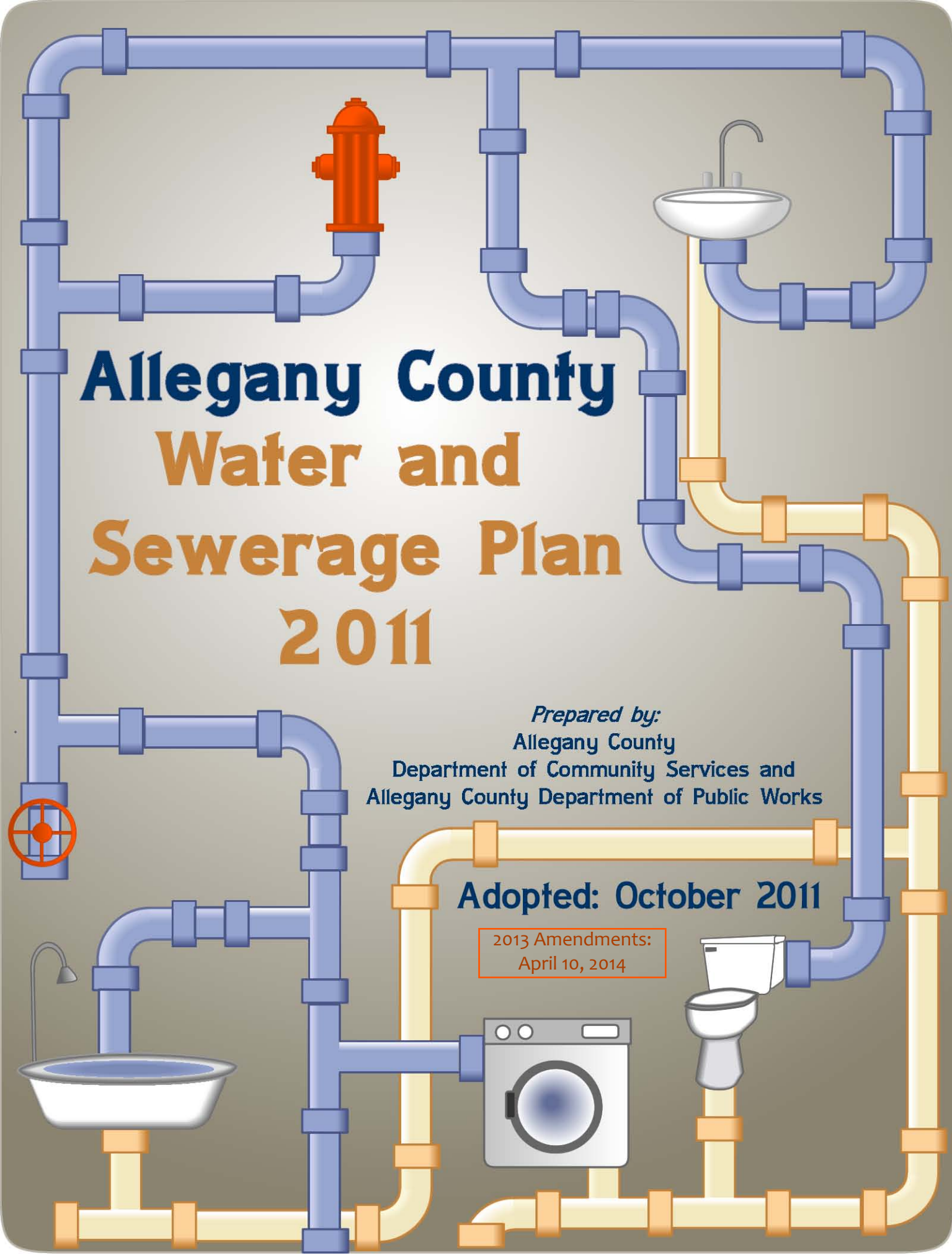




Allegany County **Water and** **Sewerage Plan** **2011**

Prepared by:
Allegany County
Department of Community Services and
Allegany County Department of Public Works

Adopted: October 2011

2013 Amendments:
April 10, 2014



2011 Allegany County Water & Sewerage Plan - 2013 Amendments - Synopsis

- On September 9, 2013, an e-mail was sent to all stakeholders seeking information on any required amendments/additions to the 2011 Allegany County Water and Sewerage Plan.
- Deadline for response was set at October 4, 2013
- Instruction received to hold off on amending plan pending resolution to issues dealing w/ Terrapin Run
- As of early 2014, no Terrapin Run resolution achieved, decision made to proceed with 2013 Amendment adoption
- Upon P&Z approval, recommendation shall be made to County Commissioners for approval
- Upon hearing any comments/questions about the proposed amendments, a resolution will be passed to incorporate the amendments into the Plan
- Following is a discussion of amendment requests received as a result of the e-mail inquiry and other discussions:
 - Town of Lonaconing (via RK&K Engineers)
 - Added "Water Station Run Road Waterline Extension" to the W-2 Final Planning Stages List
 - Added "Potomac Hollow Road Waterline Extension" to the W-2 Final Planning Stages List
 - Added "Koontz Plant Backwash Drain Line" to the W-2 Final Planning Stages List
 - Added "Maintenance Garage" to the W-2 Final Planning Stages List
 - Town of Westernport
 - Added "Westernport Water Distribution System Replacement - Phase One" to Completed Projects List
 - Added "Westernport Water Distribution System Replacement - Phase Two" to W-2 Final Planning Stages List
 - Added "Westernport Water Treatment Plant Upgrade" to Completed Projects List
 - Allegany County Utilities
 - Added "Creek Road Water" to the W-3 Immediate Priority List
 - Added "Bowling Green Water - Moss Avenue" to the W-2 Final Planning Stages List
 - Added "Bowling Green Water - Future Phases" to the W-3 Immediate Priority List
 - Added "McCoole Water Meter Replacement" to the W-2 Final Planning Stages List
 - Added "Biers Lane Collector System" to the S-3 Immediate Priority List
 - Added "Bowling Green Equipment Garage" to S-3 Immediate Priority List
 - Added language to Section 4.01 - Community Sewerage Systems describing feasibility evaluation of a potential WWTP in Locust Grove
- General Comments regarding Plan Amendments
 - Textual changes may necessitate a change in the corresponding service area map or Planned Projects Map - changes have been made as necessary in the accompanying map documents
 - Information regarding rates and fees for Allegany County customers is outdated but will be addressed during the triennial revision cycle
 - References to Appendix A: Allegany County Water Service Areas and Appendix B: Allegany County Sewer Service Areas were added to the Table of Contents and Sections 3.03 and 4.03.
 - Other information regarding annual flow data or trends will be updated during the next Plan adoption cycle in 2014
 - Goal of 2013 amendment set was to address pressing issues and make sure no projects ran into issues due to problems with the Water & Sewerage Plan

 3/31/2014
Daniel S. DeWitt, P.E. - Water & Sewerage Plan Coordinator

MOTION

By motion duly carried of the County Commissioners of Allegany County, Maryland the following action was authorized as part of the Consent Agenda for the April 10, 2014 public meeting:

Authorized the Board of County Commissioners to pass Resolution 14-09 to adopt the 2013 Amendments to the 2011 Allegany County Water & Sewerage Plan and incorporate said amendments into the 2011 Plan.

VOTE:

yes
MWMcK

yes
CVB

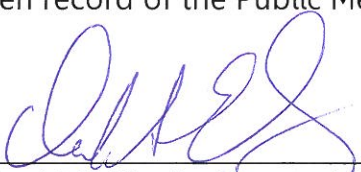
yes
WRV

County Commissioners of Allegany County, Maryland

CERTIFICATION

I, David A. Eberly, County Administrator, hereby certify that the above action of the Commissioners is a part of the formal, written record of the Public Meeting held on April 10, 2014.

BY


David A. Eberly, County Administrator

S E A L

Dept.: Public Works
Account No.: N/A
Contact: Dan DeWitt, P.E.

RESOLUTION 14-09

WHEREAS, the Board of County Commissioners of Allegany County, Maryland, are required by Act of Legislature of the State of Maryland to prepare and update a Water and Sewerage Plan in accordance with Title 9, Subtitle 5, of the Environment Article of the Annotated Code of Maryland; and

WHEREAS, the County Commissioners of Allegany County did previously pass Resolution 11-26 to adopt the 2011 Allegany County Water and Sewerage Plan on October 27, 2011 subsequent to necessary preparation and public hearing; and

WHEREAS, the County Commissioners of Allegany County desire to revise and update said Water and Sewerage Plan; and

WHEREAS, the Plan was written in conformance to the Code of Maryland Regulation, Title 26, Subtitle 3, and incorporates existing and planned water and sewerage development of Allegany County and the towns, municipal incorporations, privately owned facilities, and State facilities within the County; and

WHEREAS, the Plan was reviewed and unanimously endorsed by the Allegany County Planning & Zoning Commission on February 26, 2014 and again on March 26, 2014; and

WHEREAS, the County Commissioners of Allegany County did in accordance with the prescribed procedures advertise and hold a public hearing to revise said Plan on April 3, 2014 and the record remained open for a period of 7 days.

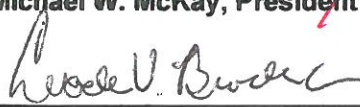
NOW, THEREFORE, BE IT RESOLVED AND ORDAINED that the Board of County Commissioners of Allegany County in accordance with the requirements of Title 9, Subtitle 5, Environment Article of the Annotated Code of Maryland, by proper motion and second in public meeting on April 10, 2014 do hereby adopt the 2013 Amendments to the 2011 Allegany County Water and Sewerage Plan and direct that copies of this Resolution and copies of the 2013 Amendments to the 2011 Allegany County Water and Sewerage Plan be made a part of the minutes of their regular meeting on April 10, 2014.

ADOPTED by the Board of County Commissioners of Allegany County, Maryland on April 10, 2014.

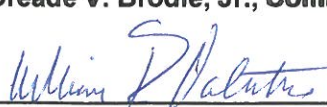
COUNTY COMMISSIONERS OF ALLEGANY COUNTY, MD



Michael W. McKay, President

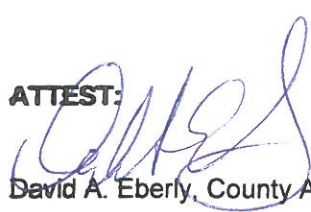


Creade V. Brodie, Jr., Commissioner



William R. Valentine, Commissioner

ATTEST:



David A. Eberly, County Administrator

2013 Amendments to the 2011 Allegany County Water & Sewerage Plan
Allegany County Planning & Zoning Commission
Evidence of Consultation with Local Comprehensive Planning Agency

We, the members of the Allegany County Planning & Zoning Commission, hereby recommend that the Allegany County Commissioners adopt the proposed 2013 amendments to the 2011 Allegany County Water & Sewerage Plan ("the Plan") following the required public hearing process and subsequent to any necessitated changes to the Plan.

The proposed amendments were presented to the Allegany County Planning & Zoning Commission in preliminary format on February 26, 2014 and in final format on March 26, 2014.

SIGNED:

Members of the Allegany County Planning & Zoning Commission

Printed Name

Signature

Richard P. DAVIS

Richard P. Davis

Donna E. Thomas

Donna E. Thomas

E. William DuVal II

E. W. DuVal II

Edward T. Robinette Sr

Edward T. Robinette Sr



Allegany County Water & Sewerage Plan Amendments - Fall 2012

Synopsis

- On August 14, 2012, an e-mail was sent to all stakeholders seeking information on any required amendments/additions to the 2011 Allegany County Water and Sewerage Plan.
- Deadline for response was set at September 7, 2012
- Upon P&Z approval, recommendation shall be made to County Commissioners for approval
- Upon hearing any comments/questions about the proposed amendments, a resolution will be passed to incorporate the amendments into the Plan
- Following is a discussion of amendment requests received as a result of the e-mail inquiry:
 - City of Cumberland
 - Added "WWTP Egg-Shaped Digester Repair and Replacement Installation" to S-3 Immediate Priority List
 - Added "UV Disinfection at WWTP" to S-5 Ten Year Period List
 - Added "North End Tank Replacement" to W-5 Ten Year Period List
 - City of Frostburg
 - Changed served population to "more than 12,500"
 - Updated average daily withdrawal figures to show present figures of 1.0 MGD average daily withdrawal for Piney Dam Reservoir and Savage wells and springs
 - Added statement noting that Piney Dam Reservoir is permitted to withdraw 1.3 MGD
 - Added paragraph describing June 2008 Water Supply Study Update by Whitman, Requardt, and Associates, LLP that projected water demand for the Frostburg system at approximately 2.23 MGD by 2030. Paragraph also describes project planning to meet the expected demand.
 - Changed population served in City of Frostburg to approximately 9,000
 - Added "Frostburg - Raw Water Transmission Main Upgrade and Low Head Hydroelectric Plant" to completed projects list and removed same from W-2 Final Planning Stages List
 - Added "Sand Spring Subdivision, Phase II (Frostburg)" to W-3 Immediate Priority List and removed same from W-4 Six Year Period List
 - Added "Frostburg Raw Water Supply Impoundment at the Water Treatment Plant, Rehabilitation & Improvements" to W-3 Immediate Priority List
 - Renamed "Frostburg - System Extension" to "Frostburg - Water Distribution System Hydraulic Loop Extension, Project C2 & C3" in W-5 Ten Year Period List
 - Added "Frostburg - Secondary Hydro Package Plant at Water Treatment Plant" to W-5 Ten Year Period List
 - Changed "Frostburg CSO Separation" project to read "50% complete" rather than "1/3 complete" under Completed Projects List
 - Added ", Phase VII B, Phase VII C" to "Frostburg - CSO Separation" under S-2 Final Planning Stages List
 - Added "Frostburg - CSO Separation, Phase VIII" to S-3 Immediate Priority List
 - Added "Sand Spring Subdivision, Phase II (Frostburg)" to S-3 Immediate Priority List and removed same from S-4 Six Year Period List
 - Added "Frostburg CSO Separation" to S-4 Six Year Period List
 - Added "Frostburg CSO Separation (Final Phases)" to S-5 Ten Year Period List



- LaVale Sanitary Commission
 - Added “Interceptor Repairs” to S-2 Final Planning Stages List
 - Added “Construction” to S-2 Final Planning Stages List
 - Revised description of system to reflect current projects
- Town of Lonaconing
 - Added “Backup Power for WTPs” to Completed Projects List and removed same from W-3 Immediate Priority List
 - Added “0.5 MGD Water Storage Tank – Midland” to W-2 Final Planning Stages List
- Rocky Gap State Park
 - Revised description of water source to read: “A new 130,000 gpd membrane filtration water treatment facility is planned. Maximum production capacity will be 300,000 gpd. Water source will continue to be Lake Habibeb and the existing water treatment plant will be decommissioned.”
 - Added “Water Treatment Plant Construction – Rocky Gap State Park” to W-2 Final Planning Stages List
 - Revised description of wastewater treatment to read: “MES is planning to upgrade and expand the existing wastewater treatment facility for an average design flow of 150,000 gpd. The proposed treatment process will employ Membrane Bio Reactor (MBR) technology. The effluent discharge location into Rocky Gap Run will remain unchanged.”
 - Added “0.15 MGD Wastewater Treatment Plant Upgrade – Rocky Gap State Park” to S-2 Final Planning Stages List
- Allegany County Utilities
 - Town of McCoole/City of Keyser (WV)
 - Added “City of Keyser – WWTP & Collection System Upgrade” to S-2 Final Planning Stages List
 - Added information regarding planned City of Keyser (WV) WWTP and Collection System Upgrade
 - This project is included because MDE funding is sought since the City of Keyser (WV) treats wastewater from residents in town of McCoole (MD) and then bills the Allegany County Department of Public Works – Utilities Division
- General Comments regarding Plan Amendments
 - Textual changes may necessitate a change in the corresponding service area map or Planned Projects Map – changes have been made as necessary in the accompanying map documents
 - Information regarding rates and fees for Allegany County customers is outdated but will be addressed during the triennial revision cycle
 - References to Appendix A: Allegany County Water Service Areas and Appendix B: Allegany County Sewer Service Areas were added to the Table of Contents and Sections 3.03 and 4.03.
 - Other information regarding annual flow data or trends will be updated during the next Plan adoption cycle in 2014
 - Goal of 2012 amendment set was to address pressing issues and make sure no projects ran into issues due to problems with the Water & Sewerage Plan

MOTION

By motion duly carried of the County Commissioners of Allegany County, Maryland the following action was authorized as part of the Consent Agenda for the November 29, 2012 public meeting:

Authorized the Board of County Commissioners to pass Resolution 12-28 to adopt the 2012 Amendments to the 2011 Allegany County Water & Sewerage Plan and incorporate said amendments into the 2011 Plan.

VOTE:

yes
MWMcK

yes
CVB

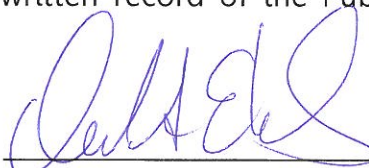
yes
WRV

County Commissioners of Allegany County, Maryland

CERTIFICATION

I, David A. Eberly, County Administrator, hereby certify that the above action of the Commissioners is a part of the formal, written record of the Public Meeting held on November 29, 2012.

BY



David A. Eberly, County Administrator

S E A L

Dept.: Public Works
Account No.: N/A
Contact: Dan DeWitt

RESOLUTION 12-28

WHEREAS, the Board of County Commissioners of Allegany County, Maryland, are required by Act of Legislature of the State of Maryland to prepare and update a Water and Sewerage Plan in accordance with Title 9, Subtitle 5, of the Environment Article of the Annotated Code of Maryland; and

WHEREAS, the County Commissioners of Allegany County did previously pass Resolution 11-26 to adopt the 2011 Allegany County Water and Sewerage Plan on October 27, 2011 subsequent to necessary preparation and public hearing; and

WHEREAS, the County Commissioners of Allegany County desire to revise and update said Water and Sewerage Plan; and

WHEREAS, the Plan was written in conformance to the Code of Maryland Regulation, Title 26, Subtitle 3, and incorporates existing and planned water and sewerage development of Allegany County and the towns, municipal incorporations, privately owned facilities, and State facilities within the County; and

WHEREAS, the Plan was reviewed and unanimously endorsed by the Allegany County Planning & Zoning Commission on October 24, 2012 and again on November 28, 2012; and

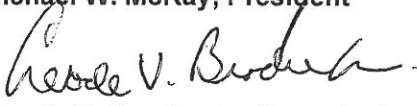
WHEREAS, the County Commissioners of Allegany County did in accordance with the prescribed procedures advertise and hold a public hearing to revise said Plan on November 15, 2012 and the record remained open for a period of 12 days.

NOW, THEREFORE, BE IT RESOLVED AND ORDAINED that the Board of County Commissioners of Allegany County in accordance with the requirements of Title 9, Subtitle 5, Environment Article of the Annotated Code of Maryland, by proper motion and second in public meeting on November 29, 2012 do hereby adopt the 2012 Amendments to the 2011 Allegany County Water and Sewerage Plan and direct that copies of this Resolution and copies of the 2012 Amendments to the 2011 Allegany County Water and Sewerage Plan be made a part of the minutes of their regular meeting on November 29, 2012.

ADOPTED by the Board of County Commissioners of Allegany County, Maryland on November 29, 2012.

**COUNTY COMMISSIONERS OF ALLEGANY
COUNTY, MD**


Michael W. McKay, President


Creade V. Brodie, Jr., Commissioner


William R. Valentine, Commissioner

ATTEST


David A. Eberly, County Administrator

We, the members of the Allegany County Planning & Zoning Commission, hereby recommend that the Allegany County Commissioners adopt the proposed amendments to the 2011 Allegany County Water & Sewerage Plan ("the Plan") following the required public hearing process and subsequent to any necessitated changes to the Plan.

The proposed amendments were presented to the Allegany County Planning & Zoning Commission in preliminary format on September 19, 2012 and in final format on October 24, 2012.

SIGNED:

Members of the Allegany County Planning & Zoning Commission

<u>Printed Name</u>	<u>Signature</u>
DONNA THOMAS	Donna Thomas
WILLIAM R. DAVIS, JR	William R Davis, Jr
Edward T Robinette Sr	Edward T Robinette Sr
E. William DeVall Jr	E. W. DeVall Jr
Rodger L. Uphold	Rodger L Uphold

Information regarding the City of Keyser (WV) planned WWTP & Collection System Upgrade and newly added references to Appendices A & B were added subsequent to the October 24, 2012 Allegany County Planning and Zoning Commission Meeting but prior to the November 15, 2012 Public Hearing. This information was distributed to members of the Planning & Zoning Commission prior to the Public Hearing and will be discussed before the Planning & Zoning Commission at the next proposed Planning & Zoning Commission Meeting on November 28, 2012. Questions may directed to Daniel S. DeWitt via e-mail at ddewitt@allconet.org.

Allegany County Water and Sewerage Plan

Preliminary Plan

2011

Allegany County Board of County Commissioners

Michael W. McKay

Creade V. Brodie, Jr.

William R. Valentine

Planning and Zoning Commission of Allegany County

E. William DuVall, II, Chairman

Dwight W. Perrin, Vice-Chairman

William R. Davis, Jr.

Rodger L. Uphold

Edward T. Robinette, Sr.

Kimberly R. Heavner

N. Lois Crossland

Stephen K. MacGray

Wesley W. McKee, Esq., Legal Council

Allegany County Water and Sewerage Plan Committee

Elizabeth E. Stahlman, GIS Manager, Department of Community Services

Daniel S. DeWitt, E.I.T, Engineer I, Department of Public Works

James L. Webber, P.E., Engineer III, Department of Public Works-Utilities Division

Mark W. Yoder, P.E., Chief, Department of Public Works-Utilities Division

Philip R. Hager, Planning Coordinator, Planning Division

Cover design by Siera Wigfield, Planning/Transit Divisions

Certification of Incorporation of Subsidiary Plans

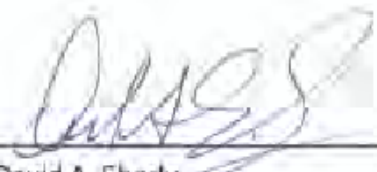
This is to certify that Allegany County Government made all reasonable efforts to include information regarding *all* public and private water and sewer systems present within the County. The Water and Sewerage Plan committee successfully made contact and received information from the following organizations:

Allegany County Health Department
City of Frostburg
Town of Westernport
Maryland Water Service
Rawlings Heights Water Company
Midlothian Water Company
Upper Potomac River Commission
Little Orleans Campground
Bald Eagle Boys Camp

City of Cumberland
Town of Lonaconing
LaVale Sanitary Commission
Maryland Environmental Service
Rawlings Improvement Association Inc.
Luke Paper Company
Broadwater Addition Water Company
City of Keyser, West Virginia

The Water and Sewerage Plan Committee sincerely appreciates the participation and cooperation of these agencies. The Committee incorporated data, plans, and revisions provided by these organizations.

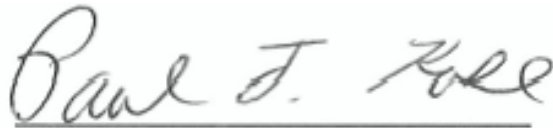
For the operators of water and sewerage systems that are not listed above, contact information is unknown or no response was received.



David A. Eberly
County Administrator

Engineer's Certification

This is to certify that sections of the 2011 Water and Sewerage Plan covering aspects of water and sewerage have been prepared and/or reviewed for adequacy to meet the defined needs.

A handwritten signature in cursive script, reading "Paul F. Kahl", written in black ink. The signature is positioned above a horizontal line.

Paul F. Kahl, P.E.
Director of Public Works

Resolution - County Commissioners

RESOLUTION 11-26

WHEREAS, the Board County Commissioners of Allegany County, Maryland, are required by Act of Legislature of the State of Maryland to prepare and update a Water and Sewerage Plan in accordance with Title 9, Subtitle 5, of the Environment Article of the Annotated Code of Maryland; and

WHEREAS, the County Commissioners of Allegany County did previously cause an amendment to the 2007 Allegany County Water and Sewerage Plan to be prepared and subjected to public hearing and subsequently adopted by appropriate action of the County Commissioners of Allegany County on August 6, 2008; and

WHEREAS, the County Commissioners of Allegany County desire to revise and update said Water and Sewerage Plan; and

WHEREAS, the Plan was written in conformance to the Code of Maryland Regulation, Title 26, Subtitle 3 and incorporates existing and planned water and sewerage development of Allegany County and the towns, municipal incorporations, privately owned facilities, and State facilities within the County; and

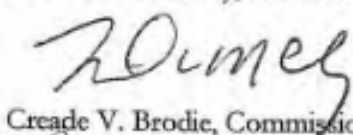
WHEREAS, the Plan was reviewed and unanimously endorsed by the Allegany County Planning & Zoning Commission on October 5, 2011; and

WHEREAS, the County Commissioners of Allegany County did in accordance with the prescribed procedures advertise and hold a public hearing to revise said Plan on October 13, 2011 and the record remained open for a period of ten days.

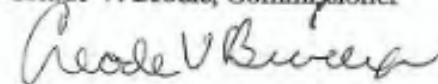
NOW, THEREFORE, BE IT RESOLVED AND ORDAINED that the Board of County Commissioners of Allegany County in accordance with the requirements of Title 9, Subtitle 5, Environment Article of the Annotated Code of Maryland, by proper motion and second in public meeting on October 27, 2011 do hereby adopt the 2011 Allegany County Water and Sewerage Plan and direct that copies of this Resolution and copies of the 2011 Allegany County Water and Sewerage Plan be made a part of the minutes of their regular meeting on October 27, 2011.

ADOPTED by the Board of County Commissioners of Allegany County, Maryland on October 27, 2011. COUNTY COMMISSIONERS OF ALLEGANY COUNTY, MD

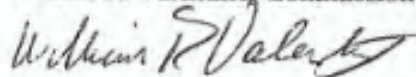
Michael W. McKay, President



Creade V. Brodie, Commissioner



William R. Valentine, Commissioner



ATTEST:

Cathy Blank, Clerk

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Definitions

- (i) "Community Water Supply System" means a source of water and a distribution system, including treatment and storage facilities, whether publicly or privately owned, serving two or more individual lots.
- (ii) "Multi-use Water Supply System" means a single system of piping, pumps, tanks, or other facilities utilizing a source of ground or surface water to supply a group of individuals on a single lot and having a capacity in excess of 1,500 GPD.
- (iii) "Water Service Area" means that area served, or potentially served, by a single distribution system under control of a single utility, or, in a very large system, sub-areas as delineated by the county.
- (iv) "Community Sewerage System" means any system, whether publicly or privately owned, serving two or more individual lots, for the collection and disposal of sewerage or industrial wastes of a liquid nature, including various devices for the treatment of sewage and industrial wastes.
- (v) "Multi-use Sewerage System" means a single system serving a single lot, under private or collective ownership, and serving a group of individuals for the collection and disposal of sewage or industrial wastes of a liquid nature, including various devices for the treatment of sewage and industrial wastes having a treatment capacity in excess of 5,000 gpd.
- (vi) "Sewerage Service Area" means the area served, or potentially served, by a system of sanitary sewers connected to a treatment plant, or in a very large system, sub-areas as delineated by the county.
- (vii) "Sanitary District" means areas that are served by infrastructure owned and operated by Allegany County Department of Public Works – Utilities Division, the geography and names are coincident with the service areas.
- (viii) "Existing service area" and "W1" and "S1" means the area that is currently served.
- (ix) "Final planning stage" and "W2" and "S2" means a work or works of community water supply or community sewerage system for which contract plans and specifications have been completed.
- (x) "Immediate priority" and "W3" and "S3" means a work or works of community water supply or community sewerage for which the beginning of construction is scheduled to start within two years following the date of the adoption of the plan, its amendments, and its revision.
- (xi) "Six-year period" and "W4" and "S4" means the period in which work or works of community water supply or community sewerage for which the beginning of construction is scheduled to start between two and six years following the date of the adoption of the plan, its amendments, and its revision.
- (xii) "Ten-year period" and "W5" and "S5" means the period in which work or works of community water supply or community sewerage for which the beginning of construction is scheduled to start between six and ten years following the date of the adoption of the plan, its amendments, and its revision.
- (xiii) "Approving Authority" means one or more officials, agents, or agencies of local government designated by the local governing body or specified by other provisions of Environment Article Title 9, Subtitle 5, to take certain actions as part of implementing these regulations.

- (xiv) "Capital Improvement Program" and "CIP" means the Allegany County CIP is reviewed and adopted each year by the Allegany County Commissioners , and contains specific proposed water and sewer infrastructure improvements for which funding is programmed for design or construction within the current four-year time frame.
- (xv) "ACDPW" is Allegany County Department of Public Works
- (xvi) "Customer" and "Account" both refer to one utility billing account and are used to represent one household in this Plan.
- (xvii) "EDU" means Equivalent Dwelling Unit and is a measure where one unit is equivalent to wastewater effluent from one home, which is 250 gallons per day per home. This amount is based on most wastewater pollution textbooks estimating an average of 100 gallons of wastewater per person, and based on the national average home occupancy of 2.5 persons per home.
- (xviii) "PFA" means Priority Funding Area
- (xix) "MGD" means million gallons per day
- (xx) "gpd" means gallons per day
- (xxi) "gpm" means gallons per minute
- (xxii) "FY"
means Fiscal Year, July 1 through June 30.

Introduction

The Allegany County 2011 Water and Sewerage Plan has been prepared in accordance with COMAR 26.03.01, Planning Water Supply and Sewerage Systems. Since the last update to the Allegany County Water and Sewerage Plan in 2007, technological advancements and organizational improvements have been utilized by all departments involved in the assembly of the 2011 Update to the Water and Sewerage Plan. This document is a collaborative effort between the County Departments: Geographic Information Systems (GIS), Public Works Department- Utilities Division, Public Works Department – Engineering Division, and the Planning Division.

The Allegany County Utilities Division and the GIS Office have made significant progress in regards to GIS data for the Allegany County utility assets since the last update to the Water and Sewerage Plan. All water and sewer mains, treatment plants, storage tanks, hydrants, manholes, pump stations, and other nodes have been digitized and are stored on an enterprise database for use throughout the County Offices. The data are attributed for use in field work, modeling, and also for asset management. In addition, the development of an internally-used “Utilities Dashboard” allows all those involved with Water and Sewerage planning, the ability to view and obtain information on water and sewerage assets in the County in an interactive map format. The “Utilities Dashboard”, along with the increased spatial information in the Utilities database, has greatly enhanced productivity by increasing accessibility to utility infrastructure data, and by decreasing error frequency in data transmission between departments. All mapping data used in the plan is contained in one central spatial database and can be viewed through the Utilities Dashboard.

Within the Public Works Department - Utilities Division, flow data for each County-maintained water distribution system and each County-maintained wastewater treatment plant has been kept in a detailed spreadsheet for the past several years. Utilizing this data along with the latest customer billing information (from the Tax and Utility Office within Allegany County) allowed the Water and Sewerage Plan Committee to compute figures for daily usage totals of County-maintained water distribution systems and County-maintained sewer collection systems.

The Public Works Department – Engineering Division is endeavoring to make the 2011 Update to the Allegany County Water and Sewerage Plan a current “one-stop shop” resource for all available County water and sewerage data. At the onset of plan creation, data was stored in several places and in various offices. The Water and Sewerage Plan Committee is confident that upon adoption of the Plan, the data contained will be in the most accurate and most up-to-date information available. A goal of the 2011 Plan will be to make the beginning stages of the next (likely 2014) update as smooth as possible by providing all necessary background information in one place.

The Planning Division incorporated the latest projections regarding population, dwelling units, group quarters, and household size in order to develop reasonable forecasts for water and sewerage demand. Allegany County is a geographically- and economically-diverse area. This creates the need for proper planning to ensure our existing and future resources are used to their greatest potential. The Water and Sewerage Plan Committee

also collaborated with consultants working with the Planning Division to create the Water Resource Element for Allegany County. This was done in an effort to achieve maximum compatibility between the two documents (sharing common data, developing common projections, etc.).

Finally, the organization of the 2011 Plan has benefited from regular Committee meetings to share progress updates, comments, questions, and concerns. The Committee met at least once per month, while smaller and more informal meetings between two or more Committee members occurred at weekly intervals. Such frequent meetings have served to keep all Committee members focused on the overall goal of an accurate and well-developed plan that is adopted in a timely fashion. The development of the 2011 Allegany County Water and Sewerage Plan has truly been a cooperative, interdepartmental effort.

Chapter I

Section 1.01 Consistency with County Comprehensive Planning

The visions and recommendations contained herein are in accordance with sound planning processes and procedures, and are based upon engineering data and analysis, and social and land use planning information from the Allegany County Planning Division, the U.S. Census Bureau, the Maryland Department of Planning, and the Maryland Department of the Environment.

Allegany County embraces the concepts of Smart Growth and Sustainability. To that end, the guiding principles of this Plan serve to facilitate compact development, concentrating new development within or - adjacent to - existing areas of development, promoting the utilization of PFAs as planning tools to support sound land use decision-making, and encouraging new land uses in areas where they can be adequately supported by infrastructure.

Sustainable, well-planned development requires that the development that is projected for the future is supported by infrastructure. This requires that Planners identify the location of infrastructure and guide development in that direction. To be truly sustainable, however, the infrastructure itself must be planned and targeted so that it can be most efficiently and effectively utilized, that it can be reasonably expected to handle projected demand, and so that resources can be most effectively allocated and timed for maximum effectiveness.

This document is a planning document that seeks to utilize the Comprehensive Plan as a map for targeting infrastructure and for sequencing necessary facility improvements. It is also intended to serve as a guide for future Comprehensive Plan updates. In short, the symbiotic nature of the relationship of this document with the Comprehensive Plan ensures sustainability and promotes the tenants of Smart Growth.

Section 1.02 County Government Organization

The Organization Chart of the Utilities Division is shown in Figure 1. The Division is part of the Department of Public Works, and the Utilities Division Chief reports to the Director of Public Works.

The Division is generally divided into two sections directed by Area Supervisors for Distribution and Collection and for Treatment. The Area Supervisors are supported by foremen, plant operators and utility workers.

The Division also includes a Utility Engineer, administrative assistants, instrumentation and control (I&C) technician and mechanics to support the operation and maintenance of the wastewater treatment plants and pump stations.

