AAHD using the EPA's approved Florida method described elsewhere in this report.

Point sources of contamination were identified within the assessment area from contaminant inventory databases and field inspections. The Maryland Office of Planning's 1997 Land Use Map for Anne Arundel County was used with local knowledge to identify non-point sources of contamination. Figures (17) and (18) show land use, potential sources of contamination, the computed assessment areas (one and ten years) and an aerial perspective.

The susceptibility analysis is based on a review of the existing water quality data for the water system, the presence of potential sources of contamination in the individual assessment area, well integrity and the inherent vulnerability of the aquifer. It was determined that the Ridgeview Plaza Complex is susceptible to contamination by Radium, based on sample results showing Gross Alpha at 17.4 picoCuries per liter.

Executive Summary
NSA Colony 7 Motel
PWSID # 1020085

The Anne Arundel County Department of Health (AAHD) has conducted a Source Water Assessment for 441 Non-Community drinking water systems in the County, including the NSA Colony 7 Motel which has a groundwater appropriations permit for use of over 10,000 gallons of water a day. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are:

1. Delineation of the area that contributes water to the source.
2. Identification of potential sources of contamination.
3. Determination of the susceptibility of the water supply to contamination.

Recommendations for protecting the drinking water supply for this and other facilities included this report.

The sources of water supply wells in Anne Arundel County are confined and unconfined, unconsolidated sand and gravel beds, interspersed with variable thickness of silts and clays. The NSA Colony 7 Motel water system, located at 9800 Savage Road in Fort Meade, Maryland is currently using two wells that draw water from the Patuxent aquifer. The Source Water Assessment Areas were delineated by AAHD using the EPA's approved Florida Method described elsewhere in this report.

Point sources of contamination were identified within the assessment area from contaminant inventory databases and field inspections. The Maryland Office of Planning's 1997 Land Use Map for Anne Arundel County was used with local knowledge to identify non-point sources of contamination. Figures (19) and (20) show land use, potential sources of contamination, the computed assessment areas (one and ten years) and an aerial perspective.

The susceptibility analysis is based on a review of the existing water quality data for the water system, the presence of potential sources of contamination in the individual assessment area, well integrity and the inherent vulnerability of the aquifer. It was determined that NSA Colony 7 Motel is susceptible to radium contamination based on Gross Alpha sample results of 18.5 picoCuries per liter.

Executive Summary
Elvaton Day Nursery
PWSID #1020084

The Anne Arundel County Department of Health (AAHD) has conducted a Source Water Assessment for 441 Non-Community drinking water systems in the County, including the Elvaton Day Nursery, which has a groundwater appropriations permit for use of over 10,000 gallons of water a day. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are:

1. Delineation of the area that contributes water to the source.
2. Identification of potential sources of contamination.
3. Determination of the susceptibility of the water supply to contamination.

Recommendations for protecting the drinking water supply for this and other facilities are included in this report.

The sources of water supply wells in Anne Arundel County are confined and unconfined, unconsolidated sand and gravel beds, which may be up to several hundred feet thick and are interspersed with variable thickness of silts and clays. Elvaton Day Nursery water system, located at 8410 Elvaton Road in Millersville, Maryland is currently using one well that draws water from the Upper Patapsco aquifer. The Source Water Assessment Area was delineated by AAHD using the EPA's approved methods described elsewhere in this report.

Point sources of contamination were identified within the assessment area from contaminant inventory databases and field inspections. The Maryland Office of Planning's 1997 Land Use Map for Anne Arundel County was used with local knowledge to identify non-point sources of contamination. Figures (21) and (22) show land use, potential sources of contamination, the computed assessment area and an aerial perspective.

The susceptibility analysis is based on a review of the existing water quality data for the water system, the presence of potential sources of contamination in the individual assessment area, well integrity and the inherent vulnerability of the aquifer. It was determined that the Elvaton Day Nursery is susceptible to radium contamination based on water sampling results from nearby properties.

REFERENCES

Bolton, D.W. and Hayes, M.A. 1999, Pilot Study of Carcinogens in Well Water in Anne Arundel County, Maryland: Maryland Geologic Survey Open-File Report No. 99-02-10

Hansen, H.J., 1972, A Users Guide for the artesian aquifers of the Maryland Coastal Plain, Part two: Aquifer Characteristics: Maryland Geologic Survey, 123p

Mack, F.K., 1962, Ground Water Supplies for Industrial and Urban Development in Anne Arundel County: Maryland Department of Geology, Mines and Water Resources, 90p

Anne Arundel County

Non-Community Systems Transient vs Non-Transient

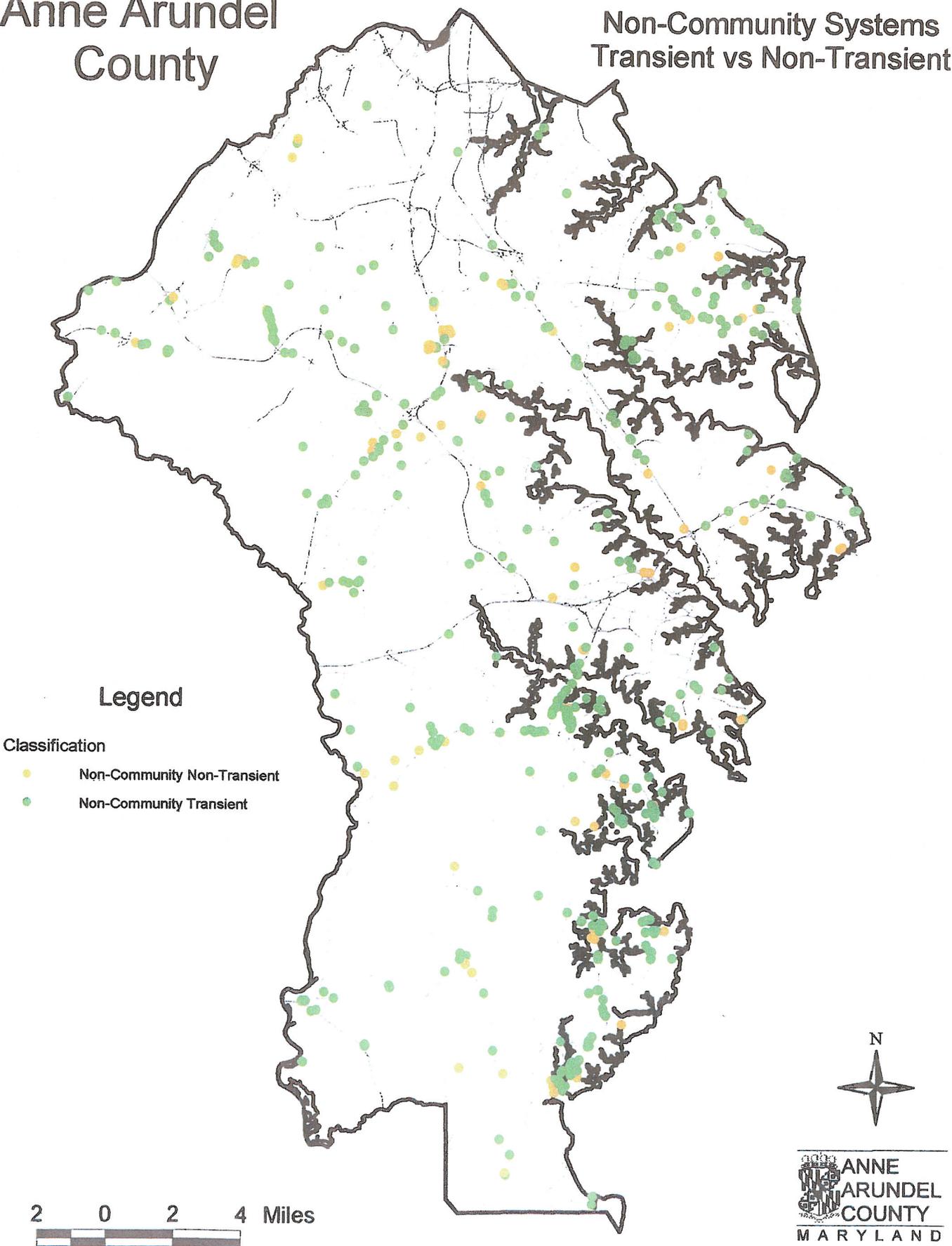
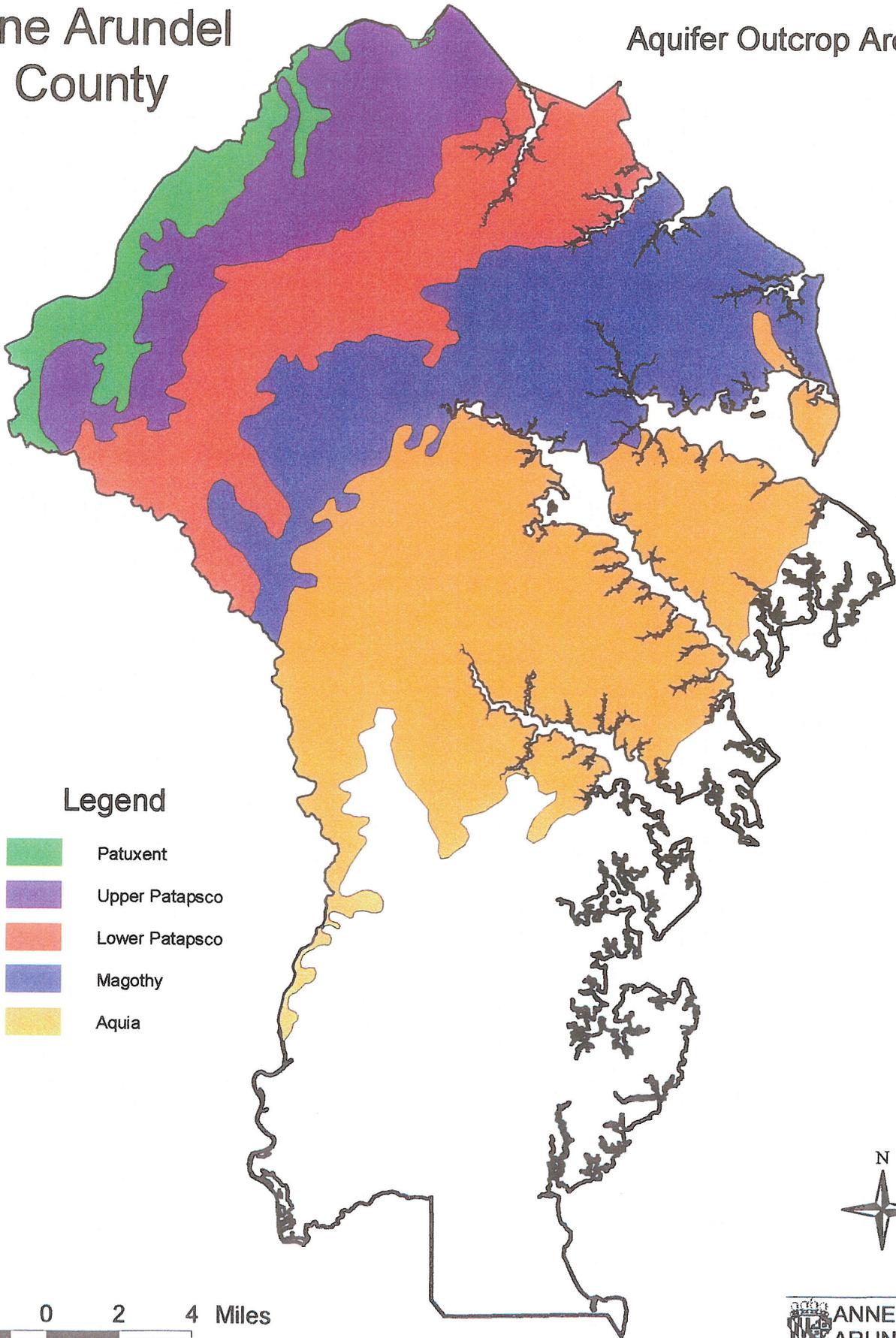


Figure 1

Anne Arundel County

Aquifer Outcrop Areas



Legend

- Patuxent
- Upper Patapsco
- Lower Patapsco
- Magothy
- Aquia

2 0 2 4 Miles

Figure 2

Anne Arundel County Geologic Cross-sections

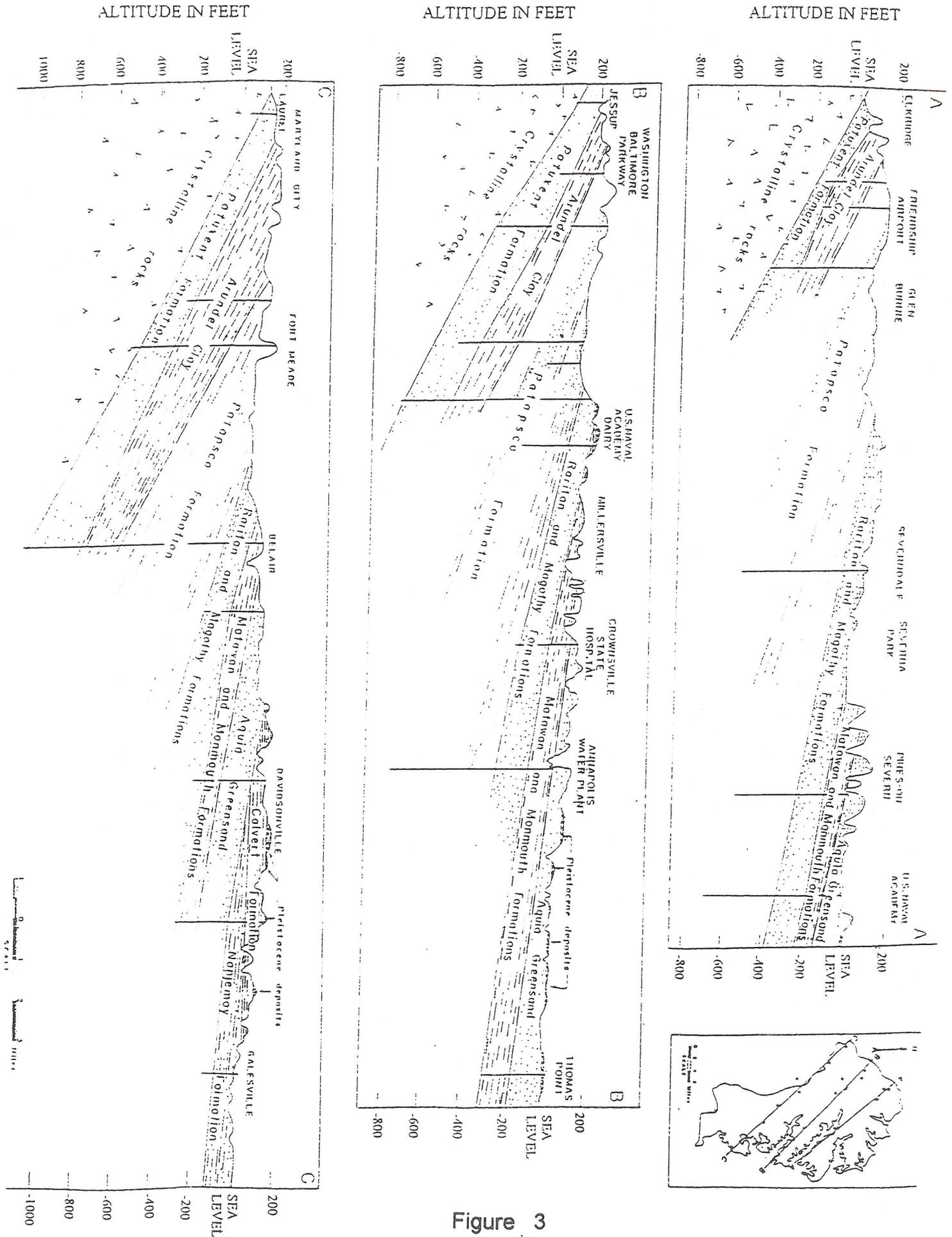


Figure 3

Anne Arundel County

Radium Testing Result Compilation

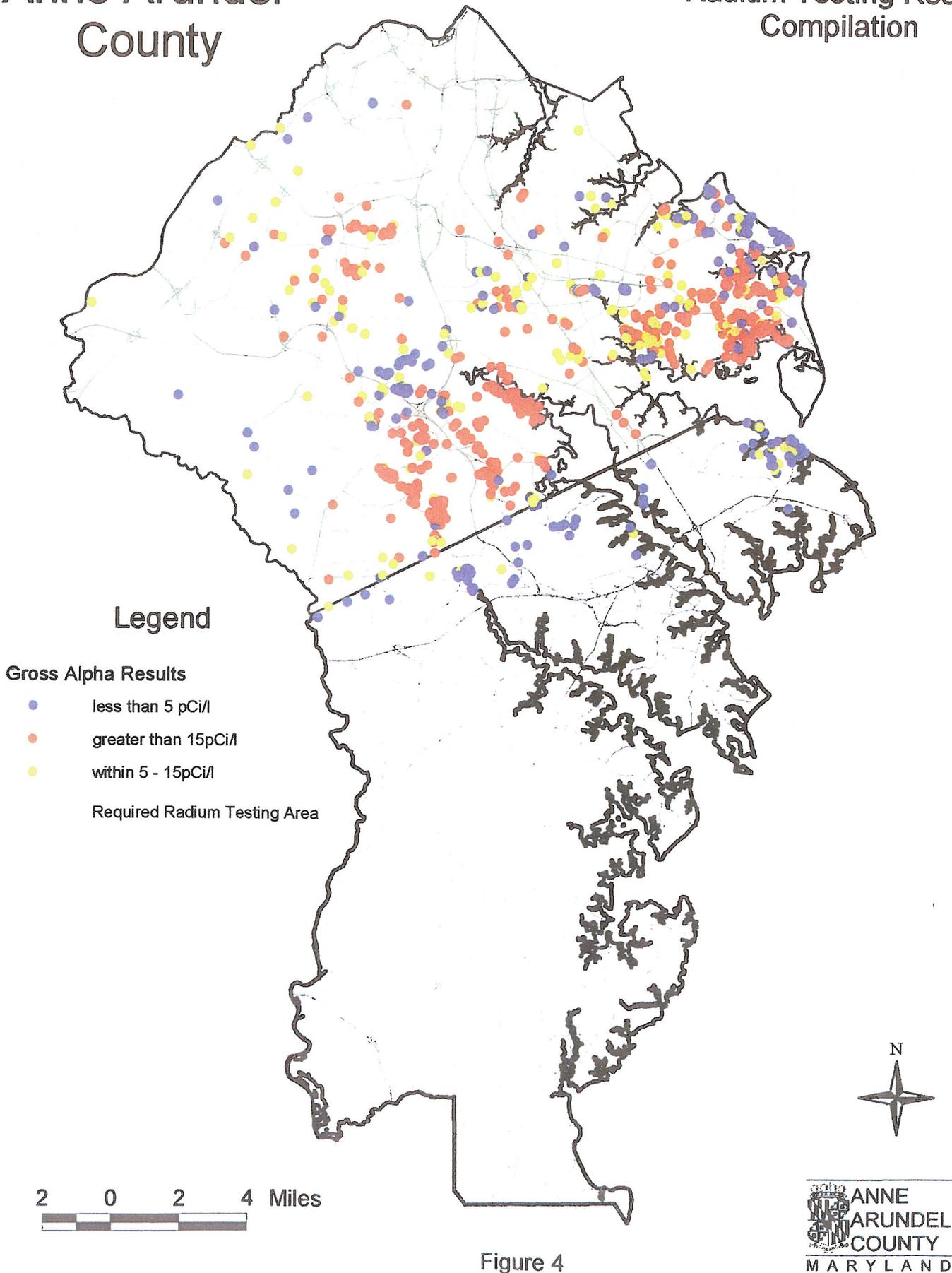
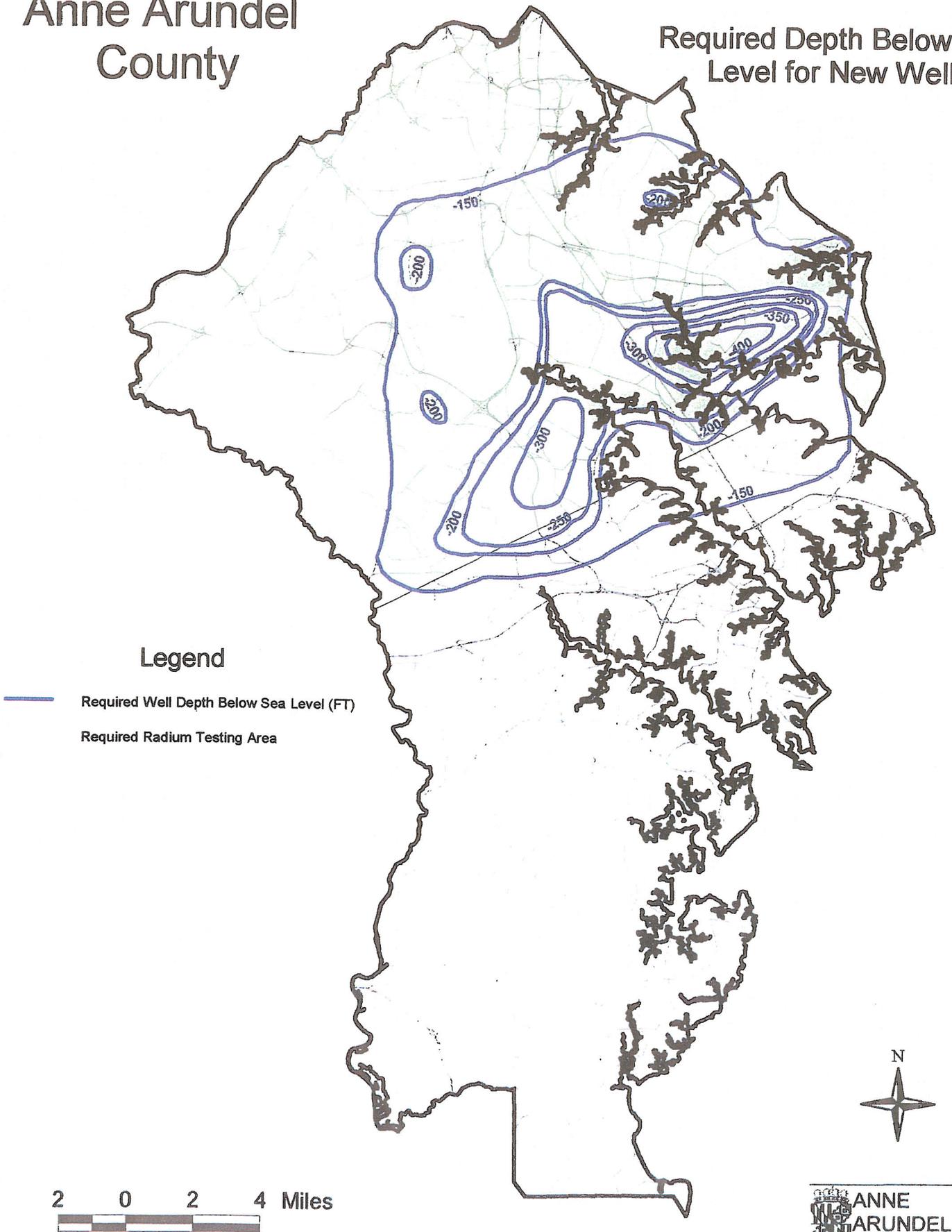


Figure 4

Anne Arundel County

Required Depth Below Sea Level for New Wells



Legend

- Required Well Depth Below Sea Level (FT)
- Required Radium Testing Area



Figure 5



Anne Arundel County

Point Source Contaminants

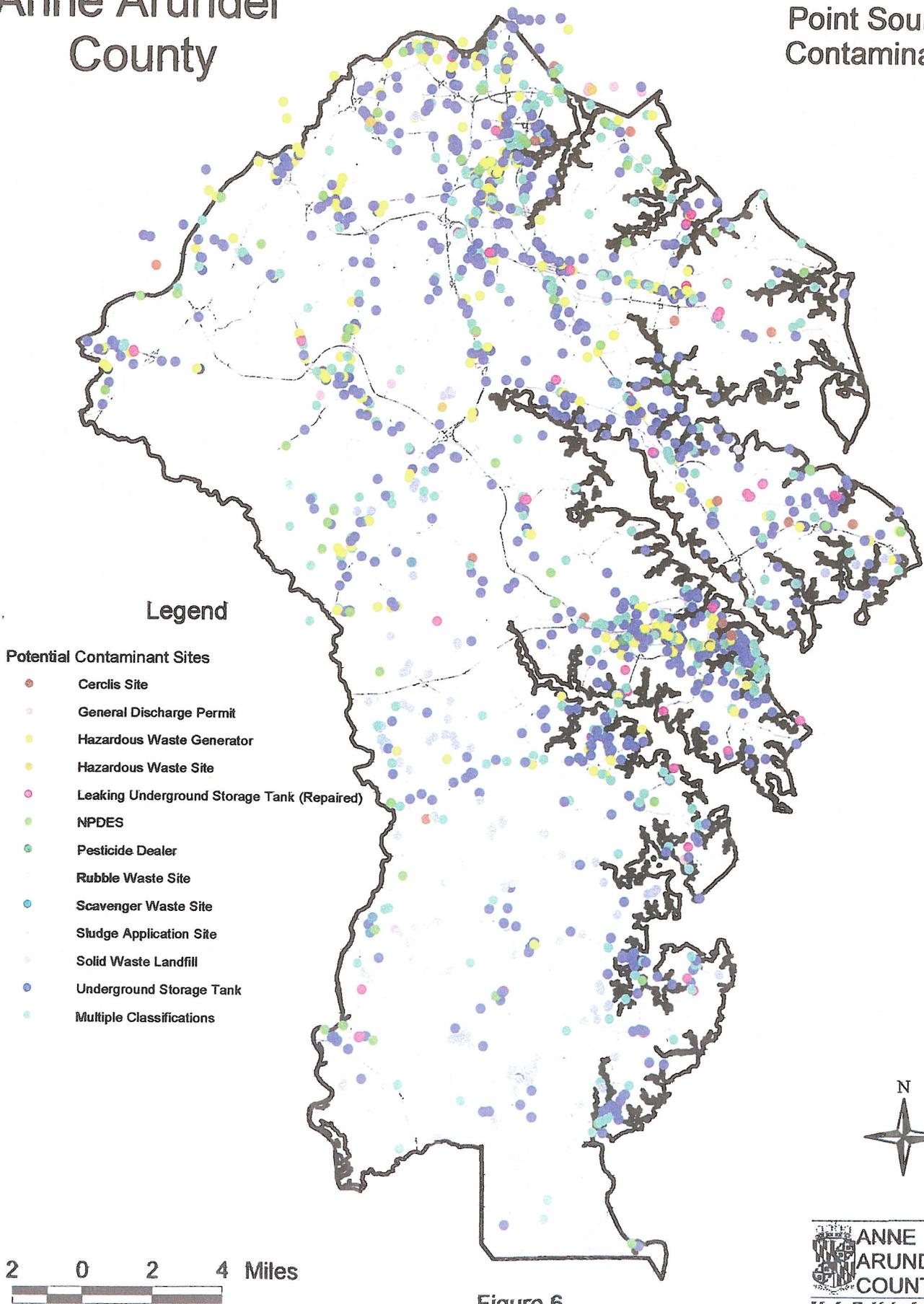


Figure 6

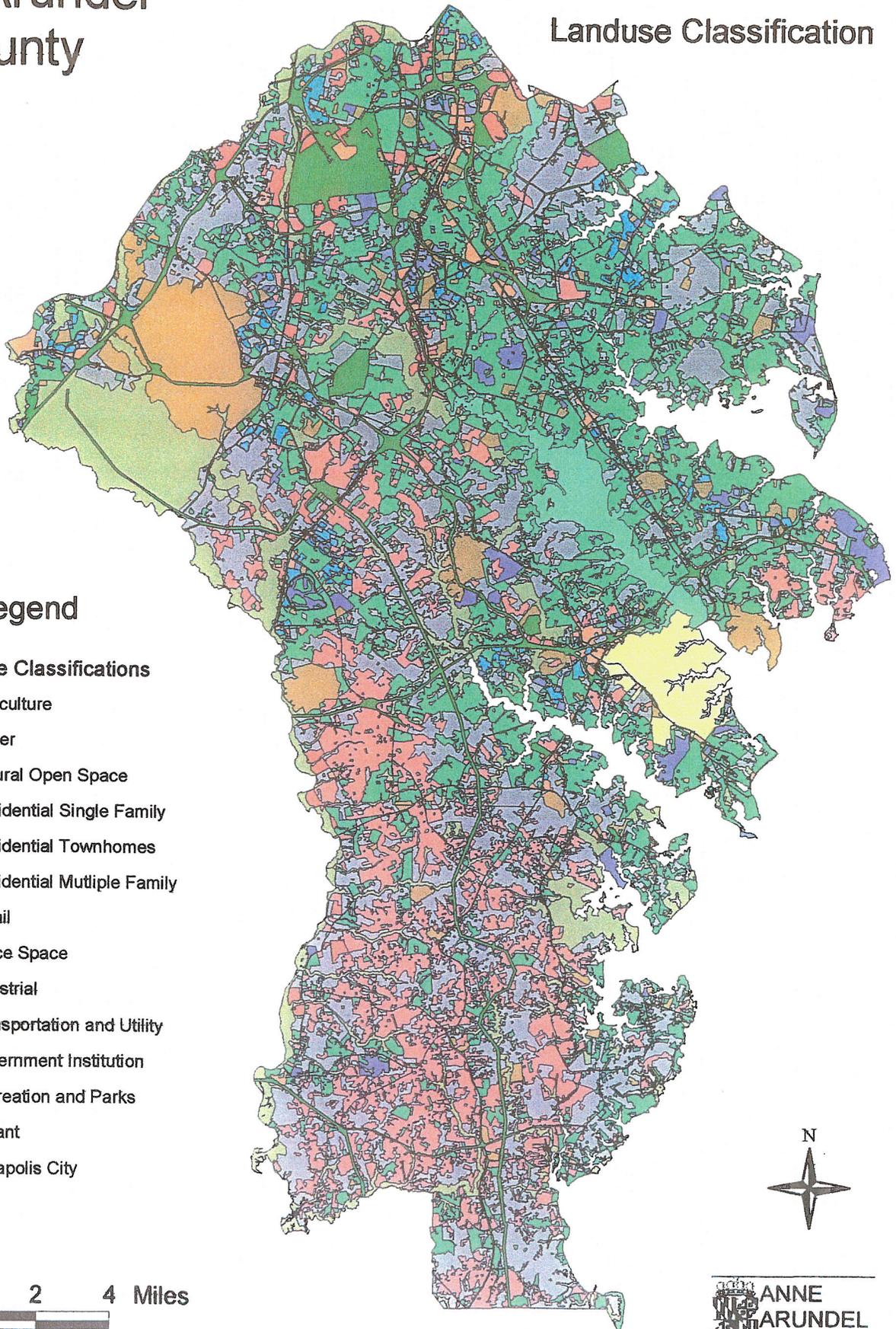
Anne Arundel County

Landuse Classification

Legend

1995 Landuse Classifications

-  Agriculture
-  Water
-  Natural Open Space
-  Residential Single Family
-  Residential Townhomes
-  Residential Multiple Family
-  Retail
-  Office Space
-  Industrial
-  Transportation and Utility
-  Government Institution
-  Recreation and Parks
-  Vacant
-  Annapolis City



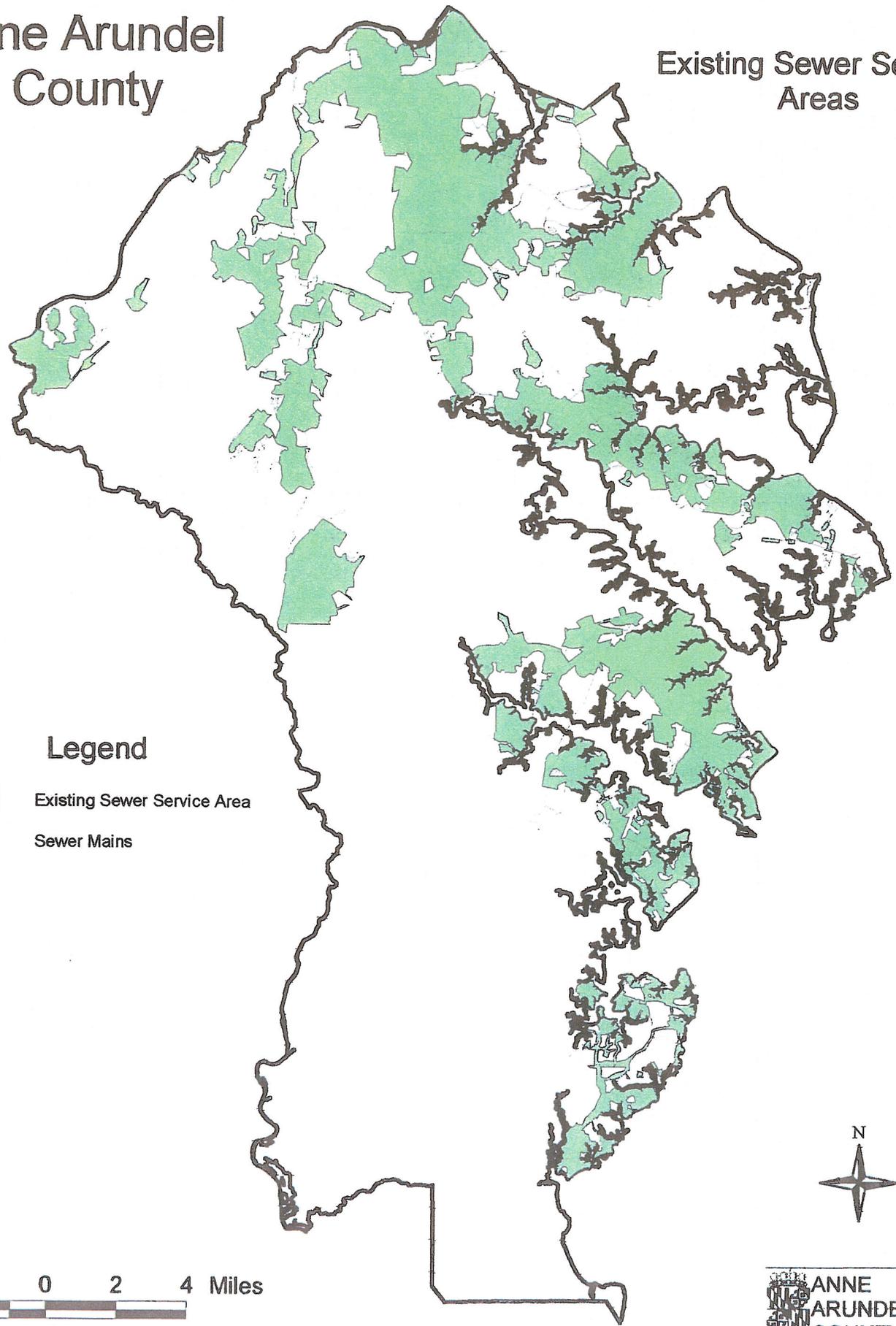
2 0 2 4 Miles

Figure 6a



Anne Arundel County

Existing Sewer Service Areas



Legend

-  Existing Sewer Service Area
-  Sewer Mains

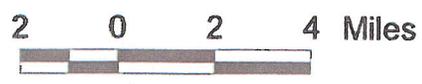
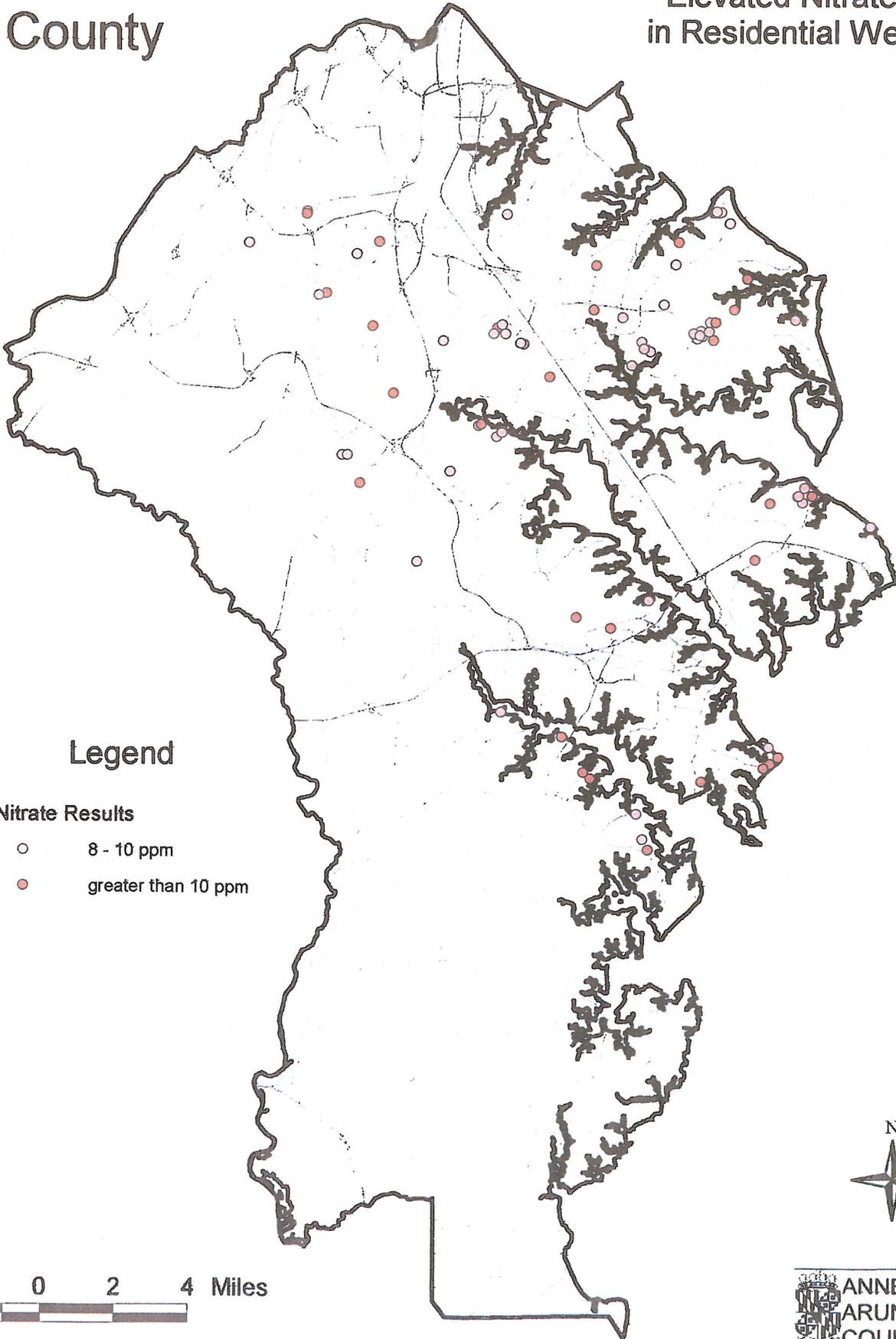


Figure 7



Anne Arundel County

Elevated Nitrates in Residential Wells



Legend

Nitrate Results

- 8 - 10 ppm
- greater than 10 ppm



Figure 8



Anne Arundel County

Elevated Chlorides in Residential Wells

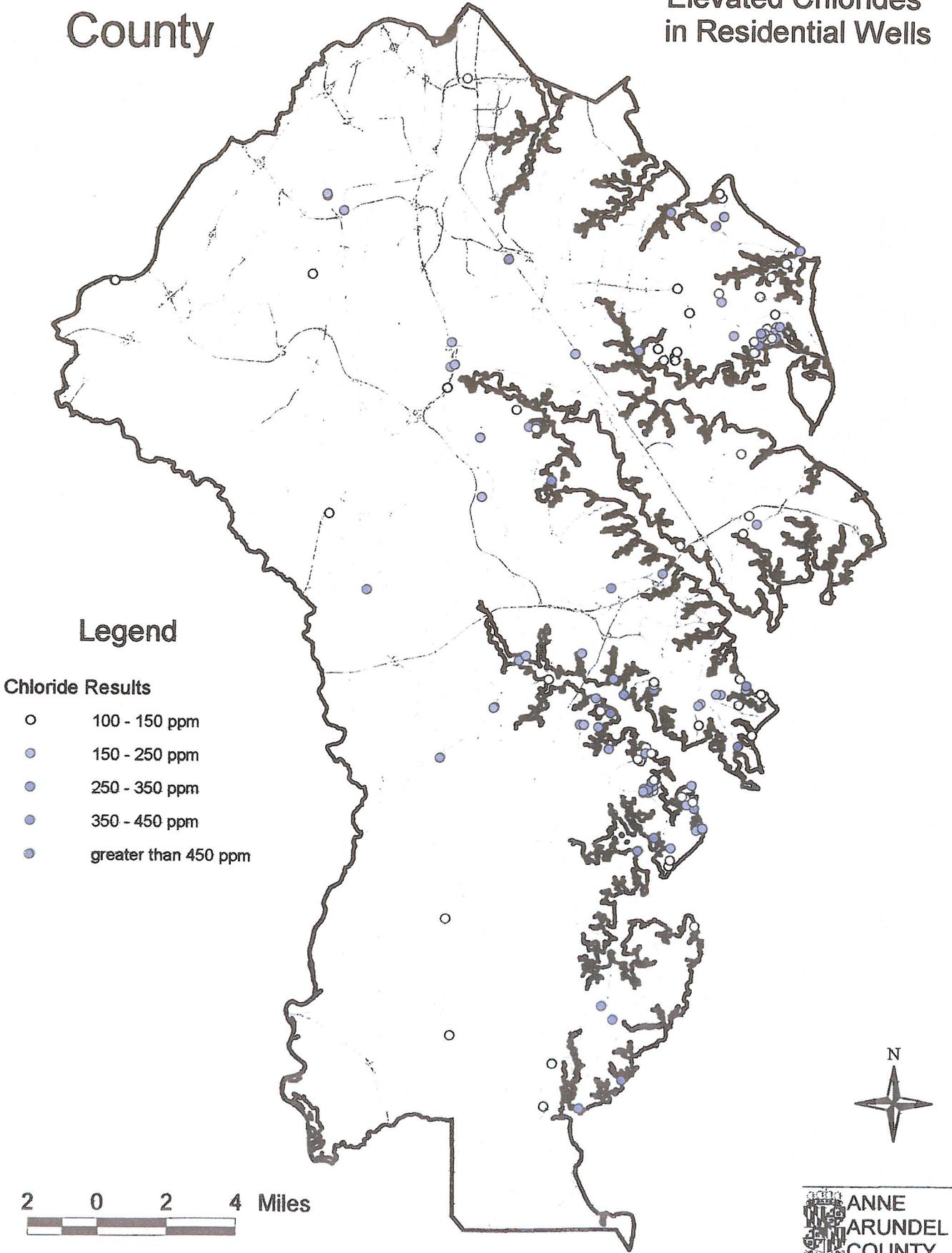
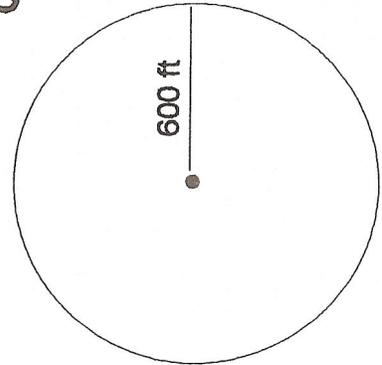
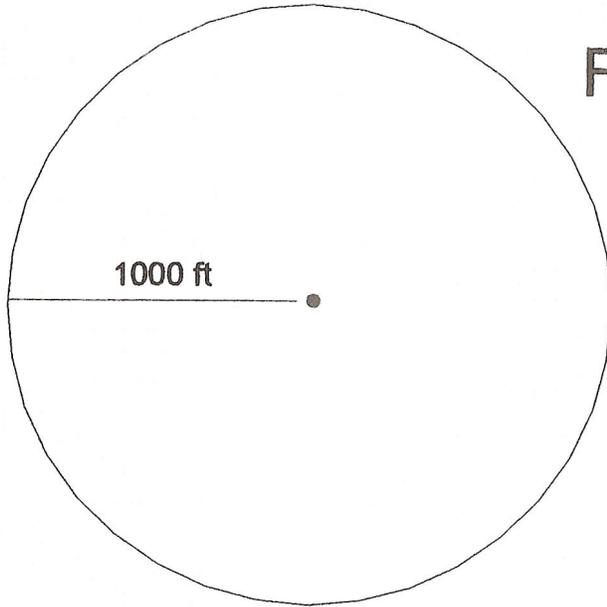


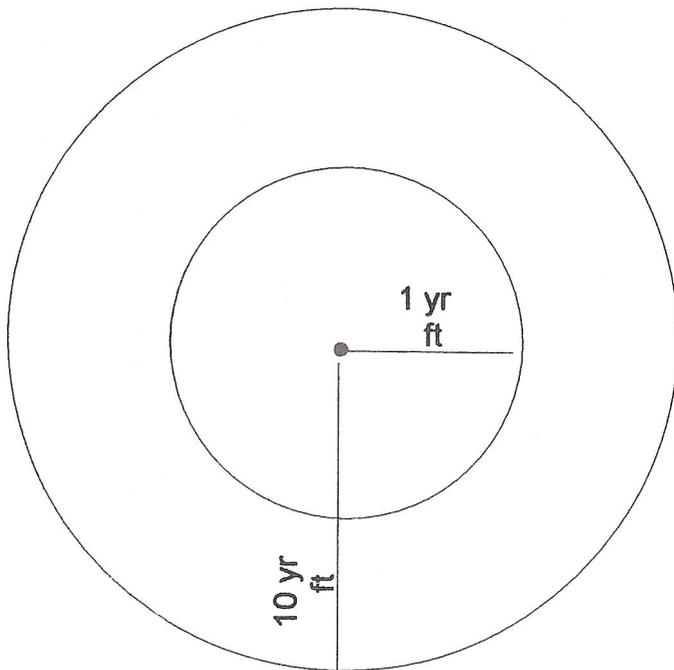
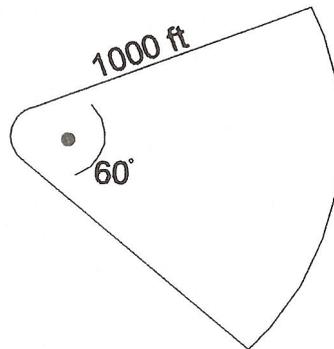
Figure 9

Assessment Area Shapes

Fixed Radius Circles



Wedge



Time of travel
for 1 and 10 yrs

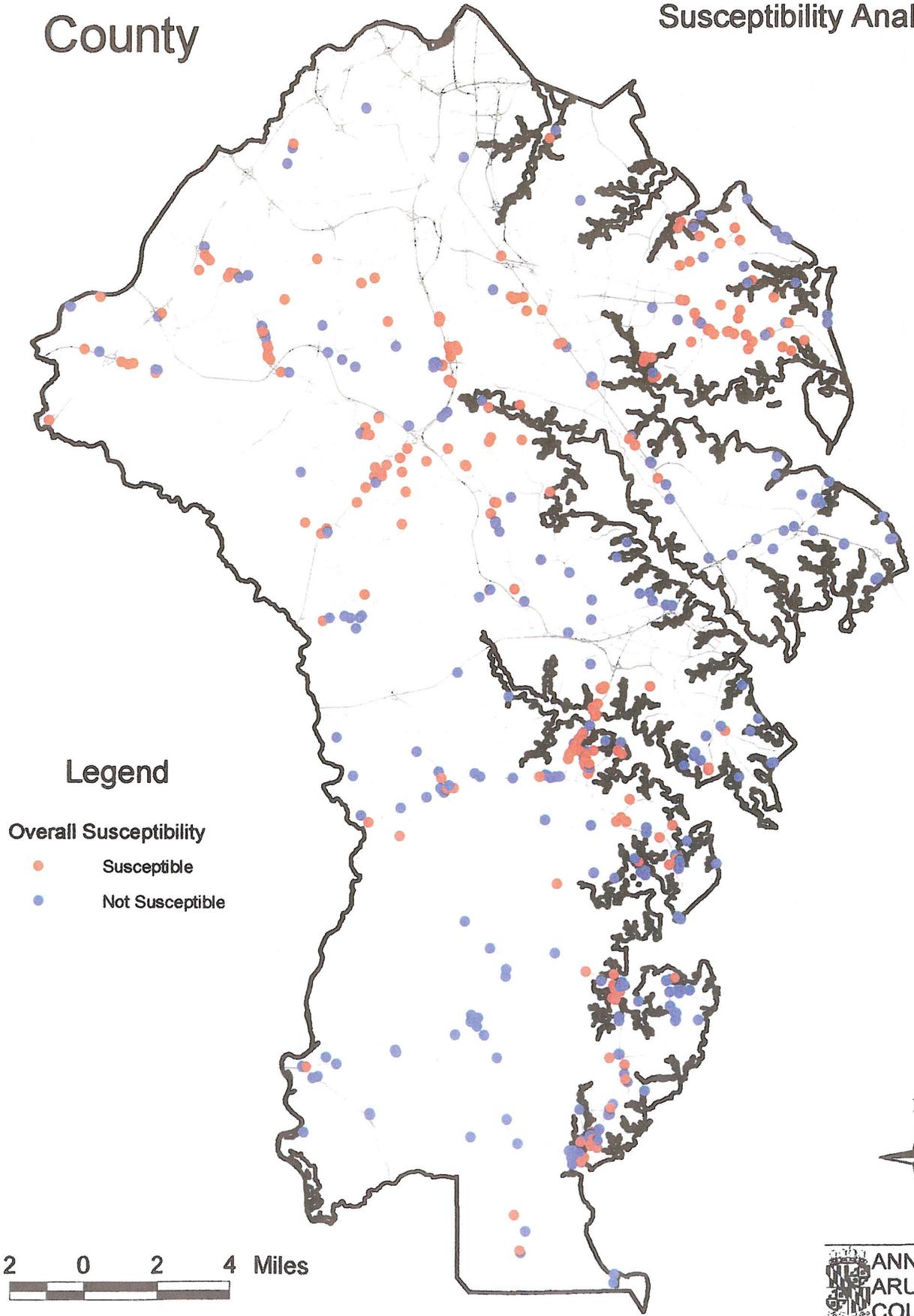
$$= \sqrt{\frac{Qt}{\pi n H}}$$

- = radius circle
- = pumpage of the well in ft^3/yr
- = porosity of the aquifer (0.25)
- = length of well screen in ft
- = time of travel in yrs