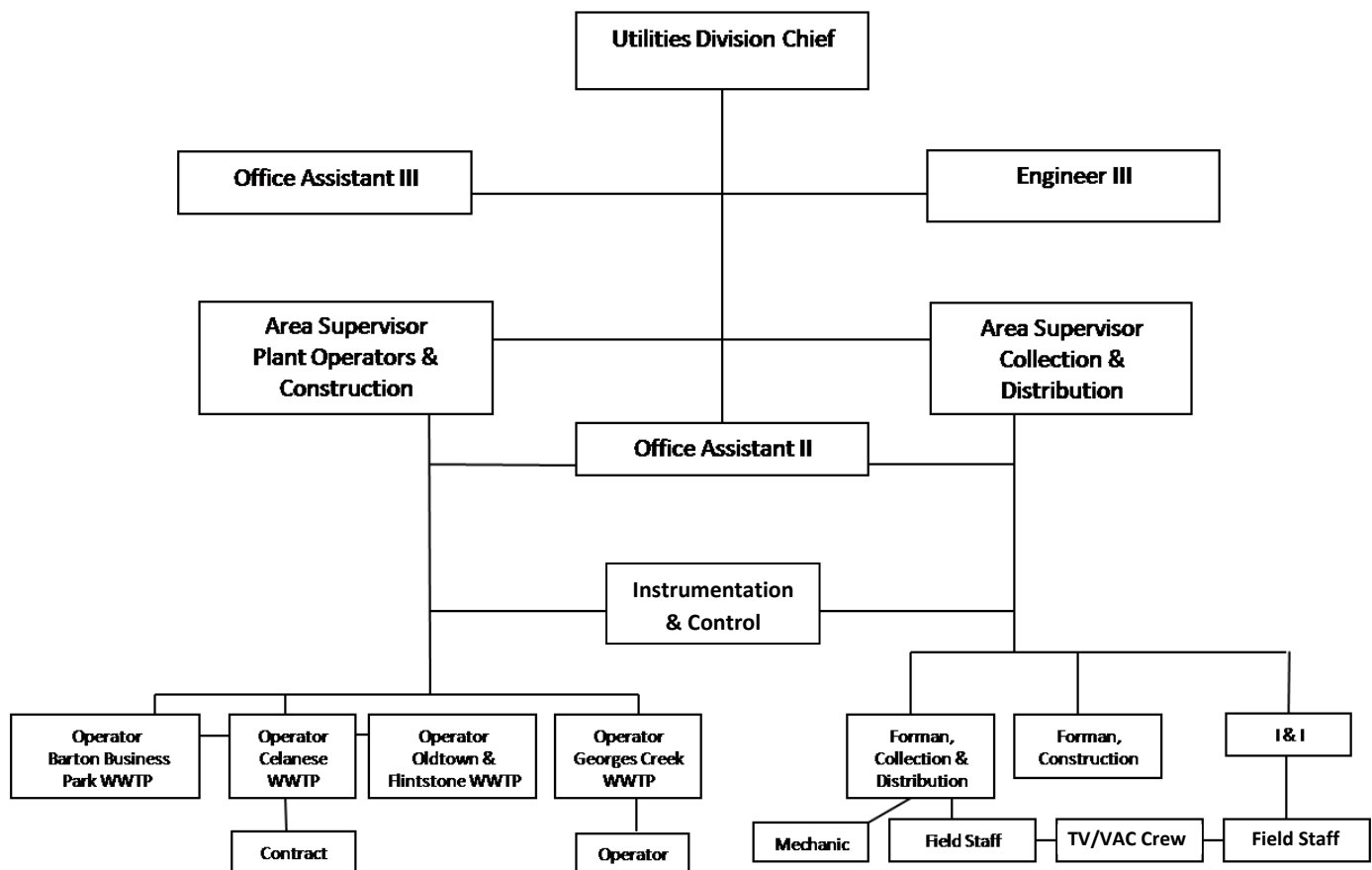


Figure 1. Utilities Organizational Chart

Chapter II Background Information

Chapter 2 presents information regarding the history and natural and cultural characteristics of Allegany County. The development patterns of Allegany County are highly correlated to the limitations of the landscape in the region. Because of the many physical constraints present within the county, it is imperative to consider these features while planning for the water and sewer systems; many areas in the County are poorly suited for wells, septic fields, or both.

It is also important to consider the population and land use projections to assure that the water and sewer plans will adequately serve the future residents of the county.

Section 2.01 Historic Context

The early development of what was to become Allegany County parallels the nation's quest to link early east coast development with the western frontier. The Narrows and the Braddock Run Valley have been used as the preferred route for westward travel since colonial times. The National Road (also known as the National Pike, and now known as National Highway or US Route 40 Alternate) was routed through this area during the 1800's, eventually linking Baltimore to St. Louis.

Early European settlers were initially drawn to the area in the 18th Century because the Potomac River afforded relatively efficient communication and transportation through the Appalachians to the Ohio Valley. Hunting, trapping, trading and agrarian pursuits were the primary economic activities of these early County residents. Trade centers developed around the economically and geographically important communities of Oldtown and Cumberland. Due to its strategic location at the confluence of Wills Creek and the Potomac, Cumberland was identified by Colonial and British military leaders as a point of military interest. This eventually led to the construction of Fort Cumberland.

Considerable portions of the National Road alignment corresponded to Braddock's Road, the route that the ill-fated Braddock expedition followed en route to their disastrous engagement near Fort Duquesne (Pittsburgh) during the French and Indian War. George Washington served as an aide and a guide to the British General whose name continues to carry prominence in Western Maryland (Braddock Run, Braddock Road, Braddock Mountain). Washington relied heavily upon the services of early County resident Thomas Cresap. Braddock's Road followed the trail first blazed by Nemacolin (Chief of the Turtle Tribe of the Lenni Lennape), a contemporary of Cresap.

After the French and Indian War, this route continued to serve as an important east-west travel corridor through the balance of the Colonial era and into the early years of the republic. As the need for transportation infrastructure within the interior was noted, Congress initiated a series of legislative enactments that led to funding appropriations for large-scale roadway construction. When completed, the National Road connected mid-Atlantic coastal areas with Western Maryland, Western Virginia, Western Pennsylvania and the areas that were later to form the states of Ohio, Kentucky, West Virginia, Indiana, and Illinois.

The presence of the National Road led to increased development and the establishment of other communities, most notably, the Town of Frostburg. The discovery of coal spurred development in much of what is now western Allegany County.

Allegany County's historic development has largely been a function of transportation. Beginning with the smaller creeks and the Potomac River and continuing with the construction of the National Road. This piece of transportation infrastructure was the first major public works project of the United States.

Another significant transportation initiative, the C&O Canal was also undertaken. The intent of this project was to link – via water – the Chesapeake Bay with the Ohio River. Although the Canal never made it further west than Cumberland, it was an important transportation route for goods and services from the tri-state area to Washington, DC for many years. The C&O Canal played an integral role in the growth of Allegany County.

In the early and mid-19th Century, mineral extraction, particularly coal, emerged as an increasingly important economic activity in the George's Creek Basin. The existing railway network (the B&O Railroad) was expanded to facilitate this industry. Largely as a direct consequence of this activity, the County's population doubled between 1880 and 1930 (approximately 40,000 to 80,000).

In the late 1800's and early 1900's, Allegany County's primary population center was the City of Cumberland and its immediate vicinity. Cumberland's nickname, "The Queen City" is indicative of its earlier size and importance. In that era, it was common practice to name the state's second largest city "The Queen City". In the latter portion of the 19th Century, only Baltimore was larger or more important than Cumberland; the transportation and railway hub that serviced the mills, waterways, manufacturing facilities, and mines of Western Maryland and the surrounding tri-state area.

In addition to Cumberland, Allegany County also had significant secondary population centers in Frostburg and along George's Creek (Midland, Lonaconing, Barton, and Westernport). These areas were important residential centers for the large numbers of miners who serviced the labor-intensive coal mining operations so prevalent during that era. The region's coal has a relatively high sulfur content and that, coupled with a nationwide decline in the use of coal (in favor of petroleum distillates such as gasoline, kerosene, etc.), and a growing labor movement in the early 20th Century (advocating better working conditions, worker safety and higher wages) signaled the end of the "King Coal" days for Western Maryland. A century later, coal is still important to Allegany County, but open pit (strip) mining has replaced the labor-intensive deep mining operations of the previous era.

In the early 1900's, large factories were built in the County to make use of the extensive labor supply that had been made available as the transportation and mining-related employment momentum began to decline. For a time, the job base lost to declining mining employment was replaced by the successful mill operations of the early and mid-20th Century: Kelly-Springfield Tire, Celanese Fiber Corp., Pittsburgh Plate Glass, etc. These industries peaked in the 1940's and 1950's but declined in the 1970's. These operations are no longer in existence, nor have they been replaced by similar industries. The loss of these industries was not at all atypical for the region. Many areas throughout the mid-Atlantic and greater Northeastern U.S. witnessed the same type of economic decline. What set this area apart from similar regions is that exceedingly little in the way of replacement industries moved in to fill these voids.

Allegany County's population peaked around 1950. For the next 60 years, the county's population steadily declined to its present population of 74,930 (Table 1). This population trend is consistent with the economic conditions within the county and generally reflects a larger trend witnessed throughout the mid-Atlantic and Northeastern U.S. regions during the latter portion of the 20th Century.

In the 1970's and into the 1980's, unemployment routinely averaged in excess of 20 percent. This trend continued until the late 1980's when the situation began to stabilize. Three factors influenced this stabilization trend. First, local job loss began to slow; second the local employment base improved as a few new industries located here and the state and federal prison systems increased the number of local positions in the 1990's. The final factor in this stabilization is that out-migration had finally begun to create a situation where job supply was coming closer to meeting job demand. As a result, the unemployment rate began to decline for the first time in decades.

Currently, the general economic outlook for the county has begun to improve and businesses and residents are beginning to think about re-investment. The improving business climate has stimulated some additional job growth as a result of several new industries within Allegany County. Interestingly enough, Allegany County has a larger job base today than any time in its history.

Table 1. Historic County Population

	Total Population	Absolute Change	Percent Change
1950	89,556	-	-
1960	84,169	-5,387	-6.02%
1970	84,044	-125	-0.15%
1980	80,548	-3,496	-4.16%
1990	74,946	-5,602	-6.95%
2000	74,930	-16	-0.02%

PREPARED BY: Allegany County Planning Services

SOURCE: U.S. Department of Commerce, Census Bureau

Section 2.02 Physical Features

2.02.01 Topography

Allegany County is comprised of two physiographic provinces, the Appalachian Plateau to the west, and the Valley and Ridge Province in the east. The highest point in Allegany County is located along the Allegheny Front, the dividing line between the two provinces; on Dans Mountain, 2,850 feet. The lowest point in the county is on the Potomac River at Sidling Hill Creek with an elevation of 420 feet. Allegany County has the most topographic relief in the State of Maryland; the digital elevation model is shown in Figure 2. In addition, forty percent of the land in Allegany County has a slope greater than 25%. These slopes are a determinate factor for existing and future land uses.

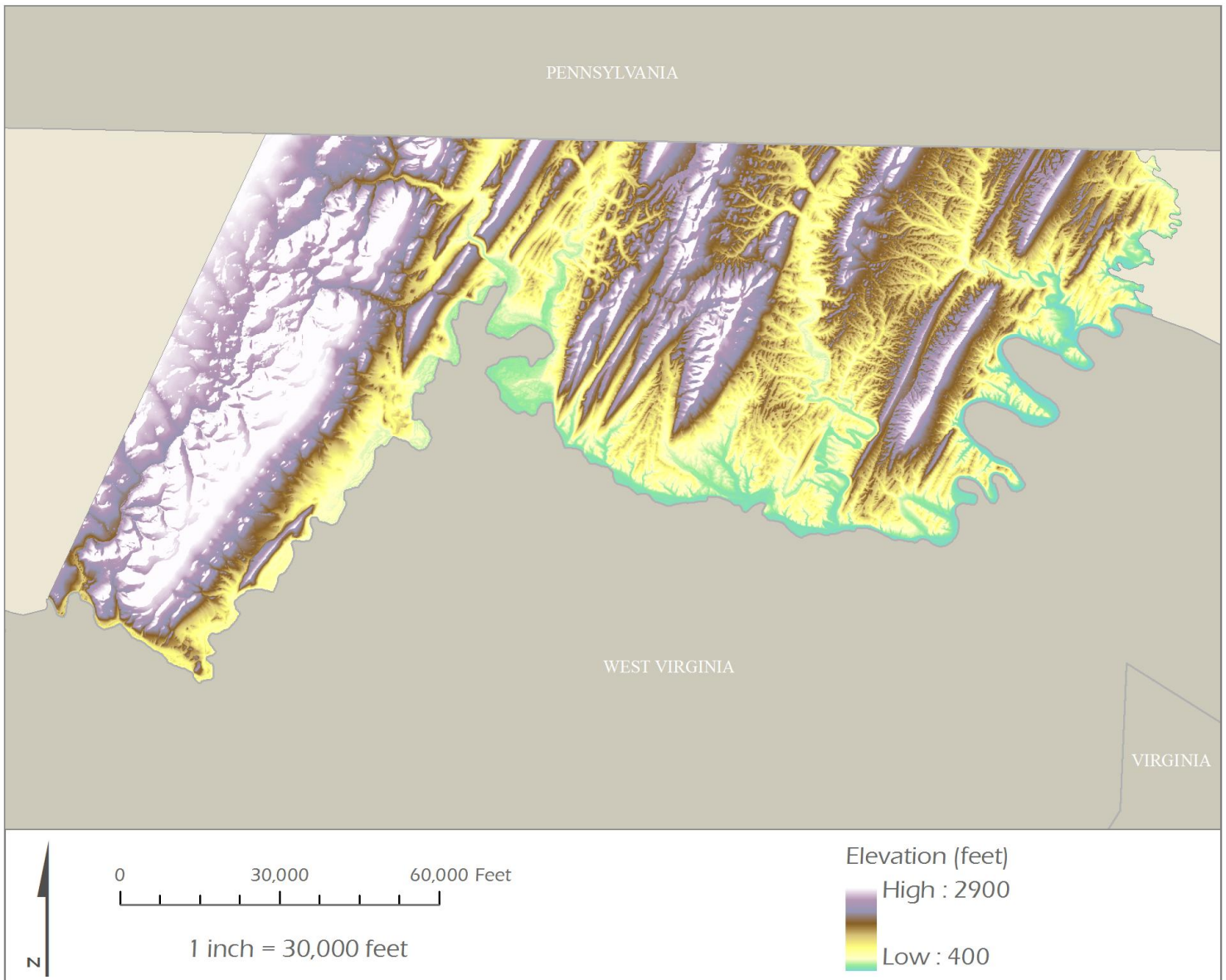


Figure 2. Topography

2.02.02 **Soil Drainage Characteristics**

The soils in Allegany County are mostly moderately well or well drained (Figure 3). However, with most of these soils, the depth to bedrock or depth to the water table is very shallow, and/or the soils are located in areas with steep slopes. Therefore, these soils typically are poorly or somewhat poorly suited for septic tank absorption fields (NRCS).



Figure 3. Soil Drainage Characteristics

2.02.03 Aquifers

The aquifers in Allegany County align with the physiographic provinces and are categorized by age (Figure 4). The aquifers within the Appalachian Plateau Province in Allegany County are predominately Pennsylvanian, and are comprised of consolidated sedimentary rocks which are also the major coal-bearing formations in the region. The Pennsylvanian rocks are layers of sandstone, shale, conglomerate, clay and coal. The sandstones are the most productive aquifers, yielding 20 to 430 gallons per minute. Water is also associated with coal beds/seams, as fractures within the deposit can store and convey water.

Within the Valley and Ridge Province the primary aquifers can be found in sandstones of Ordovician and Devonian age. However, these aquifers typically yield less than 120 gallons per minute (USGS).

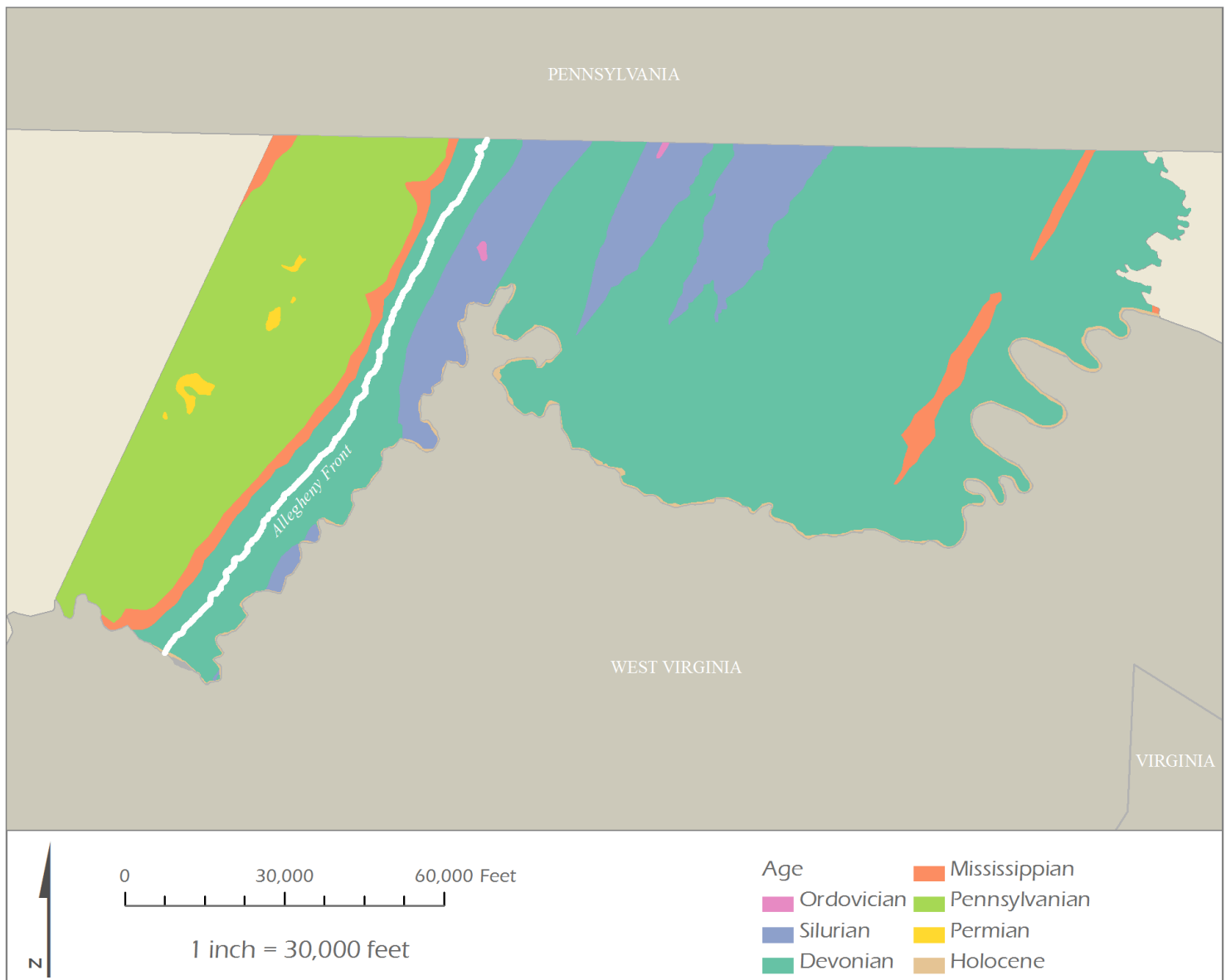


Figure 4. Geology

2.02.04 **Groundwater Patterns**

The groundwater patterns in the county are determined by the underlying rock formations and the patterns are correlated to the physiographic provinces. In the western portion of the county, the Appalachian Plateau, there is less aquifer recharge than in the eastern Valley and Ridge Province; because of the steep slopes and shallow bedrock, a significant portion of the rainwater runs off rather than infiltrating the surface. The groundwater usually moves locally from areas of high head toward areas of lower head, and moves both vertically and horizontally following the path of least resistance. Springs are found where the water table meets the valley wall and will usually feed mountain streams. The underground mining of coal in Allegany County has also affected the natural groundwater patterns. Tunnels that were constructed to divert water away from mine workings can lower water tables, and also divert ground water from one watershed to another. Collapsed mines may cause bedrock to fracture and can increase the water entering the aquifers.

The aquifers in the Valley and Ridge Province transmit most of the water through fractures and planes in all types of bedrock, and also through solution cavities in carbonate rocks. Large springs are very common, especially in carbonate rocks, and in these springs, groundwater movement is determined by gravity. Within the province, well productivity is influenced by several different geologic occurrences; wells located where fractures in the bedrock are present, where rocks have less than a 15 degree bedding plane angle, where the rocks are thin-bedded, and/or located in anti-clines, will yield more water. In addition, wells that are located in the valley floors typically are more productive than the wells located at the higher elevations (USGS).

2.02.05 Surface water patterns

The streams in Allegany County have small basins and the headwaters form at high elevations and on steep slopes. The streams are fed by springs and/or snowmelt and runoff. All of the streams in the County are tributaries to the Potomac River and include: Georges Creek, Jennings Run, Braddock Run, Wills Creek, Warrior Run, Evitts Creek, Flintstone Creek, Town Creek, Fifteen Mile Creek, and Sidling Hill Creek (Figure 5). The size of each watershed is tabulated in Table 2. The streams and rivers of Allegany County are important for recreation and wildlife habitat. They also receive effluent from wastewater treatment plants.

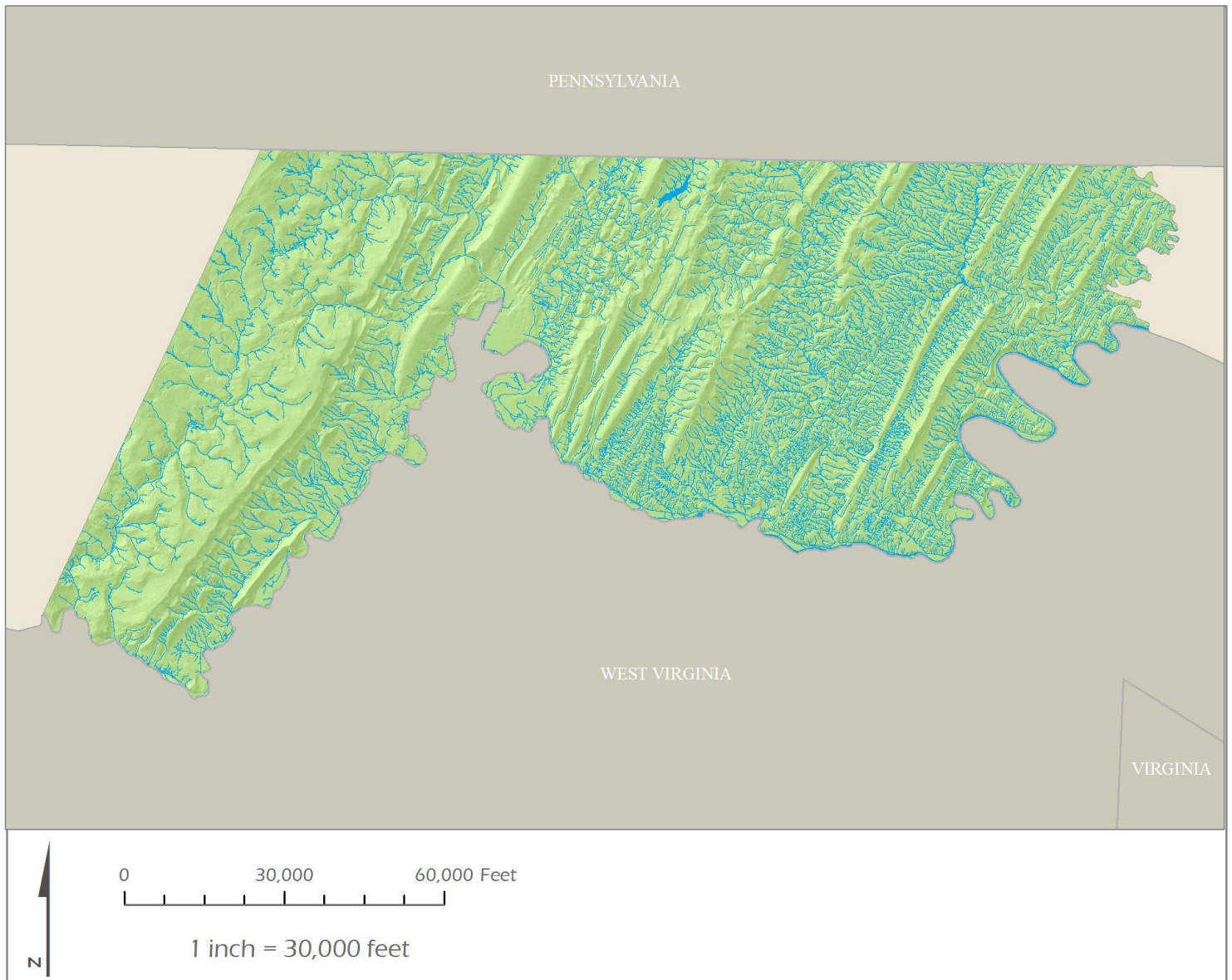


Figure 5. Surface Water Patterns

Table 2. Watersheds

Watershed	Acres
Savage River	74,537
Wills Creek*	38,430
Evitts Creek*	19,955
Town Creek*	43,410
Fifteen Mile Creek*	33,172
Sideling Hill Creek*	14,138
Georges Creek	47,694
Potomac River L N Branch	73,145
Potomac River AL County	20,861
Potomac River U N Branch	373

*Portion of watershed in Pennsylvania, not included in area calculations

The ponds and lakes in Allegany County are man-made. At 243 acres, Lake Habeeb is the only lake in the County and primarily serves as a recreational and drinking water facility. The only other surface water drinking water sources within Allegany County are small impoundments which serve the Georges Creek water system. The major sources for public water supply are all located outside of Allegany County (Figure 6). Lakes Gordon and Koon, operated by the Evitts Creek Water Company, supply the Cumberland System and are located in Bedford County, Pennsylvania. The Piney Reservoir located in Garrett County, Maryland, supplies the Frostburg System and is under the control of the City of Frostburg; the catchment area of the reservoir is 7,680 acres. The Upper Potomac River Commission operates the Savage River Dam, also in Garrett County, which is the water source for the Town of Westernport and also serves to regulate flow in the Potomac River.

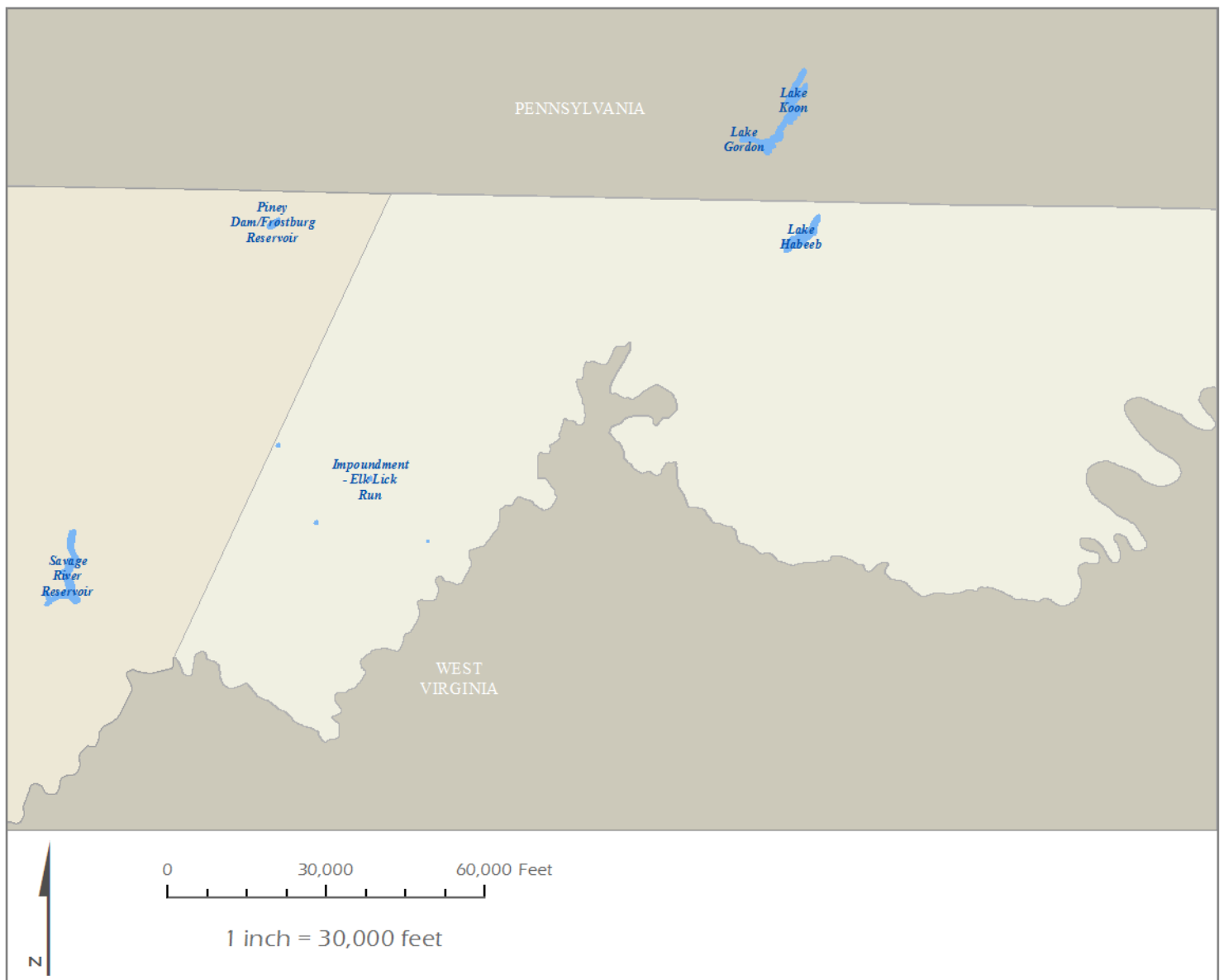


Figure 6. Public Drinking Water Supply

2.02.06 Water Quality Criteria

Allegany County complies with Maryland COMAR Title 26 and all applicable COMAR regulations. The impaired waters in Allegany County are listed in Table 3. Figure 7 is a map of the 303d impaired waterways.

Table 3. Maryland's Searchable Integrated Report Database [Combined 303(d)/305(b) List]

AU_ID	Basin Code	Water Type	Water Type Detail	Designated Use	Listing Category	Cause	Priority
MD-021410020107-Lake_Habeeb	2141002	IMPOUNDMENT	Impoundments	Aquatic Life and Wildlife	4a	Phosphorus (Total)	
MD-021410020107	2141002	RIVER	Subwatershed	Aquatic Life and Wildlife	5	pH, Low	Medium
MD-021410020105	2141002	RIVER	Subwatershed	Aquatic Life and Wildlife	3	pH, Low	
MD-02141002	2141002	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	5	Combination Benthic/Fishes Bioassessments	Low
MD-02141002	2141002	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	Total Suspended Solids (TSS)	
MD-02141002	2141002	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	5	Phosphorus (Total)	Low
MD-02141002	2141002	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	pH, Low	
MD-02140511	2140511	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	2	Combination Benthic/Fishes Bioassessments	
MD-02141004_MAINSTEM	2141004	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4b	pH, Low	
MD-02141004	2141004	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	5	Combination Benthic/Fishes Bioassessments	Low
MD-02141004	2141004	RIVER	River Mainstem	Water Contact Sports	4a	Fecal Coliform	
MD-02141004	2141004	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	pH, Low	

MD-0221410040088	2141004	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4a	pH, Low	
MD-02141004	2141004	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	Total Suspended Solids (TSS)	
MD-02141004	2141004	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	BOD, carbonaceous	
MD-021410040092	2141004	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4a	pH, Low	
MD-021410040094	2141004	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4a	pH, Low	
MD-02141004	2141004	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	BOD, nitrogenous	
MD-02141004	2141004	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Nitrogen (Total)	
MD-02141004	2141004	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Phosphorus (Total)	
MD-02141001	2141001	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	pH, Low	
MD-02141001	2141001	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	5	Phosphorus (Total)	Low
MD-02141001	2141001	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Cadmium	
MD-02141001	2141001	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	5	Combination Benthic/Fishes Bioassessments	Low
MD-02141001	2141001	RIVER	River Mainstem	Water Contact Sports	3	Fecal Coliform	
MD-02141001	2141001	RIVER	Non-tidal 8-digit watershed	Fishing	5	Methylmercury - fish tissue	High

MD-02141001	2141001	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	5	Total Suspended Solids (TSS)	Low
MD-02140508	2140508	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	5	Combination Benthic/Fishes Bioassessments	Low
MD-02141006	2141006	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Phosphorus (Total)	
MD-021410060077-Savage_Reservoir	2141006	IMPOUNDMENT	Impoundments	Fishing	4a	Methylmercury - fish tissue	
MD-02141006	2141006	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Total Suspended Solids (TSS)	
MD-02141006	2141006	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	pH, Low	
MD-02141006	2141006	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	2	Combination Benthic/Fishes Bioassessments	
MD-02141006	2141006	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Nitrogen (Total)	
MD-02140510	2140510	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	2	Combination Benthic/Fishes Bioassessments	
MD-02140512	2140512	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Nitrogen (Total)	
MD-02140512	2140512	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	5	Combination Benthic/Fishes Bioassessments	Low
MD-02140512	2140512	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Phosphorus (Total)	
MD-02140512	2140512	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Total Suspended Solids (TSS)	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	pH, Low	Low
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	Total Suspended Solids (TSS)	

MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Phosphorus (Total)	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Aluminum	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Selenium	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Lead	
MD-02141005-JENNINGS_RANDOLPH_RESERVOIR	2141005	IMPOUNDMENT	Impoundments	Fishing	5	PCB in Fish Tissue	High
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Zinc	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Nitrogen (Total)	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Nickel	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	3	Iron	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Silver	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Copper	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Manganese	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Chromium, trivalent	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Chromium, hexavalent	
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Cadmium	

MD-02141005	2141005	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	5	Combination Benthic/Fishes Bioassessments	Low
MD-02141005	2141005	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Arsenic	
MD-021410030100	2141003	RIVER	Subwatershed	Aquatic Life and Wildlife	2	pH, Low	
MD-021410030099-JENNINGS_RUN	2141003	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4a	pH, Low	Low
MD-021410030099-UT2_JENNINGS_RUN	2141003	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4a	pH, Low	Low
MD-02141003	2141003	RIVER	1st thru 4th order streams	Aquatic Life and Wildlife	5	Combination Benthic/Fishes Bioassessments	Low
MD-02141003	2141003	RIVER	River Mainstem	Water Contact Sports	4a	Fecal Coliform	
MD-021410030098-JENNINGS_RUN	2141003	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4a	pH, Low	Low
MD-021410030099-UT1_JENNINGS_RUN	2141003	RIVER	Non-tidal Segment(s)	Aquatic Life and Wildlife	4a	pH, Low	Low
MD-02141003	2141003	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	4a	Total Suspended Solids (TSS)	
MD-02141003	2141003	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	5	Phosphorus (Total)	Low
MD-02141003	2141003	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	pH, Low	
MD-02141003	2141003	RIVER	Non-tidal 8-digit watershed	Aquatic Life and Wildlife	2	Cyanide	
Disclaimer: Data on this spreadsheet was generated using the MDE website. In no event shall MDE, nor its employees, officers or agents become liable to users of the data provided herein for any loss arising from the use, operation or modification of the data.							