Figure 10

Anne Arundel County

Overall Susceptibility Analysis



Legend

- Overall Susceptibility
- Susceptible
 - Not Susceptible

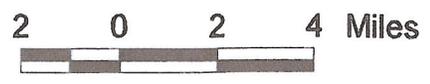


Figure 11a

Anne Arundel County

Bacteriological Susceptibility Analysis

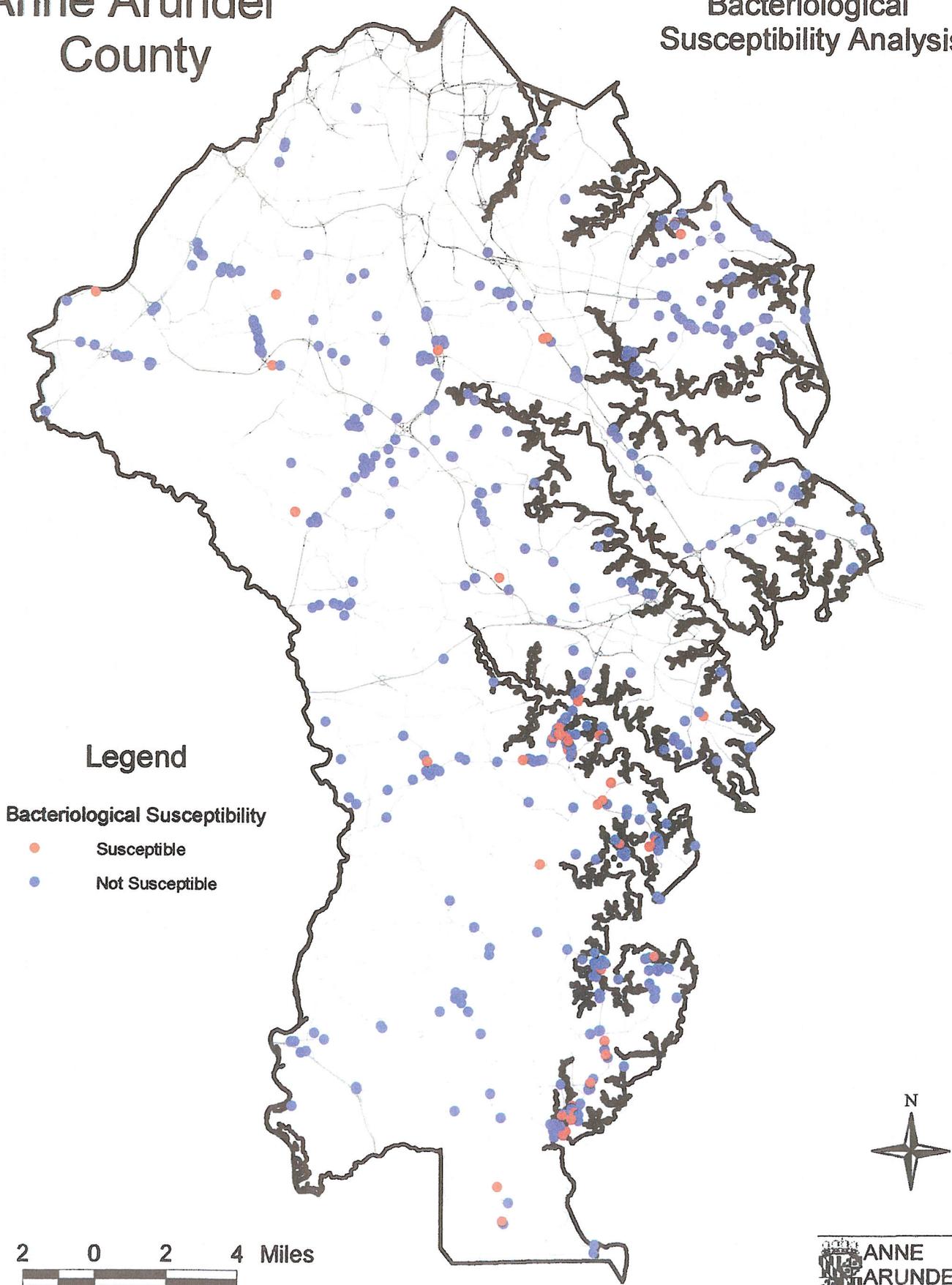
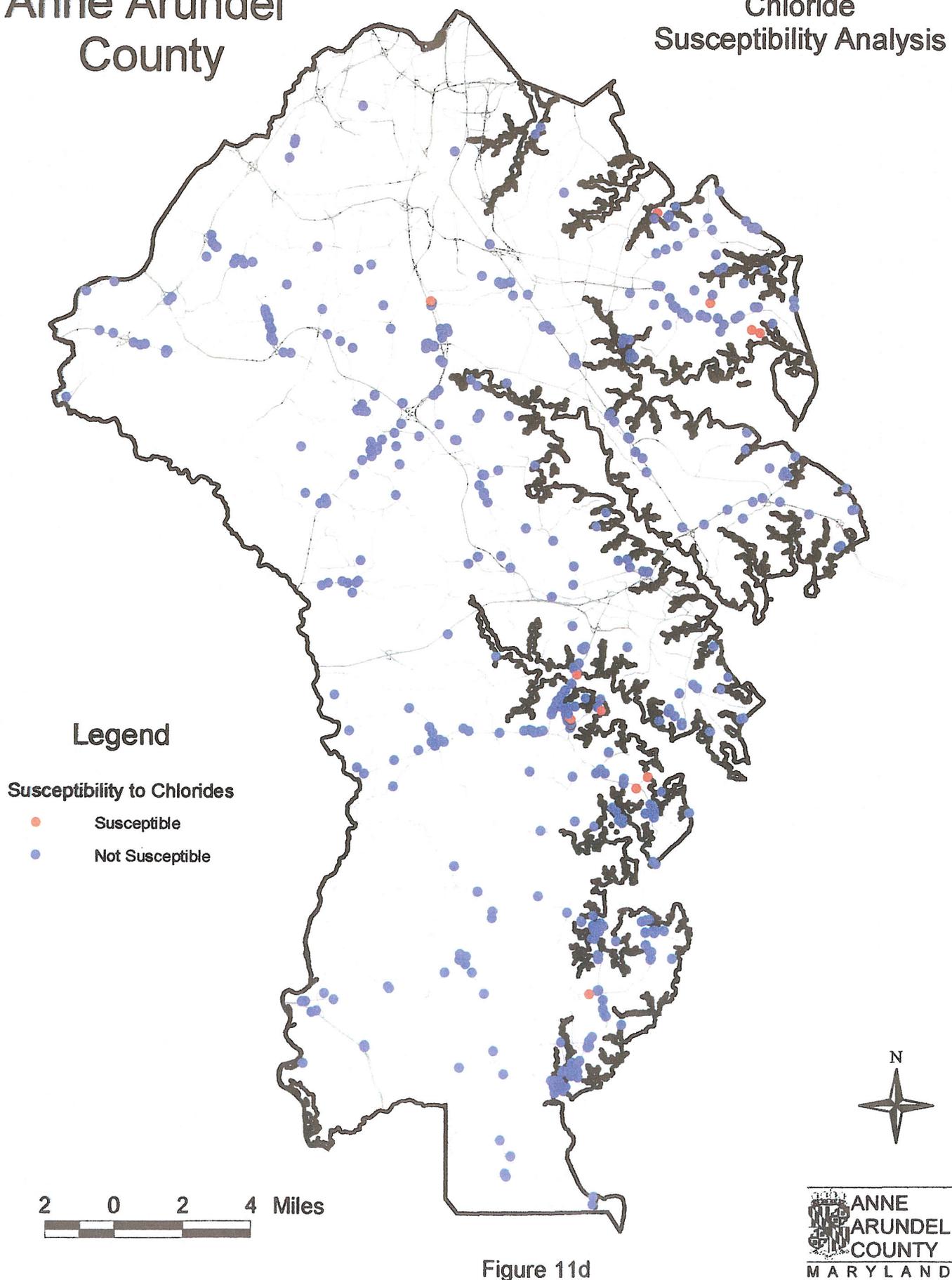


Figure 11c

Anne Arundel County

Chloride Susceptibility Analysis



Anne Arundel County

Inorganic Susceptibility Analysis

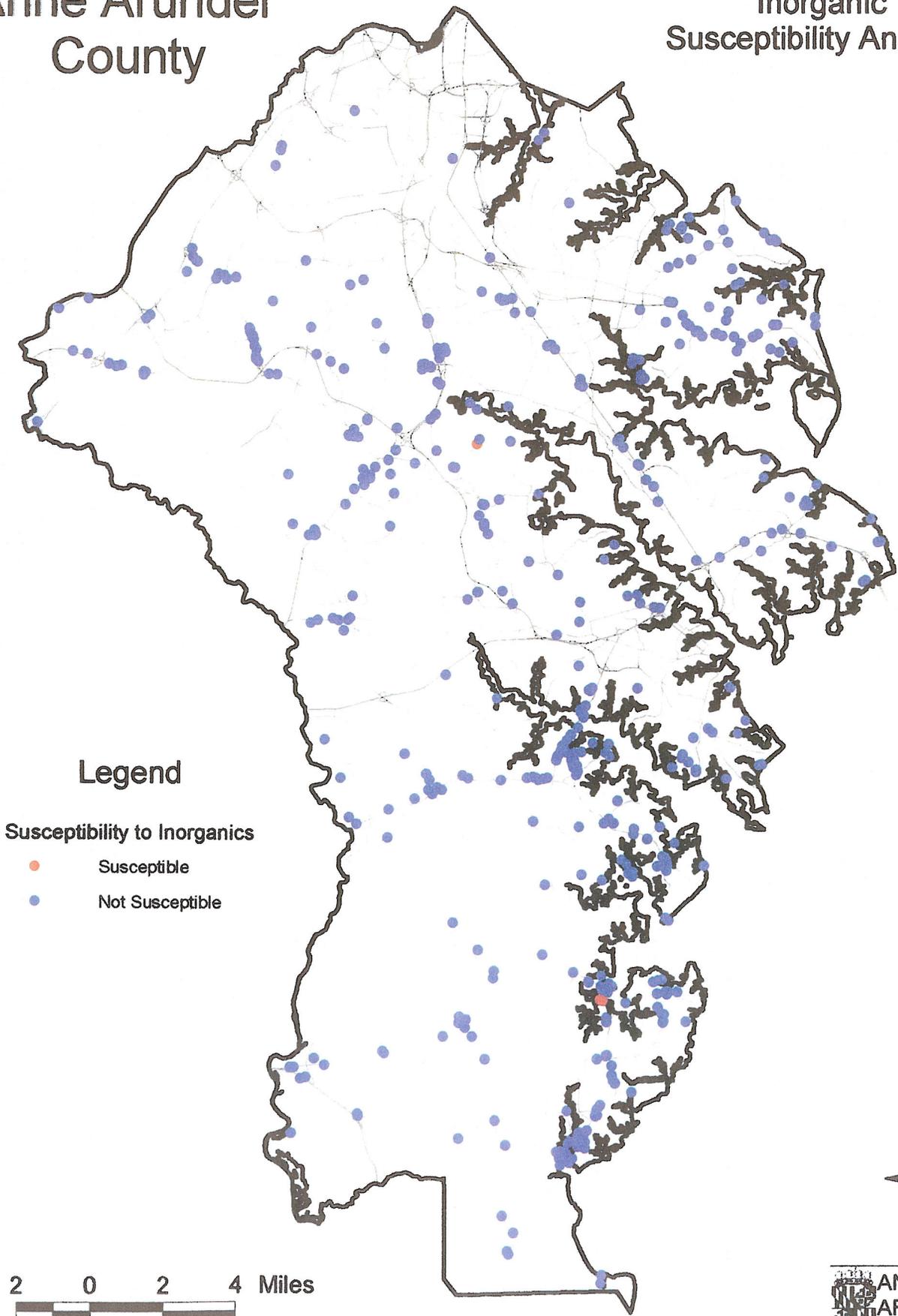
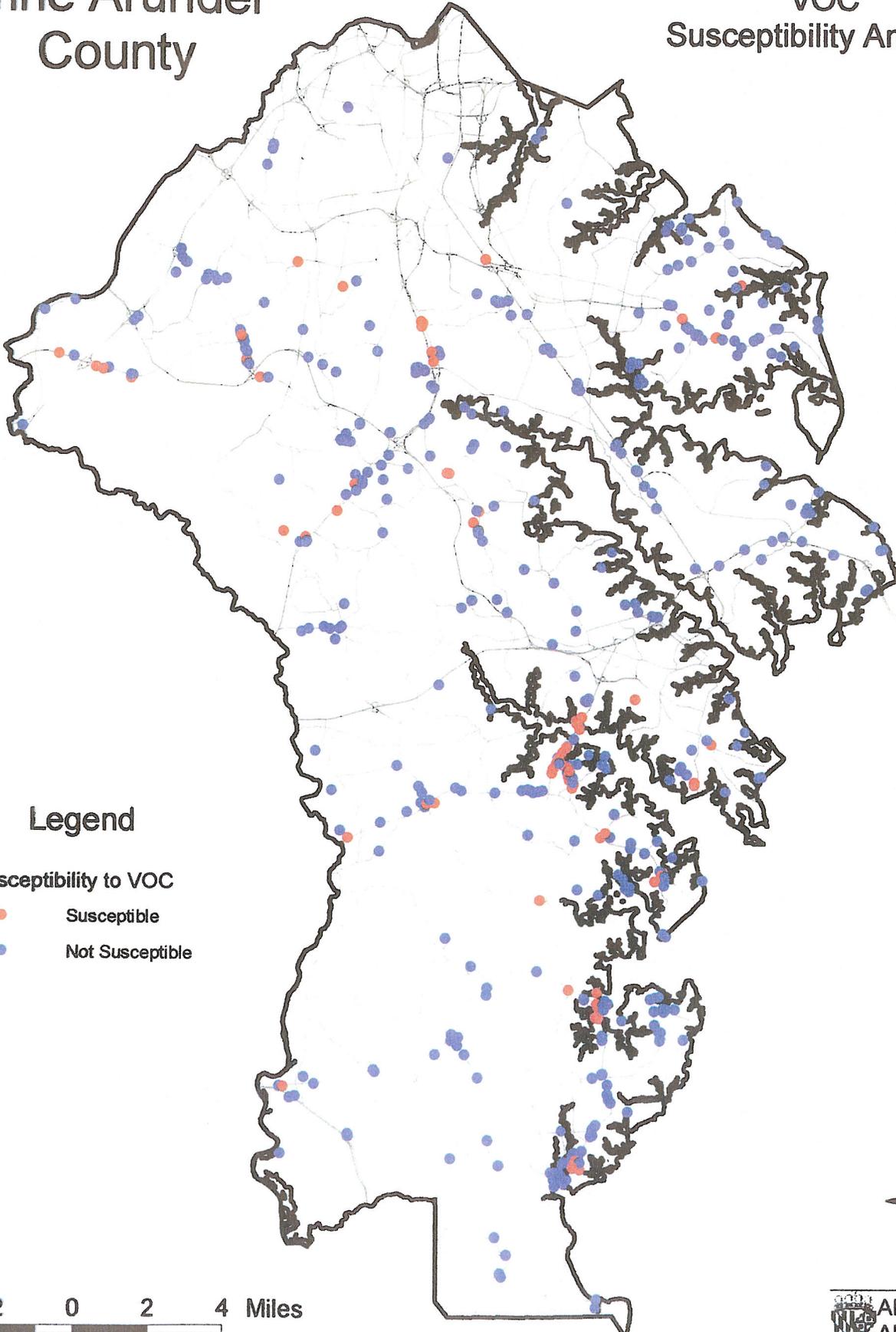


Figure 11e



Anne Arundel County

VOC Susceptibility Analysis



Legend

- Susceptibility to VOC
- Susceptible
 - Not Susceptible

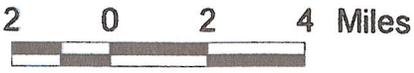


Figure 11h

Anne Arundel County

Water Sampling Locations (Excluding Radium Sampling)

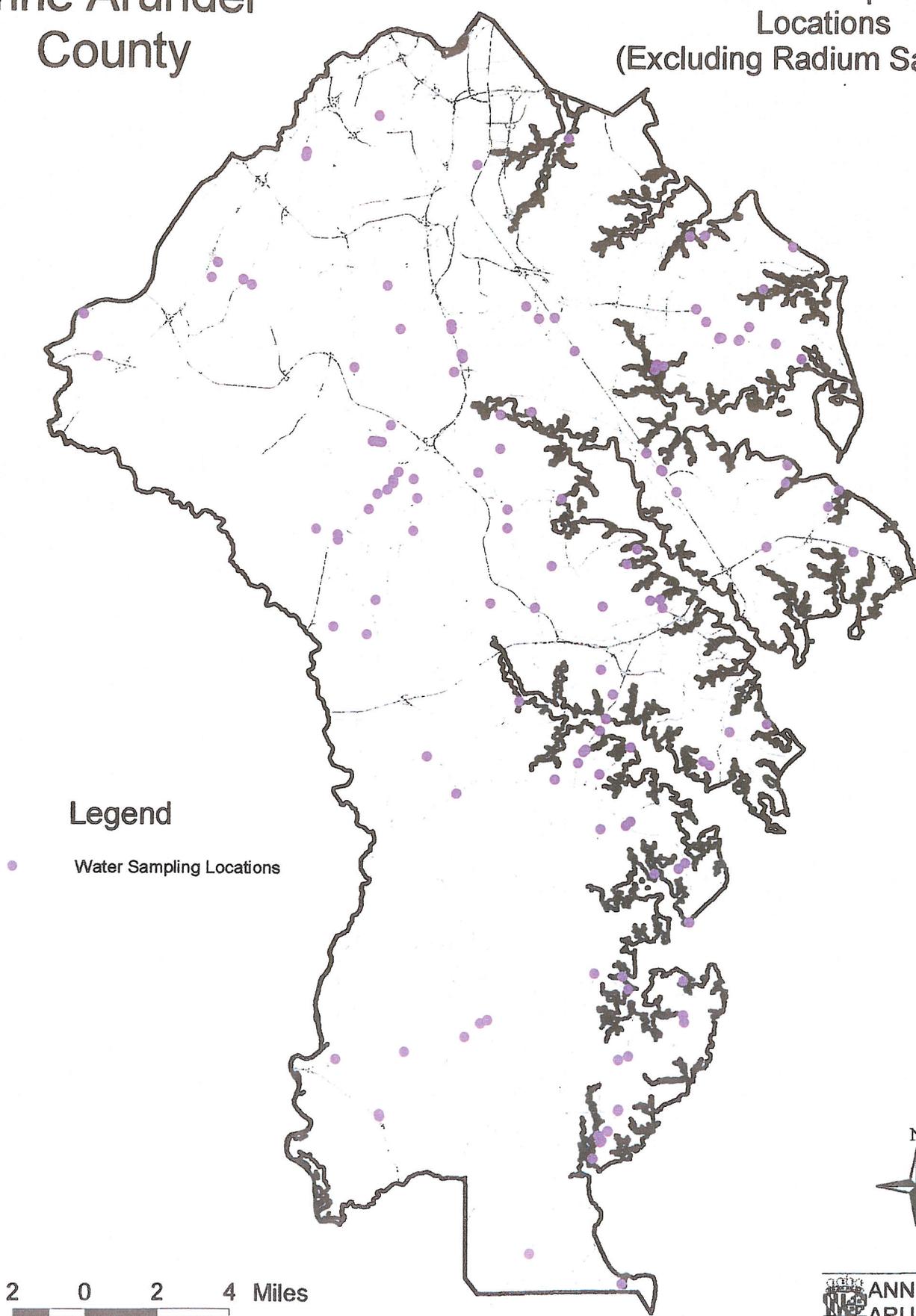
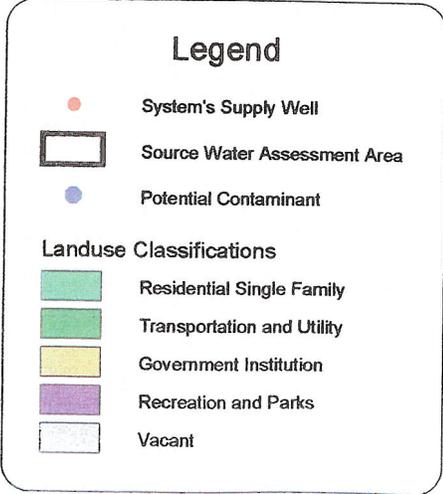
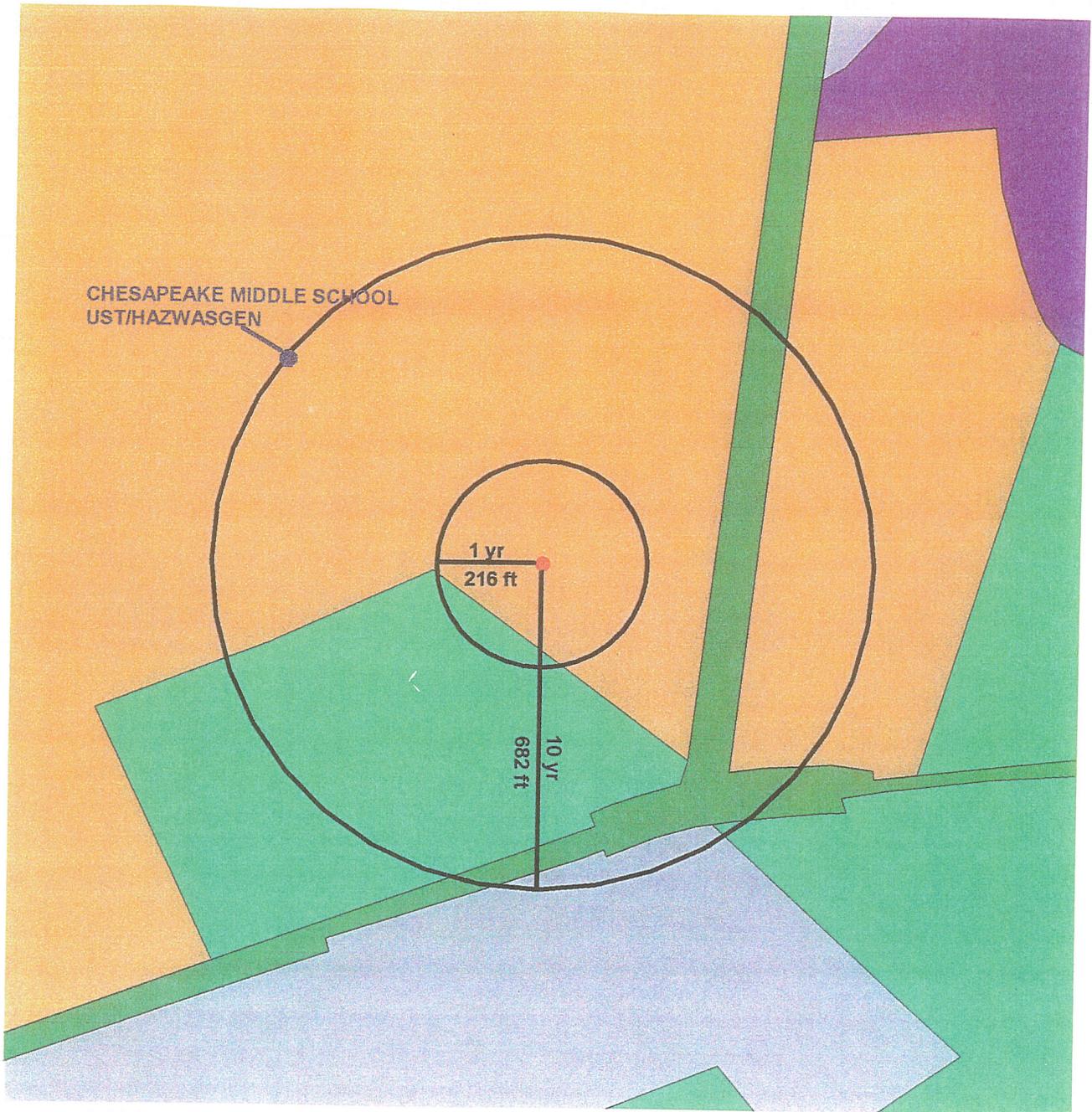


Figure 12





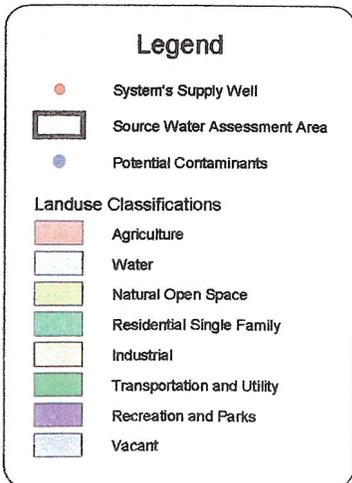
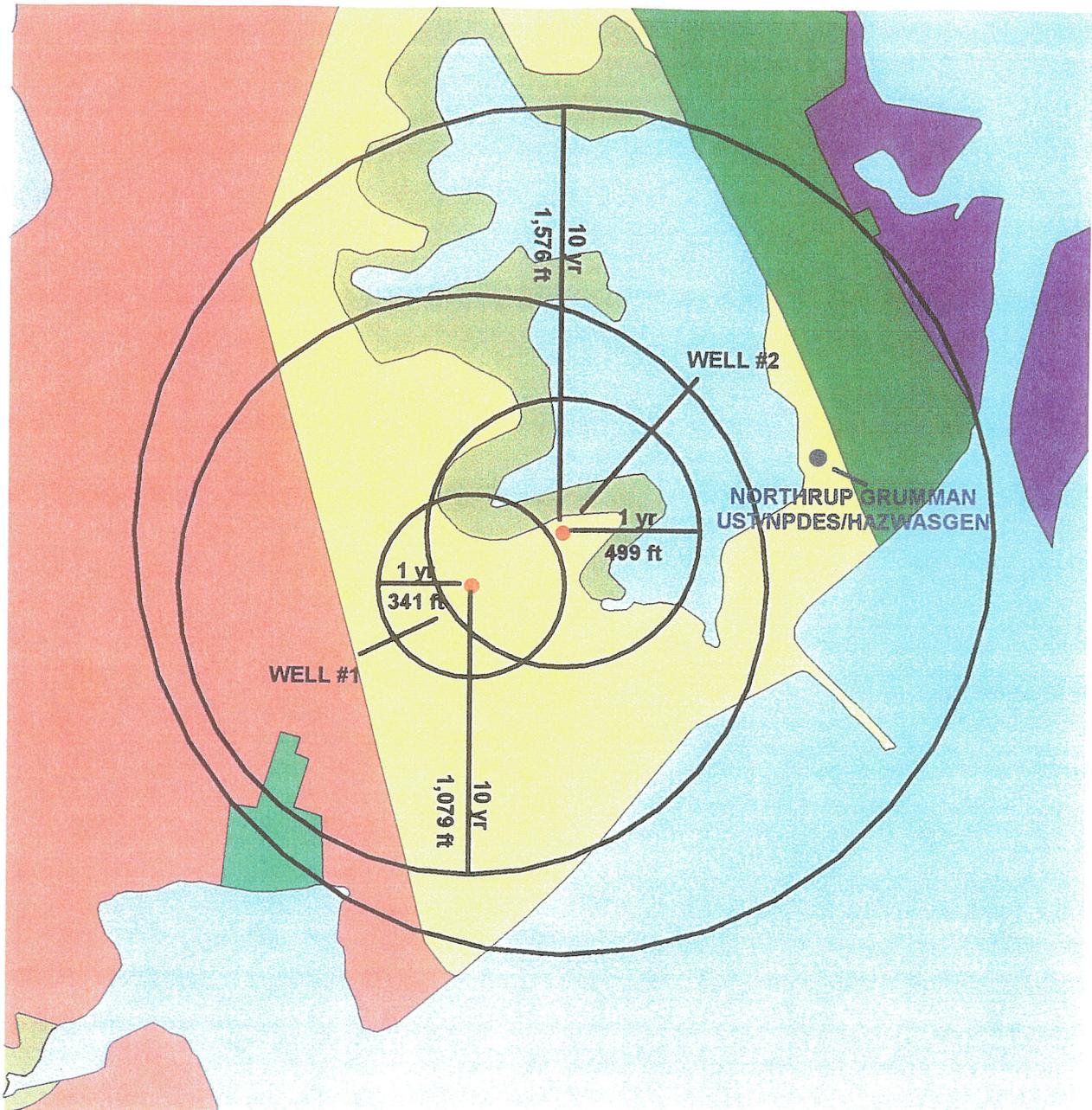
Source Water Assessment Area for
with Landuse for
Chesapeake School Complex (Lake Shore)



Septic service area.



Figure 14



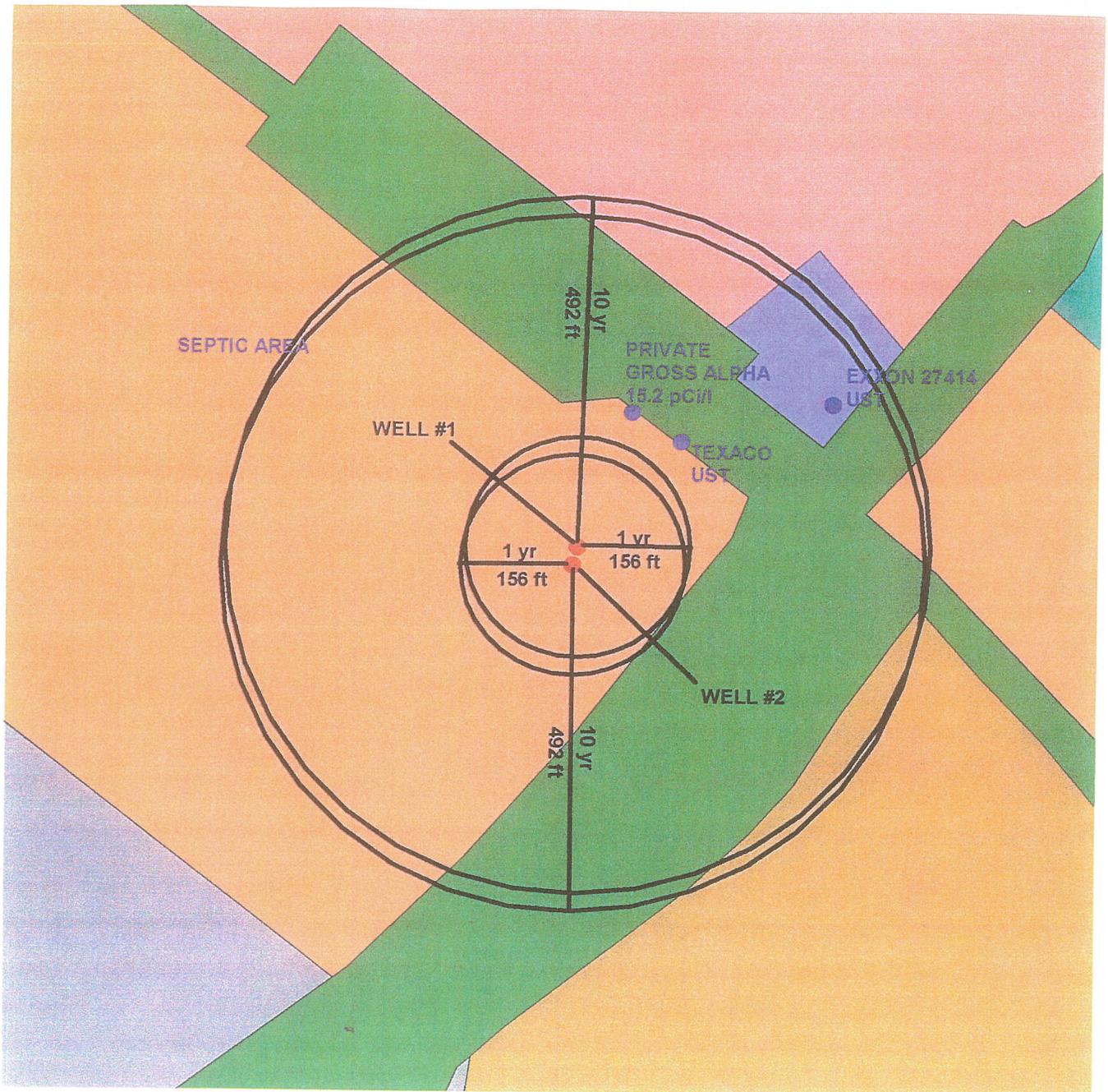
Source Water Assessment Area with Landuse for Northrup Grumman



Sewer service area.



Figure 16



Legend

- System's Supply Well
- Source Water Assessment Area
- Potential Contaminant

Landuse Classifications

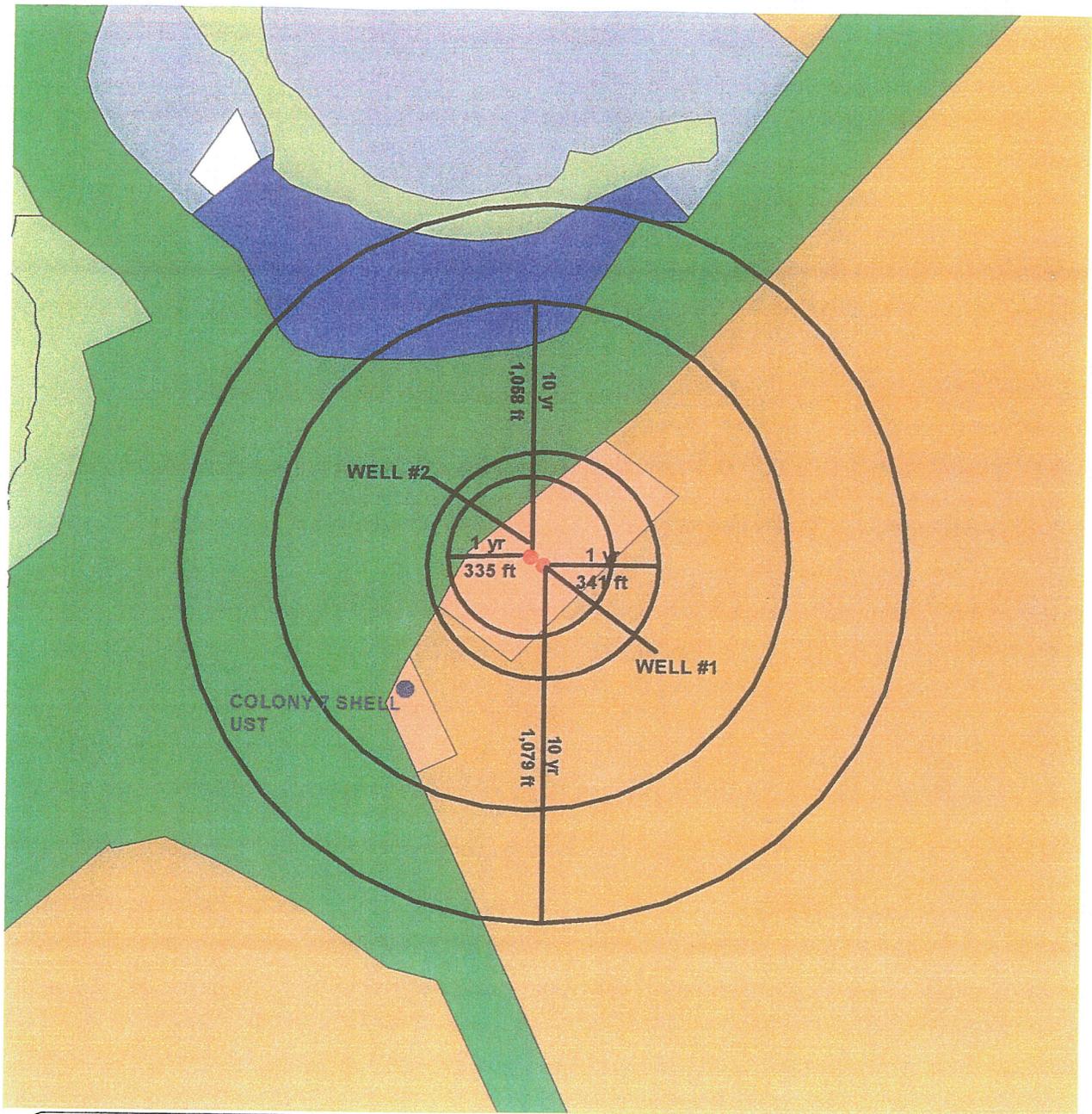
- Agriculture
- Residential Single Family
- Retail
- Office Space
- Transportation and Utility
- Government Institution
- Vacant

Source Water Assessment Area with Landuse for Ridgeview Plaza

Septic service area.



Figure 18



Legend

- System's Supply Well
- Source Water Assessment Area
- Potential Contaminant

Landuse Classifications

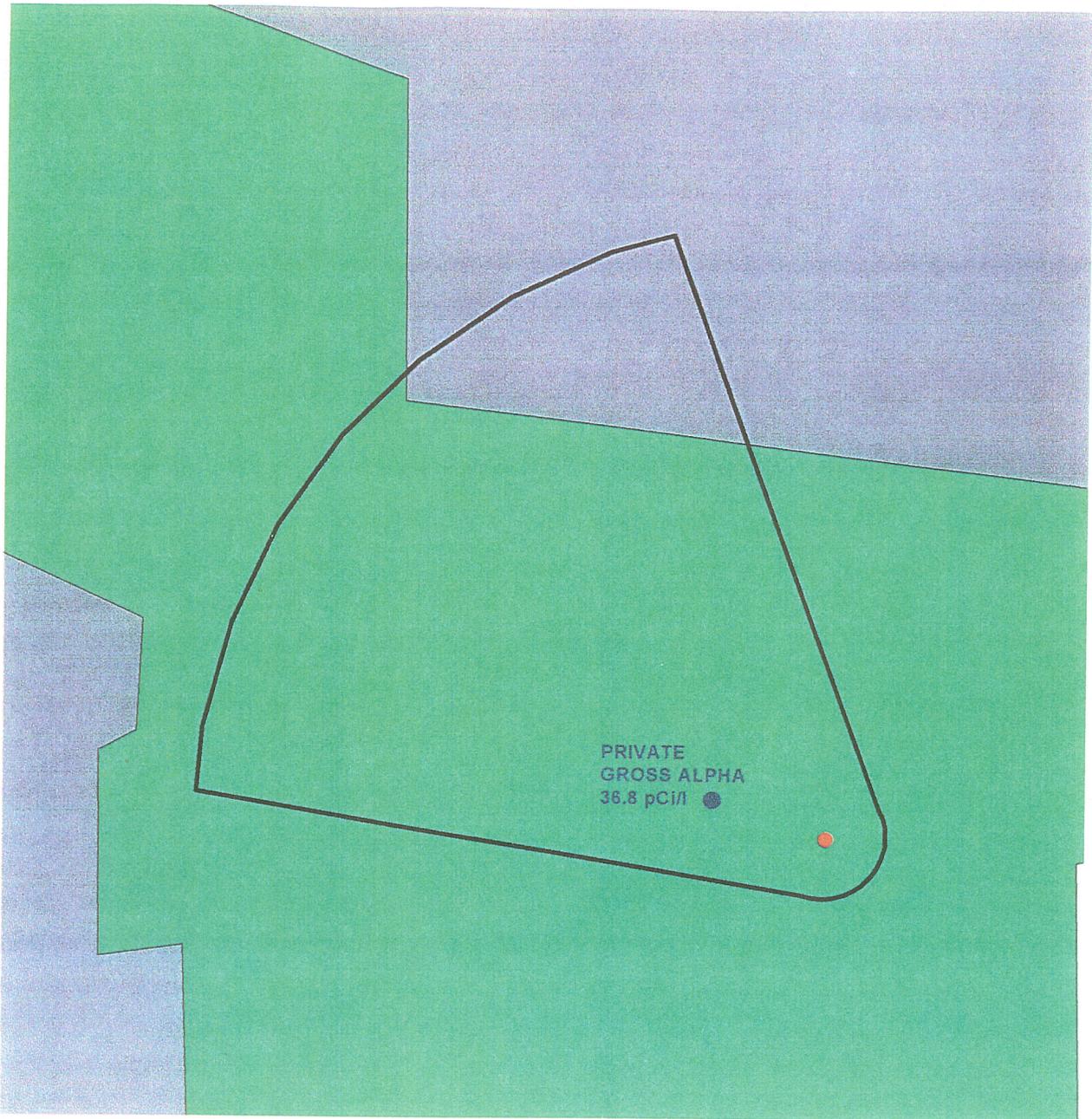
- Natural Open Space
- Retail
- Office Space
- Transportation and Utility
- Government Institution
- Recreation and Parks
- Vacant

**Source Water Assessment Area
with Landuse for
NSA Colony 7**

Septic service area.



Figure 20



Legend

- System's Supply Well
- Source Water Assessment Area
- Potential Contaminant

Landuse Classifications

- Residential Single Family
- Vacant

**Source Water Assessment Area
with Landuse for
Elvaton Day Nursery**



Septic service area.



Figure 22

Table I. Sampling Sites and Results - Radium

FACILITY NAME	PWSID	DEPTH (FT)	GROSS ALPHA RAW (pCi/l)	GROSS ALPHA TRT (pCi/l)	RA226 228 (pCi/l)
177 DINER	1021428		125.10		
AFTER DECK SPORTS BAR AND GRILL	1021277		107.00		
AMERICAN CARWASH	1021454	198.00	11.00	1.60	3.60
AMERICAN LEGION #276	1021014	107.00	20.80		
AMERICAN LEGION #277	1021015	65.00	13.90		3.60
ANCHOR INN	1021447	65.00	42.40		
ANDOVER RECREATIONAL CENTER	1021017	190.00	4.00		
ANGEL'S FOOD MARKET	1021203	195.00	28.20	2.50	
ARDEN ON THE SEVERN PARK	1021550	126.00	31.50		
ARLINGTON ECHO OUTDOOR EDUCATION	1021059	140.00	29.00		
ARNOLD PET STATION	1021665	196.00	11.50	3.00	5.90
ARUNDEL BAPTIST CHURCH	1021551		34.90		
ASSEMBLY HALL OF JEHOVAHS WITN	1021023	151.00	118.40	1.30	
B.P.O. ELKS #2283	1021051	425.00	34.00		
B.P.O. ELKS #2608	1021050	70.00	2.80	0.70	
BALDWIN CHURCH FACILITIES	1020061	94.00	42.00	42.20	
BALDWIN HILLS SWIM CLUB	1021400		35.90		
BALTIMORE KOREAN SDA CHURCH	1021666	62.00	11.80		4.50
BAY BAKERY	1021497	96.00	87.20		
BELL BRANCH ATHLETIC COMPLEX	1021553	400.00	2.40		
BENFIELD PINES ICE RINK	1021034		25.90		
BILLS NORTH ODENTON SHOPPING CTR WELL #1	1020104	118.00	5.90		2.50
BILLS NORTH ODENTON SHOPPING CTR WELL #2	1020104		5.90		2.50
BLOB'S PARK	1021045		29.90	19.60	
BODKIN PARK	1021554	90.00	127.30	2.50	
BODKIN YACHT CLUB WELL #1	1021047	145.00	2.30		
BODKIN YACHT CLUB WELL #2	1021693	75.00	3.70		
BOSTON MARKET #2729	1021502	166.00	7.90	1.20	
BRIGHTVIEW BUSINESS CENTER	1020123	248.00	107.00		
CAMP WHIPPORWILL WELL #1	1021123	135.00	4.00	0.70	
CAMP WHIPPORWILL WELL #2	1021123	135.00	34.80	1.10	
CAPITAL KOA CAMPGROUND WELL #1	1021427	363.00	4.60		
CAPITOL KOA CAMPGROUND WELL #2	1021588	363.00	7.10		
CAPITOL RACEWAY	1021065		2.60	1.70	
CARMEN'S ITALIAN ICE	1021681	85.00	188.00	1.80	
CASEY'S CRAB COMPANY	1021694	220.00	4.30		
CEDARWOOD COVE	1021405	275.00	7.70	0.90	
CHESAPEAKE BAPTIST CHURCH	1021557	82.00	34.70		
CHESHIRE CRAB	1021505	150.00	2.80		
CHRIST LUTHERN CHURCH	1021527		40.60	56.10	
CLARKS CELEBRATION AT THE BAY	1021403		3.10		
CLUB SUNSET KNOLL	1021073	107.00	2.20		
COLONY 7 SHELL	1021614	117.00	3.80		
COLUMBIAN CENTER	1021164	88.00	9.80		3.50
CONCOURSE COMMERCIAL CONDO INC.	1020106	242.00	9.70		12.10
COYOTE CAFE	1021249	112.00	19.90		
CROFTON CANTINA	1021245	240.00	6.00		2.70
CROFTON CHILDREN'S CENTER	1020046	152.00	12.40	0.70	5.10
CROFTON GO-KART RACEWAY	1021349		12.20		
CROFTON MEDICAL ARTS BLDG	1021673		12.50	1.20	4.20
CROFTON PARK	1021559	175.00	18.50		
CROWNSVILLE AUTOMOTIVE	1021592	182.00	15.30		
CURTIS BAY ATHLETIC CLUB	1021083	60.00	4.50		
DAIRY QUEEN	1021443	142.00	11.10	1.60	9.00
DANNY'S TAVERN	1021086	107.00	37.80		
DENNY'S RESTAURANT	1021365	178.00	1.90	2.70	
DJ'S PUB	1021185		35.00		
DOMINO'S PIZZA #4633	1021653	93.00	121.20		
DORR'S TEXACO	1021594		10.80	2.00	3.30
DOWNS MEMORIAL PARK WELL #2	1021560		1.70	0.80	
DUNKIN DONUTS/BASKIN ROBBINS	1021098		34.20		
EAGLE'S NEST	1020041		26.10		
EISENHOWER GOLF COURSE	1021104	230.00	3.10	2.20	
ELKS CAMP BARRETT	1021426		0.70	0.70	
FAIRWINDS BEACH CLUB, INC	1021618	61.00	38.90		
FAIRWOOD SWIM CLUB	1021409	85.00	15.70		
FAMILY VETERINARY CLINIC	1021637	165.00	3.00	1.80	
FLECK MACHINE CO., INC.	1020113	255.00	6.40		3.00

FACILITY NAME	PWSID	DEPTH (FT)	GROSS ALPHA RAW (pCi/l)	GROSS ALPHA TRT (pCi/l)	RA226 228 (pCi/l)
FT. MEADE TEXACO	1021637	465.00	12.80	1.80	5.40
FT. SMALLWOOD MAINTENANCE	1020078		5.90		2.80
FULL GOSPEL EMANIPATION LIFE	1021639	155.00	6.30		4.20
GALILEE LUTHERAN CHURCH	1021661		62.20	0.90	
GAMBRILL'S BUSINESS PARK/JAVA JOINT	1020124	240.00	5.90		
GERALD GOODMAN DENTAL OFFICE	1021532	147.00	0.70	0.80	
GRACE OF GOD FELLOWSHIP	1021534	185.00	4.80		
GRACHUR CLUB, INC	1021127		45.50		
H & J AMOCO, INC	1021508	206.00	25.90		
HANEY'S GROCERY AND DELI INC.	101132		9.60		
HARDESTY FUNERAL HOME	1021563		43.70	3.00	
HEADQUARTER 1/ HEADQUARTER 2 WELL #1	1020119	157.00	27.90		
HEADQUARTER 1/ HEADQUARTER 2 WELL #2	1020119	142.00	43.60		
HEADQUARTER 1/ HEADQUARTER 2 WELL #3	1020119	146.00	5.90		
HEADQUARTER 1/ HEADQUARTER 2 WELL #4	1020119	157.00	28.50		
HIDE N SEEK LOUNGE	1021140		10.00		
HIGHS OF BALTIMORE #99	1021220	194.00	17.10	2.80	
HILL MOTEL	1021147	260.00	12.50	0.70	
HOLMES BUILDING	1021519	86.00	77.50		
HOON YI NAE JEEP	1021247	100.00	18.20		
HORIZON ORGANIC FARM & EDUCATION WELL #2	1021685		41.90	26.70	
HUTSON'S LAKE SHORE TAVERN	1021152		24.80		
I 97 OFFICE COMPLEX WELL #1	1020116	380.00	5.10	4.80	3.20
I 97 OFFICE COMPLEX(BLD1111) WELL #2	1020116	284.00	3.10	0.90	
I 97 OFFICE COMPLEX(BLD1120) WELL #3	1020116	357.00	4.80	0.70	
I 97 OFFICE COMPLEX(BLD1121) WELL #4	1020116	347.00	5.50	2.60	2.90
I 97 OFFICE COMPLEX(BLD1127) WELL #5	1020116	343.00	3.50	1.60	
I 97 OFFICE COMPLEX(BLD1131) WELL #6	1020116	328.00	6.00	1.00	1.80
INDIAN CREEK SCHOOL	1020017	93.00	400.00	9.00	
INDIAN LANDING BOAT CLUB	1021414	112.00	4.80		
JERMAN'S I.G.A.	1021154		26.60		
JESSUP SHELL FOOD MARKET	1021156		31.90	7.30	
JOE'S OAK GROVE	1021320		32.00		
JOE'S SEAFOOD	1021352	125.00	22.50	22.10	
KAUFMANN'S TAVERN	1021161	155.00	6.00		4.00
KENTUCKY FRIED CHICKEN	1021675		3.50		
KIM'S BAR & LOUNGE INC.	1021354		20.40		
KINDERCARE LEARNING CENTER #1061	1020058	362.00	18.50	4.20	
KRAZY OTTO'S	1021165		4.60		
KURTZ'S BEACH	1021166	135.00	4.60		
LAKE SHORE ATHLETIC COMPLEX	1021566	180.00	2.80	1.00	
LAKE SHORE BAPTIST CHURCH	1021535		188.20		
LAKE SHORE CHRISTIAN ACADEMY	1020060	87.00	33.80	3.00	
LAKE SHORE DEMOCRATIC CLUB	1021664	140.00	93.30	1.10	
LAKE SHORE EXXON & JERRY SUBS	1021536	110.00	135.70	113.40	
LAKE SHORE VOLUNTEER FIRE DEPT	1021169	36.00	73.30	4.90	
LARRY'S TAVERN	1021170	58.00	61.00		
LATELA'S	1021171	247.00	12.60		6.00
LAZER EXTREME	1021523	110.00	85.40		
LONG POINT INN	1021178	87.00	23.80		
LONGPOINT IMPROVEMENT ASSOC.	1021663	68.00	309.50	63.50	
LUCKY'S #4	1021376	127.00	6.60		
MAGOTHY INN	1021366	55.00	94.60		
MARYLAND CENTRAL KOREAN BAPTIST CHURCH	1020070		272.90		
MARYLAND CITY PARK	1021572	140.00	2.00		
MARYLAND YACHT CLUB, INC.	1021188	105.00	6.30		
MASIEL BROTHERS INC	1020129	30.00	4.40		
MCDONALD'S	1021370		8.00		5.90
MCDONALDS #21058	1021318	218.00	2.30	2.70	
MIL-BUR CLUB COMMUNITY POOL	1021417		133.40		
MILLERSVILLE ELEMENTARY WELL #1	1020022	112.00	33.00	57.10	
MILLERSVILLE ELEMENTARY WELL #2	1020022	112.00	33.00	57.10	
MILLS CROWN PETROLEUM	1021528	180.00	41.00		
MINI WAREHOUSE GROUP	1021677	220.00	7.90	8.90	
MY PLACE TAVERN	1021130		30.20		
N.S.A COLONY 7 WELL #1	1020085	223.00	18.50	3.90	
N.S.A. COLONY 7 WELL #2	1020085	229.00	8.60	3.90	
NEW LIFE MINISTRY	1021624		5.20		
NEW STAR INN	1021201		33.10		
NIGHTHAWK GOLF CENTER	1021375	140.00	17.50		
ODENTON HESS	1021658		13.40		5.20

FACILITY NAME	PWSID	DEPTH (FT)	GROSS ALPHA RAW (pCi/l)	GROSS ALPHA TRT (pCi/l)	RA226_228 (pCi/l)
ODENTON MOBILE	1021678	220.00	12.00		2.60
ODENTON PARK (GORC)	1021574	216.00	2.40		
OPEN DOOR CHRITIAN SCHOOL	1020102		10.10	1.00	2.80
ORIGINAL LAUREL ASSEMBLY	1021172	140.00	18.50		
OUR LADY OF THE CHESAPEAKE	1021575	112.00	42.60	2.80	
OUR LADY OF THE FIELDS	1021679	180.00	51.40	12.70	
CURSMAN AUTO (TISCHER)	1020115		1.90	0.70	
PAGODA HOUSE RESTAURANT	1021210	101.00	26.10		
PALM BEACH PATIO	1021044	107.00	174.50		
PAMPERED PALATE	1021459	125.00	21.90		
PARKWAY INN	1021168	315.00	1.00		
PASADENA BOTEL & BEACH CLUB	1021514	103.00	7.70		5.00
PASADENA GAS AND GO	1021461		22.10		
PASADENA GOLF CENTER	1021576	120.00	39.80	4.30	
PIZZA BOLIS	1021194	57.00	31.40		
PIZZA EXPRESS	1021224	95.00	13.30		
POOL CATS	1021158		9.50		4.40
POP'S GROCERY & DELI #2	1021363	126.00	109.10	0.80	
PROVINCES PARK	1021577		8.50	1.40	
PUB TAVERN	1021463	135.00	39.80		
RAFTERS	1021267		7.90		2.80
RED CARPET INN	1021444		9.10		
REGENCY PARK ASSISTED LIVING	1020035		19.50	2.20	
REMINGTONS OF LAUREL	1021236		15.60		
RENO'S RESTAURANT	1021237	255.00	13.60		3.10
RESURRECTION OF OUR LAND ROMAN CATH. CONG.	1021690		1.50		
REYS CRABS	1021466	167.00	10.70		
RIDGEVIEW PLAZA WELL #1	1020082	530.00	17.40	0.70	
RIDGEVIEW PLAZA WELL #2	1020082	470.00	5.50	0.70	2.30
ROYAL FARMS STORE #32	1021482	190.00	197.60	6.90	
S. K. RESTAURANT	1021262	170.00	2.60	0.70	
SANDY'S CONVENIENCE STORE	1021240	275.00	3.50		
SEVERN COVENANT CHURCH	1020108	200.00	2.20	2.40	
SEVERN SQUARE SHOPPING CENTER	1020100		17.20	1.50	
SEVERNA PARK CHILDRENS CENTER	1020071	155.00	5.20		3.40
SEVERNA PARK EVANGELICAL PRES. WELL #1	1021581	130.00	7.00		3.30
SEVERNA PARK EVANGELICAL PRES. WELL #2	1021604	68.00	47.70		
SEVERNA PARK GOLF & SPORTS CEN	1021644		1.90		
SEVERNA PARK LANES	1021430	175.00	20.50	1.90	
SEVERNA PARK RACQUETBALL CLUB	1021441	137.00	40.60	13.60	
SHOOTERS SPORTS BAR AND GRILL	1021391	127.00	104.90	1.60	
SKATE ZONE	1021048		46.80	56.20	
SMITH'S MARINA INC.	1021605	92.00	62.50	68.00	
SONNY'S	1021108	189.00	9.20		
SOUTH SHORE BAPTIST CHURCH	1021608	190.00	14.00	2.60	
SPUTNIK CAFE	1021251	180.00	1.00	0.90	
ST. STEPHENS EPISCOPAL	1021585		23.50	1.60	
STUDENT SUPPORT SERVICE CENTER	1020088		18.60		
TALL OAKS RESTAURANT	1021264		8.60		4.60
TEXAS ROADHOUSE	1021036		2.80	6.40	
TEXAS STEAKS	1021208	142.00	17.10	1.80	
THE BREAKFAST SHOPPE	1021205		15.10	7.70	
TUGGIE'S TAVERN	1021274		96.80		
UTOPIA	1021071		7.50		2.50
V.F.W. POST #2462	1021276	122.00	15.20		
VENTNOR MARINE SERVICE, INC.	1021680		2.20	2.90	
VERTERANS PLAZA	1020120	125.00	134.30		
VICTORY LOUNGE	1021496	107.00	127.90		
W BUILDING	1021648	187.00	23.00		
WAUGH CHAPEL EXXON SERVICE STATION	1021649	88.00	50.80		
WAWA FOOD MARKET #532	1021336	98.00	218.50	2.80	
WEE DAY CARE(ELV.BAPT CH)	1021500	96.00	18.30		
WENDY'S OLD FASHION HAM #73	1021282	100.00	20.30		
WHITE GABLES MOTEL	1021129	255.00	9.50	1.10	
WHITE ROCK YACHTING CENTER WELL #1	1021522	140.00	5.00		1.60
WHITE ROCKS MARINA WELL #2	1021522		3.70		
WILLY D'S	1021445		20.40		
WILSON'S CITGO	1021630			8.30	
WINDOWS ON THE BAY WELL #1	1021549	141.00	9.30		2.60
WINDOWS ON THE BAY WELL #2	1021687	142.00	7.40		6.70
WOODLAND BEACH COMMUNITY ASSOCIATION	1021498		8.20		3.00