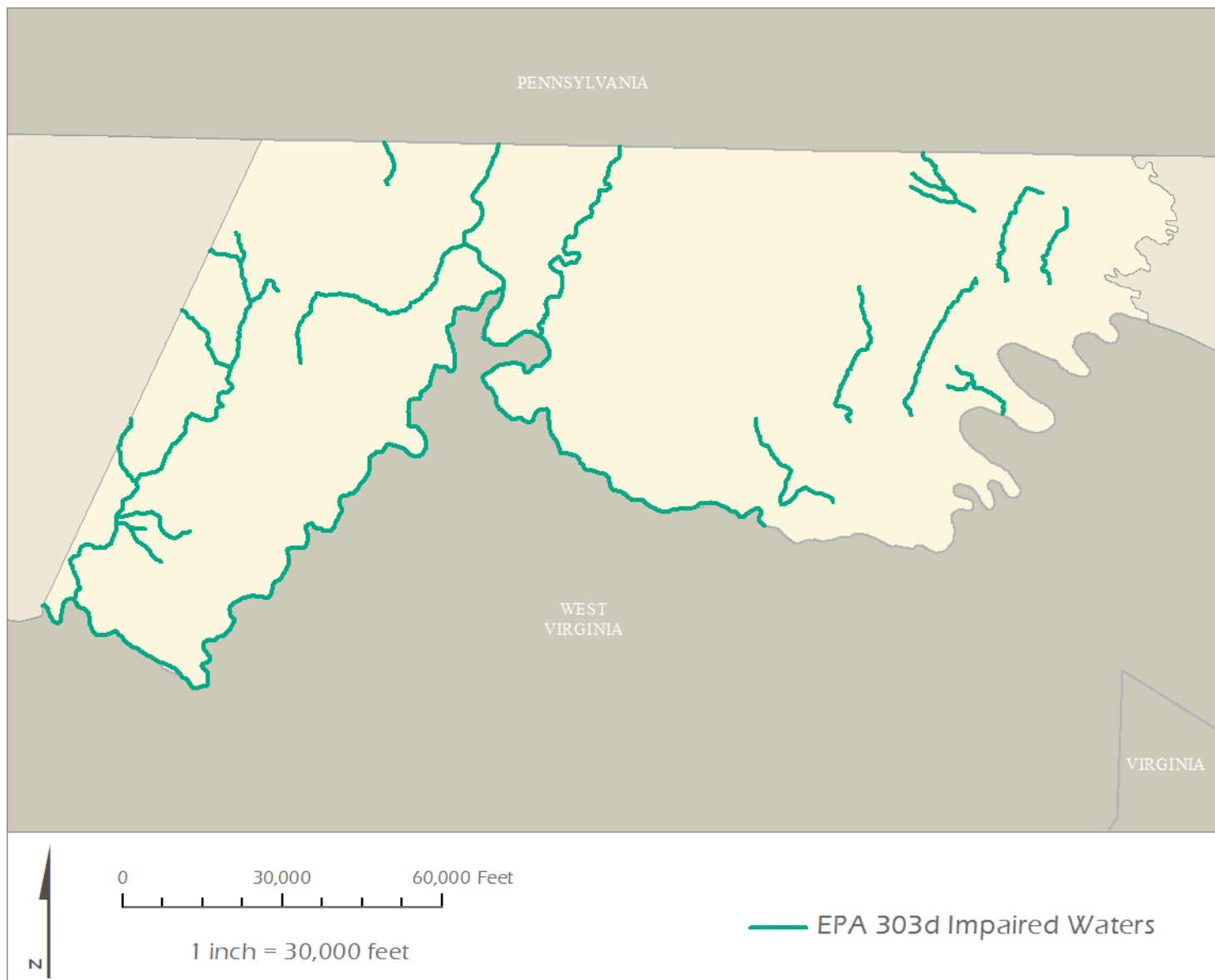


Figure 7. 303d Impaired surface waters

Section 2.03 Population

2.03.01 Present Population Distribution

The current population for Allegany County in year 2000 was 74,930 (US Census Bureau). The population distribution is shown in Figure 8; the data displayed in the map are census blocks from the 2000 Census.

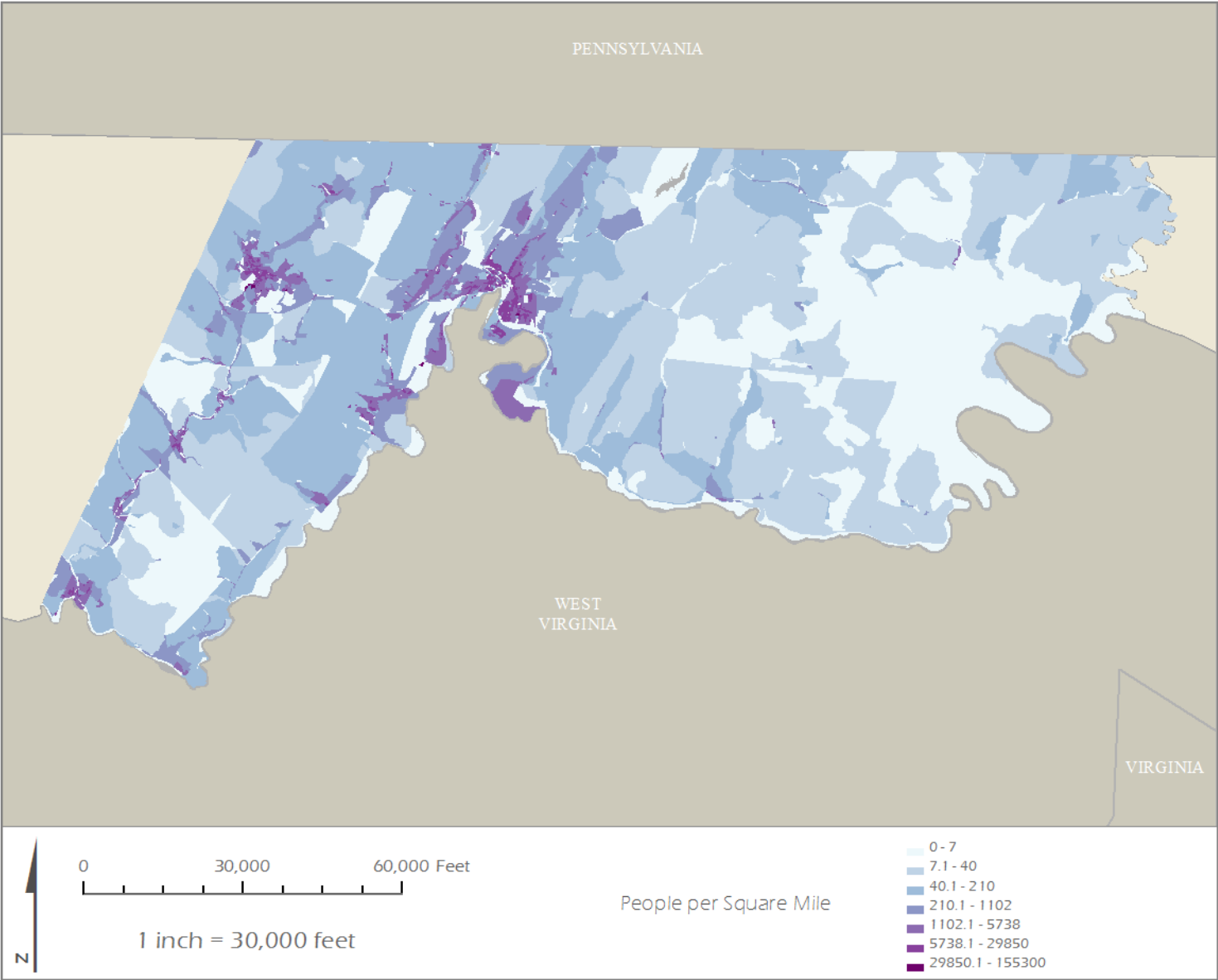


Figure 8. Population Density FY 2000

2.03.02 Future Demand Projections

Future water and sewer infrastructure demand is largely a function of population and dwelling unit trends. As was discussed in “Historic Context” (2.01), population trends for the County have been in a steady declining pattern since 1960. In 2000, the downward spiral slowed and the trend line flattened. One of the most significant components influencing county population trends is gentrification. Allegany County has a large elderly population. There has been a significant natural population decline over the past twenty years as this segment of the County’s population base has disappeared. This loss has dominated the demographic landscape in the County for the past 15 to 20 years. This trend is expected to continue for another 5 to 10 years.

Another significant factor that has impacted population trends is the decline in average household size. This nationwide trend has seen local average household sizes decline from a post World War II high of slightly more than three persons per household to a present day estimate of 2.27 persons per household. This declining continuum is expected through 2040 when it is projected to be approximately 2.14 persons per household.

This trend affects both population and dwelling unit forecasts. With fewer persons per household, the population totals for existing housing stock will decline. This means there will be an overall population decline unless new housing construction is sufficient to offset this loss. Additionally, it will mean that a proportionately larger number of new homes must be built to achieve a level of growth comparative to historic trends. Population forecasts for the County suggest a modest increase over the next 30 years. To accomplish this, nearly 4,000 new dwelling units will be constructed. Since water and sewer infrastructure demand is based upon dwelling units, there will be a corresponding increase in demand for the same period.

Housing demand is always difficult to forecast, however, in the case of Allegany County, it seems likely that there will be a significant increase in demand over the next 5 to 30 years, with the preponderance of this demand occurring in the 2015 to 2025 period. Three factors will influence this demand: internal re-location (in accordance with improving economic conditions for current residents), in-migration from adjacent jurisdictions, and in-migration from the Baltimore-Washington suburban region. Local forecasts project strong increases in available dwelling units. Demand is projected to be high, therefore occupancy rate projections are presumed to be high (particularly after 2010). If both occupancy percentages and available housing stock increase, the result will be a population increase. The degree of change and the actual amount of population increase will be determined by trends within the realm of the variables associated with average household size and occupancy rates.

The following tables chart projected increases in dwelling units, Group Quarters and total population. In preparing these tables, low assumptions were utilized for occupancy rates for existing dwelling units. A slightly higher assumption was used for new construction. Average household size factors were taken from the recent MDP release, except for 2040. Estimates from the state show a steady decline in household size from the present to 2040, except for the period 2030 to 2040. No evidence exists to suggest stabilization in the decline of average household size. Therefore, local forecasts were based upon the assumption that the decades’ old trend of decline would continue. For purposes of this analysis, household sizes of 2.35, 2.27, 2.21, 2.17, and 2.14 were used for 2010, 2020, 2030, and 2040, respectively.

It is interesting to note that while population is projected to increase in each of the 10-year increments, overall, the population growth could best be characterized as flat. Dwelling unit increases, meanwhile, show a more marked increase: 1.06 percent, 3.89 percent, 3.84 percent, and 2.76 percent, respectively, for each of the 10-year increments, and 12.04 percent overall for the analysis period. This is significantly greater than the population increase which is 0.95 percent, 0.54 percent, 1.2 percent and 2.0 percent, respectively, for each of the 10-year increments, and 4.7 percent for the entire 30-year horizon. This contrast is a direct result of declining household size. Since water demand is based upon dwelling units, overall County demand vis-à-vis dwelling units is going to increase at a level that is somewhat disproportionate to the past. It may also suggest the advisability of employing something other than the common standard of 250 gallons per day per household as the means for forecasting demand.

Table 4. Population Forecast Analysis

<i>Total Population</i>			
Year	Total Population	Absolute Change	Percent Change
2000	73,799	-	-
2010	74,499	700	0.95%
2020	74,905	406	0.54%
2030	75,807	902	1.20%
2040	77,321	1,514	2.00%
<i>Dwelling Units</i>			
Year	Total Dwelling Units	Absolute Change	Percent Change
2000	31,846	-	-
2010	32,185	339	1.06%
2020	33,436	1,251	3.89%
2030	34,721	1,285	3.84%
2040	35,681	960	2.76%
<i>Group Quarters</i>			
Year	Total Population	Absolute Change	Percent Change
2000	6,158	-	-
2010	8,623	2,465	40.03%
2020	9,177	554	6.42%
2030	9,459	282	3.07%
2040	9,701	242	2.56%

Section 2.04 Land Use

The land use in Allegany County is predominately determined by the physical features present. Steep slopes, floodplains, and poor soils are all landscape limitations present within the county that constrain development to a relatively small percentage of the County's land mass.

2.04.01 Existing Land Use

The current land use Allegany County is shown in Figure 9. The existing land use map was compiled by the Allegany County Planning Division and is a parcel based land use map in which the data was field verified prior to input into the existing land use database. Opportunities for landowners to review and correct data were provided through a series of public meetings during the comprehensive planning process. This process has allowed for a more accurate and detailed land use database. A summary of the land use categories are presented in Table 5 .

Table 5. Existing Land Use

Existing Land Use	Percent of Land Area	Existing Land Use	Percent of Land Area
Forest	62.38%	Industrial & Warehousing	0.57%
Agriculture	16.71%	Municipality	2.86%
Extractive	2.01%	Open Urban Land	0.57%
High Density Residential	0.06%	Right of Way	2.94%
Medium Density Residential	1.82%	Transportation	0.03%
Low Density Residential	7.15%	Utility	0.29%
Residential Office	0.00%	River/Stream	0.93%
Office/Professional	0.02%	C & O Canal	0.42%
Local Commercial	0.11%	Lake/Pond	0.07%
Major Commercial	0.31%	Wetland	0.01%
Institutional	0.77%	Total	100.00%

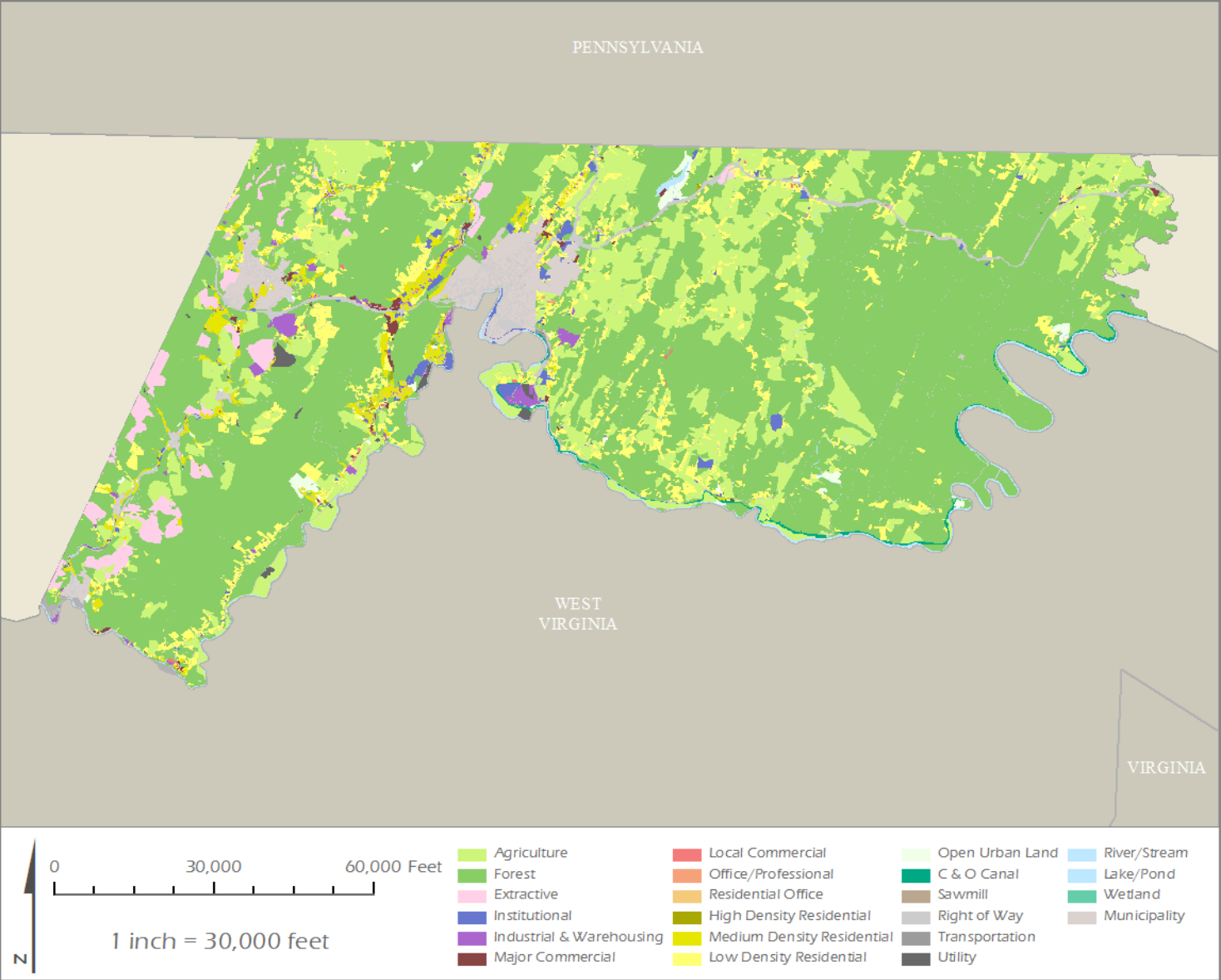


Figure 9. Existing Land Use

2.04.02 Zoning

The Allegany County Zoning is displayed in Figure 10. The percent of land in each zoning category has been calculated in Table 6. The current zoning code of Allegany County is under review and expected to change following the cycle of comprehensive plan updates.

Table 6. Zoning

Zone			Percent of County Area
	Agriculture	A	28.5%
	Conservation	C	51.1%
	Residential	R	2.8%
	General Residential	G-1	2.8%
	General Urban	G-2	4.7%
	Neighborhood Commercial	B-1	0.1%
	Major Commercial	B-2	0.4%
	Industrial	I	1.7%
	Municipality Zoning	M	3.5%
LaVale Zoning			
	Residential A	RA	0.9%
	Rural Residential	RR	2.1%
	Commercial A	CA	0.2%
	Commercial B	CB	0.0%
	Commercial C	CC	0.0%
Water		water	1.0%
Total			100.0%

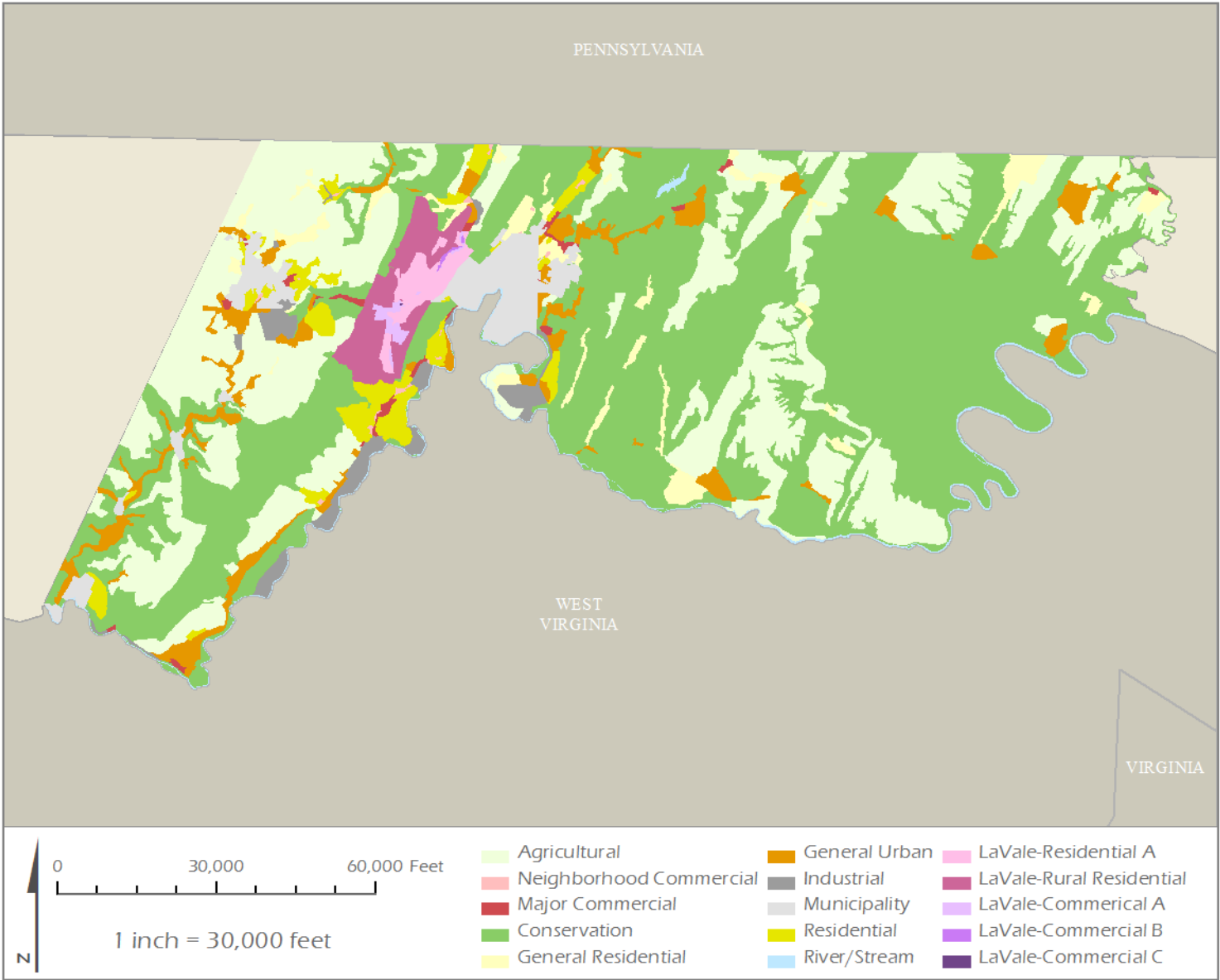


Figure 10. Zoning

2.04.03 Future Land Use

Allegany County is currently working on watershed-based plans for the Comprehensive Plan update. A series of twelve watershed-based plans are in various stages of development. Utilizing a watershed-based approach allows a more detailed analysis to be conducted per Region, instead of a generalized analysis for the county as a whole. The future land use for each parcel was determined by utilizing several factors. Some of these include: the Allegany County Land Suitability Analysis conducted by the GIS Office, slope analysis, zoning and several other environmental factors. Access to roads and other infrastructure items were also evaluated. Comprehensive re-zoning will follow Comprehensive Plan updates to re-align the forecasted future land use with the updated zoning codes. The last of the comprehensive plan updates is scheduled to be completed in May of 2012. Table 7 lists an approximation of the future land use acreage as a percentage of the county. The future land use has not been finalized for all of the Planning Regions or areas within the county and is subject to change based on new available information.

Table 7. Future Land Use

Future Land Use	% of County
Preservation	39.43
Rural Conservation	28.22
Agriculture	12.49
Low Density Residential	3.94
Right of Way	3.58
Municipality	3.05
Medium Density Residential	2.66
Extractive	2.02
Rivers & Streams	1.00
Institutional	0.89
Industrial & Warehousing	0.88
Major Commercial	0.63
Open Urban Land	0.57
Utilities	0.25
Local Commercial	0.21
Lake	0.08
High Density Residential	0.07
Office/Professional	0.02
Residential Office	0.02
Transportation	0.00

2.04.04

Institutions and Facilities

There are 23 public school facilities in Allegany County, as well as three private schools, one college, and one university. There are also four correctional institutions. These institutions, in addition to others are shown in Figure 11. The approximate population for each facility is outlined in Figure 11. Nearly all of these facilities are served by public water and/or sewer.

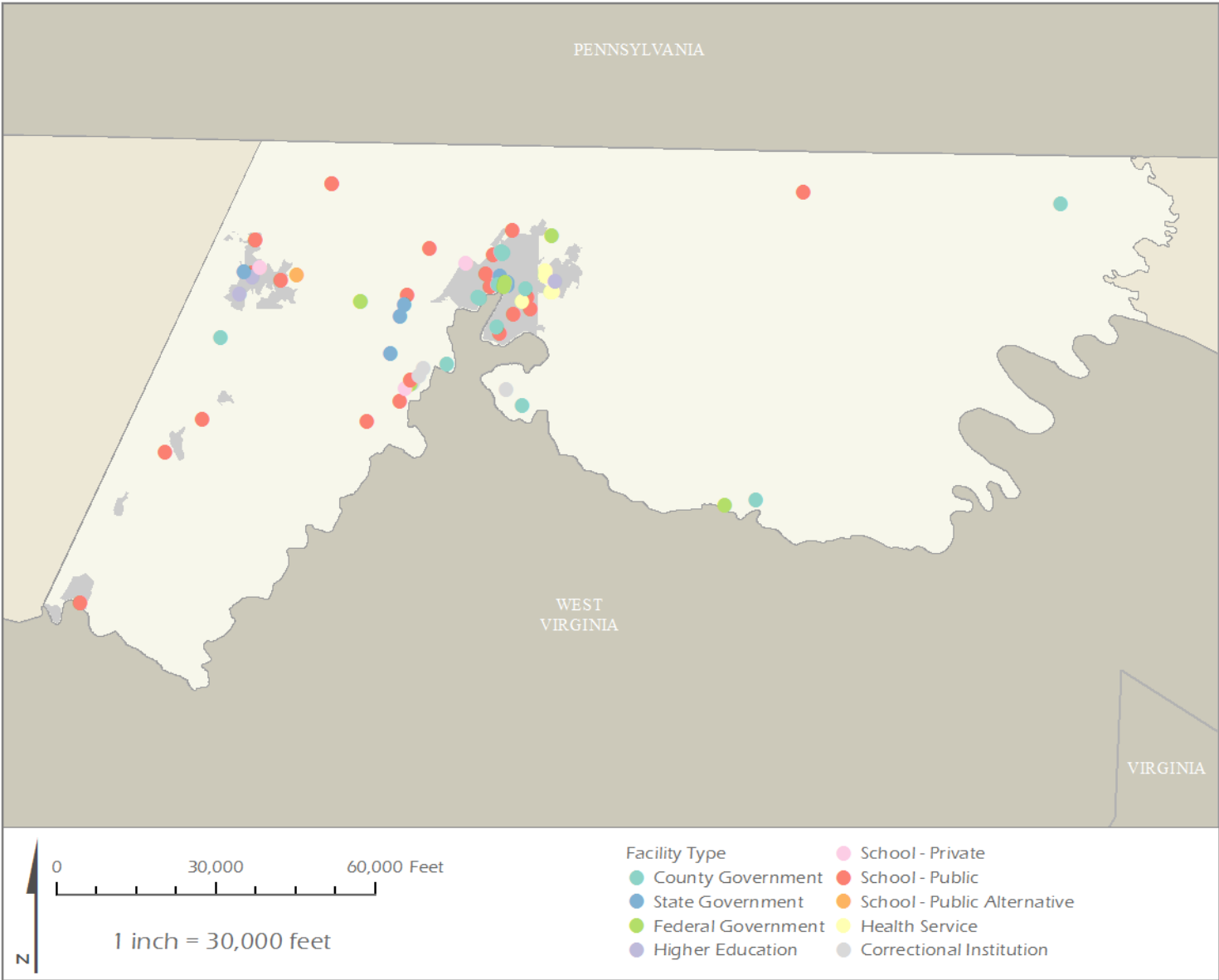


Figure 11. Institutions and Facilities

Table 8. Institutions and Facilities

Facility Name	Facility Type	Population
Allegany County Detention Center	Correctional Institution	220
North Branch Correctional Inst.	Correctional Institution	2,000
Western Correctional Inst.	Correctional Institution	2,150
Federal Correction Institution	Correctional Institution	1,785
DPS&HS Dispatch Center	County Government	10
Allegany County Building	County Government	100
Allegany County Court House	County Government	7
Board of Education	County Government	30
Allegany County Transit	County Government	25
Allegany County Animal Control	County Government	6
Allegany County Sheriff's Dept	County Government	21
Allegany County Fairgrounds	County Government	2
Allegany County Roads Division	County Government	33
Allegany County Roads Division	County Government	12
Allegany County Roads Division	County Government	12
Allegany County Roads Division	County Government	16
Public Safety and Homeland Sec.	County Government	10
Allegany County Health Department	Health Service	200
Finan Center	Health Service	190
Brandenburg Center	Health Service	45
Western Maryland Regional Medical Center	Health Service	2,500
Appalachian Laboratory	Higher Education	25
Frostburg State University	Higher Education	6,335
Allegany College of Maryland	Higher Education	4,000
Bishop Walsh High School	School - Private	
Saint Michaels School	School - Private	
Calvary Christian Academy	School - Private	330
Fort Hill High	School - Public	880
Allegany High	School - Public	840
Mountain Ridge High	School - Public	870
Braddock Middle	School - Public	615
Washington Middle	School - Public	625
Frost Elementary	School - Public	460
Beall Elementary	School - Public	635
Bel Air Elementary	School - Public	410
Park Side Elementary	School - Public	460
Cresaptown Elementary	School - Public	635
Georges Creek Elementary	School - Public	600
Mount Savage Elementary	School - Public	435
Flintstone Elementary	School - Public	410
Westernport Elementary	School - Public	465
South Penn Elementary	School - Public	855
Cash Valley Elementary	School - Public	510
John Humbird Elementary	School - Public	570
West Side Elementary	School - Public	340
Northeast Elementary	School - Public	620
Mount Savage Middle	School - Public	435
Westmar Middle	School - Public	300
Career Center	School - Public	310
Eckhart School	School - Public Alternative	55

Chapter III Water Systems

Allegany County is proud to serve approximately 90% of its residents with public water. The service areas are shown in Figure 12 , and are operated by several different agencies, including Allegany County Department of Public Works – Utilities Division, various municipalities, and privately owned water companies. There are both community and multi-use systems present within Allegany County.

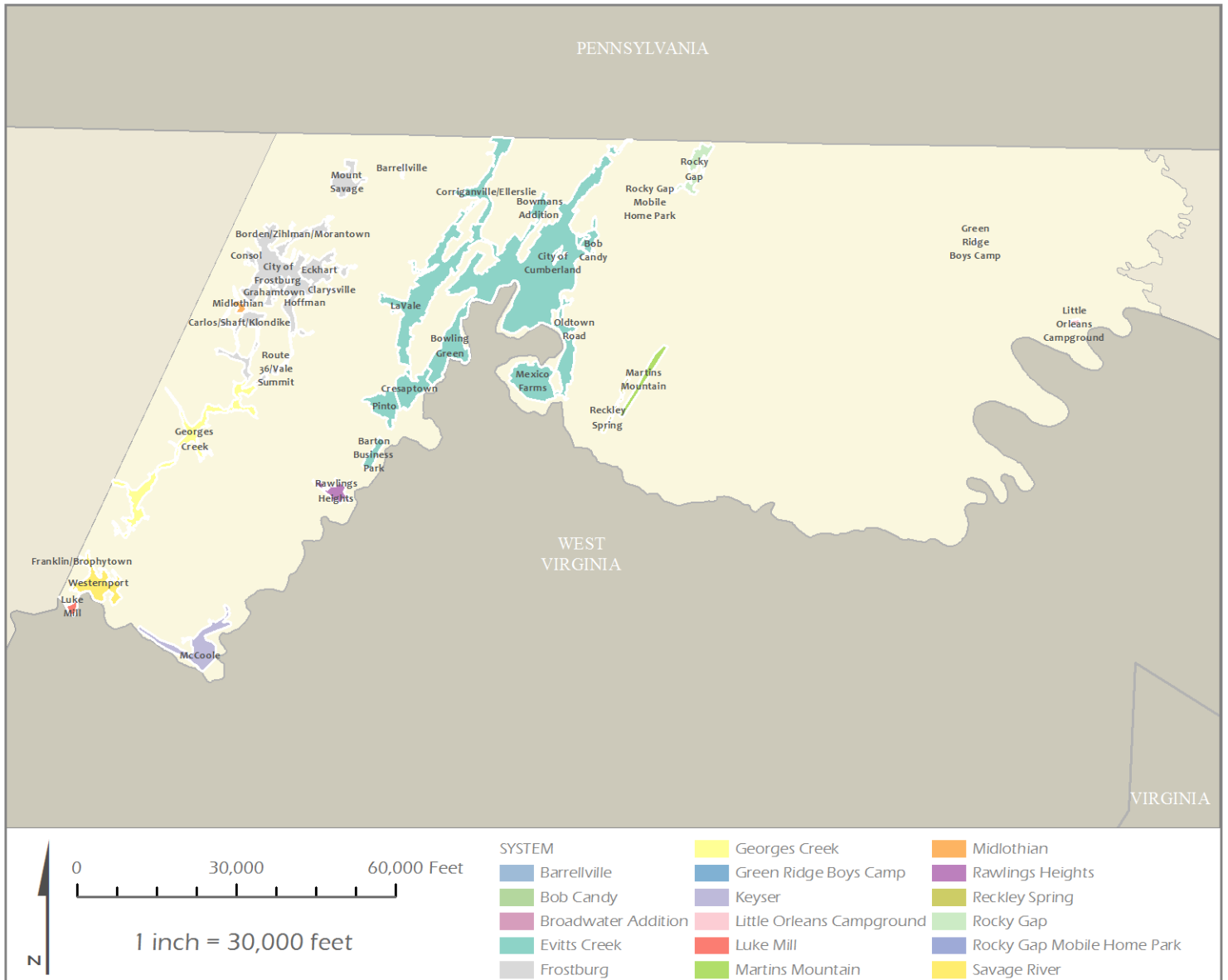


Figure 12. Water Service Areas

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Section 3.01 Community Water Supply Systems

There are fourteen community water supply systems within the County. Each system has one or more sources of water which is treated and conveyed throughout the system. The larger systems are divided into multiple service areas, which are determined either by geography, operating utility, or both. These systems are publicly or privately owned and are described in detail in the following section. Additional tabular data concerning the water supply systems are presented at the end of this chapter in Sections 3.04 through 3.11. The arrangement of water sources throughout Allegany County, Maryland as well as Southern Pennsylvania provide water supply systems arranged in spider-like fashion throughout the County. There are more service areas than sources, signifying many of the sources supply water for more than one service area. For example, the City of Cumberland's water supply comes from Southern Pennsylvania's Lakes Koon and Gordon. Water flows into Cumberland and serves areas north, south, east, and west of the City. The City of Frostburg receives water from Piney Reservoir in Garrett County and several wells and springs also located in Garrett County. Mount Savage, the newest extension of the Frostburg system, receives its water after it passes through five other communities (Frostburg, Borden, Zihlman, Morantown, and Slabtown). The topography of Frostburg compared to Mount Savage necessitates the use of pressure-reducing valves to provide water at usable pressures to Mount Savage residents, despite providing water to several other communities in between. Please refer to Figure 12 for a map showing water service areas in Allegany County.