Table II. Other Sampling Sites and Results - VOC

FACILITY NAME	PWSID	DEPTH (ft)	1ST DETECT	1ST VALUE (ppb)	2ND DETECT	2ND VALUE (ppb)	3RD DETECT	3RD VALUE (ppb)
177 DINER **	1021428	65.00	benzene	0.83				
AMERICAN LEGION #277	1021015	65.00						12.50
ANDOVER RECREATIONAL CENTER	1021017	190.00						
ANNAPOLIS FRIENDS MEETING	1021613	230.00						
BI OBS PARK	1021045							
C & C LIQUORS	1021058	56.00						
CAPITOL RACEWAY	1021065							
CARMEN'S ITALIAN ICE	1021681	85.00	chloroform	1.26				
CHESHIRE CRAB	1021505	150.00	1,2,3-trichlorobenzene	0.72				
CONGREGATION KOL-AMI	1021635	128.00						
COUNTRYSIDE DELI & CARRYOUT	1021486	325.00						
CROFTON CHILDREN'S CENTER	1020046	152.00						
CROFTON GO-KART RACEWAY	1021349		toluene	0.67	mtbe	3.80	toluene	2.94
DAIRY QUEEN	1021443	142.00						
DAVIDSONVILLE COUNTRY STORE	1021089							
DAYS INN WELL #1	1021652	325.00						
DEALE FOOD RTE	1021213	185.00	chloroform	2.28	bromodichloromethane	0.90		
DEEP CREEK RESTAURANT AND MARINA	1021090							
DENNY'S RESTAURANT	1021365	178.00						
DORR'S TEXACO	1021594							
DOWNNS COMMUNITY POOL	1021408	175.00						
DUNGAN'S FAMILY CAMPGROUND	1021215	210.00						
EASTERN PETROLEUM #4	1021467	316.00						
EISENHOWER GOLF COURSE	1021104	230.00						
ELKS CAMP BARRETT	1021426							
FIRST BAPTIST CHURCH OF DEALE	1021619	180.00						
GATES MARINE SALES WELL #2	1021655	140.00						
GIBSON'S TEXACO	1021533	330.00						
H & J AMOCO, INC	1021508	206.00						
HAPPY HOUSE PIZZA	1021258							
HIGHS DAIRY STORE #17	1021093	210.00	mtbe	0.51				
HIGHS DAIRY STORE #71	1021510	114.00						
HIGHS OF BALTIMORE #99	1021220	194.00						
J & M LOTHIAN AMOCO	1021521		chloroform	1.48	toluene	1.03		
KIWANIS CLUB OF MAYO	1021670	91.00						
LONG POINT INN	1021178	87.00						
MAGOTHY INN	1021366	55.00	mtbe	1.19				
MASIEL BROTHERS, INC	1020129	80.00						
PAGEWAY CONVENIENCE STORE	1021493	190.00						
PAPA JOHN'S PIZZA #702	1021429	128.00						
PASADENA BOTEL & BEACH CLUB	1021514	103.00						
PASADENA GAS AND GO	1021461							
PASADENA GOLF CENTER	1021576	120.00						
POP'S GROCERY & DELI #2	1021363	126.00						
RED CARPET INN	1021444		mtbe	1.90				
RED HOT AND BLUE	1021380	98.00	chloroform	10.84	trichlorofluoromethane	0.80		
RENNOS QUALITY FOOD MARKET	1021435	410.00						
RESURRECTION OF OUR LAND ROMAN CATHOLIC CONGREGATION	1021690							
RUSTY'S WAYSIDE GRILL	1021193	395.00						
ST. ANDREW THE FISHERMAN	1021584							
SUE'S DELI	1021189	85.00						
SURSIDE 7 RESTAURANT/BAR	1021082	72.00	chlorobenzene	15.70	1,4-dichlorobenzene	38.50	1,3-dichlorobenzene	30.70
TACO BELL #4748	1021388	106.00	1,2,3-trichlorobenzene	0.75				
TEXACO FOOD MART	1021470	180.00						
TEXAS STEAKS	1021208	142.00						
VICTORY LOUNGE	1021496	107.00	mtbe	0.58				
WAUGH CHAPEL EXXON SERVICE STATION	1021649	88.00	mtbe	0.94				
WEST RIVER MARKET	1021285	139.00						
WILSON'S CITGO	1021630							
WINDOWS ON THE BAY WELL #1	1021549	141.00						
WOODFIELD FISH & OYSTER CO	1021287	159.00						

** additional detects: total xylenes 32.70; 1,3,5-trimethylbenzene 14.50; 1,2,4-trimethylbenzene 23.80; naphthalene 1.90; mtbe 0.75 (ppb)

Table II. Other Sampling Sites and Results - EDB/DBCP

FACILITY NAME	PWSID	DEPTH (ft)	EDB (ppb)	DBCP (ppb)
AMERICAN LEGION #276	1021014	107.00		
AMERICAN LEGION #277	1021015	65.00		
ANDOVER RECREATIONAL CENTER	1021017	190.00		
ANNAPOLIS GOLF CLUB	1021351	130.00		
ASSEMBLY HALL OF JEHOVAHS WITN	1021023	151.00		
BALDWIN HILLS SWIM CLUB	1021400			
BELL BRANCH ATHLETIC COMPLEX	1021553	400.00		
BLOB'S PARK	1021045			
BOSTON MARKET #2729	1021502	166.00		
CAMP WABANNA WELL #1	1021063	347.00		
CAPE ST. CLAIRE COMMUNITY HALL	1021632			
CARMEN'S ITALIAN ICE	1021681	85.00		
CHESAPEAKE BAPTIST CHURCH	1021557	82.00	0.01	
COYOTE CAFE	1021249	112.00		
CROFTON CANTINA	1021245	240.00		
CROFTON CHILDREN'S CENTER	1020046	152.00		
CROFTON PARK	1021559	175.00		
DAIRY QUEEN	1021443	142.00		
DAVIDSONVILLE FAMILY DENTISTRY	1021636	145.00		
DAYS INN WELL #1	1021652	325.00		
DENNY'S RESTAURANT	1021365	178.00		
DOMINO'S PIZZA #4633	1021653	93.00		
EASTERN PETROLEUM #4	1021467	316.00		
EISENHOWER GOLF COURSE	1021104	230.00		
FIRST CHRISTIAN COMM. CHURCH	1021684	234.00		
FT. MEADE TEXACO	1021637	465.00		
GINGERVILLE COMMUNITY POOL	1021411	27.00		
HANEY'S GROCERY AND DELI INC.	101132			
HARBOR HILLS YACHT CLUB	1021412	258.00		
HERRINGTON HARBOR MARINA SOUTH WELL #1	1021139	335.00		
HIGHS DAIRY STORE #17	1021093	210.00		
HIGHS DAIRY STORE #71	1021510	114.00		
HILLSMERE COMMUNITY POOL	1021413	120.00		
HOPE ST. MARK UNITED METH. CHU	1021620	83.00		
JERMAN'S I.G.A.	1021154			
KAUFMANN'S TAVERN	1021161	155.00		
LAZER EXTREME	1021523	110.00		
LONDONTOWNE PUBLIC HOUSE	1021569	70.00		
LONG POINT INN	1021178	87.00		
MORELAND STORE	1021197	307.00		
OLD SOUTH COUNTRY CLUB WELL #2	1021418	290.00		
OUR LADY OF THE FIELDS	1021679	180.00		
PASADENA BOTEL & BEACH CLUB	1021514	103.00		
PASADENA GOLF CENTER	1021576	120.00		
QUIET WATERS PARK WELL #1	1021381	377.00		
ROYAL FARMS STORE #56	1021382	101.00		
RS LEITCH COMPANY	1020118	60.00		
RUSTY'S WAYSIDE GRILL	1021193	395.00		
SEVERNA PARK EVANGELICAL PRES. WELL #2	1021604	68.00		
SEVERNA PARK GOLF & SPORTS CEN	1021644			
ST. ANDREW THE FISHERMAN	1021584			
ST. STEPHENS EPISCOPAL	1021585			
STEINFELD MEDICAL OFFICE	1021540	127.00		
SWAMP CIRCLE SALOON	1021260	165.00		
TACO BELL #4748	1021388	106.00		
VICTORY LOUNGE	1021496	107.00		
W BUILDING	1021648	187.00		
WILSON'S CITGO	1021630			
WINDOWS ON THE BAY WELL #1	1021549	141.00		
WOODFIELD FISH & OYSTER CO	1021287	159.00		
YMCA CAMP LETTS WELL #4	1021543	90.00		

Table II. Other Sampling Sites and Results - Heavy Metals

FACILITY NAME	PWSID	DEPTH (ft)	1ST DETECT	1ST VALUE (ppm)	2ND DETECT	2ND VALUE (ppm)	3RD DETECT	3RD VALUE (ppm)	4TH DETECT	4TH VALUE (ppm)
177 DINER	1021428									
AMERICAN LEGION #277	1021015	65.00	copper	0.090	lead	0.040				
ANDOVER RECREATIONAL CENTER	1021017	190.00								
ANNAPOLIS FRIENDS MEETING	1021613	230.00								
ASSEMBLY HALL OF JEHOVAH'S WITN	1021023	151.00	arsenic	0.003	cadmium	0.005	aluminum	5.070	iron	2.950
BALDWIN HILLS SWIM CLUB	1021400		copper	0.750	lead	0.030				
BLOBS PARK	1021045		copper	0.550						
CARMEN'S ITALIAN ICE	1021681	85.00	barium	0.200						
CONGREGATION KOL-AMI	1021635	128.00								
COUNTYSIDE DELL & CARRYOUT	1021486	325.00								
CROFTON CHILDREN'S CENTER	1020046	152.00								
DAIRY QUEEN	1021443	142.00	copper	0.110						
DAYS INN WELL #1	1021652	325.00								
DEEP CREEK RESTAURANT AND MARINA	1021090		copper	0.100	lead	0.010	iron	13.500		
DENNY'S RESTAURANT	1021365	178.00								
EISENHOWER GOLF COURSE	1021104	230.00	copper	0.080	lead	0.010				
GINGERVILLE COMMUNITY POOL	1021411	27.00								
HARDESTY FUNERAL HOME	1021563		barium	0.210	lead	0.090	copper	0.010		
HIGH'S DAIRY STORE #17	1021093	210.00	copper	0.120						
HIGH'S DAIRY STORE #71	1021510	114.00								
JERMANS I.G.A.	1021154		copper	0.090	lead	0.020				
LONG POINT INN	1021178	87.00	arsenic	0.010						
MAGOTHY INN	1021366	55.00	lead	0.010						
NIGHTHAWK GOLF CENTER	1021375	140.00	copper	0.160						
PASADENA BOTEL & BEACH CLUB	1021514	103.00								
PASADENA GOLF CENTER	1021576	120.00	lead	0.010						
PUB TAVERN	1021463	135.00	barium	0.110	copper	0.860	lead	0.020		
RED CARPET INN	1021444		copper	0.870	lead	0.010				
RED HOT AND BLUE	1021380	98.00	copper	0.280						
RUSTY'S WAYSIDE GRILL	1021193	395.00								
ST. ANDREW THE FISHERMAN	1021584		arsenic	0.002	copper	0.450	lead	0.030		
TACO BELL #4748	1021388	106.00	lead	0.020	iron	2.200				
VICTORY LOUNGE	1021496	107.00	lead	0.010						
WILSON'S CITGO	1021630		copper	0.140						
WINDOWS ON THE BAY WELL #1	1021549	141.00	copper	0.060						
WOODFIELD FISH & OYSTER CO	1021287	159.00	lead	0.027						

Table II. Other Sampling Sites and Results - Inorganics

FACILITY NAME	PWSID	DEPTH (ft)	1ST DETECT	1ST VALUE (ppm)	2ND DETECT	2ND VALUE (ppm)
177 DINER	1021428		nitrate	7.80		
AMERICAN LEGION #277	1021015	65.00				
ANDOVER RECREATIONAL CENTER	1021017	190.00	nitrate	1.40		
ASSEMBLY HALL OF JEHOVAHS WITN	1021023	151.00				
BALDWIN HILLS SWIM CLUB	1021400		nitrate	2.00		
BLOB'S PARK	1021045		nitrate	2.20		
CARMEN'S ITALIAN ICE	1021681	85.00	nitrate	15.70	chloride	9.00
CONGREGATION KOL-AMI	1021635	128.00				
COUNTRYSIDE DELI & CARRYOUT	1021486	325.00				
CROFTON CHILDREN'S CENTER	1020046	152.00				
DAIRY QUEEN	1021443	142.00				
DAYS INN WELL #1	1021652	325.00				
DEEP CREEK RESTAURANT AND MARINA	1021090		turbidity	18.40		
DENNY'S RESTAURANT	1021365	178.00	nitrate	2.10		
EISENHOWER GOLF COURSE	1021104	230.00				
GINGERVILLE COMMUNITY POOL	1021411	27.00				
HARDESTY FUNERAL HOME	1021563		nitrate	17.10		
HIGHS DAIRY STORE #17	1021093	210.00	turbidity	4.80		
HIGH'S DAIRY STORE #71	1021510	114.00	turbidity	16.10		
JERMAN'S I.G.A.	1021154		nitrate	6.30		
LONG POINT INN	1021178	87.00	chloride	26.90	dissolved solids	60.70
MAGOTHY INN	1021366	55.00	chloride	48.00	nitrate	9.70
NIGHTHAWK GOLF CENTER	1021375	140.00	nitrate	7.80		
PASADENA BOTEL & BEACH CLUB	1021514	103.00	nitrate	1.20		
PASADENA GOLF CENTER	1021576	120.00	nitrate	3.30		
PUB TAVERN	1021463	135.00	nitrate	8.50		
RED CARPET INN	1021444		nitrate	4.40		
RED HOT AND BLUE	1021380	98.00	nitrate	2.20		
RUSTY'S WAYSIDE GRILL	1021193	395.00				
ST. ANDREW THE FISHERMAN	1021584		turbidity	36.00	ion	4.27
TACO BELL #4748	1021388	106.00	turbidity	21.00		
VICTORY LOUNGE	1021496	107.00	nitrate	1.90		
WILSON'S CITGO	1021630		nitrate	2.80		
WINDOWS ON THE BAY WELL #1	1021549	141.00	nitrate	2.50		
WOODFIELD FISH & OYSTER CO	1021287	159.00	nitrate	0.03		

Table II. Other Sampling Sites and Results - Viral
No Positive Results

FACILITY NAME	PWSID	DEPTH (ft)
177 DINER	1021428	
AFTER DECK SPORTS BAR AND GRILL	1021277	
ARLINGTON ECHO OUTDOOR EDUCATION	1021059	140.00
B.P.O. ELKS #2608	1021050	70.00
CARMEN'S ITALIAN ICE	1021681	85.00
CHESAPEAKE BAPTIST CHURCH	1021557	82.00
CHRIST LUTHERN CHURCH	1021527	
CLARKS LANDING WELL #1	1021538	127.00
CONGREGATION KOL-AMI	1021635	128.00
COYOTE CAFE	1021249	112.00
DEALE SUNOCO STATION	1021529	160.00
DORR'S TEXACO	1021594	
DOWNS COMMUNITY POOL	1021408	175.00
FAIRWINDS BEACH CLUB, INC	1021618	61.00
FLECK MACHINE CO., INC.	1020113	255.00
GREATER ANNAPOLIS VETERINARY HOSPITAL	1020117	
HARDESTY FUNERAL HOME	1021563	
HEADQUARTER 1/ HEADQUARTER 2 WELL #2	1020119	142.00
HOLMES BUILDING	1021519	86.00
HORIZON ORGANIC FARM AND EDUCATION WELL #2	1021685	
HUTSON'S LAKE SHORE TAVERN	1021152	
JERMAN'S I.G.A.	1021154	
JESSUP SHELL FOOD MARKET	1021156	
LAKE SHORE VOLUNTEER FIRE DEPT	1021169	86.00
LAZER EXTREME	1021523	110.00
LIBERTY YACHT CONVENIENCES WELL #1	1021479	
MAGOTHY INN	1021366	55.00
MEATS & MORE	1021229	79.00
NIGHTHAWK GOLF CENTER	1021375	140.00
O'BRIEN'S PUB & LIQUOR	1021199	192.00
OUR LADY OF PERPETUAL HELP CHURCH	1021575	90.00
OUR LADY OF THE FIELDS	1021679	180.00
PETIE GREENS	1021039	185.00
PUB TAVERN	1021463	135.00
ROYAL FARMS STORE #32	1021482	190.00
SAEFERN POOL	1021420	170.00
SANDY'S CONVENIENCE STORE	1021240	275.00
SHOOTERS SPORTS BAR AND GRILL	1021391	127.00
SMITH'S MARINA INC.	1021605	92.00
ST. ANDREWS ELEMENTARY SCHOOL WELL #2	1020030	118.00
TUGGIE'S TAVERN	1021274	
UNITARIAN UNIVERSALIST CHURCH	1021660	
VERTERANS PLAZA	1020120	125.00
WAWA FOOD MARKET #532	1021336	98.00
WEE DAY CARE(ELV.BAPT.CH)	1021500	96.00

Table III. Facility Data and Index

FACILITY NAME	FIGURE NO.	PW/SID	SYSTEM TYPE	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE	ASSESSMENT SHAPE
177 DINER	1a and 4v	1021428	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
1ST MEDICAL/TATTOO GARDEN	2a	1021211	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
7-11 #11543	3a and 1u	1021003	NCT	<10,000GPD	105.00	Unconfined	PATUXENT	1000circle
AA CO. SOUTHERN DISTRICT	no figure	1021631	NCT	<10,000GPD	390.00	Confined	AQUIA	none
ADAMS RIBS	4a, 3b and 14l	1021009	NCT	<10,000GPD	118.00	Unconfined	AQUIA	1000circle
AFTER DECK SPORTS BAR AND GRILL	5a, 1m and 10m	1021277	NCT	<10,000GPD		Unconfined	MAGOTHY	wedge
AMERICAN CARRWASH	no figure	1021454	NCT	<10,000GPD	198.00	Confined	MAGOTHY	none
AMERICAN LEGION #226	7a	1021013	NCT	<10,000GPD	112.00	Unconfined	AQUIA	1000circle
AMERICAN LEGION #276	8a	1021014	NCT	<10,000GPD	107.00	Unconfined	UPPER PATAPSCO	1000circle
AMERICAN LEGION #277	9a	1021015	NCT	<10,000GPD	65.00	Unconfined	UPPER PATAPSCO	wedge
ANCHOR INN	10a	1021447	NCT	<10,000GPD	85.00	Unconfined	UPPER PATAPSCO	wedge
ANCHORAGE SWIM CLUB	11a	1021398	NCT	<10,000GPD	94.00	Unconfined	AQUIA	1000circle
ANDOVER RECREATIONAL CENTER	no figure	1021017	NCT	<10,000GPD	190.00	Unconfined	LOWER PATAPSCO	wedge
ANGEL'S FOOD MARKET	12a, 31s and 32s	1021612	NCT	<10,000GPD	195.00	Confined	UPPER PATAPSCO	none
ANNAPOLIS CONG. OF JEHOVAHS	no figure	1021203	NCT	<10,000GPD		Unconfined	AQUIA	none
ANNAPOLIS FRIENDS MEETING	13a	1021613	NCT	<10,000GPD	230.00	Confined	MAGOTHY	wedge
ANNAPOLIS GOLF CLUB	no figure	1021351	NCT	<10,000GPD	130.00	Unconfined	AQUIA	none
ANNAPOLIS MOOSE LODGE #296	no figure	1021353	NCT	<10,000GPD	230.00	Confined	MAGOTHY	wedge
ANNAPOLIS TERRACE MOTEL	no figure	1021020	NCT	<10,000GPD	200.00	Confined	MAGOTHY	none
ARDEN ON THE SEVERN PARK	14a	1021550	NCT	<10,000GPD	126.00	Unconfined	MAGOTHY	none
ARLINGTON ECHO OUTDOOR EDUCATION	no figure	1021059	NCT	<10,000GPD	140.00	Confined	UPPER PATAPSCO	wedge
ARNOLD PET STATION	no figure	1021865	NCT	<10,000GPD	196.00	Confined	MAGOTHY	none
ARUNDEL BAPTIST CHURCH	15a, 4h, 26h, 27h and 1j	1021551	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
ASBURY BROADNECK UNITED METHODIST CHURCH	16a	1021662	NCT	<10,000GPD	67.00	Unconfined	AQUIA	wedge
ASSEMBLY HALL OF JEHOVAHS WITNESS	no figure	1021023	NCT	<10,000GPD	151.00	Confined	UPPER PATAPSCO	none
B.P.O. ELKS #283	no figure	1021051	NCT	<10,000GPD	425.00	Confined	PATUXENT	none
B.P.O. ELKS #2528	1h, 7d, 4r and 4l	1021339	NCT	<10,000GPD	210.00	Unconfined	AQUIA	1000circle
B.P.O. ELKS #2608	2b	1021050	NCT	<10,000GPD	70.00	Unconfined	AQUIA	wedge
BAGDASIAN BUILDING	4a, 3b and 14l	1021651	NCT	<10,000GPD	70.00	Unconfined	AQUIA	1000circle
BALDWIN CHURCH FACILITIES	4b	1020061	NCT	<10,000GPD	94.00	Unconfined	MAGOTHY	1000circle
BALDWIN HILLS SWIM CLUB	5b	1021400	NCT	<10,000GPD	62.00	Unconfined	UPPER PATAPSCO	wedge
BALTIMORE KOREAN SDA CHURCH	7b and 9p	1021666	NCT	<10,000GPD	96.00	Unconfined	MAGOTHY	1000circle
BAY BAKERY	8b and 11p	1021497	NCT	<10,000GPD	82.00	Unconfined	MAGOTHY	wedge
BAY RIDGE BEACH POOL	9b, 11d, 3f and 22s	1021487	NCT	<10,000GPD	115.00	Unconfined	AQUIA	1000circle
BAYSIDE BULL BBQ CATERING	no figure	1021079	NCT	<10,000GPD	170.00	Confined	AQUIA	none
BAYSIDE CRABS	no figure	1021682	NCT	<10,000GPD	400.00	Confined	UPPER PATAPSCO	none
BELL BRANCH ATHLETIC COMPLEX	10b and 1w	1021553	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
BENFIELD PINES ICE RINK	no figure	1021882	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
BILLS NORTH ODEONTON SHOPPING CTR WELL #1	11b, 12b, 3k, 8k, 20m and 4n	1020104	NCT	<10,000GPD	118.00	Unconfined	LOWER PATAPSCO	1000circle
BILLS NORTH ODEONTON SHOPPING CTR WELL #2	11b, 12b, 3k, 8k, 20m and 4n	1020104	NCT	<10,000GPD		Unconfined	LOWER PATAPSCO	1000circle
BIRCHES PARK	13b	1021045	NCT	<10,000GPD		Unconfined	LOWER PATAPSCO	1000circle
BODKIN PARK	14b	1021554	NCT	<10,000GPD	90.00	Unconfined	UPPER PATAPSCO	wedge
BODKIN YACHT CLUB WELL #1	16b and 17b	1021047	NCT	<10,000GPD	145.00	Unconfined	UPPER PATAPSCO	1000circle
BODKIN YACHT CLUB WELL #2	16b and 17b	1021693	NCT	<10,000GPD	75.00	Unconfined	UPPER PATAPSCO	wedge
BOSTON MARKET #2729	no figure	1021502	NCT	<10,000GPD	165.00	Confined	UPPER PATAPSCO	wedge
BREEZE CUISINE	18b, 5e and 4k	1021180	NCT	<10,000GPD		Unconfined	AQUIA	none
BRICK HOUSE OF SHADYSIDE	no figure	1021028	NCT	<10,000GPD	248.00	Confined	AQUIA	1000circle
BRIGHTVIEW BUSINESS CENTER	19b, 14c and 13d	1020123	NCT	<10,000GPD	125.00	Unconfined	LOWER PATAPSCO	1000circle
BURGER KINGS	20b and 7h	1021135	NCT	<10,000GPD	56.00	Unconfined	AQUIA	1000circle
C & C LIQUORS	1c and 11m	1021366	NCT	<10,000GPD		Unconfined	AQUIA	1000circle
CALYPSO BAY RESTAURANT	no figure	1021058	NCT	<10,000GPD	347.00	Confined	AQUIA	none
CAMP WABANNA WELL #1	no figure	1021063	NCT	<10,000GPD	350.00	Confined	MAGOTHY	none
CAMP WABANNA WELL #2	no figure	1021525	NCT	<10,000GPD		Confined	MAGOTHY	none
CAMP WHIPPOORWILL WELL #1	no figure	1021123	NCT	<10,000GPD	135.00	Unconfined	UPPER PATAPSCO	wedge