3.01.01 Evitts Creek System

The Evitts Creek System is served by Lakes Koon and Gordon located north of the Mason-Dixon Line in Bedford County, Pennsylvania. The Lakes are owned by the Evitts Creek Water Company which is an agency of the City of Cumberland. Lake Gordon and Lake Koon have a combined capacity of approximately 3.4 billion gallons. The water treatment plant is operated by the Evitts Creek Water Company and provides conventional treatment. The Evitts Creek System currently serves roughly 40,000 customers in Maryland, with additional customers in Pennsylvania and West Virginia with an average of 8.30 million gallons per day (MGD). The safe yield of the reservoir (16 MGD) and rated treatment capacity (15 MGD) of the water treatment plant are expected to meet the needs of the tri-state area for the foreseeable future. The Evitts Creek Water Company has projects planned for the water supply and treatment systems in the next ten years which include system improvements, upgrades, and a tank replacement. At this time there are no alternatives for providing new or additional water supplies to the Evitts Creek System, as the need is not present.

Lakes Gordon and Koon do not have significant sources of contaminants present within the 50.8 square mile watershed, as about eighty percent of the watershed is forested or wetlands and there are no urban areas present. However, there is potential for the lakes to be affected by certain non-point sources of pollution identified in the 2007 Source Water Protection Plan. The possible pollutants identified include nutrients, pesticides, and sediment, which have been attributed to faulty septic systems in residential areas, agriculture, and forestry activities. There is also potential for hazardous material contamination to occur if an incident were to happen on a roadway within the watershed, which includes a portion of U.S. Route 220 (Evitts Creek Watershed Protection Committee).

The Evitts Creek System is comprised of numerous service areas that are owned and operated by various utilities. These utilities, with the exception of the City of Cumberland, purchase their water supply from the City of Cumberland.

3.01.01.01 City of Cumberland Service Area

The City of Cumberland service area serves approximately 8,900 residential accounts within the city limits as well as 950 additional customers in areas contiguous with the service area. The City of Cumberland service area and water lines are shown in Figure 13. In addition, the City of Cumberland supplies water to industries, including the AES Warrior Run power plant, which consumes an average of 1.7 MGD of water. The City of Cumberland service area infrastructure is maintained by the City of Cumberland Public Works Department. Unique to the City of Cumberland service area are many private “water companies”. These companies are responsible for maintaining their own infrastructure, may bill individual customers, and typically consist of a dozen residences or less. The water companies include, but are not limited to: DeHaven Road Improvement Company, Country Club Road Water Associates, Bohrer Water System, Wolfe Mill/Perrini, Shades Lane, Christie Road, R.L. Popp, Growdenvale Improvements, and J.W. Harper. The residential areas associated with water companies are mapped as part of the City of Cumberland service area. The Shades Lane Water Company and other communities are seeking assistance from the County to pursue the construction of a new water system. Current problems facing the Shades Lane Water Company include severely low water pressure and lack of line maintenance. Allegany County would extend service to 12 customers and provide maintenance on the system. Estimated cost of this project is \$300,000 and it would be financed as a combination of grant and loan funding from the Maryland Department of the Environment. For more information about this future project, please see project sheet DPW-W-04 in the Allegany County Capital Improvement Program for FY 2011 through FY 2015. Other planned projects by the City of Cumberland are listed in the Sections 3.04 and 3.11.

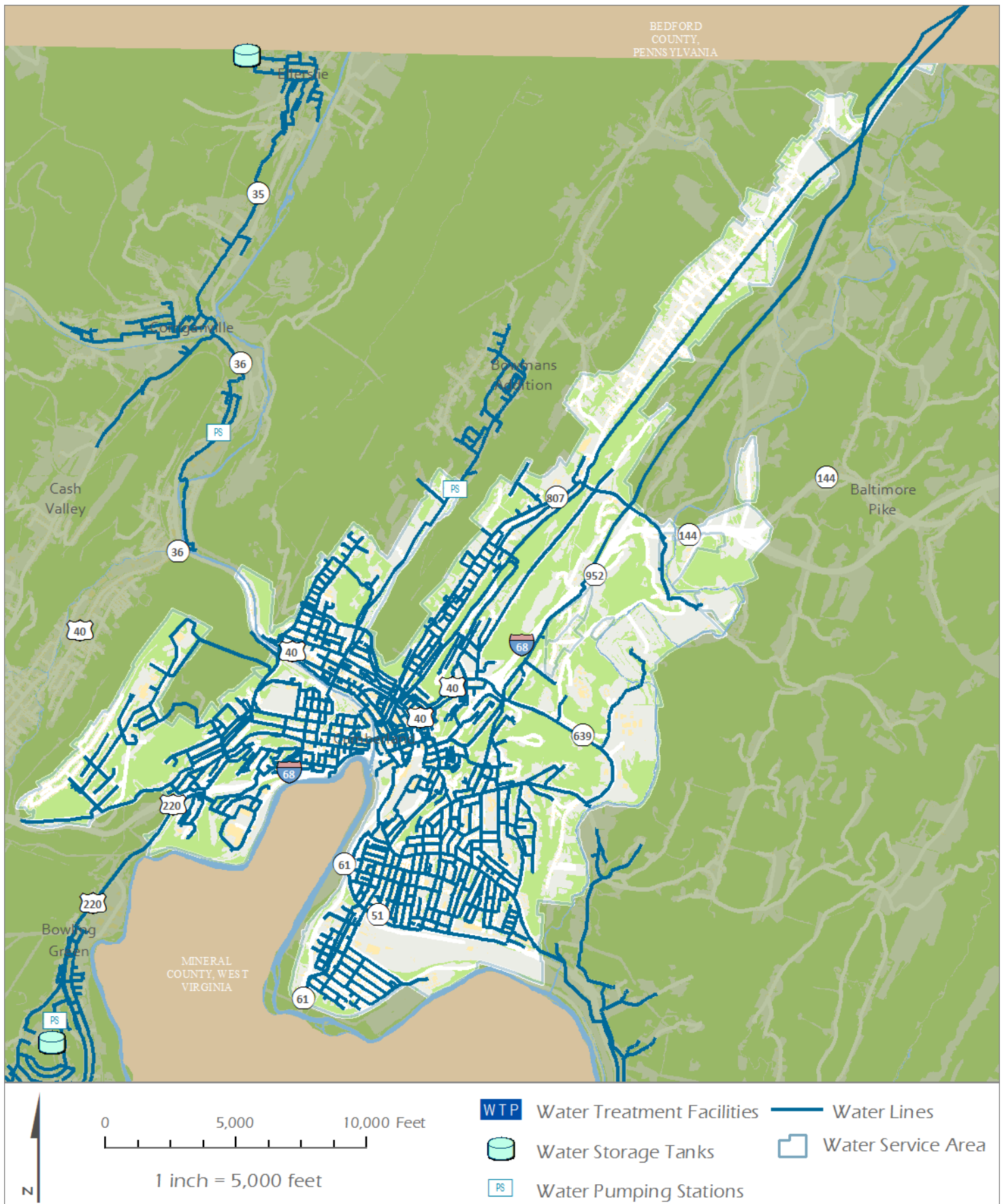


Figure 13. Cumberland Water Service Area

3.01.01.02 Bowling Green Service Area

The Bowling Green water service area serves approximately 950 customers and is operated by the Allegany County Utilities Division. The service area is located southwest of Cumberland along Route 220 and serves the Bowling Green and Potomac Parks areas (Figure 14). The State Correctional Institutions are billed directly by the City of Cumberland. Water is purchased from the Evitts Creek Water Company and treated in the manner described in Section 3.01.01. Average demand on the service area is 0.184 MGD (FY 2010). Operation, maintenance, and debt payments costs for the Bowling Green service area are \$66/quarter for customers of the system in Fiscal Year 2011.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.



Figure 14. Bowling Green Water Service Area

3.01.01.03 Bowmans Addition Service Area

The Bowmans Addition water service area is in a state of transition as of the plan adoption date. The area serves 270 customers and is operated by the Allegany County Utilities Division. The service area is located northeast of Cumberland along Valley Road (Figure 15). Water is purchased from the Evitts Creek Water Company and treated in the manner described in Section 3.01.01. Average demand on the service area is 0.014 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Bowmans Addition service area are \$86/quarter for customers of the system in Fiscal Year 2011.

The service area is undergoing an upgrade to its water distribution system to meet the needs of its customers. Completed in FY 2010, Bowmans Addition Water – Phase I installed public water connections for 165 customers originally served by an antiquated system. Bowmans Addition Water – Phase II, to be completed in FY 2012, will extend the same public water service to approximately 110 homes living in the upper elevations of the Bowmans Addition water service area, which are currently connected to a system served by wells and springs. Upon completion of the water project, a total of 275 households will be served. These projects were financed through grants and loans from Maryland Department of the Environment and the United States Department of Agriculture - Rural Development and Community Development Block Grant Program. More information on this project can be seen in project sheet DPW-W-01 in the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

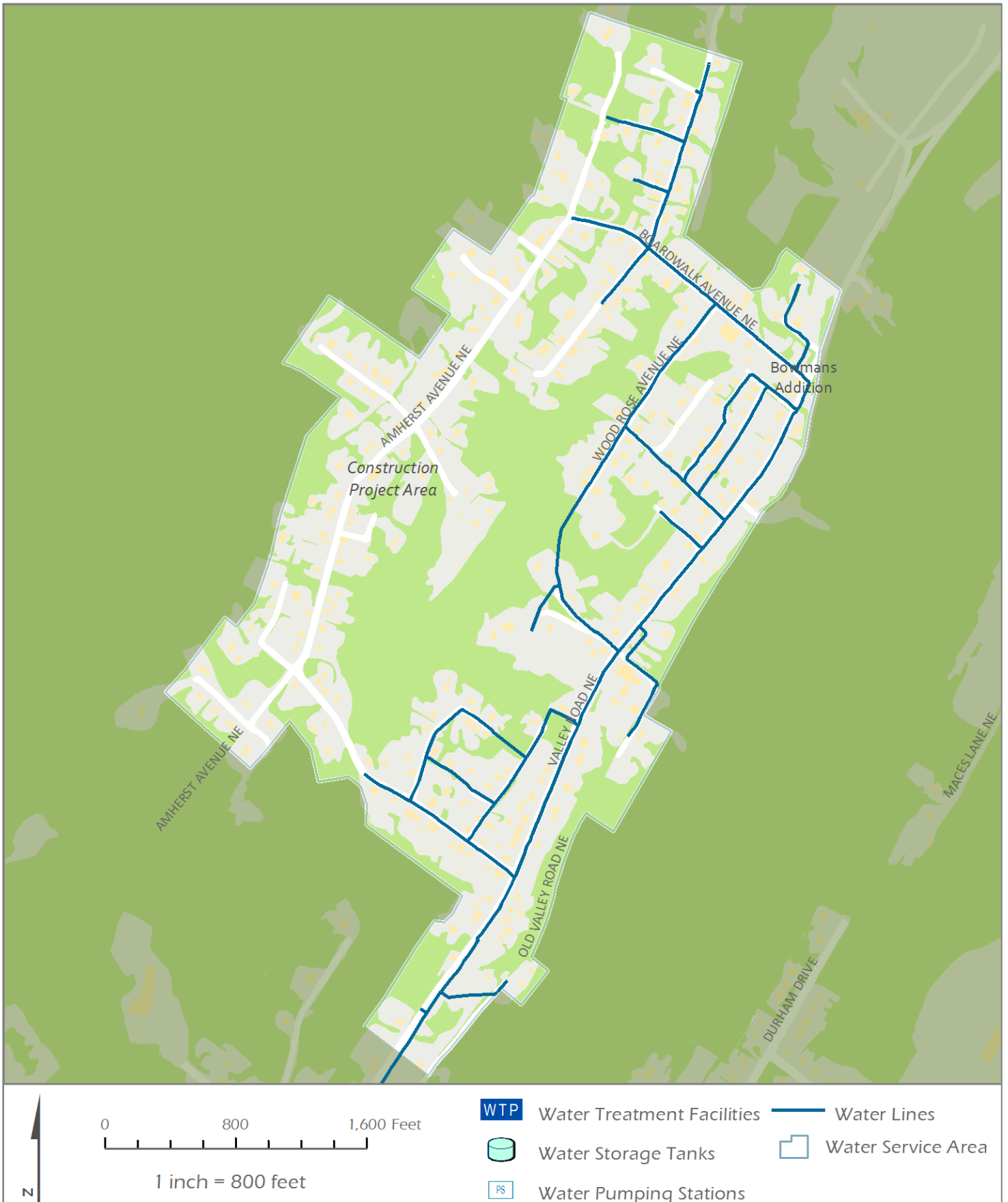


Figure 15. Bowmans Addition Water Service Area

3.01.01.04 Cresaptown Service Area

The Cresaptown water service area serves approximately 800 customers and is operated by the Allegany County Utilities Division. The service area is located in Cresaptown, which lies at the intersection of Winchester Road and McMullen Highway-US Route 220 (Figure 16). Water is purchased from the Evitts Creek Water Company and treated in the manner described in Section 3.01.01. Average demand on the service area is 0.360 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Cresaptown service area are \$42/quarter for in-district customers and \$60/quarter for out-of-district customers of the system in Fiscal Year 2011.

The service area was previously owned and operated by the Cresaptown Civic Improvement Association (CCIA). Beginning January 1, 2010, however, the CCIA transferred ownership to the Allegany County Commissioners and operation of the system to the Allegany County Utilities Division. The reason for the transfer was due to the difficulties facing a volunteer board (CCIA) in operating a water system. Also, improvements to the system were needed and the Allegany County Commissioners and the CCIA Board of Directors determined it was in the best interest of the citizens for the transfer to occur.

Several improvement projects are currently under construction or were recently completed within the service area. In August 2003, KLH Engineers, Inc. completed a Master Water Plan for the CCIA, citing all necessary improvements. Among the top priorities was replacement of the existing 125,000 gallon water storage tank on Brant Road with a tank capable of handling average daily demand and fire flow requirements for the service area. Currently under construction is a 623,000 gallon water storage tank to replace the existing 125,000 gallon tank. Also, new water meters are being installed at the property line of every water customer to help abate problems with unmetered water and improve meter reading accuracy. Finally, water line replacement is underway on McMullen Highway, where approximately 2,000 linear feet of 8" water main is being replaced with 12" main. The replacement will reduce excessive leaks, pipe velocities, increase capacity, and improve reliability. There are also several areas that require replacement of galvanized or transite water lines.

These improvement projects are being financed by a combination of loan funding from United States Department of Agriculture – Rural Development and grant funding from the Appalachian Regional Commission. More information on this project can be seen in project sheet DPW-W-o6 in the Allegany County Capital Improvement Program for FY 2011 through FY 2015. Future projects may be funded by Maryland Department of the Environment.



Figure 16. Cresaptown Water Service Area

3.01.01.05 Corriganville/Ellerslie Service Area

The Corriganville/Ellerslie water service area serves approximately 725 customers and is operated by the Allegany County Utilities Division. The service area is located northwest of Cumberland and northeast of Frostburg (Figure 17). Corriganville is located along MD Route 36 and Ellerslie lies north of Corriganville along MD Route 35/Ellerslie Road NW. Water is purchased from the Evitts Creek Water Company and treated in the manner described in Section 3.01.01. Average demand on the service area is 0.097 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Corriganville/Ellerslie service area are \$70/quarter for customers of the system in FY 2011.

Future construction projects include some pumping and line replacements to improve pressure problems. This and any other proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

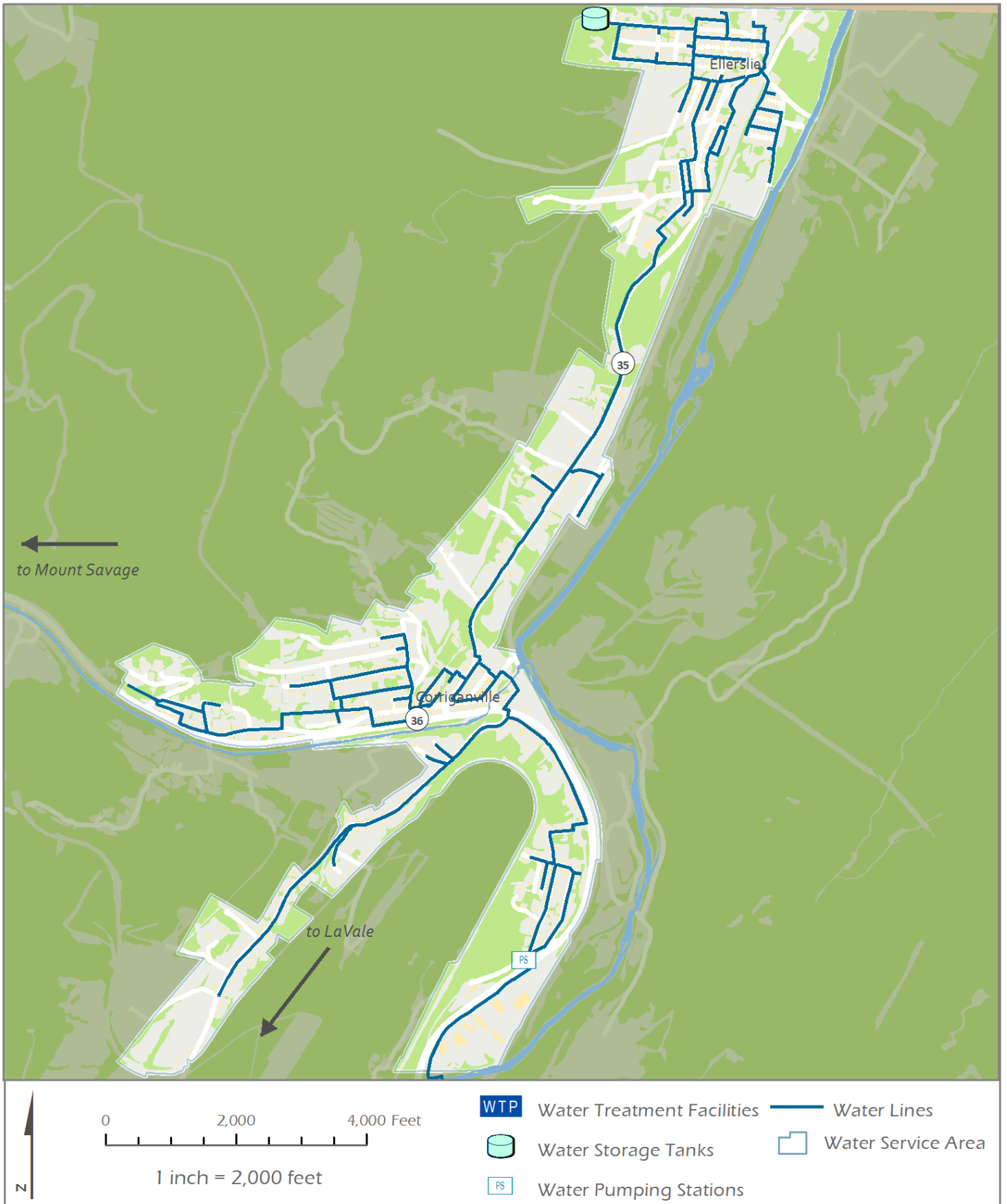


Figure 17. Corriganville/Ellerslie Service Area

3.01.01.06 Barton Business Park Service Area

The Barton Business Park water service area serves the Barton Business Park and is operated by the Allegany County Utilities Division. The Barton Business Park is located southwest of Cumberland at the intersection of U.S. Route 220 and State Highway 956 (which crosses the Potomac River into West Virginia and becomes County Route 9), as shown in Figure 18. The Business Park parallels the Potomac River. Water is purchased from the Evitts Creek Water Company and treated in the manner described in Section 3.01.01. Average demand on the service area is 0.004 MGD (FY 2010).

No improvement projects are currently planned for this service area. However, the Barton Business Park currently has vacant lots which may be occupied by new businesses in the future. New tenants within the Business Park will not have a daily demand that would exceed system capacity. Should the need for any improvement projects arise, funding assistance would be sought through United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment in similar means to currently ongoing projects in the Cresaptown and Bowmans Addition service areas.



Figure 18. Barton Business Park Water Service Area

3.01.01.07 Oldtown Road Service Area

The Oldtown Road water service area serves approximately 350 customers and is operated by the Allegany County Utilities Division, as shown in Figure 19. The service area is located along Oldtown Road/MD Route 51 which runs south from Cumberland towards the Mexico Farms service area (see the following section - Mexico Farms Service Area). Water is purchased from the Evitts Creek Water Company and treated in the manner described in Section 3.01.01. Average demand on the service area is 0.033 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Oldtown Road service area are \$80/quarter for customers of the system in FY 2011.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

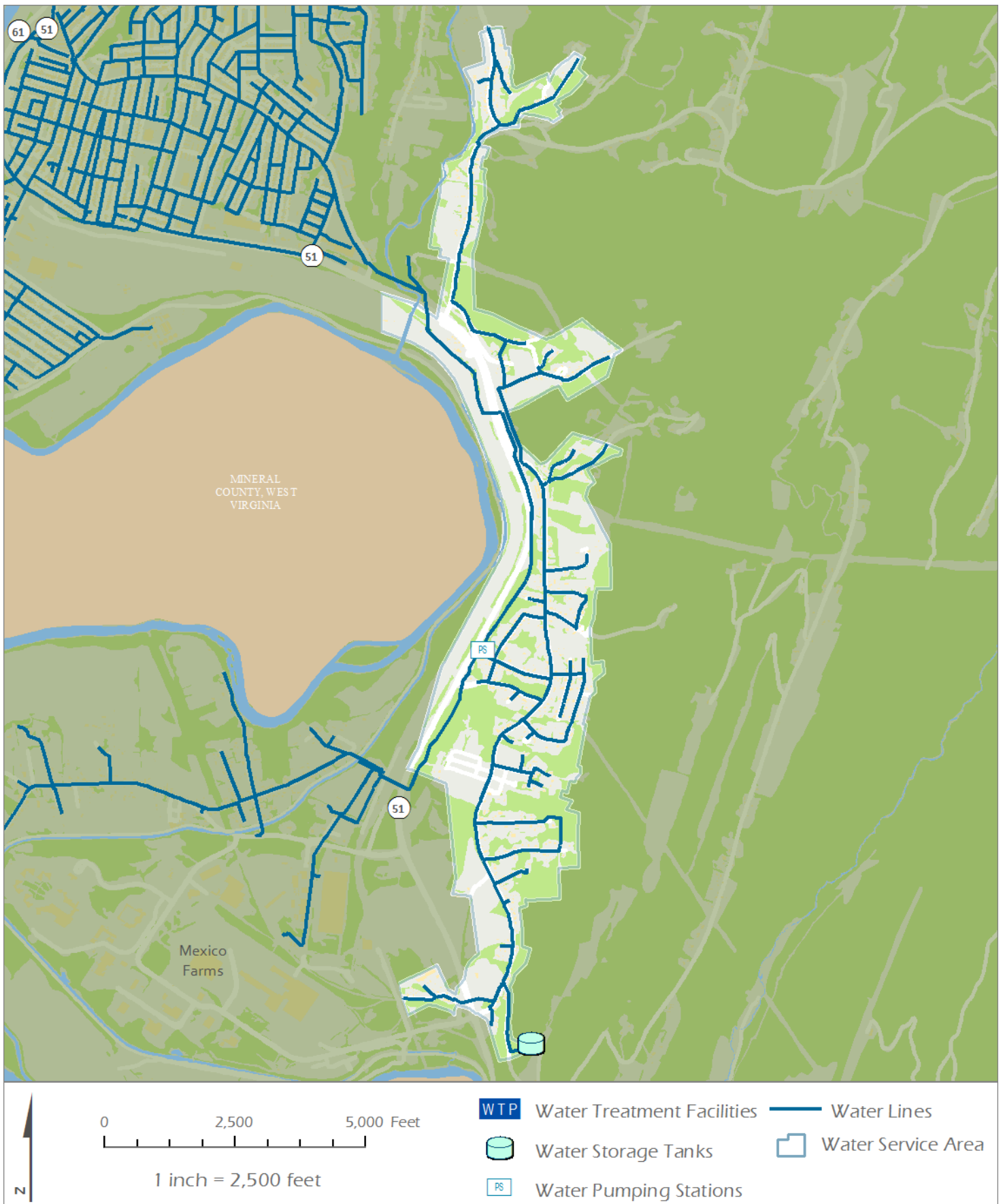


Figure 19. Oldtown Road Water Service Area

3.01.01.08 Mexico Farms Service Area

The Mexico Farms water service area serves approximately 150 residential customers and is operated by the Allegany County Utilities Division. The service area is located south of Cumberland and serves homes along Mexico Farms Road surrounding the Mexico Farms/North Branch Industrial Park area (Figure 20). In addition, Allegany County Utilities Division also serves the business (with the exception of AES-Warrior Run) and the Federal Correctional Institution in the North Branch Industrial Park. Water is purchased from the Evitts Creek Water Company and treated in the manner described in Section 3.01.01. Average demand for the service area is 0.457 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Mexico Farms service area are \$70/quarter for customers of the system in FY 2011.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.



Figure 20. Mexico Farms Water Service Area

3.01.01.09 Pinto Service Area

The Pinto service area serves a population of approximately 2,540 (Figure 21), primarily in the Bel Air and Glen Oaks developments. Maryland Water Service is the agency that operates the public water distribution system, and purchases an average of 0.13 MGD from the Allegany County Cresaptown Service Area. The costs incurred for operation and maintenance is estimated to be \$150,000 to \$200,000 per year. Any new improvements to the distribution system would likely be funded by private bank financing.

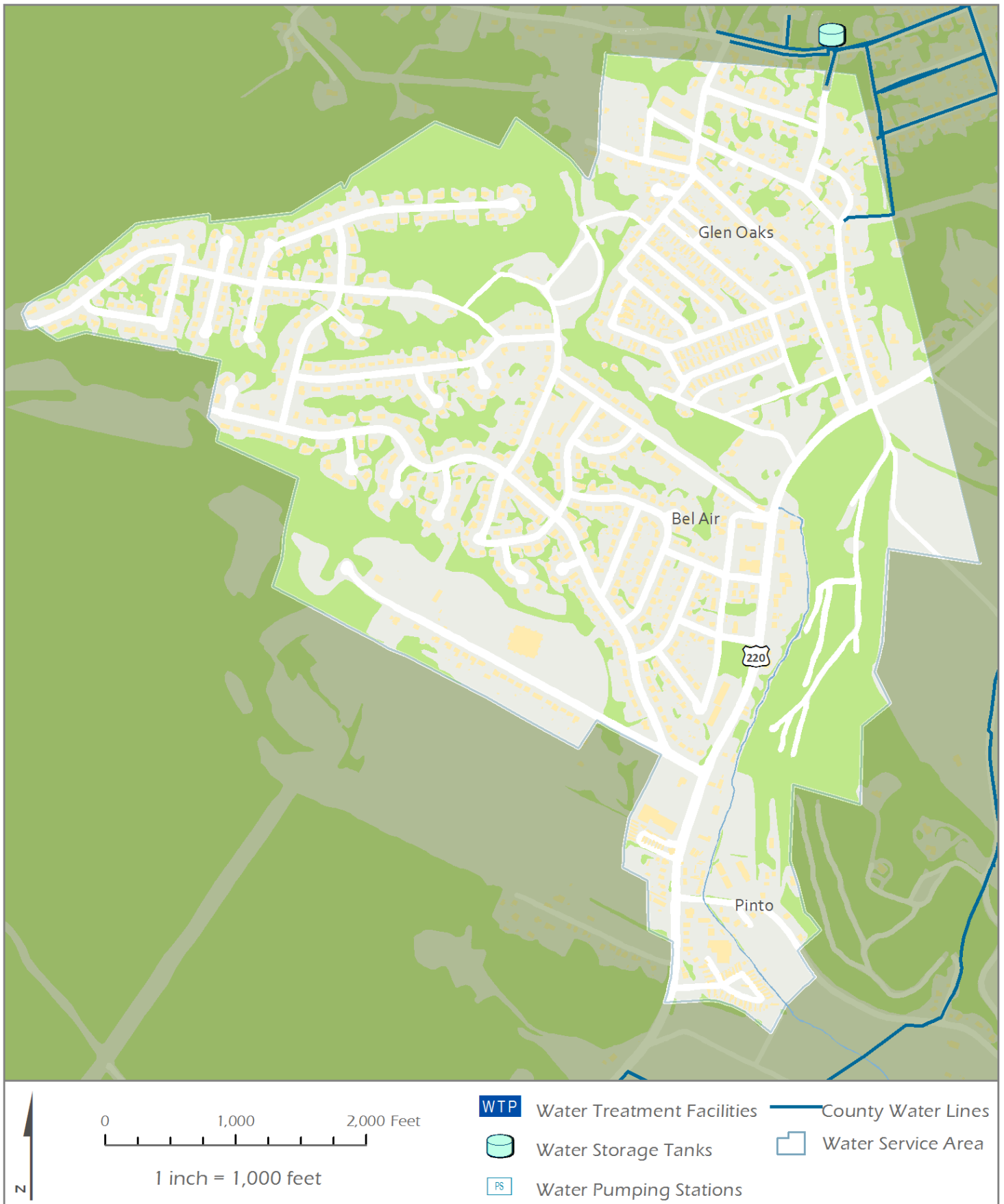


Figure 21. Pinto Water Service Area

3.01.01.10 LaVale Service Area

The LaVale service area is operated by the LaVale Sanitary Commission; there are 2,560 accounts and the service area is delineated in Figure 22. The LaVale service area is considered part of the Evitts Creek System because treated water is purchased for LaVale from the Evitts Creek Water Company. In addition, the LaVale service area water supply is supplemented by five wells and two springs operated by the LaVale Sanitary Commission. The average demand for the LaVale service area is 0.60 MGD; the wells and springs provide an average of 0.15 MGD. The raw water sourced from the wells and springs are treated by diatomaceous earth pressure filtration, and the plant is rated to treat up to 0.3 MGD. According to the Source Water Assessments for Allegany County, the LaVale water supply may be at risk of contamination from volatile organic compounds, microbiological contaminants, and iron. There are no new proposed water sources at this time.

The LaVale Sanitary Commission's operation and maintenance costs average to be \$500,000 per year, and any improvements will be financed internally. Project-specific details can be found in Sections 3.04 and 3.11.

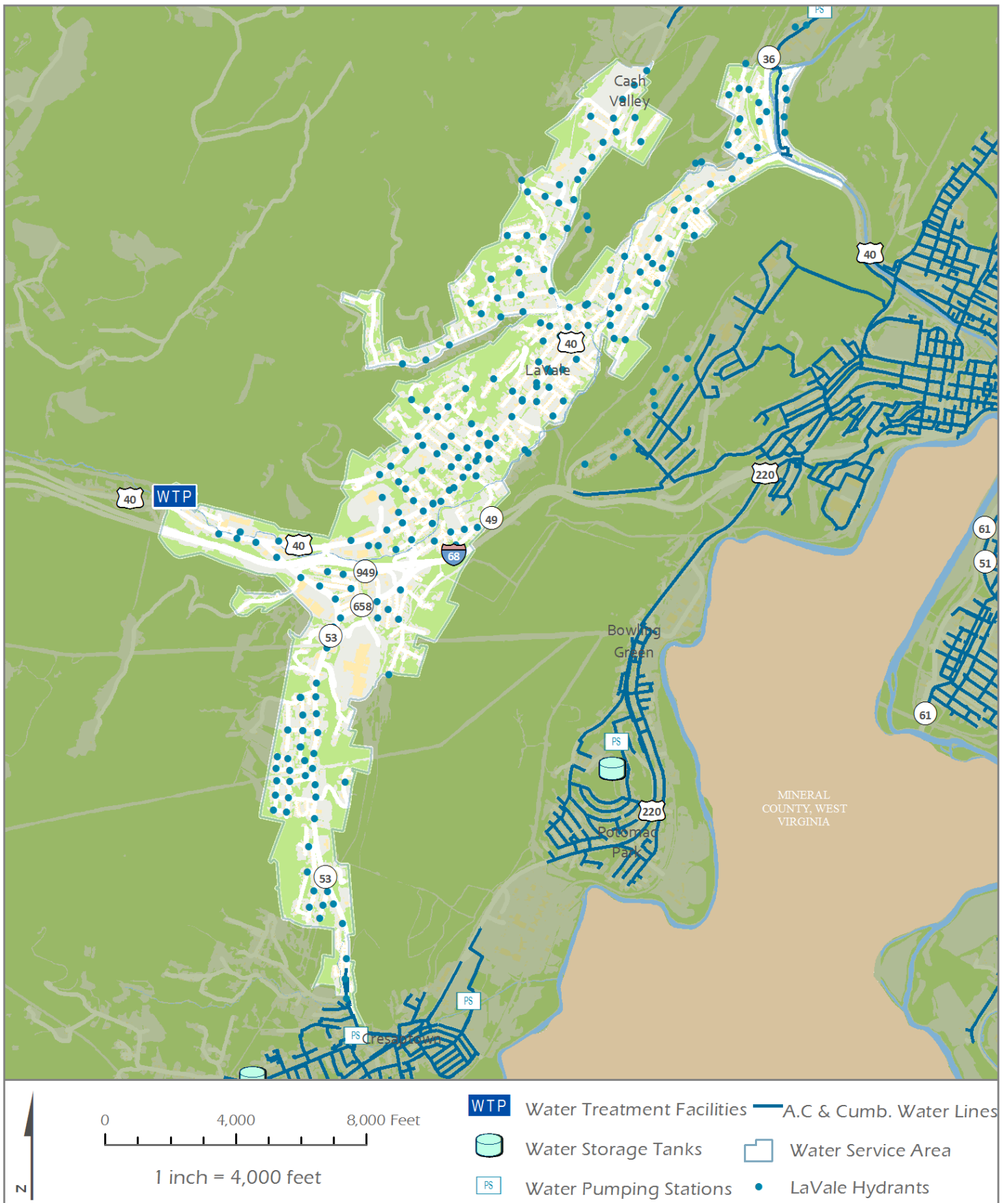


Figure 22. LaVale Water Service Area

3.01.02 Frostburg System

The Frostburg System serves the City of Frostburg and several smaller communities surrounding the city. There are more than 12,500 people served by the Frostburg System. The service areas outside the city limits with the exception to Catherine Street, Tisdale Street, and part of Welsh Hill Road are all operated by Allegany County Utilities Division; Allegany County purchases treated water from the City of Frostburg to supply these areas.