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM TYPE	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE	ASSESSMENT SHAPE
CAMP WHIPPOWILL WELL #2	2c, 3c and 5g	1021123	NCT	<10,000GPD	135.00	Unconfined	UPPER PATAPSCO	wedge
CAPE KIDS CORNER	4c	1020043	NCNT	<10,000GPD	210.00	Unconfined	MAGOTHY	1000circle
CAPE ST. CLAIRE COMMUNITY HALL	5c	1021632	NCT	<10,000GPD	70.00	Unconfined	AQUA	wedge
CAPE ST. CLAIRE PARK	6c	1021555	NCT	<10,000GPD	70.00	Unconfined	AQUA	wedge
CAPE ST. CLAIRE SWIM CLUB	11c	1021404	NCT	<10,000GPD	363.00	Unconfined	LOWER PATAPSCO	wedge
CAPITAL KOA CAMPGROUND WELL #1	no figure	1021427	NCT	<10,000GPD	363.00	Confined	LOWER PATAPSCO	none
CAPITOL KOA CAMPGROUND WELL #2	no figure	1021588	NCT	<10,000GPD	363.00	Confined	LOWER PATAPSCO	none
CAPITOL RACEWAY	12c	1021065	NCT	<10,000GPD	85.00	Unconfined	UPPER PATAPSCO	wedge
CARLSON'S PASTRIES	13c, 19c, 22c, 12d, 3h, 17h and 3l	1021450	NCT	<10,000GPD	85.00	Unconfined	AQUA	1000circle
CARMEN'S ITALIAN ICE	19h, 14c and 13d	1021681	NCT	<10,000GPD	85.00	Unconfined	UPPER PATAPSCO	1000circle
CARRIE WEEDON	no figure	1020087	NCT	<10,000GPD	150.00	Confined	AQUA	none
CASA BIANCA RESTAURANT	15c	1021894	NCT	<10,000GPD	220.00	Unconfined	UPPER PATAPSCO	1000circle
CASEY'S CRAB COMPANY	no figure	1021304	NCT	<10,000GPD	245.00	Confined	PATUXENT	none
CATLETT'S AMOCO	no figure	1021589	NCT	<10,000GPD	190.00	Confined	MAGOTHY	none
CEDAR GROVE UNITED METHODIST CHURCH	no figure	1021405	NCT	<10,000GPD	275.00	Confined	AQUA	none
CEDARWOOD COVE	16c	1021557	NCT	<10,000GPD	82.00	Confined	UPPER PATAPSCO	none
CHESAPEAKE BAPTIST CHURCH	no figure	1021698	NCT	<10,000GPD	270.00	Unconfined	UPPER PATAPSCO	wedge
CHESAPEAKE CHRISTIAN FELLOWSHIP	17c	1020107	NCNT	<10,000GPD	330.00	Confined	MAGOTHY	none
CHESAPEAKE CHRISTIAN SCHOOL	18c	1020003	NCNT	<10,000GPD	330.00	Confined	AQUA	600circle
CHESAPEAKE SCHOOL COMPLEX (LAKE SHORE)	18c	1020107	NCNT	<10,000GPD	330.00	Confined	AQUA	600circle
CHESAPEAKE SEAFOOD, INC	13c, 19c, 22c, 12d, 3h, 17h and 3l	1021087	NCT	>10,000GPD	590.00	Confined	LOWER PATAPSCO	Florida
CHESAPEAKE YACHT CLUB	no figure	1021069	NCT	<10,000GPD	110.00	Unconfined	AQUA	1000circle
CHESHIRE CRAB	20c	1021505	NCT	<10,000GPD	150.00	Confined	AQUA	none
CHEW'S MEMORIAL UNITED CHURCH	no figure	1021634	NCT	<10,000GPD	150.00	Unconfined	UPPER PATAPSCO	wedge
CHIROPRAXTORS	21c, 10l, 11l, 10, 2o and 1y	1021526	NCT	<10,000GPD	150.00	Confined	AQUA	none
CHOCOLATE BOX	13c, 19c, 22c, 12d, 3h, 17h and 3l	1021046	NCT	<10,000GPD	150.00	Unconfined	AQUA	wedge
CHRIST LUTHERN CHURCH	23c	1021527	NCT	<10,000GPD	120.00	Unconfined	UPPER PATAPSCO	1000circle
CHIGO QUIK SHOP	24c, 21l, 7m, 5o and 30s	1021190	NCT	<10,000GPD	120.00	Unconfined	AQUA	1000circle
CLARKS CELEBRATION AT THE BAY	25c, 27c and 7p	1021403	NCT	<10,000GPD	127.00	Unconfined	UPPER PATAPSCO	wedge
CLARKS LANDING WELL #1	26c	1021538	NCT	<10,000GPD	127.00	Unconfined	AQUA	wedge
CLARKS LANDING WELL #2	no figure	1021537	NCT	<10,000GPD	107.00	Confined	AQUA	none
CLUB SUNSET KNOLL	25c, 27c and 7p	1021073	NCT	<10,000GPD	107.00	Confined	UPPER PATAPSCO	wedge
COLONY 7 SHELL	28c	1021614	NCT	<10,000GPD	117.00	Unconfined	UPPER PATAPSCO	wedge
COLUMBIAN CENTER	29c	1021164	NCT	<10,000GPD	88.00	Unconfined	PATUXENT	1000circle
CONCOURSE COMMERCIAL CONDO INC.	30c and 17m	1020106	NCNT	<10,000GPD	242.00	Unconfined	AQUA	wedge
CONGREGATION KOL-AMI	31c	1021635	NCT	<10,000GPD	128.00	Unconfined	UPPER PATAPSCO	wedge
COUNTRYSIDE DELI & CARRYOUT	no figure	1021486	NCT	<10,000GPD	325.00	Unconfined	AQUA	wedge
COUNTRYSIDE STORE & VIDEO	no figure	1021212	NCT	<10,000GPD	325.00	Confined	AQUA	none
COYOLE CAFE	32c	1021249	NCT	<10,000GPD	112.00	Unconfined	AQUA	none
CROFTON CANTINA	33c	1021245	NCT	<10,000GPD	240.00	Unconfined	UPPER PATAPSCO	1000circle
CROFTON CHILDREN'S CENTER	34c	1020046	NCNT	<10,000GPD	152.00	Unconfined	MAGOTHY	wedge
CROFTON GO-KART RACEWAY	35c and 5w	1021349	NCT	<10,000GPD	152.00	Unconfined	MAGOTHY	wedge
CROFTON MEDICAL ARTS BLDG	36c	1021673	NCT	<10,000GPD	175.00	Unconfined	UPPER PATAPSCO	wedge
CROFTON PARK	no figure	1021559	NCT	<10,000GPD	182.00	Unconfined	UPPER PATAPSCO	wedge
CROWNSVILLE AUTOMOTIVE	no figure	1021592	NCT	<10,000GPD	182.00	Confined	UPPER PATAPSCO	none
CURTIS BAY ATHLETIC CLUB	37c	1021083	NCT	<10,000GPD	60.00	Confined	MAGOTHY	none
D.P. CARRY OUT	1d	1021144	NCT	<10,000GPD	313.00	Unconfined	UPPER PATAPSCO	none
DAIRY QUEEN	2d and 7l	1021443	NCT	<10,000GPD	142.00	Unconfined	AQUA	wedge
DANNY'S TAVERN	3d	1021086	NCT	<10,000GPD	107.00	Unconfined	AQUA	wedge
DAVIDSONVILLE COUNTRY STORE	4d and 23h	1021089	NCT	<10,000GPD	107.00	Unconfined	UPPER PATAPSCO	1000circle
DAVIDSONVILLE ELEMENTARY	5d	1020012	NCNT	<10,000GPD	355.00	Unconfined	UPPER PATAPSCO	1000circle
DAVIDSONVILLE FAMILY DENTISTRY	no figure	1021636	NCT	<10,000GPD	145.00	Confined	MAGOTHY	600circle
DAVIDSONVILLE RURIAN FOUNDATION	6d	1021616	NCT	<10,000GPD	58.00	Confined	MAGOTHY	none
DAVIDSONVILLE UNITED METH. CHURCH	no figure	1021593	NCT	<10,000GPD	150.00	Unconfined	MAGOTHY	1000circle
DAYS INN WELL #1	no figure	1021652	NCT	<10,000GPD	325.00	Confined	MAGOTHY	none
DAYS INN WELL #2	no figure	1021343	NCT	<10,000GPD	325.00	Confined	MAGOTHY	none
DEALE ELEMENTARY	1b, 7d, 4f and 4i	1020013	NCNT	<10,000GPD	204.00	Unconfined	AQUA	1000circle

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM TYPE	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE AQUIFER	ASSESSMENT SHAPE
DEALE FAMILY DENTISTRY		1021669	NCT	<10,000GPD	145.00	Confined	AQUIA	none
DEALE FOOD RITE		1021213	NCT	<10,000GPD	185.00	Confined	AQUIA	none
DEALE LIBRARY		1021607	NCT	<10,000GPD	160.00	Confined	MAGOTHY	none
DEALE SUNCOCO STATION		1021529	NCT	<10,000GPD	178.00	Unconfined	AQUIA	none
DEEP CREEK RESTAURANT AND MARINA		1021090	NCT	<10,000GPD	190.00	Confined	MAGOTHY	wedge
DENNIS RESTAURANT		1021365	NCT	<10,000GPD		Confined	MAGOTHY	none
DENNIS RESTAURANT #1840		1021092	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
DJS PUB		1021185	NCT	<10,000GPD		Confined	MAGOTHY	none
DOG HOUSE		1021683	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
DOMINOS PIZZA		1021434	NCT	<10,000GPD	108.00	Unconfined	AQUIA	1000circle
DOMINOS PIZZA #4633		1021452	NCT	<10,000GPD	93.00	Unconfined	AQUIA	1000circle
DORRIS TEXACO		1021653	NCT	<10,000GPD		Confined	MAGOTHY	none
DOWN'S COMMUNITY POOL		1021594	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
DOWN'S MEMORIAL PARK WELL #1		1021408	NCT	<10,000GPD	175.00	Confined	MAGOTHY	none
DOWN'S MEMORIAL PARK WELL #2		1021095	NCT	<10,000GPD		Unconfined	MAGOTHY	wedge
DUFEYS III		1021560	NCT	<10,000GPD		Unconfined	MAGOTHY	wedge
DUNCAN'S FAMILY CAMPGROUND		1021097	NCT	<10,000GPD		Confined	AQUIA	none
DUNKIN DONUTS/BAKSKIN ROBBINS		1021215	NCT	<10,000GPD	210.00	Confined	AQUIA	none
EAGLES NEST		1021098	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
EAGLES PASSAGE POOL		1020041	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
EASTERN PETROLEUM #4		1021617	NCT	<10,000GPD	289.00	Confined	UPPER PATAPSCO	1000circle
EDGEWATER ELEMENTARY		1021467	NCT	<10,000GPD	316.00	Confined	UPPER PATAPSCO	none
EDGEWATER PARK		1020014	NCT	<10,000GPD	90.00	Unconfined	AQUIA	none
EDGEWATER PROFESSIONAL OFFICE BLDG.		1021692	NCT	<10,000GPD	87.00	Unconfined	AQUIA	1000circle
EDGEWATER RESTAURANT		1021654	NCT	<10,000GPD		Unconfined	AQUIA	1000circle
EDGEWATER SUBWAY INC.		1021103	NCT	<10,000GPD	100.00	Unconfined	AQUIA	1000circle
EISENHOWER GOLF COURSE		1021489	NCT	<10,000GPD	55.00	Unconfined	AQUIA	1000circle
EL BUEN SABOR LATINO		1021348	NCT	<10,000GPD	230.00	Confined	UPPER PATAPSCO	1000circle
ELKS CAMP BARRETT		1021104	NCT	<10,000GPD		Unconfined	AQUIA	1000circle
ELEVATION DAY NURSERY		102153	NCT	<10,000GPD	125.00	Unconfined	AQUIA	1000circle
FAIRWINDS BEACH CLUB INC		1021426	NCT	<10,000GPD		Unconfined	AQUIA	1000circle
FAMILY VETERINARY CLINIC		1020084	NCT	<10,000GPD	61.00	Unconfined	UPPER PATAPSCO	wedge
FIRST BAPTIST CHURCH OF DEALE		1021618	NCT	<10,000GPD	85.00	Unconfined	MAGOTHY	1000circle
FIRST BAPTIST CHURCH OF EDGEWATER		1021409	NCT	<10,000GPD	165.00	Unconfined	MAGOTHY	none
FISHING CREEK		1021637	NCT	<10,000GPD	180.00	Confined	UPPER PATAPSCO	none
FLECK MACHINE CO., INC.		1021561	NCT	<10,000GPD	111.00	Unconfined	AQUIA	1000circle
FRANKLIN UNITED METHODIST		1021410	NCT	<10,000GPD	234.00	Confined	MAGOTHY	none
FRIENDSHIP UNITED METHODIST CHURCH		1020113	NCT	<10,000GPD	320.00	Confined	MAGOTHY	none
FRIENDSHIP UNITED METHODIST CHURCH		1021638	NCT	<10,000GPD	255.00	Unconfined	PATUXENT	1000circle
FT MEADE TEXACO		1021530	NCT	<10,000GPD	180.00	Confined	AQUIA	none
FT SMALLWOOD ELEMENTARY		1021595	NCT	<10,000GPD	425.00	Confined	AQUIA	none
FT SMALLWOOD MAINTENANCE		1021637	NCT	<10,000GPD	465.00	Confined	UPPER PATAPSCO	600circle
FULL GOSPEL EMANIPATION LIFE		1020078	NCT	<10,000GPD	290.00	Confined	LOWER PATAPSCO	600circle
GALLESVILLE EARLY LEARNING CTR.		1021639	NCT	<10,000GPD	155.00	Unconfined	MAGOTHY	1000circle
GALLESVILLE NUTRITION SITE		1020053	NCT	<10,000GPD	120.00	Confined	UPPER PATAPSCO	none
GALLIE LUTHERAN CHURCH		1021531	NCT	<10,000GPD	43.00	Unconfined	AQUIA	wedge
GATES MARINE SALES WELL #1		1021661	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	none
GATES MARINE SALES WELL #2		1021640	NCT	<10,000GPD	140.00	Confined	AQUIA	none
GERALD'S HWY CORRIDOR PARK		1021582	NCT	<10,000GPD	211.00	Confined	UPPER PATAPSCO	none
GERALD GOODMAN DENTAL OFFICE		1021532	NCT	<10,000GPD	147.00	Confined	UPPER PATAPSCO	none
GIBSON'S TEXACO		1021533	NCT	<10,000GPD	330.00	Confined	AQUIA	none
GINGERVILLE COMMUNITY POOL		1021411	NCT	<10,000GPD	27.00	Unconfined	AQUIA	1000circle
GRACE OF GOD FELLOWSHIP		1021534	NCT	<10,000GPD	185.00	Confined	UPPER PATAPSCO	none

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM TYPE	WATER USE	DEPTH (Ft)	WELL TYPE	SOURCE	ASSESSMENT SHAPE
GRACHOR CLUB, INC	2c, 3c and 5g	1021127	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	wedge
GREATER ANNAPOLIS VETERINARY HOSPITAL	6g	1020117	NCNT	<10,000GPD		Unconfined	AQUA	1000circle
GROSS SEAFOOD	7g	1021446	NCT	<10,000GPD		Unconfined	AQUA	wedge
H & J AMOCO, INC	1h and 8l	1021508	NCT	<10,000GPD	206.00	Unconfined	UPPER_PATAPSCO	1000circle
HANEYS GROCERY AND DELI INC.	4f and 2h	1011332	NCT	<10,000GPD		Unconfined	PATUXENT	1000circle
HAPPY HARBOR INN	no figure	1021133	NCT	<10,000GPD	170.00	Confined	AQUA	none
HAPPY HOUSE CARRY OUT	13c, 19c, 22c, 12d, 3h, 17h and 3l	1021455	NCT	<10,000GPD	91.00	Unconfined	AQUA	1000circle
HAPPY HOUSE PIZZA	no figure	1021258	NCT	<10,000GPD	258.00	Confined	AQUA	none
HARBOR HILLS YACHT CLUB	no figure	1021412	NCT	<10,000GPD	200.00	Confined	MAGOTHY	none
HARBOR COVE MARINA	no figure	1021509	NCT	<10,000GPD		Confined	AQUA	none
HARDESTY FUNERAL HOME	15a, 4h, 26h, 27h and 1j	1021563	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	none
HARDESTY FUNERAL HOME	no figure	1021564	NCT	<10,000GPD	177.00	Confined	AQUA	1000circle
HARLEY DELIGHT	no figure	1021596	NCT	<10,000GPD	152.00	Confined	AQUA	none
HARTGE YACHT YARD/BUILDING WELL #1	5h and 6h	1020122	NCNT	<10,000GPD	170.00	Unconfined	AQUA	wedge
HARTGE YACHT YARD/DOCK/SY WELL #2	5h and 6h	1020122	NCNT	<10,000GPD	115.00	Unconfined	AQUA	wedge
HARVEST CHURCH OF GOD	no figure	1021641	NCT	<10,000GPD	157.00	Confined	AQUA	wedge
HAYWANS CRAB HOUSE	20b and 7h	1021138	NCT	<10,000GPD	110.00	Confined	AQUA	none
HEADQUARTER 1/HEADQUARTER 2 WELL #1	8h, 9h, 10h, 11h, 19p, 14s and 3v	1020119	NCNT	<10,000GPD	157.00	Unconfined	UPPER_PATAPSCO	1000circle
HEADQUARTER 1/HEADQUARTER 2 WELL #2	8h, 9h, 10h, 11h, 19p, 14s and 3v	1020119	NCNT	<10,000GPD	142.00	Unconfined	UPPER_PATAPSCO	1000circle
HEADQUARTER 1/HEADQUARTER 2 WELL #3	8h, 9h, 10h, 11h, 19p, 14s and 3v	1020119	NCNT	<10,000GPD	146.00	Unconfined	UPPER_PATAPSCO	1000circle
HEADQUARTER 1/HEADQUARTER 2 WELL #4	8h, 9h, 10h, 11h, 19p, 14s and 3v	1020119	NCNT	<10,000GPD	157.00	Unconfined	UPPER_PATAPSCO	1000circle
HERRINGTON HARBOR MARINA SOUTH WELL #1	no figure	1021139	NCT	<10,000GPD	335.00	Confined	AQUA	none
HERRINGTON HARBOR MARINA SOUTH WELL #2	no figure	1021603	NCT	<10,000GPD	340.00	Confined	AQUA	none
HERRINGTON HARBOR NORTH WELL #1	12h, 13h, 14h and 15h	1020112	NCNT	<10,000GPD		Confined	AQUA	600circle
HERRINGTON HARBOR NORTH WELL #2	12h, 13h, 14h and 15h	1020112	NCNT	<10,000GPD	235.00	Unconfined	AQUA	wedge
HERRINGTON HARBOR NORTH WELL #3	12h, 13h, 14h and 15h	1020112	NCNT	<10,000GPD		Confined	AQUA	600circle
HERRINGTON HARBOR NORTH WELL #4 (POOL)	12h, 13h, 14h and 15h	1020112	NCNT	<10,000GPD	220.00	Confined	AQUA	600circle
HIDE N SEEK LOUNGE	16h	1021140	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	1000circle
HIGHS #84	19h and 10w	1021397	NCT	<10,000GPD	88.00	Unconfined	AQUA	1000circle
HIGHS DAIRY STORE #17	18h	1021093	NCT	<10,000GPD	210.00	Unconfined	AQUA	wedge
HIGHS DAIRY STORE #71	13c, 19c, 22c, 12d, 3h, 17h and 3l	1021510	NCT	<10,000GPD	114.00	Unconfined	AQUA	1000circle
HIGHS OF BALTIMORE #99	20h	1021220	NCT	<10,000GPD	194.00	Unconfined	MAGOTHY	1000circle
HILL MOTEL	no figure	1021147	NCT	<10,000GPD	280.00	Confined	UPPER_PATAPSCO	1000circle
HILLSMERE COMMUNITY POOL	21h	1021413	NCT	<10,000GPD	120.00	Unconfined	AQUA	none
HOLMES BUILDING	22h, 6l and 12r	1021519	NCT	<10,000GPD	86.00	Unconfined	MAGOTHY	1000circle
HOMESTEAD GARDENS	4d and 23h	1020109	NCNT	<10,000GPD	225.00	Unconfined	AQUA	1000circle
HOON YINAE JEEP	17d and 24h	1021247	NCT	<10,000GPD	100.00	Unconfined	UPPER_PATAPSCO	1000circle
HOPE ST. MARK UNITED METH CHU	25h	1021620	NCT	<10,000GPD	83.00	Unconfined	AQUA	wedge
HORIZON ORGANIC FARM & EDUCATION WELL #2	15a, 4h, 26h, 27h and 1j	1021685	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	1000circle
HORIZON ORGANIC FARM & EDUCATION WELL #1	15a, 4h, 26h, 27h and 1j	1021685	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	1000circle
HUTSONS LAKE SHORE TAVERN	11, 21, 31, 41, 51 and 61	1021152	NCT	<10,000GPD	380.00	Confined	UPPER_PATAPSCO	600circle
197 OFFICE COMPLEX WELL #1	11, 21, 31, 41, 51 and 61	1020116	NCNT	<10,000GPD	284.00	Confined	UPPER_PATAPSCO	600circle
197 OFFICE COMPLEX EXIB(D1111) WELL #2	11, 21, 31, 41, 51 and 61	1020116	NCNT	<10,000GPD	357.00	Confined	UPPER_PATAPSCO	600circle
197 OFFICE COMPLEX EXIB(D1120) WELL #3	11, 21, 31, 41, 51 and 61	1020116	NCNT	<10,000GPD	347.00	Confined	UPPER_PATAPSCO	600circle
197 OFFICE COMPLEX EXIB(D1121) WELL #4	11, 21, 31, 41, 51 and 61	1020116	NCNT	<10,000GPD	343.00	Confined	UPPER_PATAPSCO	600circle
197 OFFICE COMPLEX EXIB(D1127) WELL #5	11, 21, 31, 41, 51 and 61	1020116	NCNT	<10,000GPD	328.00	Confined	UPPER_PATAPSCO	600circle
197 OFFICE COMPLEX EXIB(D1131) WELL #6	11, 21, 31, 41, 51 and 61	1020116	NCNT	<10,000GPD	93.00	Unconfined	MAGOTHY	1000circle
INDIAN GREER SCHOOL	7l	1020017	NCNT	<10,000GPD	112.00	Unconfined	MAGOTHY	wedge
INDIAN LANDING BOAT CLUB	8l	1021414	NCT	<10,000GPD		Confined	AQUA	none
J & M LOTHIAN AMOCO	no figure	1021521	NCT	<10,000GPD	260.00	Confined	UPPER_PATAPSCO	none
J & P CAFE FINETREE ASSOCIATION WELL #2	no figure	1021471	NCT	<10,000GPD	260.00	Confined	UPPER_PATAPSCO	none
J & P CAFE FINETREE ASSOCIATION WELL #1	no figure	1021471	NCT	<10,000GPD	260.00	Confined	UPPER_PATAPSCO	none
JERMANS T.G.A.	15a, 4h, 26h, 27h and 1j	1021154	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	1000circle
JESSUP SHELL FOOD MARKET	2i	1021156	NCT	<10,000GPD	75.00	Unconfined	UPPER_PATAPSCO	wedge
JK PROPERTIES	3j and 1k	1021689	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	1000circle
JOE'S OAK GROVE	4l	1021320	NCT	<10,000GPD		Unconfined	UPPER_PATAPSCO	1000circle
JOE'S SEAFOOD	5f, 8r and 8t	1021352	NCT	<10,000GPD	123.00	Unconfined	MAGOTHY	wedge