The water sources for the Frostburg Water System include Piney Dam Reservoir on Piney Creek, two wells, and numerous springs located in Garrett County on Savage Mountain, which is known as the Frostburg Savage Pumping Station. Piney Dam Reservoir is located northwest of the City of Frostburg in Garrett County, Maryland. The reservoir has a capacity of 400 MG, with a gross safe yield of 2.50 MGD. The downstream release is 0.74 MGD. The reservoir is subject to pollution by excess nutrients from the agricultural and residential land uses within the watershed. The present average daily withdrawal from the reservoir and the Savage wells and springs is approximately 1.0 MGD. The wells and springs produce excellent quality water and are permitted by the State of Maryland to withdraw quantities of 0.1 MGD and 0.2 MGD, respectively. The Piney Dam reservoir is permitted by the State of Maryland to withdraw 1.3 MGD.

A recent (June 2008) Water Supply Study Update was prepared by Whitman, Requardt, and Associates, LLP for the City of Frostburg, Allegany County, and MDE. The study projected water demand for the Frostburg Water System, including Allegany County satellite communities and the addition of the Mount Savage area, would be 2,231,282 gallons per day by the year 2030. At this time, the City is working to maintain its existing water sources to meet the projected demand. The springs and wells at the Savage Pumping Station is a raw water supply that has served the City for more than a century. A project is currently being planned to make necessary improvements to preserve production at this important water source.

All water sources are operated by the City of Frostburg, which also operates the conventional water treatment plant. The plant is rated for a capacity of 3.0 MGD and daily production averages 1.0 MGD. The City of Frostburg expects to have demand of 1.83 to 2.23 MGD by 2030. There are no new proposed water sources at this time.

3.01.02.01 City of Frostburg Service Area

The City of Frostburg Service Area is operated by Maryland Environmental Services through the City of Frostburg Department of Public Works. The City of Frostburg's Water Department, which is part of the City Public Works, operates and maintains the Frostburg Water Distribution System, the Raw Water Transmission System, and the Piney Water Supply and Pumping System. The population served in the City of Frostburg Service Area is approximately 9,000 and the area is outlined in Figure 23. In addition, the City of Frostburg is the source of water for all facilities at Frostburg State University. The Operation and Maintenance costs for the Water Treatment Plant in addition to the water distribution system are \$2,058,000. Grants and loans will be used to finance improvements to the system.

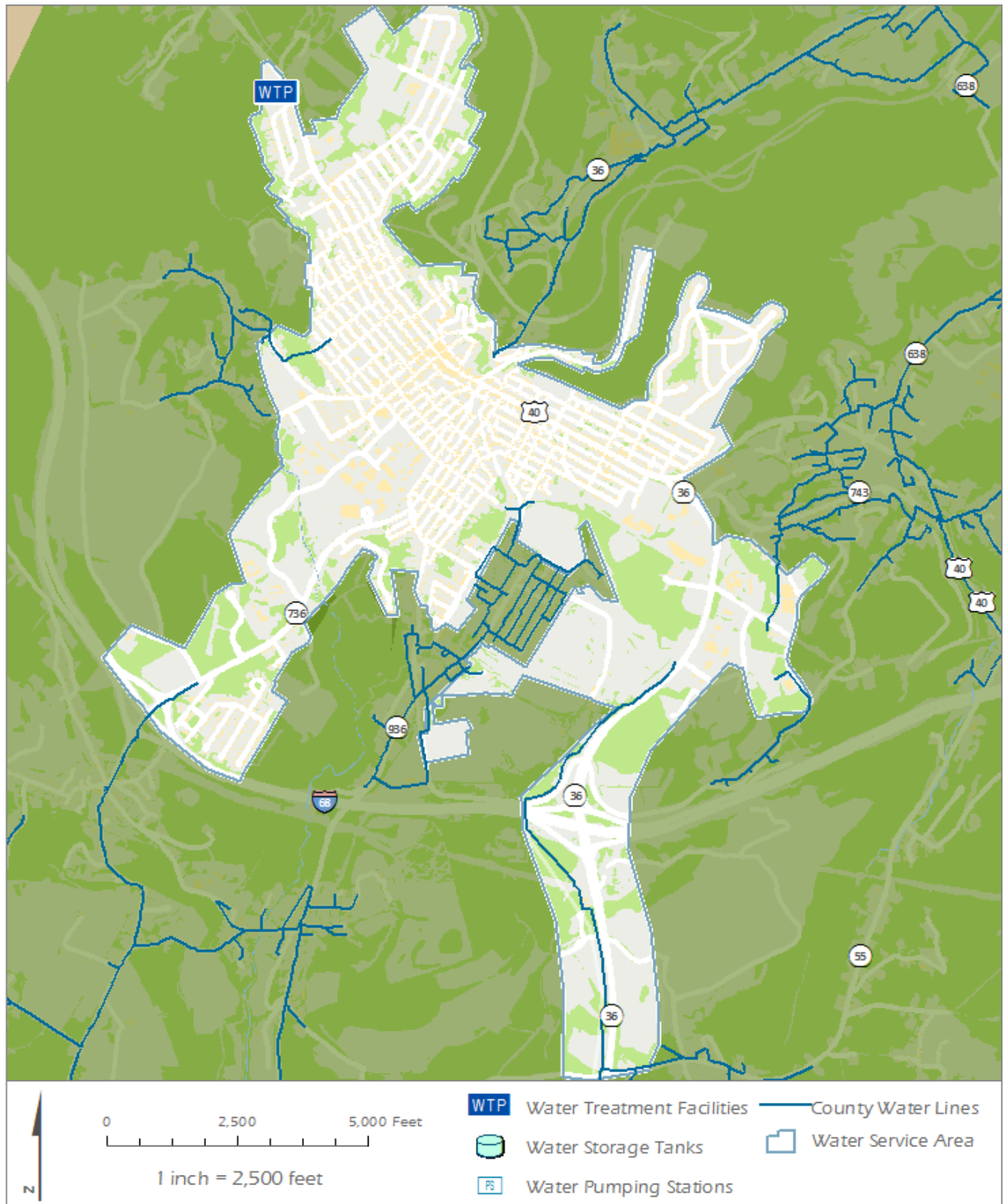


Figure 23. City of Frostburg Water Service Area

3.01.02.01 Consol Service Area

The Consol water service area serves approximately 70 customers and is operated by the Allegany County Utilities Division. The service area is located to the west of Frostburg along Sand Spring Run. Water is purchased from the City of Frostburg and treated in the manner described in Section 3.02.02. Average demand on the service area is 0.008 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Consol service area are \$71/quarter plus \$23.25/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$97.75/quarter for customers of the system in FY 2011.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

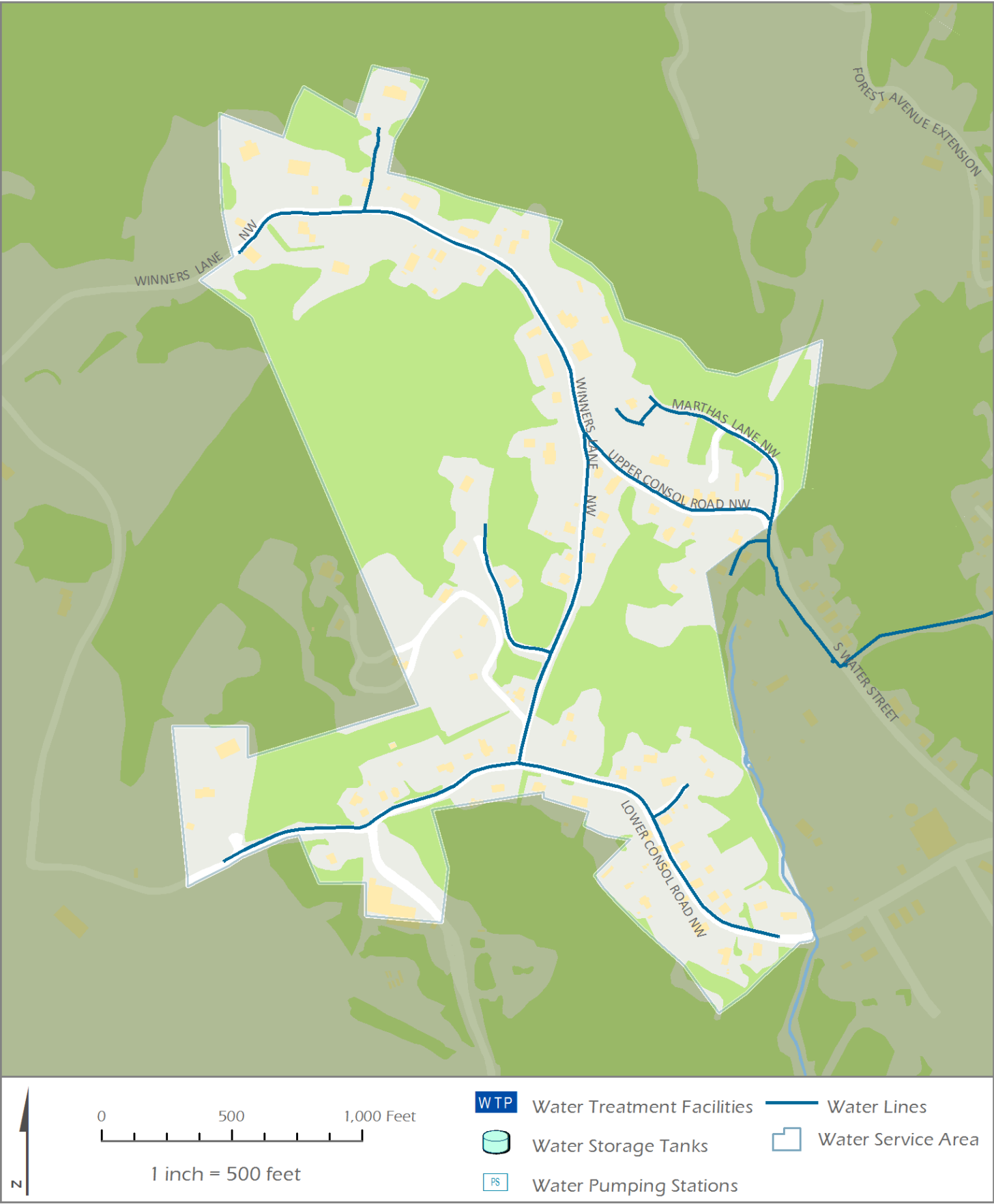


Figure 24. Consol Water Service Area

3.01.02.02 Carlos/Shaft/Klondike Service Area

The Carlos/Shaft/Klondike water service area serves approximately 350 customers and is operated by the Allegany County Utilities Division. The service area is located to the south of Frostburg along Midlothian Road and MD Route 936. Water is purchased from the City of Frostburg and is treated in the manner described in Section 3.02.02. Average demand for the service area is 0.048 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Carlos/Shaft/Klondike service area are \$71/quarter plus \$23.25/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$97.75/quarter for customers of the system in FY 2011.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

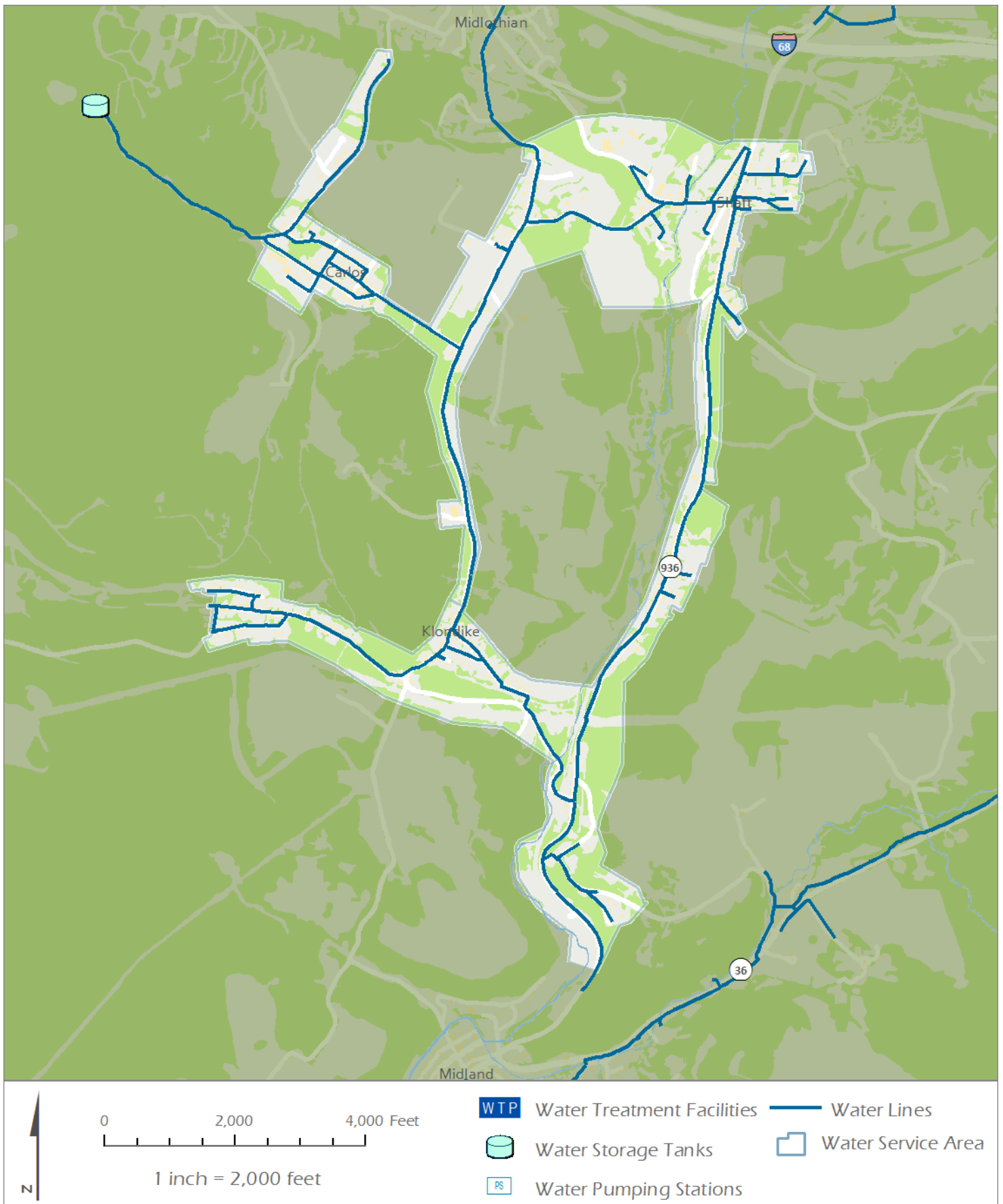


Figure 25. Carlos/Shaft/Klondike Water Service Area

3.01.02.03 Grahamtown Service Area

The Grahamtown water service area serves approximately 280 customers and is operated by the Allegany County Utilities Division. The service area is located to the south of Frostburg along MD Route 936 (Figure 26). Water is purchased from the City of Frostburg and treated in the manner described in Section 3.02.02. Average demand on the service area is 0.030 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Grahamtown service area are \$71/quarter plus \$23.25/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$97.75/quarter for customers of the system in FY 2011.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

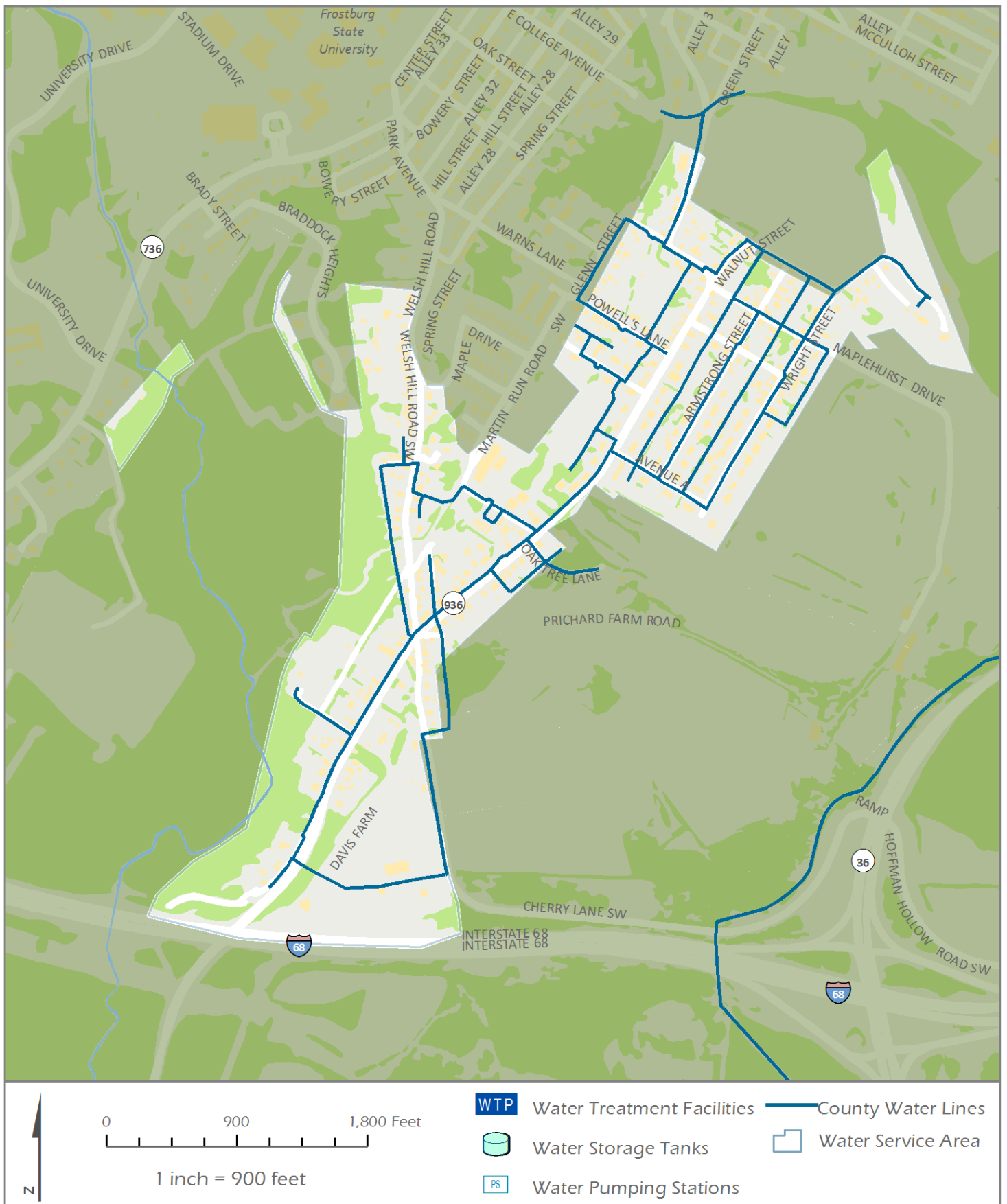


Figure 26. Grahamtown Water Service Area

3.01.02.04 Hoffman Service Area

The Hoffman water service area serves 16 customers and is operated by the Allegany County Utilities Division. The service area is located to the southwest of Frostburg along Hoffman Hollow Road, parallel to Interstate 68 (Figure 27). Water is purchased from the City of Frostburg and treated in the manner described in Section 3.02.02. Average demand on the service area is 0.002 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Hoffman service area are \$71/quarter plus \$23.25/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$97.75/quarter for customers of the system in FY 2011.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

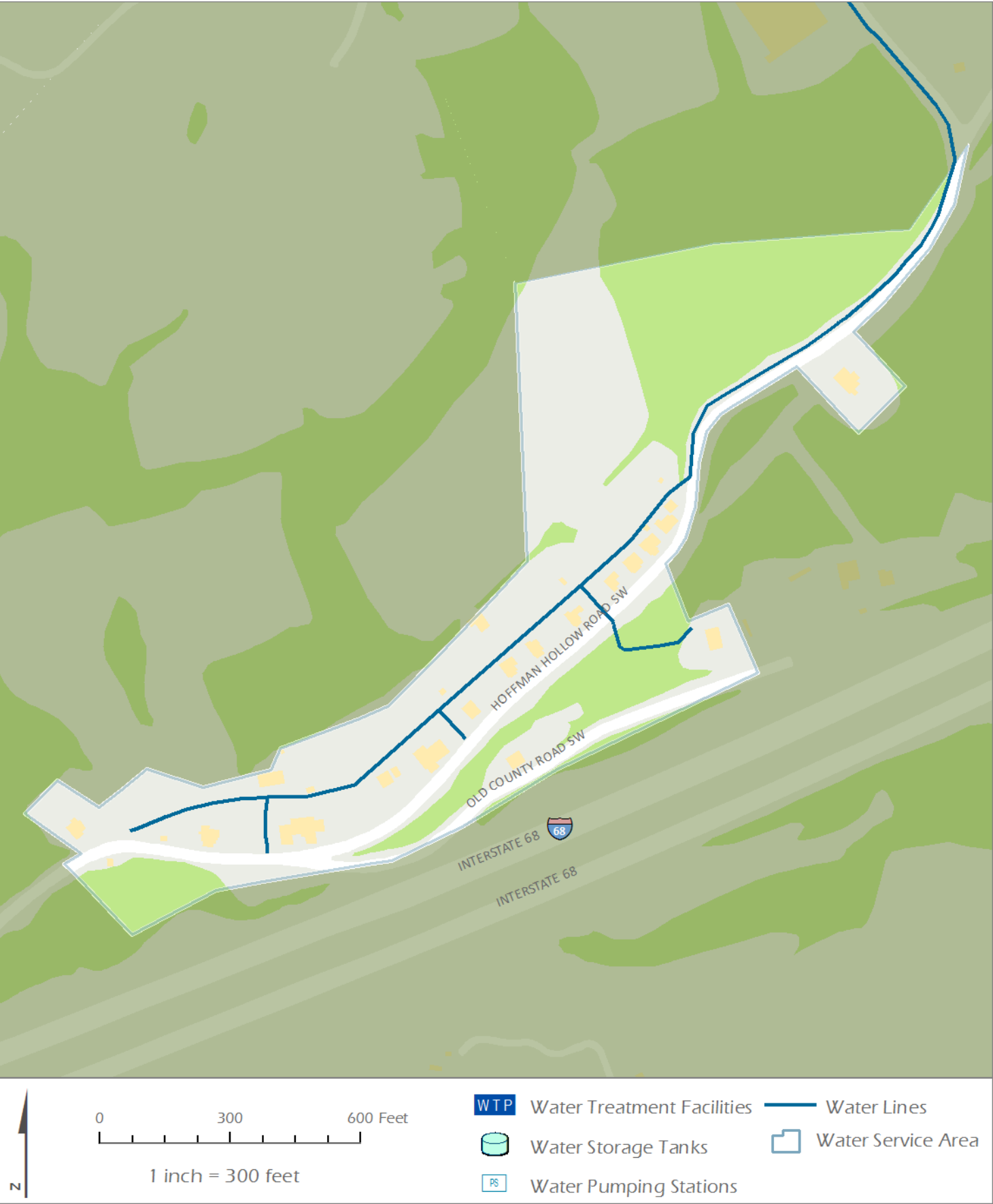


Figure 27. Hoffman Water Service Area

3.01.02.05 Eckhart/Clarysville Service Area

The Eckhart/Clarysville water service area serves approximately 600 customers and is operated by the Allegany County Utilities Division. The service area is located east of Frostburg along U.S. Route 40, and is delineated in Figure 28. Water is purchased from the City of Frostburg and treated in the manner described in Section 3.02.02. Average demand on the service area is 0.075 MGD (FY 2010). Operation, maintenance, and debt payment costs for customers in the Eckhart part of the service area are \$70/quarter plus \$10/quarter County Debt Service surcharge plus \$4.95/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$88.45/quarter for FY 2011. For customers in the Clarysville part of the service area, operation, maintenance, and debt payment costs are \$83/quarter plus \$10/quarter County Debt Service surcharge plus \$4.95/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$101.45/quarter for FY 2011. The reason for the difference in cost between Eckhart and Clarysville customers is the recently-completed Clarysville Water System project. In FY 2010, the majority of water customers in Clarysville were receiving water from wells and springs. A connection to the City of Frostburg water supply added approximately 30 customers.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

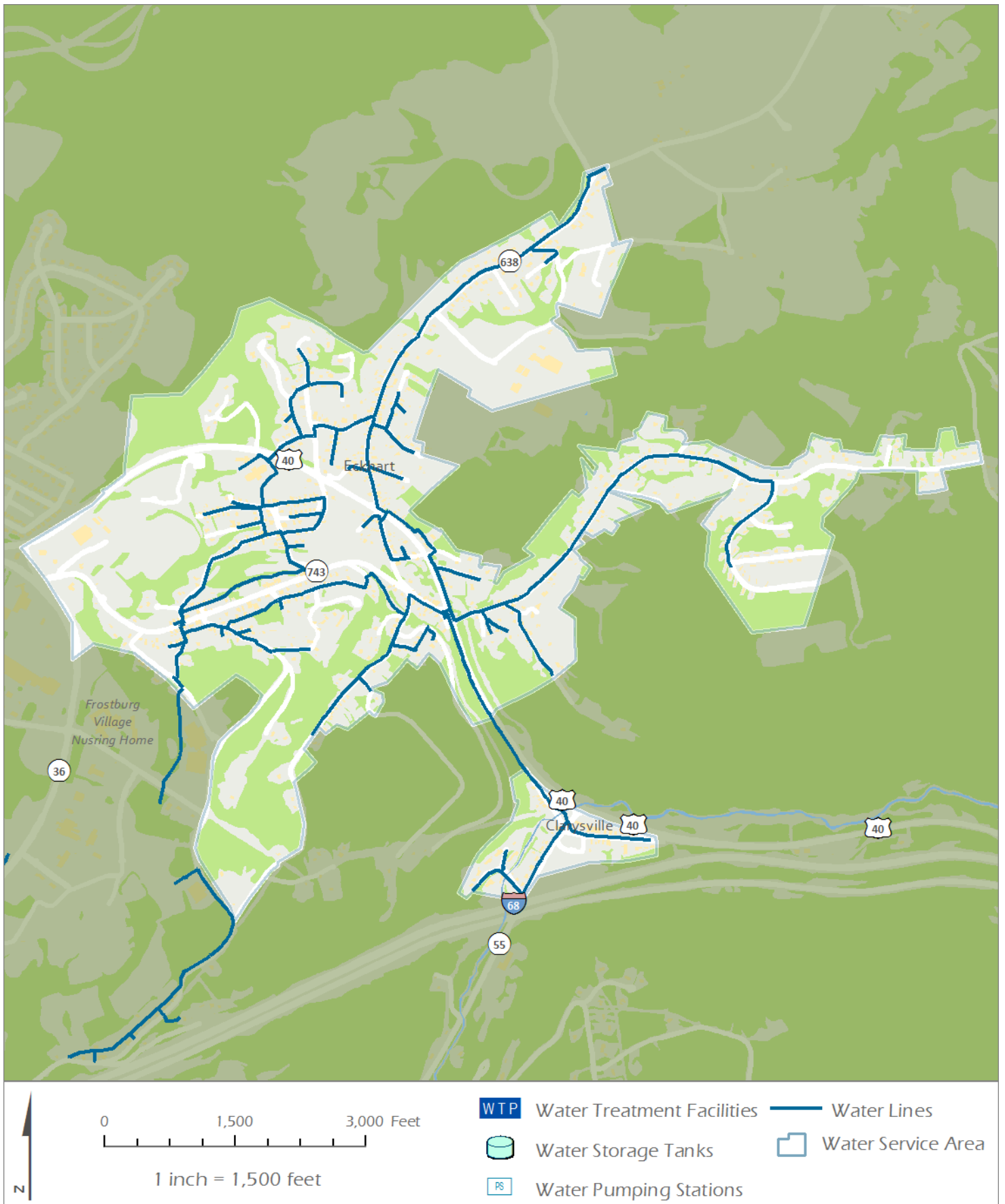


Figure 28. Eckhart/Clarysville Water Service Area

3.01.02.06 Route 36/Vale Summit Service Area

The Route 36/Vale Summit service area serves approximately 100 customers and is operated by the Allegany County Utilities Division. The service area is located south of Frostburg along MD Route 36 and along MD Route 55 in Vale Summit. Water is purchased from the City of Frostburg and treated in the manner described in Section 3.02.02. Average demand on the service area is 0.018 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Route 36/Vale Summit service area are \$71/quarter plus \$23.25/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$97.75/quarter for customers of the system in FY 2011.

Proposed improvement projects for this service area include a water storage tank for the Vale Summit area. This project is included in the Allegany County Capital Improvement Program for FY 2011 through FY 2015 as project DPW-W-5. The scope of work includes construction of a 257,000 gallon water storage tank in Vale Summit to provide fire flow and water storage for residents of the Vale Summit area. Estimated project cost is \$500,000. An additional \$10,000 was required for land acquisition and this cost was covered by Allegany County. The remaining project cost is expected to be covered through a FY 2011 grant from the Maryland Department of the Environment.

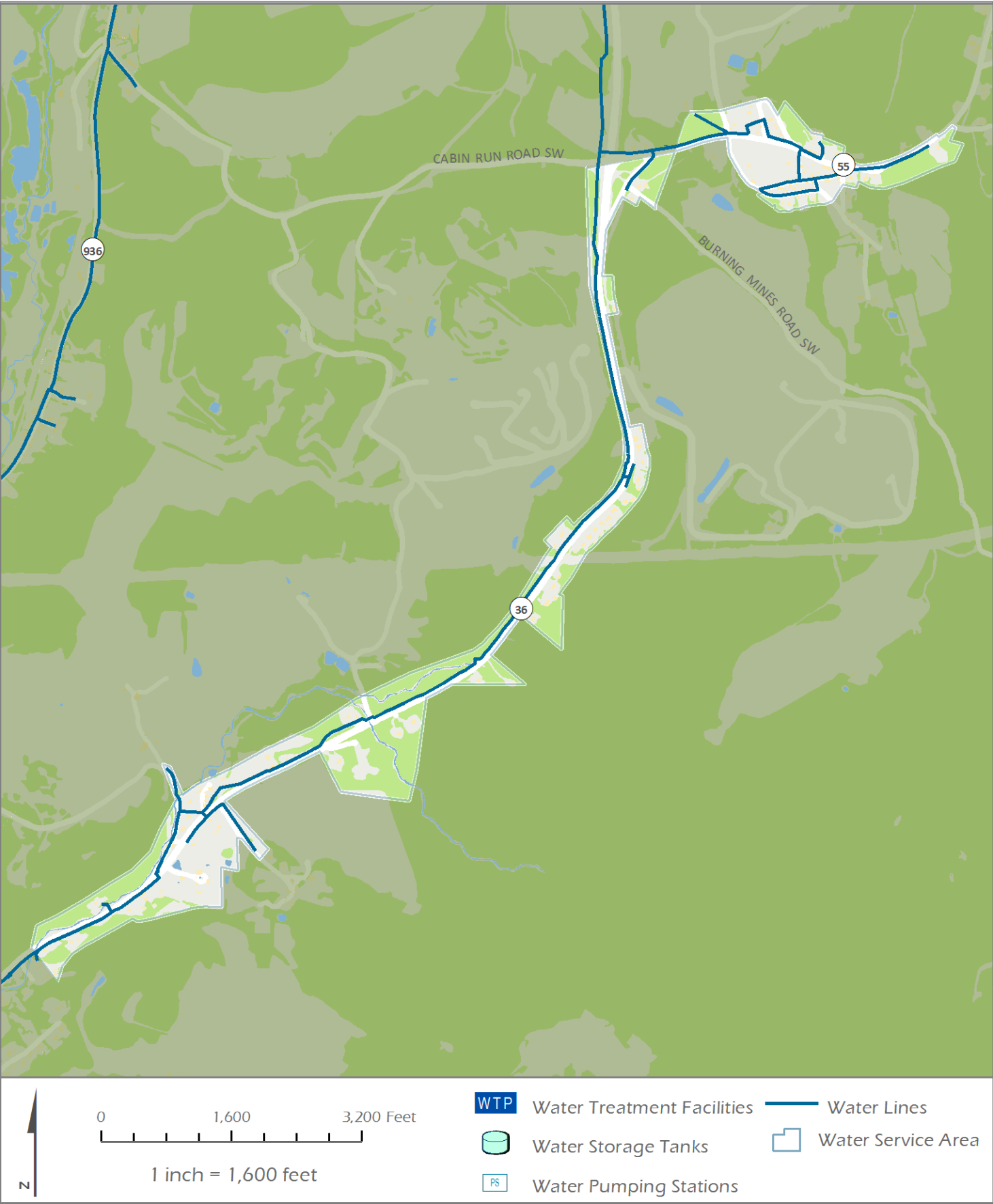


Figure 29. Route 36/Vale Summit Service Area

3.01.02.07 Borden/Zihlman/Morantown/Slabtown Service Area

The Borden/Zihlman/Morantown/Slabtown water service area serves approximately 220 customers and is operated by the Allegany County Utilities Division. The service area is located north of Frostburg along MD Route 36 (Figure 30). Water is purchased from the City of Frostburg and treated in the manner described in Section 3.02.02. Average demand on the service area is 0.025 MGD (FY 2010). Operation, maintenance, and debt payment costs for the Borden/Zihlman/Morantown/Slabtown service area are \$71/quarter plus \$23.25/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$97.75/quarter for customers of the system in FY 2011.

The recently-completed Mount Savage Water Transmission Main project (see Allegany County Capital Improvement Program for FY 2011 through FY 2015 project DPW-W-3) connected the Mount Savage Service Area to the Piney Systems through an interconnection with the Borden/Zihlman/Morantown/Slabtown service area. Currently in development is the Mount Savage Water Distribution Project (Allegany County Capital Improvement Program for FY 2011 through FY 2015 project DPW-W-2 – see Mount Savage Service area for description) will convey water for Mount Savage through the Borden/Zihlman/Morantown/Slabtown service area.

No other improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in Cresaptown and Bowmans Addition service areas.

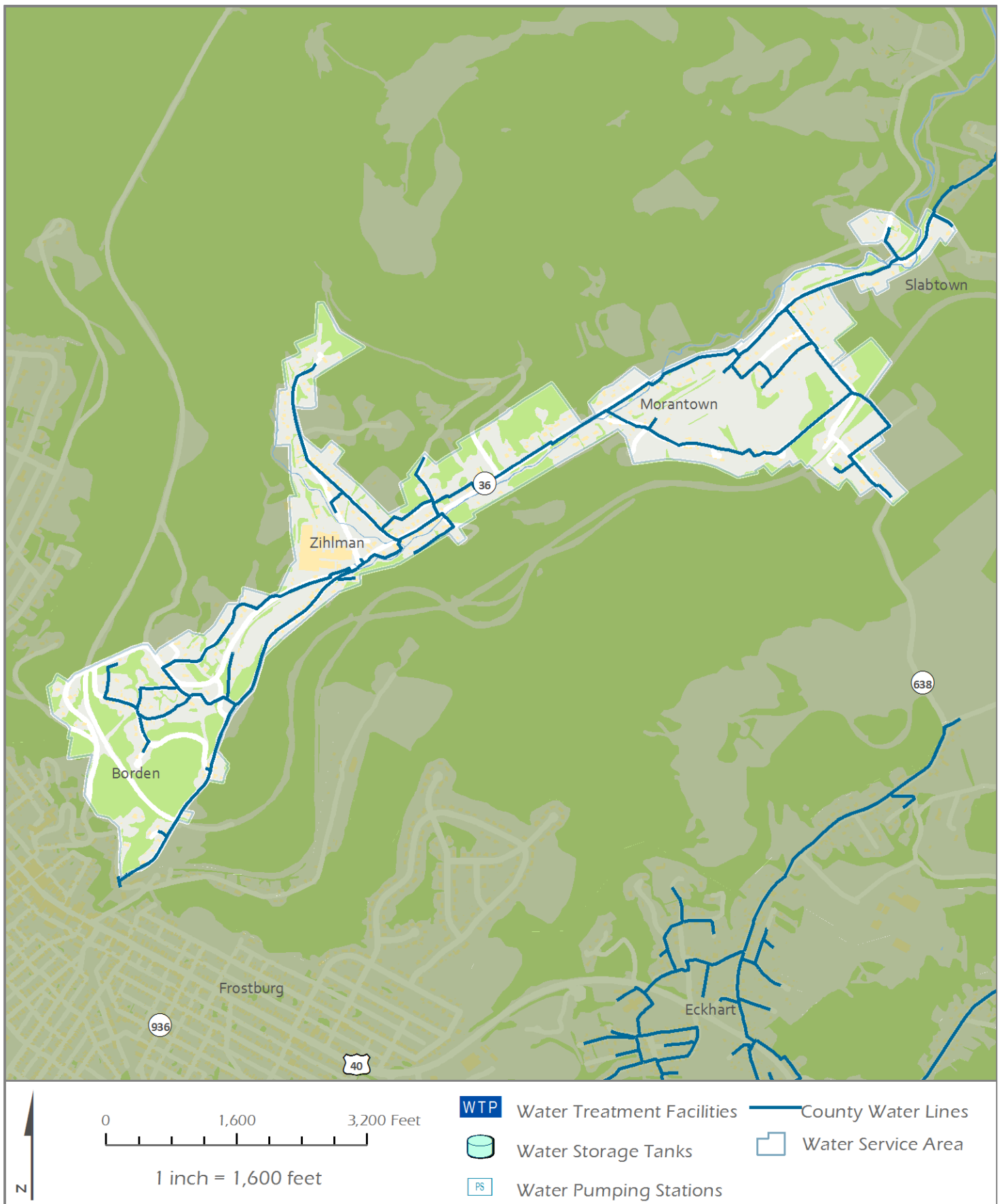


Figure 30. Borden/Zihlman/Morantown/Slabtown Service Area

3.01.02.08 Mount Savage Service Area

The Mount Savage service area is in a state of transition as of the plan adoption date. The Mount Savage Water Company currently operates the service area, as outlined in Figure 31. According to the Source Water Assessment, Mount Savage is currently served by nine wells and four springs, which are vulnerable to contamination by microbiological contaminants. The community is under the direction of Maryland Department of the Environment to connect to a public water supply system. As described in the previous Borden/Zihlman/ Morantown/Slabtown service area section, the recently completed Mount Savage Water Transmission Main project completed an interconnection with the Borden/Zihlman/Morantown service area, thus enabling transmission of water from the City of Frostburg to Mount Savage.

The ongoing Mount Savage Water Distribution System project will provide water service and fire protection to the community of Mount Savage. The Mount Savage service area will serve approximately 440 customers and will be owned by the Allegany County Commissioners and operated by the Allegany County Utilities Division. Water will be purchased from the City of Frostburg and treated in the manner described in Section 3.02.02. Construction is expected to be completed in the spring of 2012. The estimated \$7,000,000 project is funded through Maryland Department of the Environment, Community Development Block Grants and a United States Department of Agriculture – Rural Development grant and loan. The loan will be repaid by users of the system. Estimated operation and maintenance costs are \$80/quarter plus \$23.25/quarter Frostburg surcharge and \$3.50/quarter Public Service Commission (PSC) surcharge for a total of \$106.75/quarter for customers of the system (projected FY 2012). Estimated average demand on the Mount Savage service area (based on distribution system completion) is 0.0845 MGD to 0.100 MGD.

The new Mount Savage transmission main coveys water through an area between Slabtown and Mount Savage; this area is not designated as PFA and has steep slopes. As such, the area not within the PFA shall be considered Denied Access. This condition was necessary for the grant request approval though MDE.

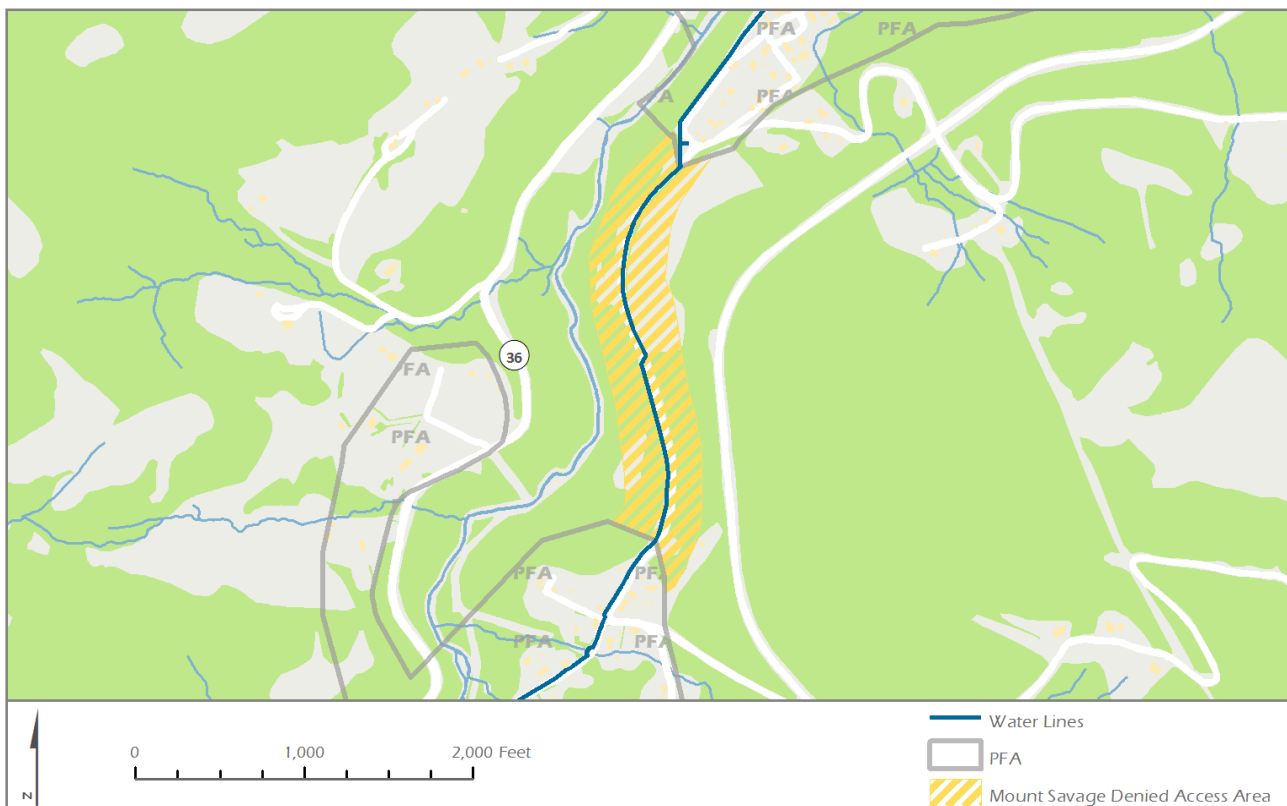


Figure 31 a. Denied Access Area

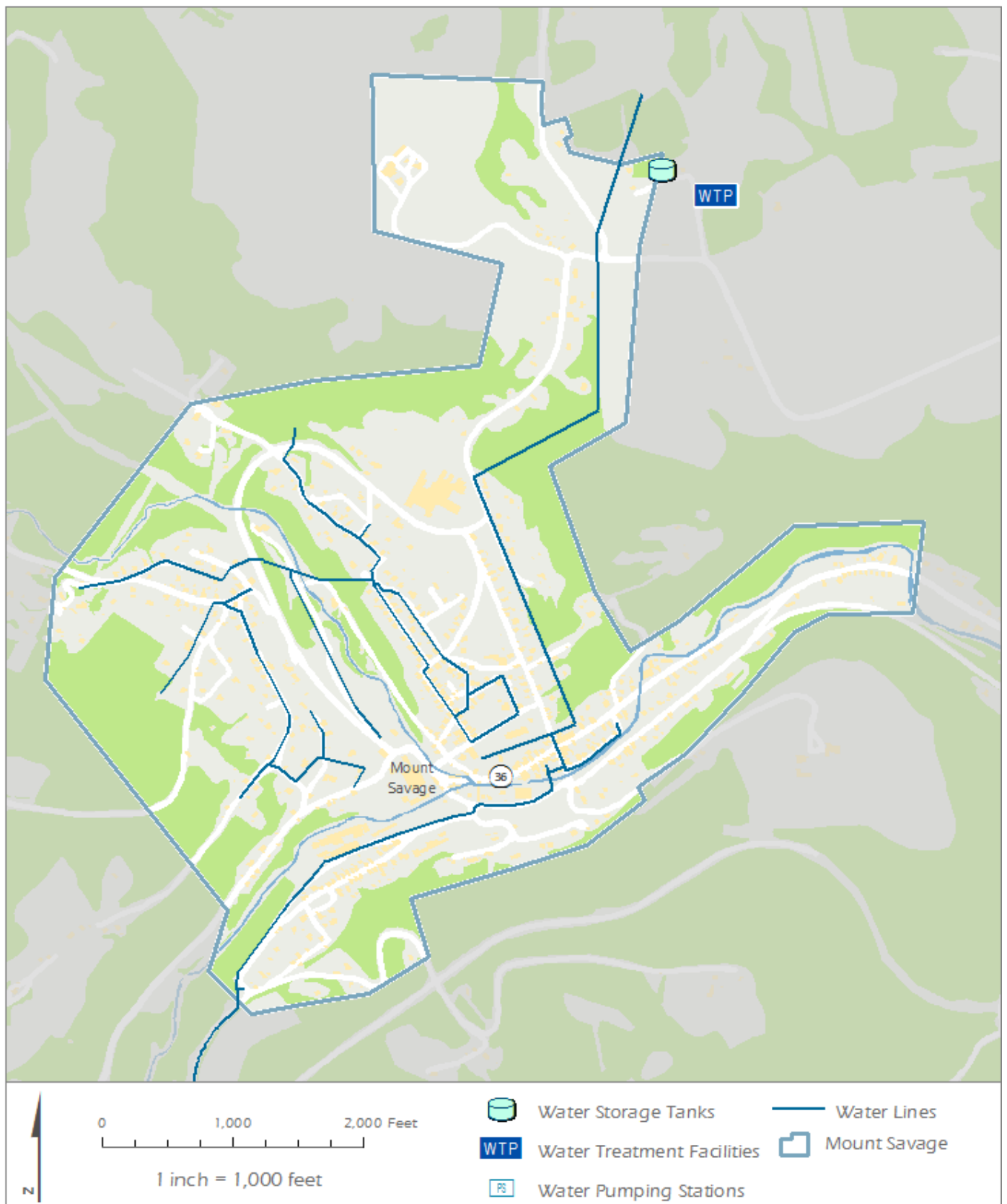


Figure 31. Mount Savage Water Service Area

3.01.03 Georges Creek System and Service Area

The Georges Creek System serves the entire Georges Creek valley in western Allegany County from the Town of Midland to south of Barton, as shown in Figure 32. The system is owned by the Town of Lonaconing and serves approximately 5,600 residents. Total operation and maintenance cost for FY 2011 is approximately \$775,000. Within the service area, there are five wells and three impoundments, and the water is treated at three separate water treatment plants. At each of the three plants, the water is treated using an up flow clarifier and mixed media filter. The entire system is rated to provide 0.576 MGD, actual production averages 0.300 MGD.

The Charlestown water treatment plant treats water from one well with a capacity of 30,000 gallons and from the Jackson Run impoundment which has a 3.55 MG capacity (0.100 MGD average daily withdrawal). The Charlestown plant is rated to treat 0.144 MGD, actual production averages 0.075 MGD. There are improvements planned for the Charlestown plant including a fence around the reservoir. Also, near the Charlestown plant are homes in which there is mine drainage present in the wells. Maryland Department of the Environment may assist in locating a funding source for new lines and a 20,000 gallon tank and pump for the affected residences.

The Koontz water treatment plant treats three wells and the Koontz Run impoundment, which has a capacity of 1.82 MG and the average daily withdrawal is 0.100 MGD. The treatment plant is production is rated at 0.144 MGD, actual production is 0.075 MGD. Planned projects for the Koontz plant include a three million gallon raw water tank to replace the reservoir.

The Gilmore water treatment plant treats two wells and the Elk Lick Run Impoundment. The wells produce 90,000 GPD with a maximum of 200,000 GPD during the peak season. The reservoir has a capacity of 4.03 MG and an average daily withdrawal of 0.175 MGD. The Gilmore plant production rating is 0.288 MGD, the actual production averages 0.150 MGD. Projects planned for the Gilmore plant include reservoir fencing. In addition, in the Gilmore/Midland area, the radio read meter project is planned to be completed.

Recently completed in this system was a project to provide backup power to all three water treatment plants. The system is also slated to receive an additional 0.5 MG in storage via a new storage tank on Old Dans Rock Road in Midland.

As stated in the Source Water Assessment, all three water systems are susceptible to contamination due to increased turbidity. The three water treatment plants are operated by Miller Environmental Inc.

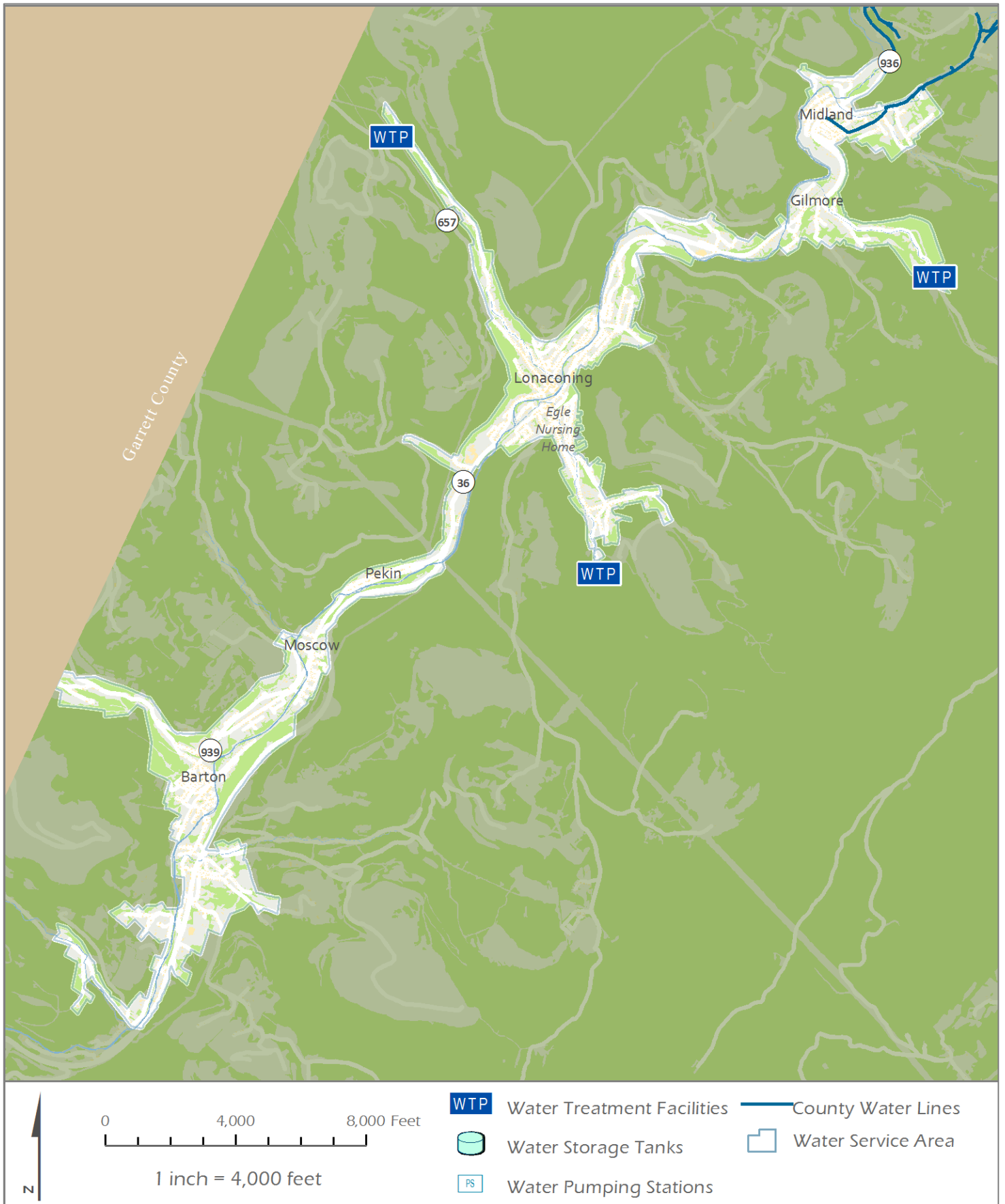


Figure 32. Georges Creek Water Service Area

3.01.04 Savage River System

The Savage River System serves the Town of Westernport and a small area just north of Westernport, referred to as Franklin/Brophytown. The water source is the Savage River Reservoir located northwest of Westernport in Garrett County, Maryland. A large portion of the watershed is located within the Savage River State Forest and is predominately forested. The reservoir is operated by the Upper Potomac River Commission and has a capacity of six billion gallons with a safe yield of 15 MGD. In addition, there is an average release of 100 cfs for flow control in the Savage and the Potomac Rivers. The Source Water Assessment states that the water quality in the Savage River Reservoir is “generally excellent”, and the only concerning water quality indicator is periodic levels of high turbidity.

The water supply is treated by the City of Westernport’s filtration plant. The plant is rated to produce up to 1.0 MGD, actual production averages 0.5 MGD. Improvements to the water treatment plant would likely be financed through state and federal agencies including Maryland Department of the Environment, United States Department of Agriculture – Rural Development, and United States Department of Housing and Urban Development - Community Development Block Grant programs. The Operation and Maintenance costs for the system are approximately \$400,000 per year. There are no new proposed water supplies for the Savage River System, as the reservoir meets current and future demands.

3.01.04.01 Westernport Service Area

The Westernport system is operated by the Town of Westernport and serves a population of 2,100 people with approximately 0.5 MGD. The distribution system in Westernport is in poor condition and is in need of ongoing repair and rehabilitation. There are localized issues within the system, for example there are quality problems at Horse Rock. Improvements to the distribution system would likely be financed through state and federal agencies including Maryland Department of the Environment, United States Department of Agriculture – Rural Development, and United States Department of Housing and Urban Development - Community Development Block Grant programs. The Westernport service area is shown in Figure 33.

A significant future project identified for the Town of Westernport is to supply the Town of Luke with drinking water. Currently, the Luke Paper Company provides the potable water to the Town of Luke (see information regarding treatment in following sub-section). The project will include the construction of 12,000 feet of 10-inch water line from the Westernport water treatment plant to the Town of Luke, a 500,000 gallon ground storage reservoir and a 350 gpm pump station. The completion of this project would provide high quality drinking water to the citizens of Luke, while also having an economic benefit to all customers within the Savage River System.



Figure 33. Westernport Water Service Area

3.01.04.02 Franklin/Brophytown Service Area

The Franklin/Brophytown water service area serves the Moran Manor Health Center and the Grande View Senior Apartments (approximately 160 residents) and is operated by the Allegany County Utilities Division. The service area is located along MD Route 36 just north of the town of Westernport (Figure 34). Water is purchased from the Town of Westernport and treated in the manner described in Section 3.02.04.

No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in the Cresaptown and Bowmans Addition service areas.

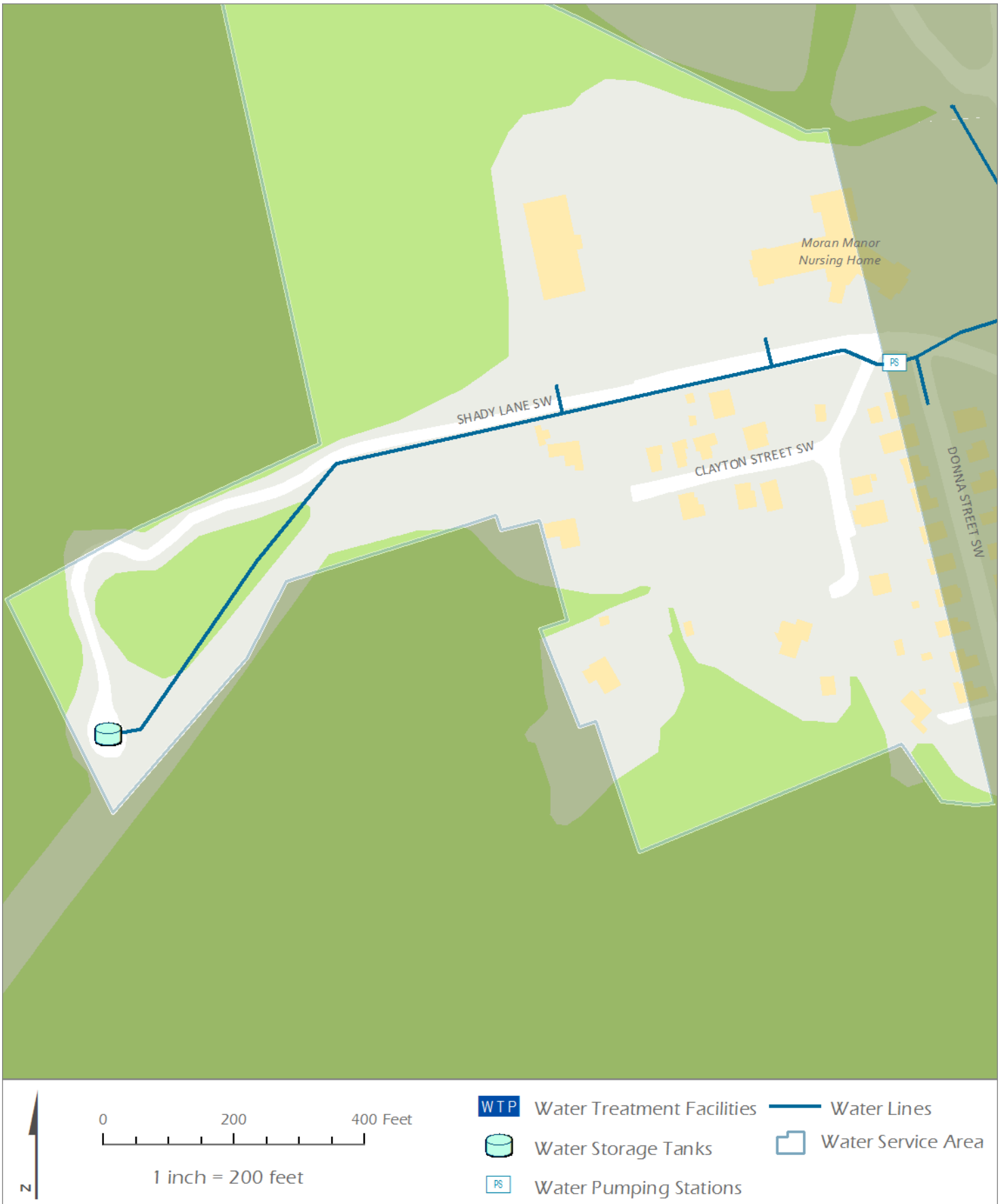


Figure 34. Franklin/Brophytown Water Service Area

3.01.05 Luke Mill System and Service Area

The Luke Mill System is operated by the Luke Paper Company. The water source for the system is the North Branch Potomac River. The water treatment plant uses rapid sand filtration and is rated to treat 30 MGD, average production is 25.1 MGD. The system serves the Town of Luke, with a population of approximately 70 people, the NewPage Mill, with a staff of 950 people, and all industrial processes related to paper production (Figure 35).

A potential new water source for the Town of Luke will be the Westernport water supply. This would allow the Luke Paper Company to discontinue treating water to meet drinking water standards. Currently, over 95% of the treated water is used for paper production and does not need to be potable water. The completion of this project would lead to a cost savings for the residents of Luke and Westernport and also for the Luke Paper Company.



Figure 35. Luke Mill Water Service Area

3.01.06 Keyser, WV System

The Keyser System is located in Keyser, West Virginia, and serves Keyser area in addition to selling treated water to the Allegany County Utilities Division to supply the McCoole service area with public water. The system serves approximately 9,000 residents in total. The water supply for the Keyser system is New Creek, a stream located in West Virginia. The City of Keyser operates the water treatment plant, which is rated to produce 3 MGD, actual production is 1.1 MGD. A new water treatment plant is scheduled for construction in 2013.

3.01.06.01 McCoole Service Area

The McCoole water service area serves approximately 330 customers and is operated by the Allegany County Utilities Division. The service area is located south of Cumberland and east of Westernport at the intersection of U.S. Route 220 and MD Route 135 (Figure 36). Water is purchased from the City of Keyser, WV and treated in the manner described in Section 3.02.06. Average demand on the service area is 0.062 MGD (FY 2010). Operation, maintenance, and debt payment costs for the McCoole service area are \$87/quarter.

A new water pump station project was recently completed at the Route 220 Bridge over the North Branch Potomac River. This was part of the Route 220 Bridge Project, and was funded by the West Virginia Department of Transportation. No additional improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing in the Cresaptown and Bowmans Addition service areas.



Figure 36. McCoolle Water Service Area

3.01.07 Midlothian System and Service Area

The Midlothian System serves approximately 300 people south of Frostburg (Figure 37). The water system is operated by the Midlothian Water Company. There are two wells that supply the system, which are rated to produce 100,000 gallons per day; the actual production is 26,000 gallons per day. Green sand filters with KMnO_4 are used to treat and remove iron from the ground water. The water quality is fair to good, as there is iron and some manganese present in the raw water. The annual operation and maintenance costs for the Midlothian Water Company are approximately \$20,000. At this time, there are no planned projects and no new proposed water sources. If improvements to the system are needed in the future, expenses would be self-financed. Long term plans may include a distribution system replacement and connection to the City of Frostburg water supply and could be operated and maintained by Allegany County.

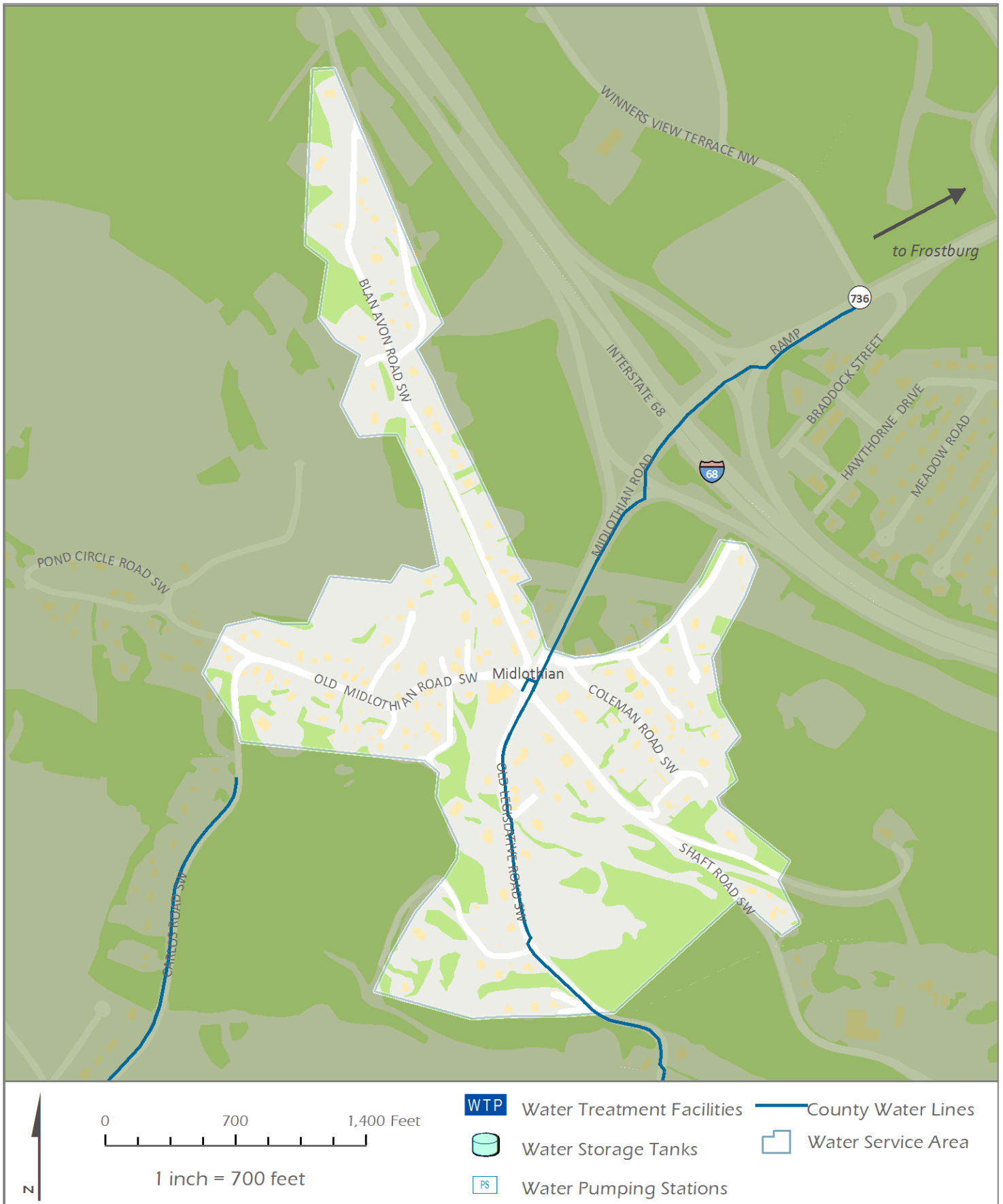


Figure 37. Midlothian Water Service Area

3.01.08 Rawlings System and Service Area

The Rawlings System serves the Rawlings community, which has a population of approximately 650 people. The water treatment plant and distribution system is operated by the Rawlings Water Company Inc. and is shown in Figure 38. The water source is an impounded stream, Mill Run, in which the entire watershed is forested. The treatment process is filtration followed by chlorination. The capacity of the reservoir is 60,000 gallons. The rated capacity for the plant is 30,000 gpd, however, average production is 60,000 to 70,000 gpd. The Rawlings community system is currently being studied by an engineering firm to determine alternatives for possible future construction projects. Alternatives will be proposed for short-term feasibility (0-5 years) and long-term feasibility (more than 5 years) and include options such as connecting to the City of Cumberland water supply system, drilling for groundwater, or rehabilitating the existing water treatment plant. More information on this project can be seen in project sheet DPW-W-10 in the Allegany County Capital Improvement Program for FY 2011 through FY 2015. Maryland Department of the Environment has provided may unsatisfactory inspection reports and instructed Rawlings to find alternate water sources because of both quantity and quality problems. The Rawlings Water Company Inc. has formally indicated to Maryland Department of the Environment and Allegany County is it wants to cease operation of the water system. A total distribution system replacement is needed for Allegany County to provide water service.



Figure 38. Rawlings Water Service Area

3.01.09 Broadwater Addition System and Service Area

The Broadwater Addition System serves the small community of Broadwater Addition, as shown in Figure 39. The system is operated by the Broadwater Addition Water Company, and provides water to a total of twelve residences. The source of the water is a well, and operation and maintenance costs are the cost of electric and disinfection. At the present time, the Broadwater Addition Water Company desires to apply for grant money to fund improvements.