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM TYPE	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE	ASSESSMENT SHAPE
JUG BAY WELLS AND SANCTUARY	no figure	1021565	NCT	<10,000GPD	159.00	Confined	AQUA	1000circle
KALAS FUNERAL HOME	no figure	1021622	NCT	<10,000GPD	256.00	Confined	MAGOTHY	none
KAUFMAN'S TAVERN	3j and 1k	1021611	NCT	<10,000GPD	155.00	Unconfined	UPPER PATAPSCO	1000circle
KENTUCKY FRIED CHICKEN	11b, 12b, 3k, 8k, 20m and 4n	1021511	NCT	<10,000GPD		Unconfined	AQUA	1000circle
KERR BUILDING	2k and 26s	1021675	NCT	<10,000GPD	90.00	Unconfined	LOWER PATAPSCO	1000circle
KIDS FARM EARLY LEARNING CTR WELL #1	18b, 5e and 4k	1022095	NCNT	<10,000GPD	118.00	Unconfined	AQUA	1000circle
KIDS FARM EARLY LEARNING CTR WELL #2	5k	1022064	NCNT	<10,000GPD	110.00	Unconfined	AQUA	1000circle
KILLBARRY HOUSE	6k	1021066	NCNT	<10,000GPD	100.00	Unconfined	AQUA	wedge
KIMS BAR & LOUNGE INC.	11b, 12b, 3k, 8k, 20m and 4n	1021354	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	wedge
KINDER CARE LEARNING CENTER #1061	9k	1022098	NCNT	<10,000GPD	362.00	Unconfined	UPPER PATAPSCO	1000circle
KIWANIS CLUB OF MAYO	10k	1021670	NCNT	<10,000GPD	91.00	Unconfined	PATUXENT	1000circle
KRAZY OTTOS	no figure	1021165	NCT	<10,000GPD	35.00	Unconfined	AQUA	1000circle
KURTZ'S BEACH	no figure	1021166	NCT	<10,000GPD	135.00	Confined	MAGOTHY	none
LAKE SHORE ATHLETIC COMPLEX	no figure	1021535	NCT	<10,000GPD	180.00	Confined	UPPER PATAPSCO	none
LAKE SHORE BAPTIST CHURCH	no figure	1021566	NCT	<10,000GPD	180.00	Confined	UPPER PATAPSCO	none
LAKE SHORE CHRISTIAN ACADEMY	11	1021535	NCT	<10,000GPD	180.00	Confined	UPPER PATAPSCO	none
LAKE SHORE DEMOCRATIC CLUB	21	1020060	NCNT	<10,000GPD	87.00	Unconfined	MAGOTHY	1000circle
LAKE SHORE ELEMENTARY	31	1021684	NCT	<10,000GPD	140.00	Unconfined	UPPER PATAPSCO	wedge
LAKE SHORE EXXON & JERRY SUBS	41	1020019	NCNT	<10,000GPD	182.00	Unconfined	UPPER PATAPSCO	1000circle
LAKE SHORE VOI UNITEER FIRE DEPT	51 and 61	1021536	NCT	<10,000GPD	110.00	Unconfined	UPPER PATAPSCO	1000circle
LARRY'S TAVERN	22h, 61 and 12r	1021789	NCT	<10,000GPD	86.00	Unconfined	MAGOTHY	1000circle
LATELAS	71 and 5w	1021170	NCT	<10,000GPD	58.00	Unconfined	UPPER PATAPSCO	wedge
LAZER EXTREME	no figure	1021171	NCT	<10,000GPD	247.00	Confined	PATUXENT	none
LEDO'S PIZZA	1h and 81	1021523	NCT	<10,000GPD	110.00	Unconfined	MAGOTHY	1000circle
LIBERTY YACHT CLUB CONVENIENCES WELL #1	7e, 9f, 5p and 5t	1021512	NCT	<10,000GPD	120.00	Unconfined	AQUA	1000circle
LIBERTY YACHT CLUB WELL #2	21c, 10f, 11f, 1o, 2o and 1y	1021479	NCT	<10,000GPD		Unconfined	AQUA	wedge
LOCH HAVEN PARK	21c, 10f, 11f, 1o, 2o and 1y	1021657	NCT	<10,000GPD	42.00	Unconfined	AQUA	wedge
LONDON TOWNE COMMUNITY HALL	121	1021568	NCT	<10,000GPD	67.00	Unconfined	AQUA	1000circle
LONDON TOWNE MARINA	4a, 3b and 141	1021671	NCT	<10,000GPD	95.00	Unconfined	AQUA	1000circle
LONDON TOWNE PUB	151 and 161	1021598	NCT	<10,000GPD		Unconfined	AQUA	wedge
LONDON TOWNE PUBLIC HOUSE	151 and 161	1021177	NCT	<10,000GPD	70.00	Unconfined	AQUA	wedge
LONG POINT INN	171	1021178	NCT	<10,000GPD	87.00	Unconfined	MAGOTHY	wedge
LONG POINT IMPROVEMENT ASSOC.	131	1021569	NCT	<10,000GPD		Unconfined	MAGOTHY	wedge
LOTHIAN CTGO	181	1021663	NCT	<10,000GPD	68.00	Unconfined	MAGOTHY	wedge
LOTHIAN ELEMENTARY	191	1021570	NCT	<10,000GPD	150.00	Unconfined	AQUA	wedge
LOTHIAN MOBILE INC.	201	1020020	NCNT	<10,000GPD	304.00	Confined	MAGOTHY	600circle
LOUIS LIQUORS	no figure	1021571	NCT	<10,000GPD		Confined	AQUA	none
LUCKY'S #4	24c, 211, 7m, 5o and 30s	1021364	NCT	<10,000GPD	127.00	Unconfined	UPPER PATAPSCO	1000circle
MAGOTHY INN	221	1021376	NCT	<10,000GPD	55.00	Unconfined	UPPER PATAPSCO	wedge
MARLEY STATION SHELL	5a, 1m and 10m	1021366	NCT	<10,000GPD	70.00	Unconfined	MAGOTHY	wedge
MARYLAND CENTRAL KOREAN BAPTIST CHURCH	2m	1021623	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
MARYLAND CITY PARK	3m	1020070	NCT	<10,000GPD	140.00	Unconfined	MAGOTHY	1000circle
MARYLAND HEALTH SOCIETY	4m	1021572	NCT	<10,000GPD	160.00	Unconfined	PATUXENT	1000circle
MARYLAND YACHT CLUB INC.	no figure	1021416	NCT	<10,000GPD	105.00	Unconfined	MAGOTHY	none
MASHEL BROTHERS INC	5m	1021188	NCT	<10,000GPD	80.00	Unconfined	UPPER PATAPSCO	wedge
MAYO ELEMENTARY	6m	1020129	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	wedge
MAYO PARK	24c, 211, 7m, 5o and 30s	1020021	NCNT	<10,000GPD	320.00	Unconfined	AQUA	1000circle
MAYO YACHT CLUB AND GRILL	no figure	1021573	NCT	<10,000GPD	100.00	Unconfined	AQUA	none
MCDONALD'S	8m	1021030	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
MCDONALD'S #21058	9m, 3n and 3o	1021370	NCT	<10,000GPD	218.00	Unconfined	PATUXENT	1000circle
MEATS & MORE	no figure	1021318	NCT	<10,000GPD	79.00	Unconfined	MAGOTHY	none
MEXICAN CAFE INC.	5a, 1m, and 10m	1021229	NCT	<10,000GPD		Unconfined	AQUA	1000circle
MIL BUR CLUB COMMUNITY POOL	1c and 11m	1021460	NCT	<10,000GPD	112.00	Unconfined	MAGOTHY	wedge
MILLERSVILLE ELEMENTARY WELL #1	14m	1020417	NCT	<10,000GPD	112.00	Unconfined	MAGOTHY	1000circle
MILLERSVILLE ELEMENTARY WELL #2	15m and 16m	1020022	NCNT	<10,000GPD	112.00	Unconfined	MAGOTHY	1000circle
MILLS CROWN PETROLEUM	15m and 16m	1021528	NCT	<10,000GPD	180.00	Confined	PATUXENT	none

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE	ASSESSMENT SHAPE
MINI WAREHOUSE GROUP	30c and 17m	1021877	NCT	<10,000GPD	220.00	Unconfined	UPPER PATAPSCO	wedge
MONTESORO INTL CHILD HOUSE	18m	1020066	NCT	<10,000GPD	140.00	Unconfined	AQUA	1000circle
MORIEL STORE	no figure	1021197	NCT	<10,000GPD	307.00	Confined	AQUA	none
MT. CARMEL DAY NURSERY	19n and 15p	1020067	NCT	<10,000GPD	67.00	Unconfined	MAGOTHY	1000circle
MT. ZION CHURCH	no figure	1020111	NCT	<10,000GPD	380.00	Confined	AQUA	none
MY PLACE TAVERN	11b, 12b, 3k, 8k, 20m and 4n	1021130	NCT	<10,000GPD	223.00	Unconfined	UPPER PATAPSCO	1000circle
N.S.A. COLONY 7 WELL #1	1n and 2n	1020085	NCT	>10,000GPD	229.00	Confined	PATUXENT	Florida
N.S.A. COLONY 7 WELL #2	1n and 2n	1020085	NCT	>10,000GPD	229.00	Confined	PATUXENT	Florida
NANCY'S FLAMING PIT	no figure	1021340	NCT	<10,000GPD		Confined	AQUA	none
NEW LIFE MINISTRY	9m, 3n and 3o	1021624	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
NIGHTHAWK GOLF CENTER	11b, 12b, 3k, 8k, 20m and 4n	1021201	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
NORTHROP GRUDMAN OCEANIC WELL #1	5n	1021375	NCT	<10,000GPD	140.00	Unconfined	MAGOTHY	1000circle
NORTHROP GRUDMAN OCEANIC WELL #2	6n and 7n	1020037	NCT	<10,000GPD	545.00	Confined	UPPER PATAPSCO	Florida
OAK GROVE MARINA	6n and 7n	1020037	NCT	<10,000GPD	545.00	Confined	UPPER PATAPSCO	Florida
OAK GROVE MARINA	21c, 10f, 11i, 1o, 2o and 1y	1020037	NCT	>10,000GPD	545.00	Unconfined	UPPER PATAPSCO	wedge
OAK GROVE MARINA	21c, 10f, 11i, 1o, 2o and 1y	1021600	NCT	<10,000GPD	42.00	Unconfined	AQUA	wedge
OAKLAND UNITED METHUENIST	no figure	1021506	NCT	<10,000GPD	150.00	Confined	AQUA	wedge
O'BRIEN'S PUB & LIQUOR	no figure	1021199	NCT	<10,000GPD	192.00	Confined	AQUA	none
ODENTON HESS	9m, 3n and 3o	1021658	NCT	<10,000GPD		Confined	UPPER PATAPSCO	1000circle
ODENTON MOBILE	4o	1021574	NCT	<10,000GPD	220.00	Unconfined	MAGOTHY	1000circle
ODENTON PARK (GORK)	no figure	1021678	NCT	<10,000GPD	216.00	Confined	UPPER PATAPSCO	none
OLD SOUTH ATHLETIC FIELD	no figure	1021601	NCT	<10,000GPD	272.00	Confined	AQUA	none
OLD SOUTH COUNTRY CLUB WELL #1	no figure	1021374	NCT	<10,000GPD	310.00	Confined	AQUA	none
OLD SOUTH COUNTRY CLUB WELL #2	no figure	1021418	NCT	<10,000GPD	290.00	Confined	AQUA	none
OLD STEIN INN	24c, 21f, 7m, 5o and 30s	1021206	NCT	<10,000GPD	97.00	Unconfined	AQUA	1000circle
OLDE SOUTH CATERING	no figure	1021146	NCT	<10,000GPD		Confined	AQUA	none
OPEN DOOR CHRISTIAN SCHOOL	6o	1020102	NCT	<10,000GPD		Unconfined	LOWER PATAPSCO	1000circle
ORIENT EXPRESS	no figure	1021376	NCT	<10,000GPD		Confined	AQUA	none
ORIGINAL LAUREL ASSEMBLY	7o	1021172	NCT	<10,000GPD	140.00	Unconfined	UPPER PATAPSCO	wedge
OUR LADY OF PERPETUAL HELP CHURCH	8o, 36s and 11i	1021575	NCT	<10,000GPD	90.00	Unconfined	AQUA	1000circle
OUR LADY OF SORROWS	no figure	1021602	NCT	<10,000GPD		Confined	AQUA	1000circle
OUR LADY OF THE CHESAPEAKE	no figure	1021575	NCT	<10,000GPD	112.00	Confined	UPPER PATAPSCO	none
OUR LADY OF THE FIELDS	9o	1021679	NCT	<10,000GPD	180.00	Unconfined	MAGOTHY	1000circle
OURSMAN AUTO (TISCHER)	10a, 17g and 6r	1020115	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
OWENSVILLE PRIMARY CARE	no figure	1020110	NCT	<10,000GPD	305.00	Confined	AQUA	none
P & W SEAFOOD	1p	1021625	NCT	<10,000GPD		Unconfined	AQUA	wedge
PAGEWAY CONVENIENCE STORE	no figure	1021493	NCT	<10,000GPD	190.00	Confined	AQUA	none
PAGODA HOUSE RESTAURANT	1e, 2p, 12r, 13p and 8w	1021210	NCT	<10,000GPD	101.00	Unconfined	MAGOTHY	1000circle
PALM BEACH PATIO	3p and 4w	1021044	NCT	<10,000GPD	107.00	Unconfined	MAGOTHY	1000circle
PAMPERED PALATE	4p	1021459	NCT	<10,000GPD	125.00	Unconfined	MAGOTHY	1000circle
PAPA JOHN'S PIZZA #702	7e, 9f, 5p and 5l	1021429	NCT	<10,000GPD	128.00	Unconfined	AQUA	1000circle
PARK'S STEAMED CRABS	no figure	1021499	NCT	<10,000GPD		Confined	AQUA	none
PARKWAY INN	no figure	1021168	NCT	<10,000GPD	315.00	Confined	PATUXENT	none
PARKWOOD LEARNING CENTER	6p	1020069	NCT	<10,000GPD	53.00	Unconfined	MAGOTHY	1000circle
PASADENA BOTEL & BEACH CLUB	29c, 27c and 7p	1021514	NCT	<10,000GPD	103.00	Unconfined	MAGOTHY	wedge
PASADENA GAS AND GO	8p	1021461	NCT	<10,000GPD		Unconfined	MAGOTHY	wedge
PASADENA GOLF CENTER	7b and 9p	1021576	NCT	<10,000GPD	120.00	Unconfined	MAGOTHY	1000circle
PASADENA SEVENTH DAY ADVENTIST	10p	1021691	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
PAT'S COUNTRY BAKERY	no figure	1021218	NCT	<10,000GPD	192.00	Confined	AQUA	none
PELIE GREENS	no figure	1021039	NCT	<10,000GPD	185.00	Confined	AQUA	none
PHILLIP MERRILL ENVIRONMENTAL CTR	8b and 11p	1020130	NCT	<10,000GPD	84.00	Unconfined	AQUA	wedge
PIER 44 / BAR HARBOR MARINA	no figure	1021025	NCT	<10,000GPD	215.00	Confined	AQUA	none
PIGOUT'S LIMITED, INC.	no figure	1021477	NCT	<10,000GPD	190.00	Confined	AQUA	none
PIZZA BOLIS	16, 2p, 12p, 13p and 8w	1021194	NCT	<10,000GPD	57.00	Unconfined	UPPER PATAPSCO	1000circle
PIZZA EXPRESS	1e, 2p, 12p, 13p and 8w	1021224	NCT	<10,000GPD	95.00	Unconfined	UPPER PATAPSCO	1000circle
PODKICKERY POINT	no figure	1021419	NCT	<10,000GPD	300.00	Confined	MAGOTHY	none
POOL CATS	14p	1021158	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM TYPE	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE	ASSESSMENT SHAPE
POPS GROCERY & DELI #2	19m and 15p	1021363	NCT	<10,000GPD	126.00	Unconfined	AQUIFER MAGOTHY	1000circle
POWER TECH LIMITED PARTNERS	19p	1020101	NCT	<10,000GPD	328.00	Confined	UPPER PATAPSCO	600circle
PRODUCE BASKET	10o, 17p and 6r	1021231	NCT	<10,000GPD	170.00	Unconfined	PATUXENT	1000circle
PROVINCES PARK	19p	1021577	NCT	<10,000GPD	135.00	Unconfined	UPPER PATAPSCO	1000circle
PUB YAVERN	8h, 9h, 10h, 11h, 19p, 14s and 3v	1021463	NCT	<10,000GPD	377.00	Confined	MAGOTHY	1000circle
QUIET WATERS PARK WELL #1	no figure	1021381	NCT	<10,000GPD	120.00	Unconfined	AQUA	1000circle
QUIET WATERS PARK WELL #2	1q	1021578	NCT	<10,000GPD	328.00	Confined	MAGOTHY	none
QUIET WATERS PARK WELL #3	no figure	1021579	NCT	<10,000GPD	310.00	Confined	MAGOTHY	none
QUIET WATERS PARK WELL #4	no figure	1021580	NCT	<10,000GPD	310.00	Confined	UPPER PATAPSCO	none
RAFTERS	no figure	1021267	NCT	<10,000GPD	98.00	Unconfined	PATUXENT	1000circle
RALPH J BUNCH COMMUNITY CENTER	1f	1021686	NCT	<10,000GPD	140.00	Unconfined	AQUA	1000circle
RED CARPET INN	2r	1021340	NCT	<10,000GPD	172.00	Confined	UPPER PATAPSCO	none
RED HOT AND BLUE	3r	1021699	NCT	<10,000GPD	410.00	Confined	AQUA	none
REDEMER LUTHERAN CHURCH	1b, 7d, 4r and 4l	1020035	NCT	<10,000GPD	255.00	Unconfined	PATUXENT	1000circle
REGENCY PARK ASSISTED LIVING	5r	1021237	NCT	<10,000GPD	177.00	Unconfined	MAGOTHY	wedge
REMINGTONS OF LAUREL	10o, 17p and 6r	1021697	NCT	<10,000GPD	530.00	Confined	AQUA	none
RENDITIONS GOLF COURSE WELL #1	no figure	1021236	NCT	<10,000GPD	290.00	Confined	PATUXENT	Florida
RENDITIONS HALFWAY HOUSE WELL #2	no figure	1021435	NCT	<10,000GPD	200.00	Confined	MAGOTHY	600circle
RENNOS QUALITY FOOD MARKET	no figure	1021237	NCT	<10,000GPD	190.00	Unconfined	MAGOTHY	none
RENNOS RESTAURANT	no figure	1021690	NCT	<10,000GPD	101.00	Unconfined	AQUA	1000circle
RESURRECTION OF OUR LAND ROMAN CATHOLIC CONGREGATION	7f	1021515	NCT	<10,000GPD	60.00	Unconfined	AQUA	1000circle
REVELL EXXONJERRYS SUBS	no figure	1021466	NCT	<10,000GPD	245.00	Confined	MAGOTHY	none
REYS GRABS	5f, 8r and 8l	1021332	NCT	<10,000GPD	177.00	Unconfined	MAGOTHY	wedge
RICHARDS CORNER GRILL	no figure	1020082	NCT	>10,000GPD	530.00	Confined	AQUA	none
RIDGEVIEW PLAZA WELL #1	9r and 10r	1020082	NCT	>10,000GPD	470.00	Confined	PATUXENT	Florida
RIDGEVIEW PLAZA WELL #2	11r and 7w	1020131	NCT	<10,000GPD	290.00	Confined	MAGOTHY	600circle
RIDGLEY OAKS PROFESSIONAL CTR	no figure	1021697	NCT	<10,000GPD	200.00	Confined	MAGOTHY	none
ROCCOS CATERING	22h, 6l and 12r	1021482	NCT	<10,000GPD	190.00	Unconfined	MAGOTHY	1000circle
ROYAL FARMS STORE #32	4e, 6e, 13r and 2w	1021382	NCT	<10,000GPD	101.00	Unconfined	AQUA	1000circle
ROYAL FARMS STORE #66	14r	1020118	NCT	<10,000GPD	60.00	Unconfined	AQUA	1000circle
RS LITCH COMPANY	no figure	1021438	NCT	<10,000GPD	245.00	Confined	MAGOTHY	none
RUDY'S TAVERN	no figure	1021193	NCT	<10,000GPD	395.00	Confined	AQUA	none
RUSTYS WAYSIDE GRILL	no figure	1021262	NCT	<10,000GPD	170.00	Confined	MAGOTHY	none
S K RESTAURANT	no figure	1021420	NCT	<10,000GPD	170.00	Confined	MAGOTHY	none
SAEHERN POOL	no figure	1021244	NCT	<10,000GPD	335.00	Confined	MAGOTHY	none
SAFEWAY STORE #1423	no figure	1021389	NCT	<10,000GPD	50.00	Unconfined	AQUA	1000circle
SAMARITAN HOUSE, INC.	1s	1021248	NCT	<10,000GPD	200.00	Unconfined	AQUA	wedge
SAM'S MARKET	2s	1021439	NCT	<10,000GPD	200.00	Confined	MAGOTHY	none
SANDY POINT STATE PARK MARINA WELL #1	no figure	1021439	NCT	<10,000GPD	200.00	Confined	MAGOTHY	none
SANDY POINT STATE PARK MARINA WELL #2	no figure	1021439	NCT	<10,000GPD	200.00	Confined	MAGOTHY	none
SANDY'S CONVENIENCE STORE	no figure	1021240	NCT	<10,000GPD	275.00	Confined	UPPER PATAPSCO	none
SELBY BAY YACHT BASIN, INC.	3s	1021539	NCT	<10,000GPD	70.00	Unconfined	AQUA	wedge
SELBY BAY YACHT CLUB	4s	1021421	NCT	<10,000GPD	60.00	Unconfined	AQUA	wedge
SELBY SUB SHOPPE	6a and 5s	1021462	NCT	<10,000GPD	70.00	Unconfined	AQUA	wedge
SEVERN COVENANT CHURCH	6s	1020108	NCT	<10,000GPD	200.00	Unconfined	UPPER PATAPSCO	1000circle
SEVERN SQUARE SHOPPING CENTER	6s	1020100	NCT	<10,000GPD	200.00	Unconfined	LOWER PATAPSCO	1000circle
SEVERN SUB SHOP	9d and 7's	1021627	NCT	<10,000GPD	135.00	Unconfined	UPPER PATAPSCO	1000circle
SEVERNIA PARK CHILDRENS CENTER	8s	1020077	NCT	<10,000GPD	135.00	Unconfined	UPPER PATAPSCO	1000circle
SEVERNIA PARK EVANGELICAL PRES WELL #1	9a, 10a and 11s	1021581	NCT	<10,000GPD	130.00	Unconfined	MAGOTHY	1000circle
SEVERNIA PARK EVANGELICAL PRES WELL #2	9s, 10s and 11s	1021240	NCT	<10,000GPD	68.00	Unconfined	MAGOTHY	1000circle
SEVERNIA PARK GOLF & SPORTS CEN	12s	1021644	NCT	<10,000GPD	175.00	Unconfined	MAGOTHY	1000circle
SEVERNIA PARK LANES	13s	1021430	NCT	<10,000GPD	137.00	Unconfined	MAGOTHY	1000circle
SEVERNIA PARK RACQUETBALL CLUB	8h, 9h, 10h, 11h, 19p, 14s and 3v	1021441	NCT	<10,000GPD	310.00	Unconfined	MAGOTHY	1000circle
SHADYSIDE ELEMENTARY	15s	1020025	NCT	<10,000GPD	167.00	Confined	AQUA	600circle
SHADYSIDE MARKET	no figure	1021442	NCT	<10,000GPD	185.00	Confined	AQUA	none
SHADYSIDE PARK	no figure	1021582	NCT	<10,000GPD	185.00	Confined	AQUA	none
SHADYSIDE SOFT SERVE	no figure	1021628	NCT	<10,000GPD	135.00	Confined	AQUA	none

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM TYPE	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE AQUIFER	ASSESSMENT SHAPE
SHANNONS								
SHIPWRIGHT HARBOR	no figure	1021228	NCT	<10,000GPD		Confined	AQUIER	none
SHOELESS JOES	no figure	1021422	NCT	<10,000GPD	142.00	Confined	AQUIA	none
SHOOTERS SPORTS BAR AND GRILL	16s	1021011	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
SKATE ZONE	17s	1021391	NCT	<10,000GPD	127.00	Unconfined	MAGOTHY	1000circle
SKIPPERS PIER	18s	1021048	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	wedge
SMITHS MARINA INC.	no figure	1021255	NCT	<10,000GPD		Confined	AQUIA	none
SMITHSONIAN ENVIRO. RESEARCH CTR. ED. CENTER WELL #1	19s	1021605	NCT	<10,000GPD	92.00	Unconfined	AQUIA	wedge
SMITHSONIAN ENVIRO. RESEARCH CTR. LAB/OFFICE WELL #2	20s	1020089	NCT	<10,000GPD	355.00	Confined	MAGOTHY	600circle
SNUGS HARBOR INN	21s	1020089	NCT	<10,000GPD		Confined	MAGOTHY	600circle
SONNYS	no figure	1021392	NCT	<10,000GPD	168.00	Confined	AQUIA	none
SOUTH ARUNDEL VETERINARY	no figure	1021108	NCT	<10,000GPD	189.00	Confined	MAGOTHY	1000circle
SOUTH COUNTY DEAL MOOSE LODGE	9b, 1021606	1021606	NCT	<10,000GPD		Confined	AQUIA	none
SOUTH COUNTY PRE-SCHOOL	no figure	1021583	NCT	<10,000GPD	130.00	Unconfined	AQUIA	none
SOUTH COUNTY RECREATION CENTER	23s	1020073	NCT	<10,000GPD		Confined	MAGOTHY	600circle
SOUTH RIVER BIBLE CHURCH	no figure	1021650	NCT	<10,000GPD	305.00	Confined	AQUIA	none
SOUTH RIVER LANDING	no figure	1021648	NCT	<10,000GPD	178.00	Confined	AQUIA	none
SOUTH RIVER LIQUORS	24s	1021423	NCT	<10,000GPD	68.00	Unconfined	AQUIA	wedge
SOUTH RIVER MEDICAL PROFESSIONAL	8e and 25s	1021246	NCT	<10,000GPD	70.00	Unconfined	AQUIA	1000circle
SOUTH SHORE BAPTIST CHURCH	2k and 26s	1021645	NCT	<10,000GPD		Unconfined	AQUIA	none
SOUTH SHORE ELEMENTARY	no figure	1021608	NCT	<10,000GPD	190.00	Confined	MAGOTHY	600circle
SOUTHERN HIGH SCHOOL	27s	1020027	NCT	<10,000GPD	280.00	Confined	MAGOTHY	600circle
SOUTHERN MIDDLE SCHOOL	28s	1020028	NCT	<10,000GPD		Confined	AQUIA	600circle
SPUTNIK CAFE	no figure	1020029	NCT	<10,000GPD	380.00	Confined	AQUIA	600circle
ST. ANDREW THE FISHERMAN	24c, 21f, 7m, 5d and 30s	1021251	NCT	<10,000GPD	180.00	Confined	UPPER PATAPSCO	none
ST. ANDREWS ELEMENTARY SCHOOL WELL #1	12a, 31s and 32s	1020030	NCT	<10,000GPD	140.00	Unconfined	AQUIA	1000circle
ST. ANDREWS ELEMENTARY SCHOOL WELL #2	12a, 31s and 32s	1020030	NCT	<10,000GPD	118.00	Unconfined	AQUIA	wedge
ST. JAMES PARISH	no figure	1021609	NCT	<10,000GPD	380.00	Confined	AQUIA	600circle
ST. MARGARET'S LEARNING CENTER	33s	1020075	NCT	<10,000GPD	265.00	Confined	MAGOTHY	1000circle
ST. STEPHENS UNITED METHODIST	no figure	1021610	NCT	<10,000GPD		Confined	AQUIA	none
ST. STEPHENS EPISCOPAL	34s	1021585	NCT	<10,000GPD	127.00	Unconfined	MAGOTHY	1000circle
STEAMBOAT LANDING RESTURANT	no figure	1021257	NCT	<10,000GPD		Confined	AQUIA	none
STEINFIELD MEDICAL OFFICE	no figure	1021540	NCT	<10,000GPD	72.00	Unconfined	AQUIA	1000circle
STUDENT SUPORT SERVICE CENTER	35s	1020088	NCT	<10,000GPD	85.00	Unconfined	UPPER PATAPSCO	1000circle
SUES DELL	8o, 36s and 11f	1021189	NCT	<10,000GPD	72.00	Unconfined	AQUIA	1000circle
SURFSIDE 7 RESTAURANT/BAR	37s	1021082	NCT	<10,000GPD	165.00	Confined	AQUIA	wedge
SWAMP CIRCLE SALOON	no figure	1021388	NCT	<10,000GPD	106.00	Unconfined	AQUIA	none
TACO BELL #4748	1f	1021284	NCT	<10,000GPD		Unconfined	UPPER PATAPSCO	1000circle
TALL OAKS RESTAURANT	2f	1021338	NCT	<10,000GPD		Unconfined	AQUIA	wedge
TAPERADE	13c, 19c, 22c, 12d, 3h, 17h and 3f	1020121	NCT	<10,000GPD		Unconfined	AQUIA	1000circle
TENDER YEARS CHILD CARE	1b, 7d, 4r and 4f	1021393	NCT	<10,000GPD		Unconfined	AQUIA	1000circle
TEXACO FOOD MART	7e, 9f, 5p and 5f	1021470	NCT	<10,000GPD	72.00	Unconfined	AQUIA	1000circle
TEXACO FOOD MART	no figure	1021470	NCT	<10,000GPD	190.00	Confined	MAGOTHY	1000circle
TEXAS ROADHOUSE	5f and 6f	1021036	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
TEXAS STEAKS	2d and 7f	1021208	NCT	<10,000GPD	142.00	Unconfined	MAGOTHY	1000circle
THE BREAKFAST SHOPPE	5f, 8r and 8f	1021205	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
THE KEY SCHOOL WELL #1	9f and 10f	1020018	NCT	<10,000GPD	121.00	Unconfined	AQUIA	wedge
THE KEY SCHOOL WELL #2	9f and 10f	1020018	NCT	<10,000GPD	124.00	Unconfined	AQUIA	1000circle
THE SUMMIT SCHOOL	8o, 11f and 36s	1020103	NCT	<10,000GPD	150.00	Unconfined	AQUIA	1000circle
TOPSIDE INN	no figure	1021271	NCT	<10,000GPD	180.00	Confined	AQUIA	1000circle
TRACY'S LANDING ELEMENTARY	12f	1020031	NCT	<10,000GPD	332.00	Confined	AQUIA	600circle
TOGGIERS TAVERN	13f	1021274	NCT	<10,000GPD		Unconfined	MAGOTHY	wedge
UNION MEMORIAL UNITED METH. CHURCH	no figure	1021649	NCT	<10,000GPD	135.00	Confined	MAGOTHY	none
UNITARIAN UNIVERSALIST CHURCH	14f	1021660	NCT	<10,000GPD		Unconfined	AQUIA	wedge
UTOPIA	3s and 1u	1021071	NCT	<10,000GPD		Unconfined	PATUXENT	1000circle
V.F.W. POST #2462	1v	1021276	NCT	<10,000GPD	122.00	Unconfined	MAGOTHY	1000circle
VENTNOR MARINE SERVICE, INC.	2v	1021660	NCT	<10,000GPD		Unconfined	MAGOTHY	wedge

FACILITY NAME	FIGURE NO.	PWSID	SYSTEM TYPE	WATER USE	DEPTH (FT)	WELL TYPE	SOURCE	ASSESSMENT
VERTERANS PLAZA	8h, 9h, 10h, 11h, 19p, 14s and 3v	1020120	NCNT	<10,000GPD	125.00	Unconfined	MAGOTHY	1000circle
VICTORY LOUNGE	1a and 4v	1021496	NCT	<10,000GPD	107.00	Unconfined	MAGOTHY	1000circle
W BUILDING	10b and 1w	1021648	NCT	<10,000GPD	187.00	Unconfined	UPPER PATAPSCO	1000circle
W FIVE	4e, 6e, 13r and 2w	1021280	NCT	<10,000GPD	55.00	Unconfined	AQUA	1000circle
WAUGH CHAPEL EXXON SERVICE STATION	3w	1021649	NCT	<10,000GPD	88.00	Unconfined	MAGOTHY	1000circle
WAWA FOOD MARKET #332	3p and 4w	1021336	NCT	<10,000GPD	98.00	Unconfined	MAGOTHY	1000circle
WEE DAY CARE (ELV BAPT CH)	7l and 5w	1021500	NCNT	<10,000GPD	96.00	Unconfined	UPPER PATAPSCO	1000circle
WEE LAD & LASSIE EARLY LEARNING CTR	6w	1020077	NCNT	<10,000GPD	130.00	Unconfined	AQUA	wedge
WEEMS CREEK MEDICAL CTR	11r and 7w	1020126	NCNT	<10,000GPD	1008.00	Unconfined	UPPER PATAPSCO	1000circle
WENDY'S OLD FASHION HAM #6	1e, 2p, 12p, 13p and 8w	1021281	NCT	<10,000GPD	100.00	Unconfined	UPPER PATAPSCO	1000circle
WENDY'S OLD FASHION HAM #13	35c and 9w	1021282	NCT	<10,000GPD	139.00	Unconfined	MAGOTHY	wedge
WEST RIVER MARKET	no figure	1021586	NCT	<10,000GPD	150.00	Confined	AQUA	none
WEST RIVER SAILING CLUB	no figure	1021285	NCT	<10,000GPD	165.00	Confined	AQUA	none
WEST RIVER UNITED METHODIST CHURCH CENTER WELL #1	no figure	1021424	NCT	<10,000GPD	150.00	Confined	AQUA	none
WEST RIVER UNITED METHODIST CHURCH WELL #2	no figure	1021284	NCT	<10,000GPD	165.00	Confined	AQUA	none
WEST RIVER YACHT HARBOR	no figure	1021425	NCT	<10,000GPD	150.00	Confined	AQUA	none
WHARF SIDE BAR & GRILL	19h and 10w	1021080	NCT	<10,000GPD	50.00	Unconfined	UPPER PATAPSCO	1000circle
WHITE GABLES MOTEL	no figure	1021129	NCT	<10,000GPD	255.00	Confined	MAGOTHY	none
WHITE ROCK YACHTING CENTER WELL #1	11w, 12w, 15w, 16w and 20w	1021522	NCT	<10,000GPD	140.00	Unconfined	UPPER PATAPSCO	wedge
WHITE ROCKS MARINA WELL #2	11w, 12w, 15w, 16w and 20w	1021522	NCT	<10,000GPD	140.00	Unconfined	UPPER PATAPSCO	wedge
WHITMAN'S CATERING PIRATES COVE	no figure	1021223	NCT	<10,000GPD		Confined	AQUA	none
WILLY D'S	13w	1021445	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
WILSON'S CTIGO	14w	1021630	NCT	<10,000GPD		Unconfined	MAGOTHY	1000circle
WINDOWS ON THE BAY WELL #1	11w, 12w, 15w, 16w and 20w	1021549	NCT	<10,000GPD	141.00	Unconfined	UPPER PATAPSCO	1000circle
WINDOWS ON THE BAY WELL #2	11w, 12w, 15w, 16w and 20w	1021687	NCT	<10,000GPD	142.00	Unconfined	UPPER PATAPSCO	wedge
WONDER YEARS	18w	1020097	NCNT	<10,000GPD	196.00	Unconfined	UPPER PATAPSCO	wedge
WOODFIELD FISH & OYSTER CO	19w	1021287	NCT	<10,000GPD	159.00	Confined	AQUA	600circle
WOODLAND BEACH COMMUNITY ASSOCIATION	11w, 12w, 15w, 16w and 20w	1021498	NCT	<10,000GPD		Unconfined	AQUA	wedge
YELLOWFIN RESTURANT	21c, 10l, 11l, 1o, 2o and 1y	1021453	NCT	<10,000GPD		Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #1	2y, 4y, 5y, 6y, 7y and 8y	1021061	NCT	<10,000GPD		Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #2	3y and 9y	1021541	NCT	<10,000GPD	59.00	Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #3	2y, 4y, 5y, 6y, 7y and 8y	1021542	NCT	<10,000GPD	90.00	Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #4	2y, 4y, 5y, 6y, 7y and 8y	1021543	NCT	<10,000GPD	108.00	Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #5	2y, 4y, 5y, 6y, 7y and 8y	1021544	NCT	<10,000GPD	84.00	Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #6	2y, 4y, 5y, 6y, 7y and 8y	1021545	NCT	<10,000GPD	100.00	Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #7	2y, 4y, 5y, 6y, 7y and 8y	1021546	NCT	<10,000GPD		Unconfined	AQUA	wedge
YMCA CAMP LETTIS WELL #8	3y and 9y	1021547	NCT	<10,000GPD	81.00	Unconfined	AQUA	wedge

FACILITY NAME	PWSID	OVERALL SUSCEPT.	SUSCEPT. BACT.	SUSCEPT. RADIUM	SUSCEPT. INORGAN.	SUSCEPT. VOC	SUSCEPT. SOC	SUSCEPT. NITRATES	SUSCEPT. CHLORIDES
MAYO YACHT CLUB AND GRILL	1021030	NO	NO	NO	NO	NO	NO	NO	NO
MCDONALD'S	1021370	YES	NO	YES	NO	NO	NO	NO	NO
MCDONALDS #21058	1021318	NO	NO	NO	NO	NO	NO	NO	NO
MEATS & MORE	1021229	YES	NO	YES	NO	NO	NO	NO	NO
MEXICAN CAFE INC.	1021460	YES	YES	NO	NO	YES	NO	YES	NO
MIL-BUR CLUB COMMUNITY POOL	1021417	YES	NO	YES	NO	NO	NO	NO	NO
MILLERSVILLE ELEMENTARY WELL #1	1020022	NO	NO	NO	NO	NO	NO	NO	NO
MILLERSVILLE ELEMENTARY WELL #2	1020022	YES	NO	YES	NO	NO	NO	YES	NO
MILLS CROWN PETROLEUM	1021928	YES	NO	YES	NO	NO	NO	NO	NO
MINI WAREHOUSE GROUP	1021677	YES	NO	YES	NO	NO	NO	NO	NO
MONTESSORI INTL.CHILD HOUSE	1020066	NO	NO	NO	NO	NO	NO	NO	NO
MORELAND STORE	1021197	NO	NO	NO	NO	NO	NO	NO	NO
MT. CARMEL DAY NURSERY	1020067	YES	NO	YES	NO	NO	NO	NO	NO
MT. ZION CHURCH	1020111	NO	NO	NO	NO	NO	NO	NO	NO
MY PLACE TAVERN	1021130	YES	YES	YES	NO	NO	NO	NO	NO
N.S.A COLONY 7 WELL #1	1020085	YES	NO	YES	NO	NO	NO	NO	NO
N.S.A. COLONY 7 WELL #2	1020085	YES	NO	YES	NO	NO	NO	NO	NO
NANCY'S FLAMING PIT	1021340	NO	NO	NO	NO	NO	NO	NO	NO
NEW LIFE MINISTRY	1021624	YES	NO	YES	NO	NO	NO	NO	NO
NEW STAR INN	1021201	YES	NO	YES	NO	NO	NO	NO	NO
NIGHTHAWK GOLF CENTER	1021375	YES	NO	YES	NO	NO	NO	YES	NO
NORTHROP GRUMMAN OCEANIC WELL #1	1020037	NO	NO	NO	NO	NO	NO	NO	NO
NORTHROP GRUMMAN OCEANIC WELL #2	1020037	NO	NO	NO	NO	NO	NO	NO	NO
OAK GROVE MARINA		YES	NO	NO	NO	YES	NO	YES	NO
OAK GROVE, INC.	1021600	YES	NO	NO	NO	YES	NO	YES	NO
OAKLAND UNITED METHODIST	1021506	NO	NO	NO	NO	NO	NO	NO	NO
O'BRIEN'S PUB & LIQUOR	1021199	YES	YES	NO	NO	NO	NO	NO	NO
ODENTON HESS	1021658	YES	NO	YES	NO	YES	NO	NO	NO
ODENTON MOBILE	1021678	YES	YES	NO	NO	YES	NO	NO	NO
ODENTON PARK (GORC)	1021574	NO	NO	NO	NO	NO	NO	NO	NO
OLD SOUTH ATHLETIC FIELD	1021601	NO	NO	NO	NO	NO	NO	NO	NO
OLD SOUTH COUNTRY CLUB WELL #1	1021374	NO	NO	NO	NO	NO	NO	NO	NO
OLD SOUTH COUNTRY CLUB WELL #2	1021418	NO	NO	NO	NO	NO	NO	NO	NO
OLD STEIN INN	1021206	NO	NO	NO	NO	NO	NO	NO	NO
OLDE SOUTH CATERING	1021146	NO	NO	NO	NO	NO	NO	NO	NO
OPEN DOOR CHRISTIAN SCHOOL	1020102	NO	NO	NO	NO	NO	NO	NO	NO
ORIENT EXPRESS	1021376	NO	NO	NO	NO	NO	NO	NO	NO
ORIGINAL LAUREL ASSEMBLY	1021172	YES	NO	YES	NO	NO	NO	NO	NO
OUR LADY OF PERPETUAL HELP CHURCH	1021575	YES	YES	NO	NO	YES	NO	NO	NO
OUR LADY OF SORROWS	1021602	NO	NO	NO	NO	NO	NO	NO	NO
OUR LADY OF THE CHESAPEAKE	1021575	YES	NO	YES	NO	NO	NO	NO	NO
OUR LADY OF THE FIELDS	1021679	YES	NO	YES	NO	NO	NO	YES	NO
OURS MAN AUTO (TISCHER)	1020115	YES	NO	NO	NO	YES	NO	YES	NO
OWENSVILLE PRIMARY CARE	1020110	NO	NO	NO	NO	NO	NO	NO	NO
P & W SEAFOOD	1021625	NO	NO	NO	NO	NO	NO	NO	NO
PACEWAY CONVENIENCE STORE	1021493	NO	NO	NO	NO	NO	NO	NO	NO
PAGODA HOUSE RESTAURANT	1021210	YES	NO	YES	NO	NO	NO	NO	NO
PALM BEACH PATIO	1021044	YES	NO	YES	NO	YES	NO	YES	NO
PAMPERED PALATE	1021459	YES	NO	YES	NO	NO	NO	NO	NO
PAPA JOHN'S PIZZA #702	1021429	YES	NO	NO	NO	YES	YES	NO	NO
PARK'S STEAMED CRABS	1021499	NO	NO	NO	NO	NO	NO	NO	NO
PARKWAY INN	1021168	NO	NO	NO	NO	NO	NO	NO	NO
PARKWOOD LEARNING CENTER	1020089	YES	YES	NO	NO	YES	YES	YES	NO
PASADENA BOTEL & BEACH CLUB	1021514	NO	NO	NO	NO	NO	NO	NO	NO
PASADENA GAS AND GO	1021481	YES	NO	YES	NO	NO	NO	YES	NO

FACILITY NAME	PWSID	OVERALL SUSCEPT.	SUSCEPT. BACT.	SUSCEPT. RADIUM	SUSCEPT. INORGAN.	SUSCEPT. VOC	SUSCEPT. SOC	SUSCEPT. NITRATES	SUSCEPT. CHLORIDES
SEVERN COVENANT CHURCH	1020108	NO	NO	NO	NO	NO	NO	NO	NO
SEVERN SQUARE SHOPPING CENTER	1020100	YES	NO	YES	NO	NO	NO	NO	NO
SEVERN SUB SHOP	1021627	YES	NO	YES	NO	YES	NO	YES	NO
SEVERNA PARK CHILDRENS CENTER	1020071	NO	NO	NO	NO	NO	NO	NO	NO
SEVERNA PARK EVANGELICAL PRES. WELL #1	1021581	YES	YES	NO	NO	NO	NO	NO	NO
SEVERNA PARK EVANGELICAL PRES. WELL #2	1021604	YES	YES	YES	NO	NO	NO	YES	NO
SEVERNA PARK GOLF & SPORTS CEN	1021644	NO	NO	NO	NO	NO	NO	NO	NO
SEVERNA PARK LANES	1021430	YES	NO	YES	NO	NO	NO	NO	NO
SEVERNA PARK RACQUETBALL CLUB	1021441	YES	YES	YES	NO	YES	NO	YES	NO
SHADYSIDE ELEMENTARY	1020025	NO	NO	NO	NO	NO	NO	NO	NO
SHADYSIDE MARKET	1021442	NO	NO	NO	NO	NO	NO	NO	NO
SHADYSIDE PARK	1021582	NO	NO	NO	NO	NO	NO	NO	NO
SHADYSIDE SOFT SERVE	1021628	NO	NO	NO	NO	NO	NO	NO	NO
SHANNONS	1021228	NO	NO	NO	NO	NO	NO	NO	NO
SHIPWRIGHT HARBOR	1021422	NO	NO	NO	NO	NO	NO	NO	NO
SHOELESS JOE'S	1021011	NO	NO	NO	NO	NO	NO	NO	NO
SHOOTERS SPORTS BAR AND GRILL	1021391	YES	NO	YES	NO	NO	NO	NO	NO
SKATE ZONE	1021048	YES	NO	YES	NO	NO	NO	YES	NO
SKIPPER'S PIER	1021255	YES	YES	YES	NO	NO	NO	NO	NO
SMITH'S MARINA INC.	1021605	YES	NO	YES	NO	NO	NO	NO	NO
SMITHSONIAN ENVIRO. RESEARCH CTR. ED. CENTER	1020089	NO	NO	NO	NO	NO	NO	NO	NO
SMITHSONIAN ENVIRO. RESEARCH CTR. LAB/OFFICE	1020089	NO	NO	NO	NO	NO	NO	NO	NO
SNUG HARBOR INN	1021392	NO	NO	NO	NO	NO	NO	NO	NO
SONNY'S	1021108	NO	NO	NO	NO	NO	NO	NO	NO
SOUTH ARUNDEL VETERINARY	1021606	NO	NO	NO	NO	NO	NO	NO	NO
SOUTH COUNTY DEALE MOOSE LODGE	1021583	NO	NO	NO	NO	NO	NO	NO	NO
SOUTH COUNTY PRE-SCHOOL	1020073	YES	NO	NO	NO	NO	YES	NO	NO
SOUTH COUNTY RECREATION CENTER	1021650	NO	NO	NO	NO	NO	NO	NO	NO
SOUTH RIVER BIBLE CHURCH	1021646	NO	NO	NO	NO	NO	NO	NO	NO
SOUTH RIVER LANDING	1021423	NO	NO	NO	NO	NO	NO	NO	NO
SOUTH RIVER LIQUORS	1021246	YES	YES	NO	NO	YES	NO	NO	NO
SOUTH RIVER MEDICAL-PROFESSIONAL	1021645	YES	NO	NO	NO	YES	NO	YES	NO
SOUTH SHORE BAPTIST CHURCH	1021608	NO	NO	NO	NO	NO	NO	NO	NO
SOUTH SHORE ELEMENTARY	1020027	YES	NO	YES	NO	YES	NO	NO	NO
SOUTHERN HIGH SCHOOL	1020028	NO	NO	NO	NO	NO	NO	NO	NO
SOUTHERN MIDDLE SCHOOL	1020029	NO	NO	NO	NO	NO	NO	NO	NO
SPUTNIK CAFE	1021251	NO	NO	NO	NO	NO	NO	NO	NO
ST. ANDREW THE FISHERMAN	1021584	YES	YES	NO	NO	YES	NO	YES	NO
ST. ANDREWS ELEMENTARY SCHOOL WELL #1	1020030	YES	NO	NO	NO	NO	NO	YES	NO
ST. ANDREWS ELEMENTARY SCHOOL WELL #2	1020030	YES	NO	NO	NO	NO	NO	YES	NO
ST. JAMES PARISH	1021609	NO	NO	NO	NO	NO	NO	NO	NO
ST. MARGARET'S LEARNING CENTER	1020075	NO	NO	NO	NO	NO	NO	NO	NO
ST. MATHEWS UNITED METHODIST	1021610	NO	NO	NO	NO	NO	NO	NO	NO
ST. STEPHENS EPISCOPAL	1021585	YES	NO	YES	NO	NO	NO	NO	NO
STEAMBOAT LANDING RESTURANT	1021257	YES	YES	NO	NO	NO	NO	NO	NO
STEINFELD MEDICAL OFFICE	1021540	NO	NO	NO	NO	NO	NO	NO	NO
STUDENT SUPPORT SERVICE CENTER	1020088	YES	NO	YES	NO	NO	NO	NO	NO
SUE'S DELI	1021189	YES	YES	YES	NO	YES	NO	NO	NO
SURFSIDE 7 RESTAURANT/BAR	1021082	NO	NO	NO	NO	NO	NO	NO	NO
SWAMP CIRCLE SALOON	1021260	YES	NO	NO	NO	NO	NO	NO	NO
TACO BELL #4748	1021388	YES	NO	NO	NO	YES	NO	NO	YES
TALL OAKS RESTAURANT	1021284	YES	YES	NO	NO	NO	NO	YES	NO
TAPERADE	1021338	NO	NO	NO	NO	NO	NO	NO	NO
TENDER YEARS CHILD CARE	1020121	YES	YES	NO	NO	YES	YES	YES	NO
TEXACO FOOD MART	1021393	YES	NO	NO	NO	YES	YES	NO	NO

Appendix A
Water Sampling/Quality
Assurance Plan

Appendix A

Water Sampling/Quality Assurance

The Anne Arundel County Department of Health has contracted with the Maryland Department of the Environment to conduct groundwater assessments for non-community public drinking water systems in the County. As part of this assessment, existing water quality documents will be reviewed, where available, and water samples of representative facilities will be collected and analyzed for potential contaminants. Figure (1) shows the geographic locations of the non-community sites in the County.

Six different types of samples will be collected for analysis: Volatile Organics (VOCs), Synthetic Organic Compounds (SOCs), Heavy Metals, Inorganic Chemicals, Radionuclides (Gross Alpha), and Viruses. Specific chemical's to be tested for are listed as figures (2), (3), and (4). Viral testing will be to determine the presence of coliphage in the drinking water. Sampling sites have been determined separately by type of sample based on the criteria listed below:

-Radionuclides. All non-community facilities north of the line on Figure (1) will be tested for gross alpha particles. Those facilities south of the line are not considered to be at risk, based on previous studies.

-VOCs. Only non-community transient (NCT) sites will be considered for sampling, since adequate data is already available from non-community non-transient (NCNT) sites. Up to 75 sites will be selected for sampling. Figure (5) shows the locations of the sites currently under consideration. Preference for sampling will be given to sites with a high potential for contamination as a result of previous and current property usage. (eg. gas stations).

-Synthetic Organic Compounds (Method 504.1 EDB/DEC). Up to 75 samples will be collected, with preference to wells in unconfined aquifers in areas where past or current land use is agricultural or aviation related. The presence of elevated nitrate in nearby wells will also be taken in consideration, as will aquifer distribution. Only non-community transient wells will be considered. Figure (6) indicates the site locations currently under consideration.

-Viruses. Up to 75 samples will be collected. The vast majority of samples will be from areas with elevated nitrates. Non-community facilities with a history of coliform failures will also be included. Figure (7) shows the sites under consideration.

-Inorganic Chemicals and Heavy Metals. Forty to fifty samples will be collected from representative geographic sites (County-wide distribution), with representative aquifer distribution. To limit the number of different facilities visited, these sites will correspond with site already selected for sampling for the other parameters.

It is the Health Department's intention to have all of the above listed analyses conducted by the Maryland State Laboratory, which has extensive experience in all but virus analysis. Samples will be collected by trained and qualified personnel, chilled and fixed as required and transported to the laboratory via courier on the date collected. The laboratory will follow usual protocol in storing and analyzing the samples. Chain of custody documentation will not be required unless legal situations arise and involve re-sampling. Samples will pass from field collector, to Health Department laboratory space, to courier, to the State Laboratory.

Sampling procedure: To maximize the comparability of the data, all samples will be collected in a consistent and reliable manner. Steps in sample collection include; checking of field equipment, well purging, monitoring of field parameters, sample collection, sample treatment, sample storage and sample transportation to the State laboratory. Well purging will be done only to the extent required to clear distribution lines of stale water. A period of 10 minutes will be adequate in most cases (longer if the distribution system requires). Field parameters will be taken and recorded on each sample submission form. The preferred point for collecting samples is the spigot at the bottom of the pressure tank. If that spigot is unusable, then the nearest downstream tap may be used. Only raw water samples are to be collected, with the exception that treated water will be collected if specified (raw and treated gross alpha samples may be collected at some sites). Preservation, treatment and container types will be as required in "Sample Collection and Preservation/Measurement of Field Parameters", a publication distributed by the Water Management Administration as part of its sampling course. Standard quart cubitainers, rather than gallon containers will be used for gross alpha samples. Samples will be chilled in the field, where required, and returned to the Health Department laboratory in time to be processed for courier pick-up (4:00 pm). Although holding time varies for different samples, to avoid confusion all sampling will be completed on Mondays, Tuesdays and Wednesdays.

Site documentation: Each well for which a susceptibility analysis will be completed will be assigned a unique identification number. This number, along with property name, address and well permit number will be used to insure that sample results are assigned to the correct site. Bottle numbers will be unique and will be assigned from the 500 series of numbers. The site ID number along with the address will appear on all sample paperwork. Copies of all sampling paperwork will be attached to the site packet and given to the project leader. Meaningful detections will be entered in the project database to be used in determining the susceptibility to contamination of each well. It is planned that all other data will ultimately be available in a countywide database.

Quality Assurance Sampling. Quality-assurance samples will be submitted to the laboratory throughout the sampling program in order to monitor for sample contamination and document analytical precision. QA data for this assessment will consist of analyses of trip blank sample, field blank samples, and duplicate samples. Most QA samples will be collected early in the sampling program to ensure that any

problems are identified and corrected. Both field blanks and trip blanks will be submitted with selected VOC and SOC samples.

-Blank samples: Blank samples will be submitted to determine whether contamination occurred during sample collection, processing, or transport. Blank samples consist of field blanks and trip blanks. Field blanks are sample bottles filled with double distilled water treated with the same procedures as were used when collecting the environmental samples. Trip blanks are sample bottles filled with double distilled water bottled under clean conditions and transported with the environmental samples. VOC trip blanks will be collected and submitted with every batch of VOC samples.

-Duplicate samples will be submitted to document laboratory precision and variation in sample water during the collection process.

Result notification. Sample results will be provided to facility owners/managers along with an implementation of results and, when appropriate, water treatment techniques.

Note: Figures for this Appendix are not included in the report.

Appendix B

Assessment Areas of Non Community Facilities

Point Source Contaminant Abbreviations and Descriptions

CERCLIS: These are unauthorized dumping sites that at one time were considered for the national Superfund list.

CHLORIDES: Identifies where chloride result are a concern.

GENDIS (GENERAL DISCHARGE): This is another category of NPDES sites where one permit covers a number of facilities.

GROSS ALPHA: Identifies where a short term gross alpha particles sample was collected.

GRWATDIS (GROUND WATER DISCHARGE): Permitted to discharge unaltered water directly back into the ground, usually through recharge wells.

HAZWASGEN (HAZARDOUS WASTE GENERATORS): Facilities or businesses that generate some sort of hazardous waste in their operations (ex: dry cleaners, veterinary clinics, publishing,...)

HAZWASSITE (HAZARDOUS WASTE SITES): A location where hazardous waste may have been improperly stored or deposited at some time in the past and is considered a concern by the Department of Health

LUST (LEAKING UNDERGROUND STORAGE TANK): Location where a leaking underground storage tank has been discovered. Tanks have properly been removed, but chemicals may remain in the soil.

NITRATES: Identifies where nitrates result are a concern.

NPDES (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM): Sites that have been approved by the Maryland Department of the Environment to discharge process water into the waters of the state.

RA226/228: Identifies where a Radium226/228 sample was collected.

RUBBLE: Construction debris only landfill sites.

SCAV (SCAVENGER): Farmland that was once approved for the dumping of raw sewage collected by liquid waste haulers.

SLUDGE: Farmland approved for and permitted to receive sludge from wastewater treatment plants

SOLIDWAS (SOLID WASTE LANDFILL): Current and previously permitted landfills.

UST (UNDERGROUND STORAGE TANK): Underground storage tank, usually for gasoline or fuel oil.