Figure 39. Broadwater Addition Water Service Area

3.01.10 Martins Mountain System and Service Area

The Martins Mountain water system is a private system that serves approximately 15 households located on top of Martins Mountain, southeast of Cumberland (Figure 40). This residential area was previously an apple orchard and water quantity has been an issue in the area. In the late 1990's a well was drilled at the base of the mountain, near Frog Hollow Road to supply the system. The well is permitted for an average daily withdrawal of 8,000 gpd, which could serve up to a maximum of forty residences. This information is currently the best available data compiled from Allegany County Health Department records; there are currently issues with the ownership of the system.

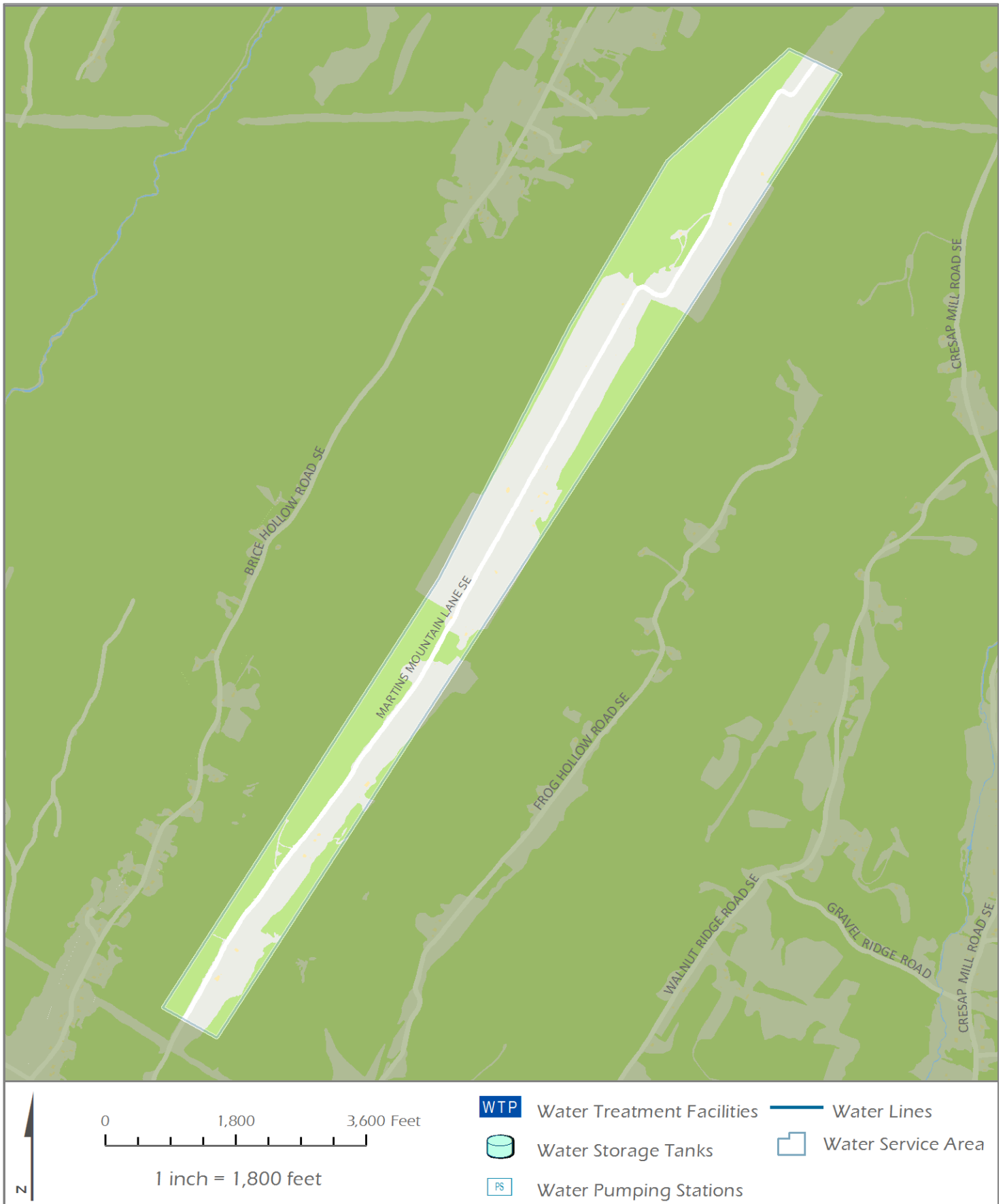


Figure 40. Martins Mountain Water Service Area

3.01.11 Reckley Springs System and Service Area

The Reckley Spring water system serves a small community of approximately 45 residences along Brice Hollow Road, southeast of Cumberland (Figure 41). The system is served by a spring that is subject to contamination with volatile organic compounds and coliform bacteria. Water quantity in wells serving this area has historically been an issue. No additional information regarding this system has been provided for inclusion in the Water and Sewerage Plan.



Figure 41. Reckley Spring Water Service Area

3.01.12 Barrelville System and Service Area

The Barrelville water system serves approximately 25 customers in the community of Barrelville, located at the intersection MD Route 36 and MD Route 47 (Figure 42). The system is served by two wells, which have naturally occurring iron present and also are susceptible to coliform bacteria. The system is operated by a resident of Barrelville; no further information was made available for inclusion in the Water and Sewerage Plan.

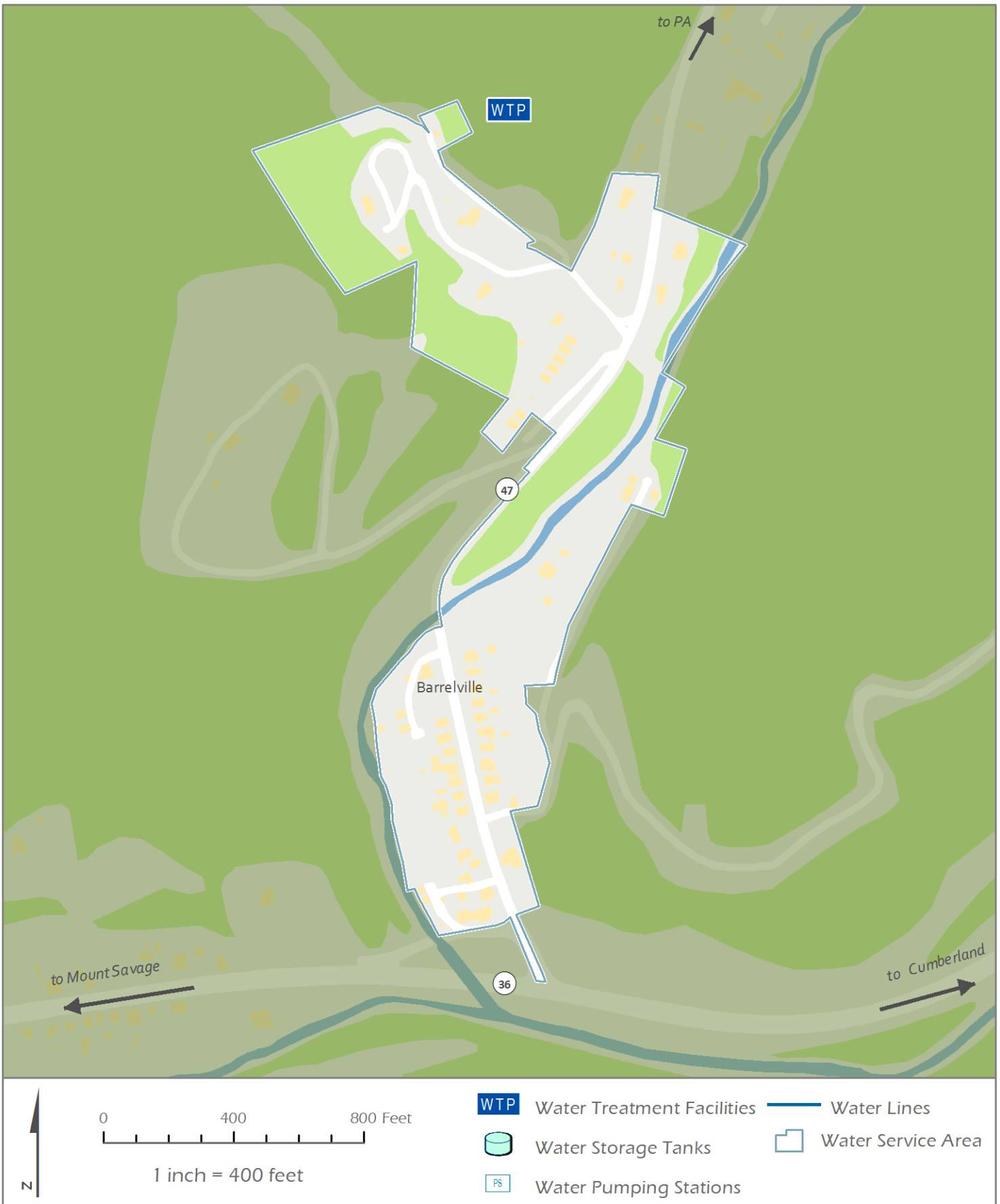


Figure 42. Barrelville Water Service Area

3.01.13 Bob Candy System and Service Area

The Bob Candy water system is located east of the City of Cumberland (Figure 43). The system is served by a well, and provides water to four residential customers and the Tri State Zoological Park. No additional information was provided for inclusion in the Water and Sewerage Plan.

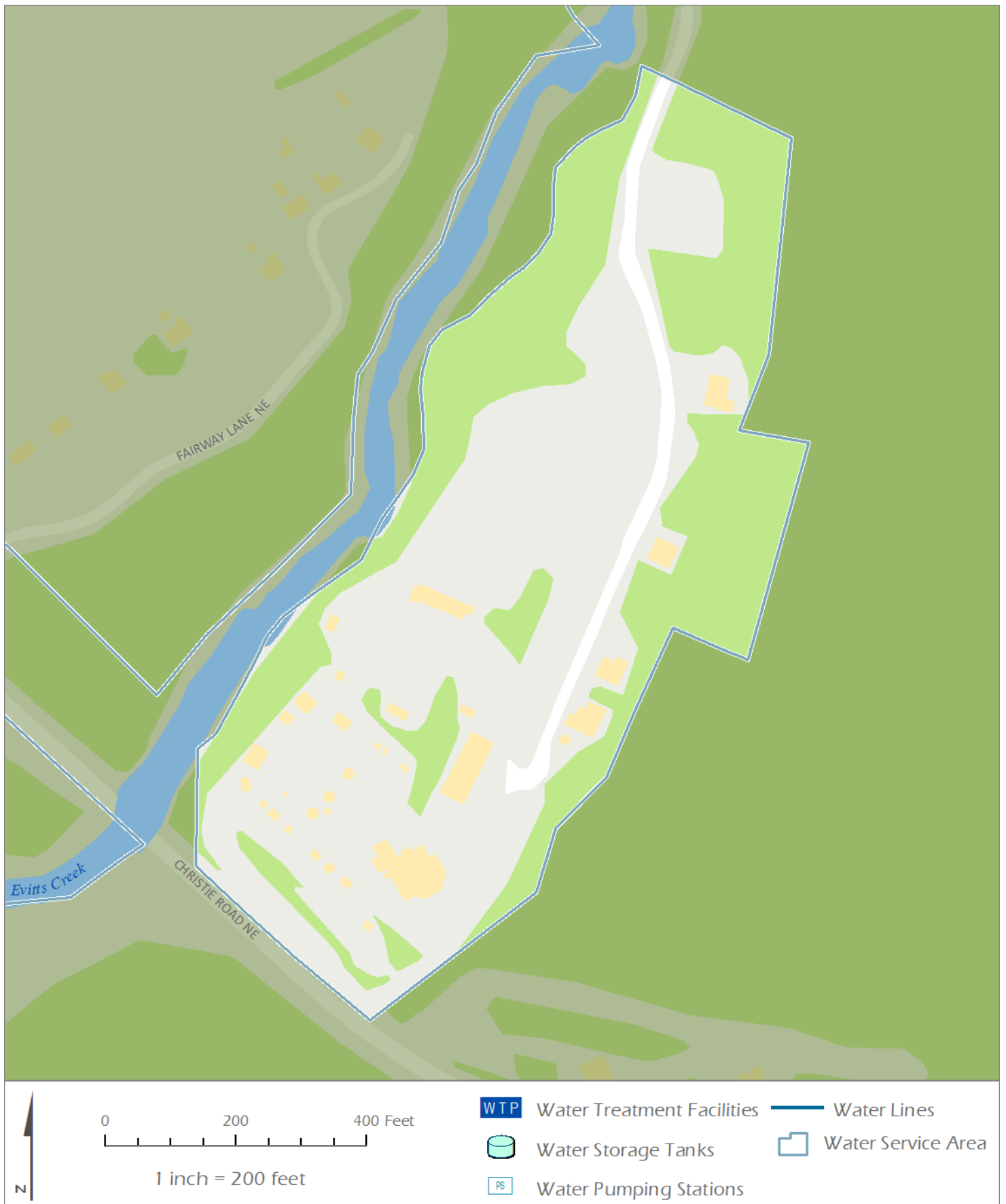


Figure 43. Bob Candy Water Service Area

3.01.14 Rocky Gap Mobile Home Park System and Service Area

The Rocky Gap Mobile Home Park system serves approximately 20 mobile homes with water (Figure 44). There are four wells in the system. The water is generally of high quality. No additional information was available for inclusion in the Water and Sewerage Plan.



Figure 44. Rocky Gap Mobile Home Park Water Service Area

Section 3.02 Multi-use Water Supply Systems

There are three water systems in Allegany County that can be described as multi-use systems defined in COMAR 26.03.01.01 as a single system of piping, pumps, tanks, or other facilities utilizing a source of ground or surface water to supply a group of individuals on a single lot and having a capacity in excess of 1,500 GPD.

3.02.01 Rocky Gap System and Service Area

The Rocky Gap System serves the park, campground, golf course, hotel and conference center at Rocky Gap State Park, the area is shown in Figure 45. In 2007, there were 820,000 visitors at the State Park. Lake Habeeb is the source of water for the Rocky Gap System, and is rated to treat 239,000 gpd. The average production is 57,753 gpd. The plant is operated by Maryland Environmental Service. Demand is projected to increase due to proposed facilities related to slot machines. There is no new proposed water source. However, in regards to the water treatment plant, replacement has been recommended. A new 130,000 gpd membrane filtration water treatment facility is planned. Maximum production capacity will be 300,000 gpd. Water source will continue to be Lake Habeeb and the existing water treatment plant will be decommissioned. Further details regarding the Rocky Gap water system and operations can be found in the 2009 Water and Sewer Master Plan prepared by Maryland Environmental Service.

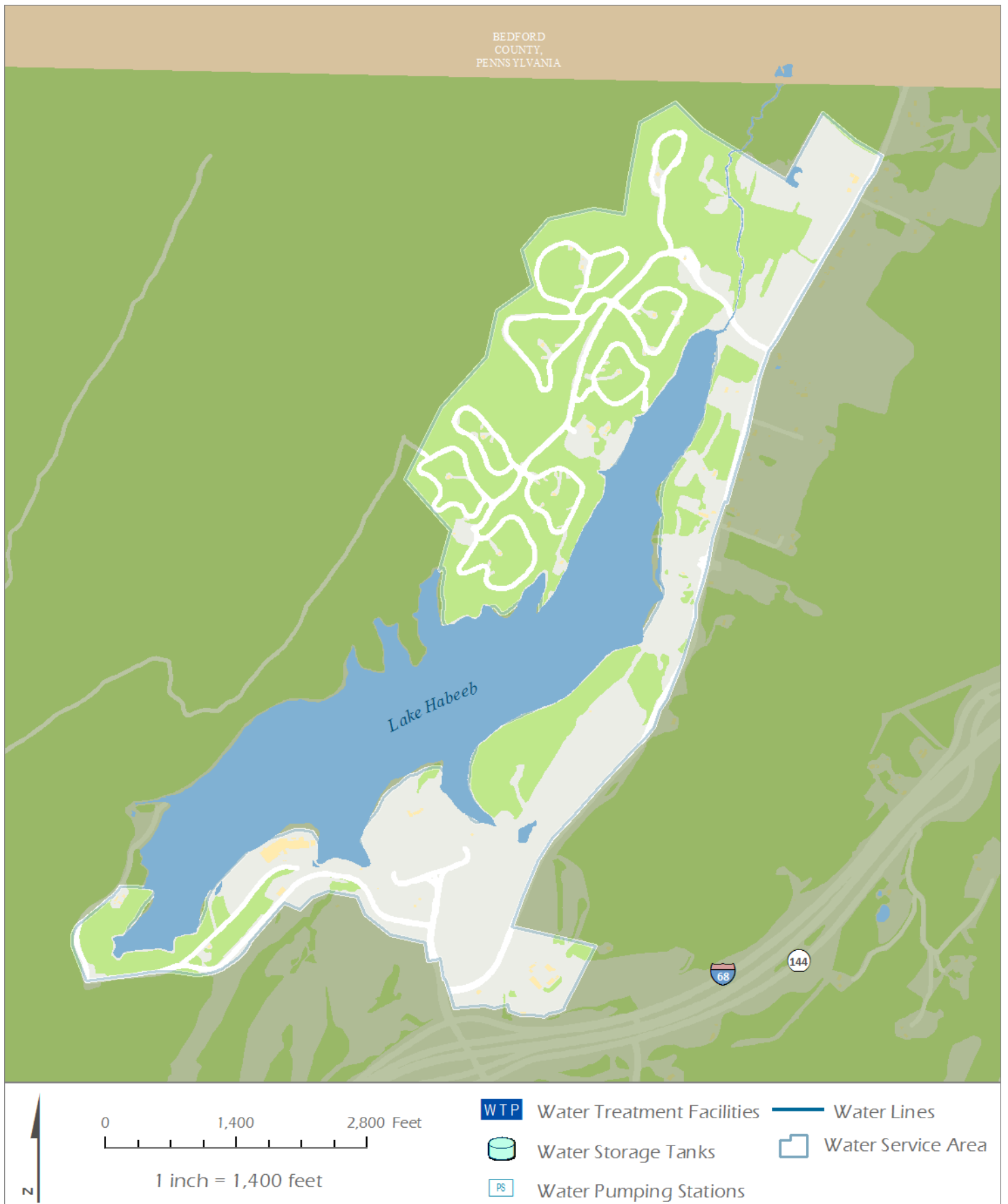


Figure 45. Rocky Gap Water System Service Area

3.02.02 Green Ridge Boys Camp System and Service Area

The Green Ridge Boys Camp water system is operated by Maryland Environmental Service (Figure 46). The system is served by three wells and the water treatment plant is rated for 63,000 gpd. Average production for the water treatment plant is 3,200 gpd. The service area is located in eastern Allegany County within Green Ridge State Forest, south of I-68. The average population is 35 students and 10 faculty members. There are no future plans for expansion, and upgrades are performed as needed. Additional information about the water system at Green Ridge Boys Camp can be found in the 2009 Water and Sewer Master Plan prepared by Maryland Environmental Service.



Figure 46. Green Ridge Boys Camp Water Service Area

3.02.03 Little Orleans Campground System and Service Area

The Little Orleans Campground is located in eastern Allegany County near the Potomac River (Figure 47). The system is served by three wells that produce 3,000 gpd and provide water for 200 campsites. There are separate water treatment systems for each well; two are disinfected with UV light, the third is treated with potassium permanganate. Rated production capacity is 2,000 gpd per well, actual production is 1,000 gpd per well. There is a planned expansion of an additional 1,000 gpd for 2011 to accommodate additional campsites. An additional well is proposed as the water source. The system is operated by Little Orleans Campground. The water quality is generally good with low amounts of iron and sulfur.

Note: Bald Eagle Boys Camp (formerly New Dominion) is currently not operating at a capacity near or greater than 1,500 gpd and therefore is not included in the Water and Sewerage Plan as a multi-use water system.

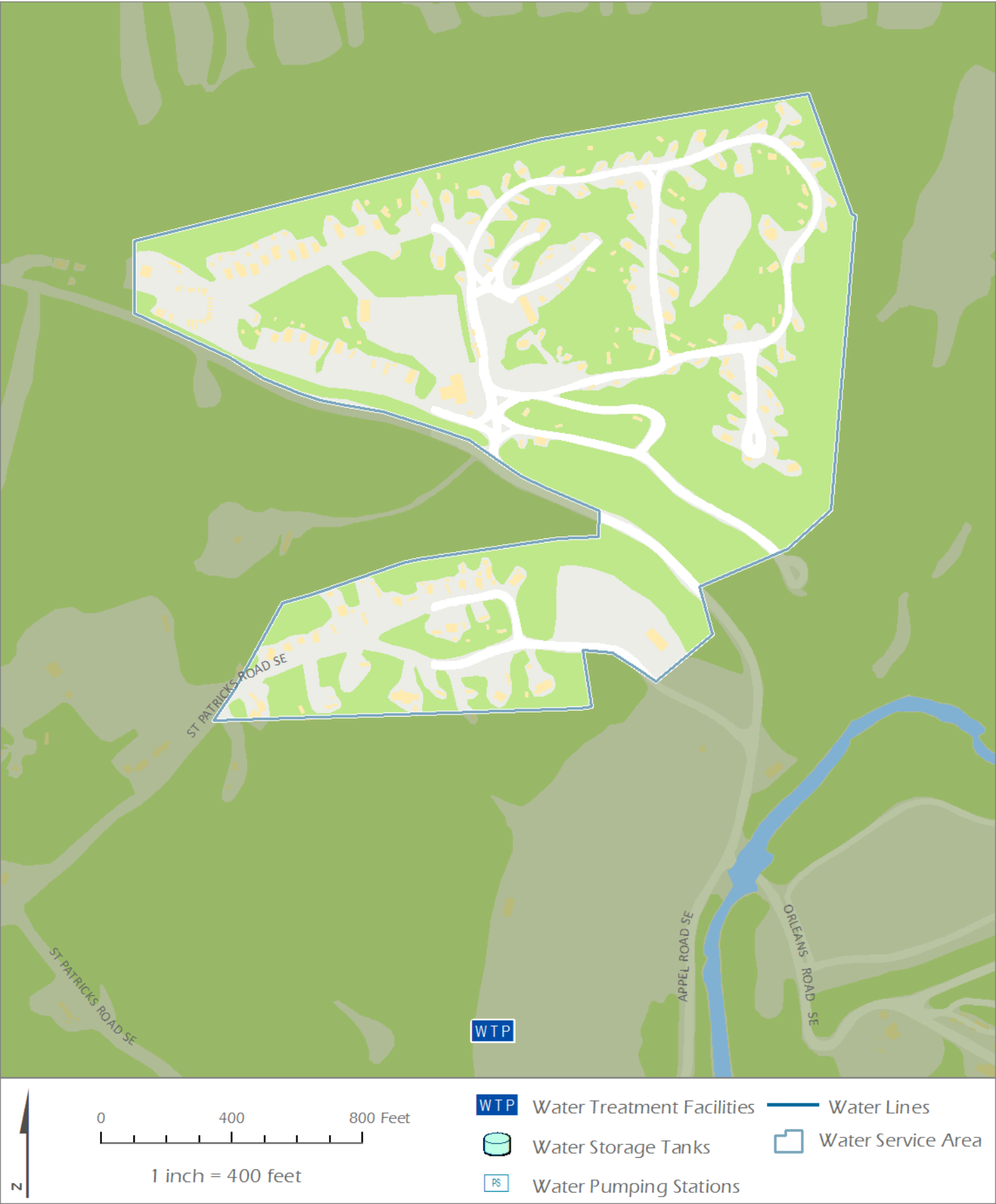


Figure 47. Little Orleans Campground Water Service Area

Section 3.03 Future Water Service Areas

Proposed expansions to existing water systems are delineated as future service areas on the Water Service Area map found in an enclosure at the end of this Plan, and are also listed in Section 3.04. Projected growth of the water service areas can be attributed to one or more of the following situations: new subdivisions in which utilities are to be constructed to county specifications, poor well water quality and/or quantity. Nearly all of the proposed new service areas are adjacent to existing service areas and will utilize existing capacity present within the current water supply and conveyance system.

3.03.01 Flintstone Water Supply

The Flintstone area is currently served by individual wells and the groundwater supply has a long history of problems ranging from low pressure to elevated levels of fecal coliform bacteria. A possible opportunity to address these problems has emerged in the form of an existing mineral extraction operation on Martins Mountain. This sand and gravel operation currently utilizes five wells to provide water for its operation. This project is nearing its projected extraction duration and these wells could possibly be used to provide water to the residents of Flintstone. The owner/operator supports this use and is interested in transitioning these wells to some form of public-private management.

A water tank and/or holding facility would need to be constructed just east of the Martins Mountain ridge. Sufficient suitable land area is available adjacent to the wells. This water supply infrastructure may address the existing water pressure and water quality problems currently experienced in Flintstone.

3.03.02 Terrapin Run

The Terrapin Run development was approved by the Allegany County Board of Zoning Appeals as a 4,300 unit Planned Residential Development. This area is not currently supported by any type of water supply system. Through their review and approval of the 2007 Master Water & Sewer Plan, the Planning & Zoning Commission reduced the scope of this development by nearly 80 percent (from 4,300 to 920 units). Additionally, these units were to be sequenced in such a manner that no more than 360 would be constructed within the first 10 years and would be subject to MDE issuing a groundwater appropriation permit for the community production wells.

Development of this project has been delayed by law suit and appeals and its future is unclear. What is certain is that this development will not have a significant landscape-level impact and development activities will be on a minor scale with water being supplied through onsite resources. A scale of development that exceeds the reduced scope will necessitate some type of large-scale community surface water supply system that must be engineered and financed through private means.

Section 3.04 Water Projects

This section identifies projects that have been completed in the time frame since the adoption of the 2007 Water and Sewer Plan Update. All known proposed projects scheduled to take place within the next ten years are listed, whether publicly or privately funded. The public projects are also described and mapped in Section 3.11. Private projects are italicized and are subject to approval by required permitting agencies.

Completed Projects

- Bowmans Addition Water – Phase 1
- Clarysville Water Project
- Mount Savage Water Transmission Main
- Frostburg - Raw Water Transmission Main Upgrade and Low Head Hydroelectric Plant
- Georges Creek - Backup Power for all Water Treatment Plants
- Cumberland - Water System SCADA
- Cumberland - Ridgedale Reservoir Replacement
- Cumberland - Asbestos/Concrete Pipe Replacement
- Cumberland - Fort Hill Tank Replacement
- Cumberland - System-wide Rehab and Extension
- Westerport – Water Distribution System Replacement – Phase I
- Westerport – Water Treatment Plant Upgrade

W-2, Final Planning Stages

- Bowmans Addition Water – Phase 2
- Mount Savage Water Distribution System
- Shades Lane Water
- Cresaptown Water Tank Project
- Cresaptown Water Meter Replacement Project
- Potomac River Water Treatment Plant Study
- County Water and Sewer Study
- Rawlings Water Study
- Midland – 0.5 MGD Water Storage Tank
- Westernport - Water Line Project to Town of Luke and NewPage Mill
- Cumberland- Chlorine Handling Improvements
- LaVale - System Rehab and Extension
- LaVale – Water Tank Replacement Projects and Distribution Upgrade
- Georges Creek - Koontz Run- New 3 MG Raw Water Tank to Replace Reservoir
- Frostburg - Savage Raw Water Improvements and Energy Conservation Project
- Water Station Run Road Waterline Extension
- Potomac Hollow Road Waterline Extension
- Lonaconing Maintenance Garage
- Bowling Green Water Improvements
- McCoole Water Meter Replacement
- Westernport Water Distribution System Replacement – Phase II

Cumberland Chase Subdivision (near Pinto)
Rocky Gap State Park – Water Treatment Plant Construction

W-3, Immediate Priority

Vale Summit Water Storage Tank
Cresaptown Distribution Upgrades
Rawlings Water System Improvements
Frostburg - Raw Water Supply Impoundment at Water Treatment Plant, Rehab and Improvements
Cumberland - Fort Hill Reservoir Valve Replacement
Cumberland - System Rehab & Extension
Cumberland - 36" Main upgrade
Cumberland - North End System and Pipe Upgrades
Cumberland - Water Filtration Plant Rehabilitation/Improvements
Georges Creek - Upper Charlestown Road Line and Tank Project
Replace Grant Street Water Storage Tank
Creek Road Water
Sand Spring Subdivision, Phase II (Frostburg)
Morgan Farm Subdivision (near Frostburg)

W-4, Six-Year Period

Potomac River Water Treatment Plant
Bedford Road Water Project
Distribution System along Route 36 North between Mount Savage and Barrelville
Cumberland - Filtration Plant Upgrades and Repair
Cumberland - West End System Pipe Upgrades
Cumberland - Asbestos/concrete Pipe Replacement
Cumberland - Water Valves/Water Line Rehabilitations City-wide
Cumberland - Meter Improvements
Cumberland - Source Water Protection Projects
Frostburg - Distribution System for Braddock Estates to Welsh Hill to Cherry Lane
Little Orleans Campground Service Area Expansion
Exit 33, I-68 at Braddock Road (Frostburg)
Exit 34, I-68 at Route 36 (Frostburg)
Braddock Estates, Phase III & IV (Frostburg)
Prichard Farms Subdivision (near Frostburg)

W-5, Ten Year Period

Harwood – Vale Summit Water Service
Baltimore Pike Water Service
Flintstone Water Supply and Distribution
Cumberland - Water Filtration Plant outfall re-design/relocation
Cumberland - Filtration Plant standby backwash pump/elevated tank
Cumberland - Disinfection By-Product system upgrade

Cumberland - Fort Hill Reservoir Replacement or Rehabilitation
 Cumberland - Haystack Tank Replacement
 Cumberland - South End System and Pipe Upgrades
 Cumberland - McNamee Area Water System and Tank Upgrade
 Cumberland - Seneca Area Supply Upgrades/Replacement
 Cumberland - Willowbrook Road Corridor Water System Expansion
 Cumberland – North End Tank Replacement
 Frostburg – Water Distribution System Hydraulic Loop Extension, Project C2 & C3
 Frostburg – Secondary Hydro Package Plant at Water Treatment Plant
Cumberland Chase Subdivision (later Phases)

Section 3.05 Inventory of Existing Community System Wells

Water Service Area	Well Name or Number	Aquifer	Depth of Well	Diameter of Well	Pumping Capacity	Water Quality
Frostburg	Frostburg Savage Pumping Station well – GA-1979G012 springs – GA-1985G007	Pocono Formation	200 ft	8 in	100,000 gpd wells/ 200,000 gpd springs	excellent
Midlothian	AL-88-0230		150 ft	6 in	100,800 gpd	fair-good
Midlothian	AL-81-0820		150 ft	6 in	72,000 gpd	fair-good
Lonaconing	Charlestown #2 AL-94-0661	Conemaugh Formation	505 ft	6 in	30,000 gpd	good
Lonaconing	Koontz #1 AL-94-0553	Conemaugh Formation	400 ft	6 in	43,200 gpd	fair
Lonaconing	Koontz #2 AL-94-0648	Conemaugh Formation	505 ft	6 in	no pump	fair
Lonaconing	Koontz #3 AL-01-1429	Conemaugh Formation	1276 ft	6 in	artesian	fair
Lonaconing	Gilmore #1 AL-01-4379	Conemaugh Formation	1354 ft	6 in	90,000 gpd, max 200,000 gpd	good
Lonaconing	Gilmore #2 AL-88-2080	Conemaugh Formation	200 ft	6 in	90,000 gpd, max 200,000 gpd	good
LaVale	LaVale #1	Greenbrier Formation	250 ft avg.	8 in	35,000 gpd avg	good
LaVale	LaVale #2	Greenbrier Formation	250 ft avg.	8 in	35,000 gpd avg	good
LaVale	LaVale #3	Greenbrier Formation	250 ft avg.	8 in	35,000 gpd avg	good
LaVale	LaVale #4	Pocono Formation	250 ft avg.	8 in	35,000 gpd avg	fair
LaVale	LaVale #6	Pocono Formation	250 ft avg.	8 in	35,000 gpd avg	fair
Green Ridge Youth Center	GR Well #1	-	100 ft	6 in	13,000 gpd	good
Green Ridge Youth Center	GR Well #2	-	200 ft	6 in	14,400 gpd	good
Green Ridge Youth Center	GR Well #3	-	unknown	unknown	n/a	poor
Non-community						
Little Orleans Campground	L.O. Well A		325 ft	6 in	14,400 gpd	good
Little Orleans Campground	L.O. Well B		200 ft	6 in	14,400 gpd	good
Little Orleans Campground	L.O. Well C		90 ft	6 in	14,400 gpd	good

Information provided by water system operator

Section 3.06 Inventory of Existing Impounded Supplies

List of Owners	Impoundment Name	Crest Elevation (above sea level)	Total Length of Dam	Height of crest above stream bed	Flooded area of crest elevation	Length of shore line at crest elevation	Area of land owned	Date water overflowed crest for first time	Capacity of reservoir	Safe yield (MGD)	Average daily withdrawal (MGD)
Municipal											
Upper Potomac River Commission	Savage River Reservoir	1,497.5 ft	1,050 ft	184 ft	382 acres	10 miles	521 acres	1950's +/-	18,500 ac-ft	15	65 - includes 100 cfs low-flow release
Town of Lonaconing	Jackson Run	1,760 ft	185 ft	22-25 ft	1.06 acres	885 ft	none	1900 +/-	10.9 ac-ft	1.4	0.1
Town of Lonaconing	Koontz Run	2,050 ft	115 ft	22-25 ft	0.50 acres	420 ft	25 acres	1920's +/-	5.6 ac-ft	2.8	0.1
Town of Lonaconing	Elk Lick Run	1,880 ft	229 ft	22-25 ft	1.28 acres	1,070 ft	25 acres	1930	12.4 ac-ft	2.2-2.5	0.175
City of Frostburg	Piney Dam Reservoir	2,381.5 ft	1,275 ft	46 ft	110 acres	5 miles	1,600 acres	N/A	1,228 ac-ft	2.3	0.7 - GA-1975 So 06(05)
Evitts Creek Water Co. (Cumberland)	Lakes Gordon & Koon	948 ft	150 ft	100 ft	388 acres	-	4,100 acres	N/A	10,434 ac-ft	16	9
Private Community											
Rawlings		Pond	12 ft	6 ft	3,000 ft ²	230 feet	7 acres	1st day?	0.18 ac-ft	0.1	0.06-0.07
Rocky Gap State Park	Lake Habeeb				243 acres		3,329 acres				0.142

Information provided by water system operator

Section 3.07 Inventory of Other Surface Water Supplies

Planned Withdrawal Source	Planned Project Name	Description	Status
North Branch Potomac River	Potomac River Water Treatment Plant	The Rawlings area along U.S. Route 220 is in need of water supply upgrades or replacement. One alternative is to withdraw water from the North Branch of the Potomac River for use in a Water Treatment Plant. This would provide reliable drinking water to customers and provide opportunities for bulk wholesaling in the future. The project could be designed in phases, beginning with a Raw Water Intake/Pump Station phase, followed by phases for construction of a base plant, a build-out area, and finally an ultimate plant layout.	The Allegany County Utilities Division is awaiting feedback from the Maryland Department of the Environment (MDE) regarding a recently submitted Water Appropriation Permit for permission for water withdrawal from the Potomac River. Design of this project will continue as more information is received from MDE regarding the status of the Water Appropriation Permit.

Section 3.08 Inventory of Existing Water Treatment Facilities

List of Owners	Water source	Type of treatment	Rated plant capacity (MGD)	Average Production (MGD)	Max. Peak Flow (MGD)	Storage Capacity (MGD)	Planned Expansion MGD/Dates	Method of Sludge Disposal	Operating Agency
Municipal									
City of Frostburg	Piney Dam Reservoir and Savage Pumping Station	Conventional	3.0	1.0	2.0	5.0	1.5 / 2030	drying beds	City of Frostburg
Rawlings Water Co.	Impoundment	Filter and Chlorination	0.03	0.06-0.07	0.085	0.3	n/a	sedimentation ponds	Rawlings Water Co.
Midlothian Water Co.	two wells	Green Sand Filters with KMnO ₄	0.1	0.026	0.058 (during leak)	0.03	n/a	Private Septic Company	Midlothian Water Co.
Town of Lonaconing	Jackson Run & 1 Well	Up Flow Clarifier w/ Mixed Media Filter (1)	0.144	0.075	0.1675	0.212	n/a	Sanitary Sewer	Miller Environmental Inc.
Town of Lonaconing	Koontz Run & 3 wells	Up Flow Clarifier w/ Mixed Media Filter (1)	0.144	0.075	0.1675	0.292	new 3 million gal. raw water tank	Sanitary Sewer	Miller Environmental Inc.
Town of Lonaconing	Elk Lick Run & two wells	Up Flow Clarifier w/ Mixed Media Filters (2)	0.288	0.15	0.335	0.5	new 500,000 gal. storage tank / 2013	Sanitary Sewer	Miller Environmental Inc.
City of Cumberland	Lakes Gordon and Koon	Conventional	15.0	7.944	12	Source- 3.4 billion gallons, Water Plant 1.8 MG, Tanks and Res. 7.8 MG max	n/a	land application	Evitts Creek Water Company
Town of Westernport	Savage River Reservoir	Filtration	1.0	0.5	1	1.05		Public Sewer System	Town of Westernport
LaVale Sanitary Commission	5 wells & 2 springs	Diatomaceous Earth Pressure Filtration	0.3	0.15	0.03	500,000 raw, 350,00 finished	n/a	Sanitary Sewer	LaVale Sanitary Commission

Information provided by water system operator

List of Owners	Water source	Type of treatment	Rated plant capacity (MGD)	Average Production (MGD)	Max. Peak Flow (MGD)	Storage Capacity (MGD)	Planned Expansion MGD/Dates	Method of Sludge Disposal	Operating Agency
Municipal/Industrial									
Luke Mill	North Branch Potomac River	Rapid Sand Filter	30.0	25.1	29.0	0.4	n/a	settling pond	Luke Paper Co.
Private Community									
Rocky Gap State Park	Lake Habeeb	Activated Carbon Filters (2), Diatomaceous Earth Filtration Units (2), lime-chlorine-slurry & clearwell	0.239	0.057	0.207	0.5	200,000 gpd WTP with expansion capability to 300,000 gpd / 2011	backwash lagoon	Maryland Environmental Service
Green Ridge Youth Center	2 wells	Green Sand Filters (2) & chemical feed for KMnO ₄ , pre-sodium hypochlorite & soda ash	0.063	0.0032	0.009	0.006	retrofit upgrades / as needed	below grade reservoirs	Maryland Environmental Service
Private Non-community									
Little Orleans Campground	Well A	UV Light	0.002	0.001	0.014	0	1,000 gpd / 2011	none	Little Orleans Campground
Little Orleans Campground	Well B	Green Sand Filters with KMnO ₄	0.002	0.001	0.014	0		none	Little Orleans Campground
Little Orleans Campground	Well C	UV Light	0.002	0.001	0.043	0		none	Little Orleans Campground

Information provided by water system operator

Section 3.09 Inventory of Water Problem Service Areas

Location	Population			Nature of Problem	Owner
	Served	Unserved	Total		
Charlestown Road (Upper)	2,000	50	2,050	Mine drainage in wells	Lonaconing Water Co.
Midland	750-900	50	800-950	Storage Needed, b/c if tower or mainline problem between Gilmore and Midland-Town of Midland is w/o water	Lonaconing Water Co.
Johns Lane / Ore Banks	100	100	200	No Water Service	LaVale Sanitary Commission
Town of Westernport	*300,000 GPD total flow			Water Supply and Distribution to Town of Luke - NewPage Mill	Town of Westernport
Town of Westernport				Poor Distribution System	Town of Westernport
Rocky Gap				WTP is obsolete, replacement recommended	Maryland Environmental Service
Rawlings				Turbidity, Bacteria, Poor Quality, Insufficient Quantity	Rawlings Water Co. / Allegany County Utilities Division
Mount Savage				Inadequate well supplying public service	Mount Savage Water Company
Bedford Road				Pressure	Private Water Companies
Flintstone				Increased number of business and private wells under direct influence of groundwater	
Harwood Subdivision - Vale Summit				Poor well water quality/quantity	

Section 3.10 Projected Water Supply Demands and Planned Capacity

Service Area	2010					
	Pop.			GPCD	Cap. (MGD)	
	Total	Served	Unserved	gallons	Existing Capacity	demand
Barrelville	54	54		99.1	0.005	0.005
Bob Candy	9	9		110.1	0.001	0.001
Broadwater Addition	27	27		99.1	0.003	0.003
Bowling Green	2,161	2,161		85.1	0.200	0.184
Bowmans Addition	375	375		36.3	0.020	0.014
City of Cumberland	28,188	28,188		165.3	4.800	4.660
Corriganville/Ellerslie	1,643	1,643		58.8	0.100	0.097
Cresaptown	1,846	1,846		124.8	0.250	0.230
LaVale	5,811	5,711	100	103.2	0.625	0.600
Mexico Farms	338	338		68.0	0.044	0.023
Oldtown Road	799	799		40.9	0.040	0.033
Pinto	2,540	2,540		51.2	0.150	0.130
Georges Creek	5,650	5,550	100	53.1	0.576	0.300
McCoole	785	785		79.1	0.080	0.062
Luke Mill - Town of Luke	68	68		100.0	0.007	0.007
Martins Mountain	34	34		99.9	0.003	0.003
Midlothian	300	300		86.7	0.100	0.026
Mount Savage	511	511		99.9	0.080	0.051
Borden/Zihlman/Morantown	490	490		50.6	0.050	0.025
Carlos/Shaft/Klondike	792	792		60.5	0.070	0.048
Consol	157	157		51.1	0.010	0.008
Eckhart/Clarysville	1,389	1,389		54.2	0.100	0.075
Frostburg	7,569	7,569		104.9	1.600	0.794
Grahamtown	631	631		47.7	0.060	0.030
Hoffman	36	36		41.3	0.005	0.002
Route 36/Vale Summit	234	234		77.4	0.040	0.018
Rawlings	650	650		46.2	0.100	0.030
Reckley Springs	102	102		97.9	0.010	0.010
Rocky Gap Mobile Home Park	45	45		99.1	0.005	0.005
Franklin/Brophytown	161	161		118.0	0.050	0.019
Westernport	2,100	2,100		181.4	0.950	0.381
Green Ridge Boys Camp	40	40		80.0	0.063	0.003
Little Orleans Campground	200	200		15.0	0.006	0.003
Rocky Gap	820,000	820,000		0.1	0.239	0.057
Industrial						
Barton Business Park						0.0036
Mexico Farms (NBIP)	1570	1570				0.4200
Luke Mill						25.0932
Estimated						

		2020				
		Pop.		GPCD	Cap.	
Service Area	Total	Served	Unserved	gallons	demand	planned
Barrelville	55	55		100.0	0.005	0.005
Bob Candy	9	9		100.0	0.001	0.001
Broadwater Addition	27	27		100.0	0.003	0.003
Bowling Green	2,173	2,173		85.0	0.185	0.200
Bowmans Addition	377	377		40.0	0.015	0.015
City of Cumberland	28,340	28,340		165.0	4.676	4.800
Corriganville/Ellerslie	1,652	1,652		60.0	0.099	0.100
Cresaptown	1,855	1,855		125.0	0.232	0.250
LaVale	5,843	5,843		100.0	0.584	0.600
Mexico Farms	340	340		70.0	0.024	0.440
Oldtown Road	803	803		45.0	0.036	0.400
Pinto	2,554	2,554		55.0	0.140	0.150
Georges Creek	5,681	5,681		55.0	0.312	0.576
McCoole	790	790		80.0	0.063	0.080
Luke Mill - Town of Luke	68	68		100.0	0.007	0.007
Martins Mountain	34	34		100.0	0.003	0.003
Midlothian	302	302		90.0	0.027	0.100
Mount Savage	514	514		100.0	0.051	0.080
Borden/Zihlman/Morantown	493	493		55.0	0.027	0.050
Carlos/Shaft/Klondike	797	797		65.0	0.052	0.070
Consol	157	157		55.0	0.009	0.010
Eckhart/Clarysville	1,397	1,397		55.0	0.077	0.100
Frostburg	7,609	7,609		110.0	0.837	1.200
Grahamtown	634	634		50.0	0.032	0.060
Hoffman	37	37		45.0	0.002	0.005
Route 36/Vale Summit	235	235		80.0	0.019	0.040
Rawlings	654	654		50.0	0.033	0.100
Reckley Springs	103	103		100.0	0.010	0.010
Rocky Gap Mobile Home Park	46	46		100.0	0.005	0.005
Franklin/Brophytown	162	162		120.0	0.019	0.050
Westernport	2,111	2,111		180.0	0.380	0.950
Green Ridge Boys Camp	40	40		80.0	0.003	0.063
Little Orleans Campground	275	275		15.0	0.004	0.007
Rocky Gap	860,000	860,000				
Industrial						
Barton Business Park						0.0036
Mexico Farms (NBIP)	1,580	1,580				0.4200
Luke Mill						30.0000

	2030					
	Pop.			GPCD	Cap.	
Service Area	Total	Served	Unserved	gallons	demand	planned
Barrelville	55	55		100.0	0.006	0.005
Bob Candy	9	9		100.0	0.001	0.001
Broadwater Addition	28	28		100.0	0.003	0.003
Bowling Green	2,199	2,199		85.0	0.187	0.200
Bowmans Addition	381	381		40.0	0.015	0.015
City of Cumberland	28,680	28,680		165.0	4.732	4.800
Corriganville/Ellerslie	1,672	1,672		60.0	0.100	0.100
Cresaptown	1,878	1,878		125.0	0.235	0.250
LaVale	5,913	5,913		100.0	0.591	0.600
Mexico Farms	344	344		75.0	0.026	0.440
Oldtown Road	813	813		45.0	0.037	0.400
Pinto	2,584	2,584		55.0	0.142	0.150
Georges Creek	5,749	5,749		55.0	0.316	0.576
McCoole	799	799		80.0	0.064	0.080
Luke Mill - Town of Luke	69	69		100.0	0.007	0.007
Martins Mountain	35	35		100.0	0.003	0.003
Midlothian	305	305		90.0	0.027	0.100
Mount Savage	520	520		100.0	0.052	0.080
Borden/Zihlman/Morantown	499	499		55.0	0.027	0.050
Carlos/Shaft/Klondike	806	806		65.0	0.052	0.070
Consol	159	159		55.0	0.009	0.010
Eckhart/Clarysville	1,414	1,414		55.0	0.078	0.100
Frostburg	7,701	7,701		110.0	0.847	1.353
Grahamtown	642	642		50.0	0.032	0.060
Hoffman	37	37		45.0	0.002	0.005
Route 36/Vale Summit	238	238		80.0	0.019	0.040
Rawlings	661	661		50.0	0.033	0.100
Reckley Springs	104	104		100.0	0.010	0.010
Rocky Gap Mobile Home Park	46	46		100.0	0.005	0.005
Franklin/Brophytown	164	164		120.0	0.020	0.050
Westernport	2,137	2,137		180.0	0.385	0.950
Green Ridge Boys Camp	41	41		80.0	0.003	0.063
Little Orleans Campground	275	275		15.0		0.007
Rocky Gap	920,000	920,000				
Industrial						
Barton Business Park						0.0036
Mexico Farms (NBIP)	1,590	1,590				0.4200
Luke Mill						30.0000

		2040				
		Pop.		GPCD	Cap.	
Service Area	Total	Served	Unserved	gallons	demand	planned
Barrelville	57	57		100.0	0.006	0.005
Bob Candy	9	9		100.0	0.001	0.001
Broadwater Addition	28	28		100.0	0.003	0.003
Bowling Green	2,243	2,243		85.0	0.191	0.200
Bowmans Addition	389	389		40.0	0.016	0.016
City of Cumberland	29,254	29,254		165.0	4.827	4.800
Corriganville/Ellerslie	1,706	1,706		60.0	0.102	0.100
Cresaptown	1,915	1,915		125.0	0.239	0.250
LaVale	6,031	6,031		100.0	0.603	0.600
Mexico Farms	351	351		80.0	0.028	0.440
Oldtown Road	829	829		45.0	0.037	0.400
Pinto	2,636	2,636		55.0	0.145	0.150
Georges Creek	5,864	5,864		55.0	0.323	0.576
McCoole	815	815		80.0	0.065	0.080
Luke Mill - Town of Luke	71	71		100.0	0.007	0.007
Martins Mountain	35	35		100.0	0.004	0.003
Midlothian	311	311		90.0	0.028	0.100
Mount Savage	530	530		100.0	0.053	0.080
Borden/Zihlman/Morantown	509	509		55.0	0.028	0.050
Carlos/Shaft/Klondike	822	822		65.0	0.053	0.070
Consol	163	163		55.0	0.009	0.010
Eckhart/Clarysville	1,442	1,442		55.0	0.079	0.100
Frostburg	7,855	7,855		110.0	0.864	1.400
Grahamtown	655	655		50.0	0.033	0.060
Hoffman	38	38		45.0	0.002	0.005
Route 36/Vale Summit	243	243		80.0	0.019	0.040
Rawlings	675	675		50.0	0.034	0.100
Reckley Springs	106	106		100.0	0.011	0.010
Rocky Gap Mobile Home Park	47	47		100.0	0.005	0.005
Franklin/Brophytown	167	167		120.0	0.020	0.050
Westernport	2,179	2,179		180.0	0.392	0.950
Green Ridge Boys Camp	42	42		80.0	0.003	0.063
Little Orleans Campground	275	275		15.0	0.004	0.007
Rocky Gap	1,000,000	1,000,000				
Industrial						
Barton Business Park						0.0036
Mexico Farms (NBIP)	1,600	1,600				0.4200
Luke Mill						30.0000

Section 3.11 Immediate, 5, and 10-year priorities for Water Development

Project Locations: Figure 48

Proj. No.	Project Area	County Priority Assigned	Description	Cost (in thousands)			Project Status/Const. Start	
				Total	Federal and/or State	Local	Immediate Priority Projects	5 & 10 yr. period projects
1	Allegany County	W-2	Bowmans Addition Water - PH 2	3225	3225	0	X	
2	Allegany County	W-2	Mt. Savage Water Distribution System	7000	7000	0	X	
3	Allegany County	W-2	Shades Lane Water	300	300	0	(0-5 years)	
4	Allegany County	W-2	Cresaptown Water System Improvements	1850.4	1850.4	0	X	
5	Allegany County	W-2	Potomac River Water Trmt. Plant Study	148	15	133	X	
6	Rawlings	W-2	Rawlings Water Study	33	25	0	X	
7	Westernport	W-2	NewPage Mill - Town of Luke Waterline	3000	2100	600	X	
8	LaVale	W-2	LaVale System Rehab and Extension	0	0	0	X	
9	Georges Creek	W-2	Koontz Run Raw Water Tank	4200	0	0	X	
10	Frostburg	W-2	Savage Raw Water Improvements & Energy Conservation	892	792	100	X	
11	Allegany County	W-2	County Water and Sewer Study (county-wide)	219.6	100	86.7	X	
12	Georges Creek	W-2	0.5 MGD Water Storage Tank	1500	1500	0	X	
13	LaVale	W-2	Water Tank Replacement Projects and Distribution Upgrade	0	0	0	X	
14	Georges Creek	W-2	Water Station Run Road Waterline Extension	0	0	0	X	
15	Georges Creek	W-2	Potomac Hollow Road Waterline Extension	0	0	0	X	
16	Georges Creek	W-2	Lonaconing Maintenance Garage	0	0	0	X	
17	Allegany County	W-2	Bowling Green Water Improvements	0	0	0	X	

Project Locations: Figure 48

Proj. No.	Project Area	County Priority Assigned	Description	Cost (in thousands)			Project Status/Const. Start	
				Total	Federal and/or State	Local	Immediate Priority Projects	5 & 10 yr. period projects
18	Allegany County	W-2	McCoole Water Meter Replacement	0	0	0	X	
19	Westernport	W-2	Westernport Water Distribution System Replacement - Phase II	0	0	0	X	
20	Cumberland	W-2, W-3	Chlorine Handling system improvements	950	950	42	X	
21	Frostburg	W-3	Raw Water Supply Impoundment at WTP Rehab/Improvement	250	200	50	X	
22	Allegany County	W-3	Cresaptown Distribution Upgrades	0	0	0	X	
23	Allegany County	W-3	Vale Summit Water Storage Tank	500	490	10	X	
24	Rawlings	W-3	Rawlings Water System Improvements	0	0	0	X	
25	Georges Creek	W-3	Upper Charlestown Road Line & Tank Project	0	0	0	X	
26	Cumberland	W-3	Fort Hill Reservoir valve replacement	0	0	0	X	
27	Cumberland	W-3	36" Main upgrade	11405	11405	0	X	
28	Cumberland	W-3	North End system and pipe upgrades	0	0	0	X	
29	Allegany County	W-3	Bowling Green Distribution Upgrades	0	0	0		
30	Cumberland	W-3	City wide system rehab & extension (city-wide)	0	0	0	X	X
31	Allegany County	W-3	Creek Road Water	0	0	0		X
32	Cumberland	W-3-5	Water Filtration Plant Rehabilitation/Improvements (Blanketed coverage for projects regulatory/safety related)	0	0	0	X	X
33	Allegany County	W-4	Potomac River Water Treatment Plant	9944	9944	0		X
34	Allegany County	W-4	Bedford Road Water Project	0	0	0		X
35	Allegany County	W-4	Distribution System - Route 36 North between Mt. Savage and Barrelville	0	0	0		X

Project Locations: Figure 48

Proj. No.	Project Area	County Priority Assigned	Description	Cost (in thousands)			Project Status/Const. Start	
				Total	Federal and/or State	Local	Immediate Priority Projects	5 & 10 yr. period projects
36	Frostburg	W-4	Distribution System - Braddock Estates to Welsh Hill to Cherry Lane	0	0	0		X
37	Cumberland	W-4	Filtration plant raw water intake replacement	1270	1270	0		X
38	Cumberland	W-4	Filtration plant dam bar screens replacement/upgrade	645	645	0		X
39	Cumberland	W-4	West End system and pipe upgrades	500	500	0	X	
40	Cumberland	W-4	Asbestos/concrete pipe replacement (city-wide)	0	0	0	X	
41	Cumberland	W-4	Water valves/water line rehabilitations (city-wide)	0	0	0		X
42	Cumberland	W-4	Meter improvements/Change-out for water system (residential/Industrial - including water companies) (city-wide)	0	0	0	X	
43	Cumberland	W-4, W-5	Source water protection projects	3275	3275	50	X	X
44	Cumberland	W-5	Water Filtration Plant outfall re-design/relocation	0	0	0		X
45	Cumberland	W-5	Filtration Plant standby backwash pump/elevated tank	814	814	32		X
46	Cumberland	W-5	Fort Hill Reservoir replacement or rehabilitation	0	0	0		X
47	Cumberland	W-5	Haystack tank replacement	1200	1200	0		X
48	Cumberland	W-5	South End system and pipe upgrades	0	0	0		X
49	Cumberland	W-5	McNamee area water system and tank upgrade	400	400	0		X
50	Cumberland	W-5	Seneca area supply upgrades/replacement	1028	1028	0		X
51	Cumberland	W-5	Willowbrook Road corridor water system expansion	0	0	0		X
52	Frostburg	W-5	Water Distribution System Hydraulic Loop Extension	0	0	0		X

Project Locations: Figure 48

Proj. No.	Project Area	County Priority Assigned	Description	Cost (in thousands)			Project Status/Const. Start	
				Total	Federal and/or State	Local	Immediate Priority Projects	5 & 10 yr. period projects
53	Allegany County	W-5	Baltimore Pike Water Service	0	0	0		X
54	Allegany County	W-5	Harwood/Vale Summit Water Service	0	0	0		
55	Allegany County	W-5	Flintston Water Supply and Distribution	0	0	0		X
56	Cumberland	W-5	Disinfection By-Product system upgrade (city-wide)	0	0	0		X
57	Cumberland	W-5	North End Tank Replacement	0	0	0		X
58	Frostburg	W-5	Secondary Hydro Package Plant at Water Treatment Plant	0	0	0		X

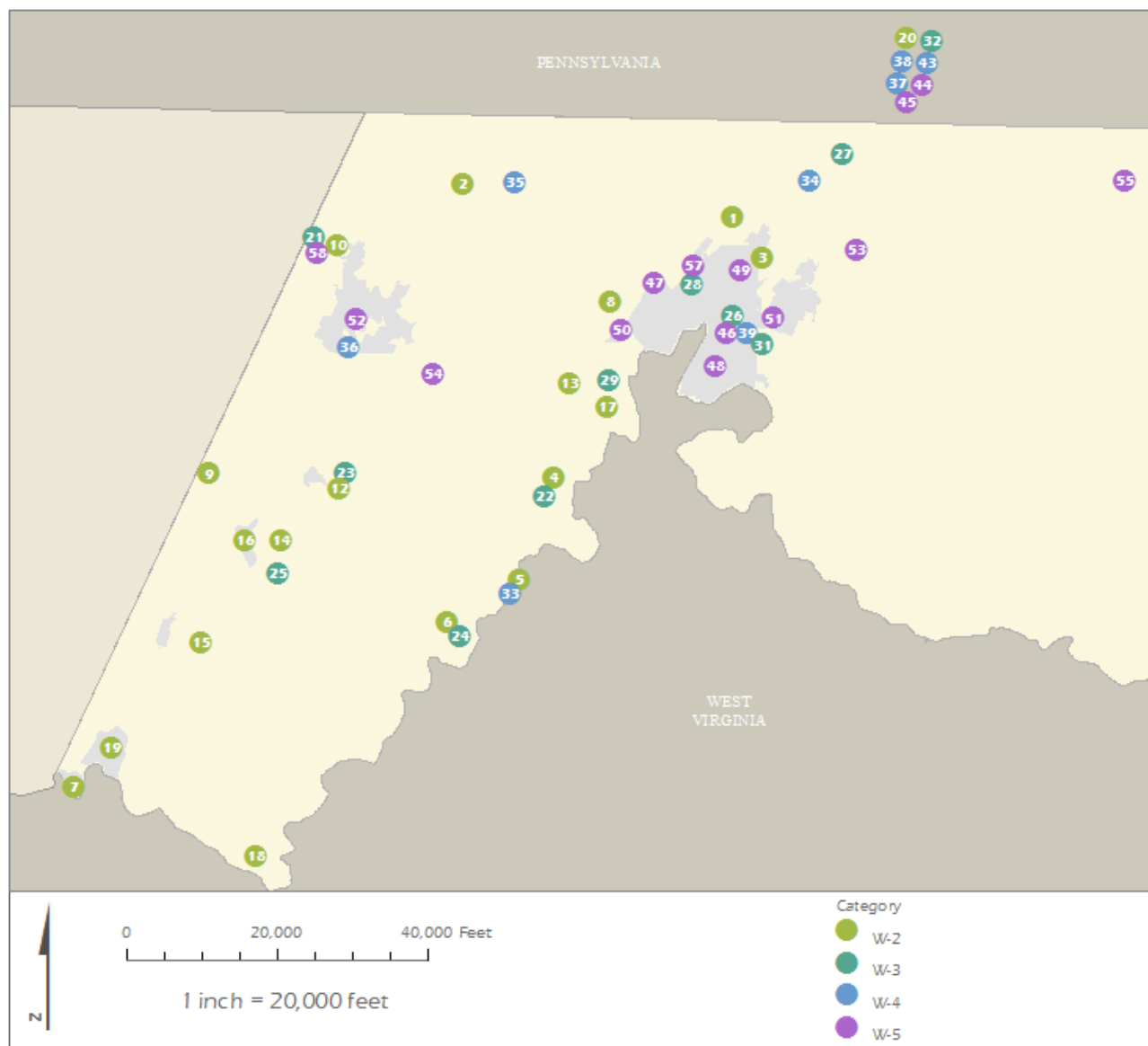


Figure 48. Planned County Water Projects

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Chapter IV Sewerage Systems

Allegany County is proud to serve approximately 87% of its residents with public sewer service. The sewer service areas are shown in Figure 49. The sewerage systems are operated by businesses, private organizations and various public agencies, including the Allegany County Department of Public Works. There are both community and multi-use sewerage systems in Allegany County. Also, it is to be noted the service areas that are operated by Allegany County Department of Public Works are synonymous with the Allegany County Sanitary Districts.

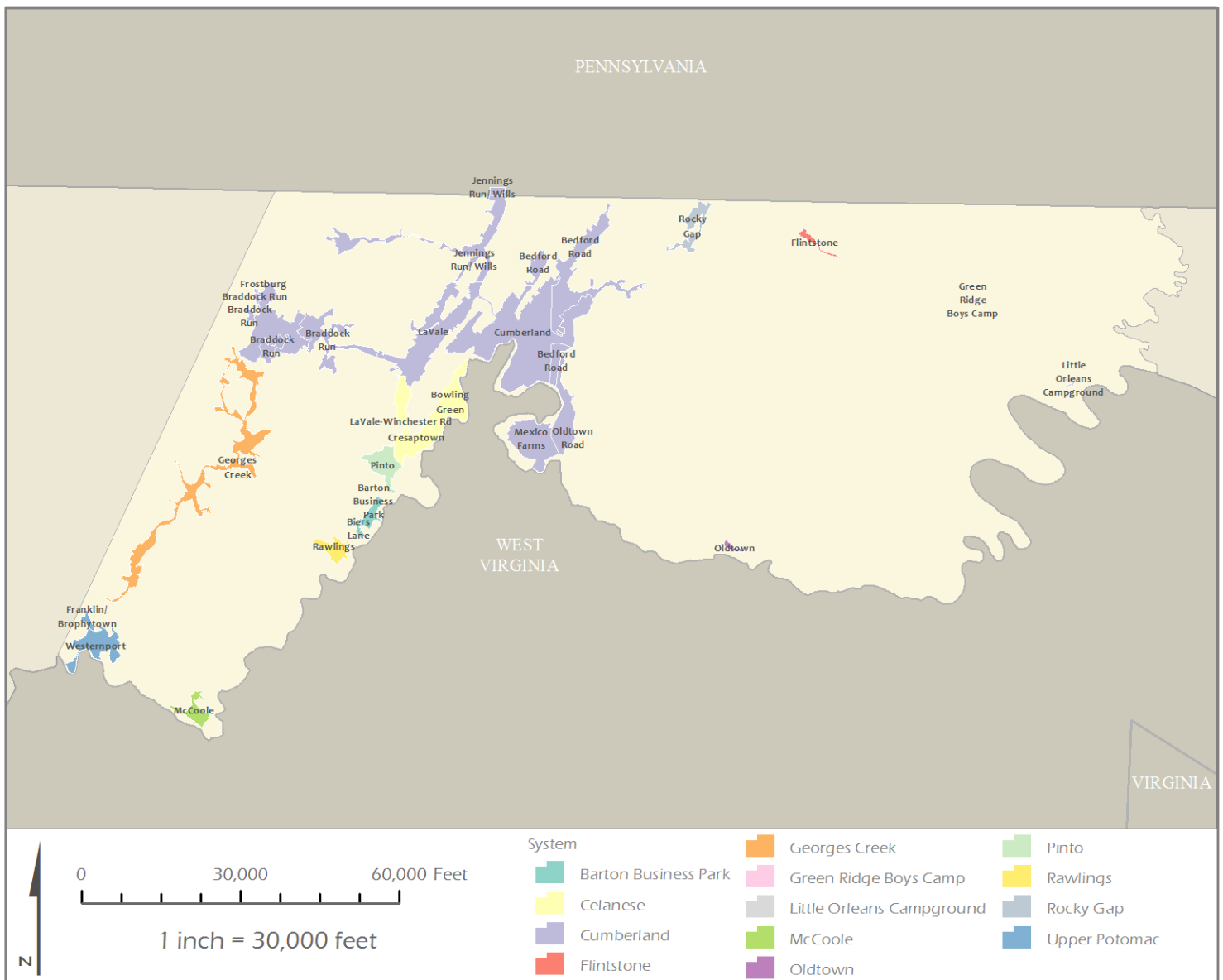


Figure 49. Sewer Service Areas

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Section 4.01 Community Sewerage Systems

There are ten community sewerage systems in Allegany County. Each system is served by one wastewater treatment facility. The systems are publicly, privately, or business owned and treat both sewage and liquid industrial wastes. Each system is comprised of one or more service areas, which are defined by disparate geography, ownership, or both. These service areas are described in detail in the following sub-sections. Additional details regarding infrastructure assets can be found in tabular form in Sections 4.03 through 4.10.

The topography of Allegany County provides for a unique arrangement of sewerage systems. In some of the systems, wastewater may flow as many as 18 miles before entering its respective system's wastewater treatment plant. All effluent from the WWTP's eventually flows into the North Branch of the Potomac River, a tributary of the Chesapeake Bay. For example, wastewater in the Frostburg area travels through the Braddock Run service area to LaVale and then follows the LaVale system to the City of Cumberland system to be treated at the Cumberland Wastewater Treatment Plant (approximately 15 miles away). Sewage from areas located south of Frostburg gravity flows through the Georges Creek Valley for treatment at the Georges Creek WWTP. All sewerage systems in Allegany County are shown in Figure 49.

At this time, Allegany County Department of Public Works staff are evaluating the feasibility of constructing a wastewater treatment plant in the Locust Grove area northwest of Cumberland at the confluence of Wills Creek and Braddock Run. Flows received from the City of Frostburg, LaVale, the Braddock Run Sanitary District, and the Jennings Run/Wills Creek Sanitary District would be treated at this facility and no longer be transported to the City of Cumberland's WWTP. For the time being, County staff wishes to make known that this project is being evaluated internally for its feasibility. Further amendments to the Allegany County Water & Sewerage Plan will be made at such time if/when more formal details become available.

4.01.01 Cumberland System

The Cumberland sewer system is served by the Cumberland Wastewater Treatment Plant (Cumberland WWTP), which is owned and operated by the City of Cumberland. The Cumberland WWTP is designed to treat an average of 15 MGD, and a peak flow of 30 MGD. The actual dry weather flow average is 8.4 MGD and the all-weather flow average is 12.8 MGD. The maximum flow was 38.95 MGD and occurred on April 21, 2008. At the present time, average plant capacity is anticipated to remain the same: 15 MGD for the next 30 years. The plant currently is designed for Biological Nutrient Removal (BNR). In accordance with Bay Restoration Legislation, the Cumberland plant is being upgraded to Enhanced Nutrient Removal (ENR). The costs of these and other improvements have been, and will be funded, by the Bay Restoration Fund and the American Recovery and Reinvestment Act.

The City of Cumberland is under a consent order from the Maryland Department of the Environment to resolve issues associated with Combined Sewer Overflows (CSO). The City of Cumberland is planning to construct WWTP CSO storage facilities/tanks to negate the effect of a combined sewer system in storm events. The facility will hold excess stormwater until treatment capacity is available at the Cumberland WWTP, thereby significantly reducing the quantity of untreated wastewater entering the North Branch Potomac River. The current location of discharge for the Cumberland WWTP is the North Branch of the Potomac, as shown in Figure 50. There are no new proposed points of discharge.

A pelletizer was permitted and started production of Class A pelletized biosolids in October 2010. The disposal/distribution will be conducted by New England Fertilizer Company (NEFCO). Bulk distribution will be used for the biosolids for purposes such as land application, fertilizer blenders, and/or energy/alternative fuel.

In total, the Cumberland WWTP serves approximately 40,000 residents in Maryland with public sewer service. In addition to the residents of Allegany County, the Cumberland WWTP also serves the communities of Ridgeley, Carpendale, and Wiley Ford, West Virginia and Londonderry Township in Pennsylvania.

4.01.01.01 City of Cumberland Service Area

The City of Cumberland serves all of its residents with public sewer, approximately 20,000 people, in addition to a few residences and the Finan Center, which are located outside of the municipal boundary (Figure 50). The system is a combined sewer and is subject to a consent order issued by the Maryland Department of the Environment (MDE). The City of Cumberland plans to expand capacity of pipes and build storage capacity for stormwater events, rather than separate the stormwater and sewer systems. This has been determined to be a cost effective solution for the City.

Due to the age of the City's infrastructure, many of the sewer lines are deteriorating and are in need of replacement. Several pipe replacements and upgrades are planned for the next ten years. These improvements will be funded through the City of Cumberland, the Bay Restoration Fund, the American Recovery and Reinvestment Act, MDE grants and loans, and EPA or other federal resources when available. Project specific details are available in Sections 4.04 and 4.09.

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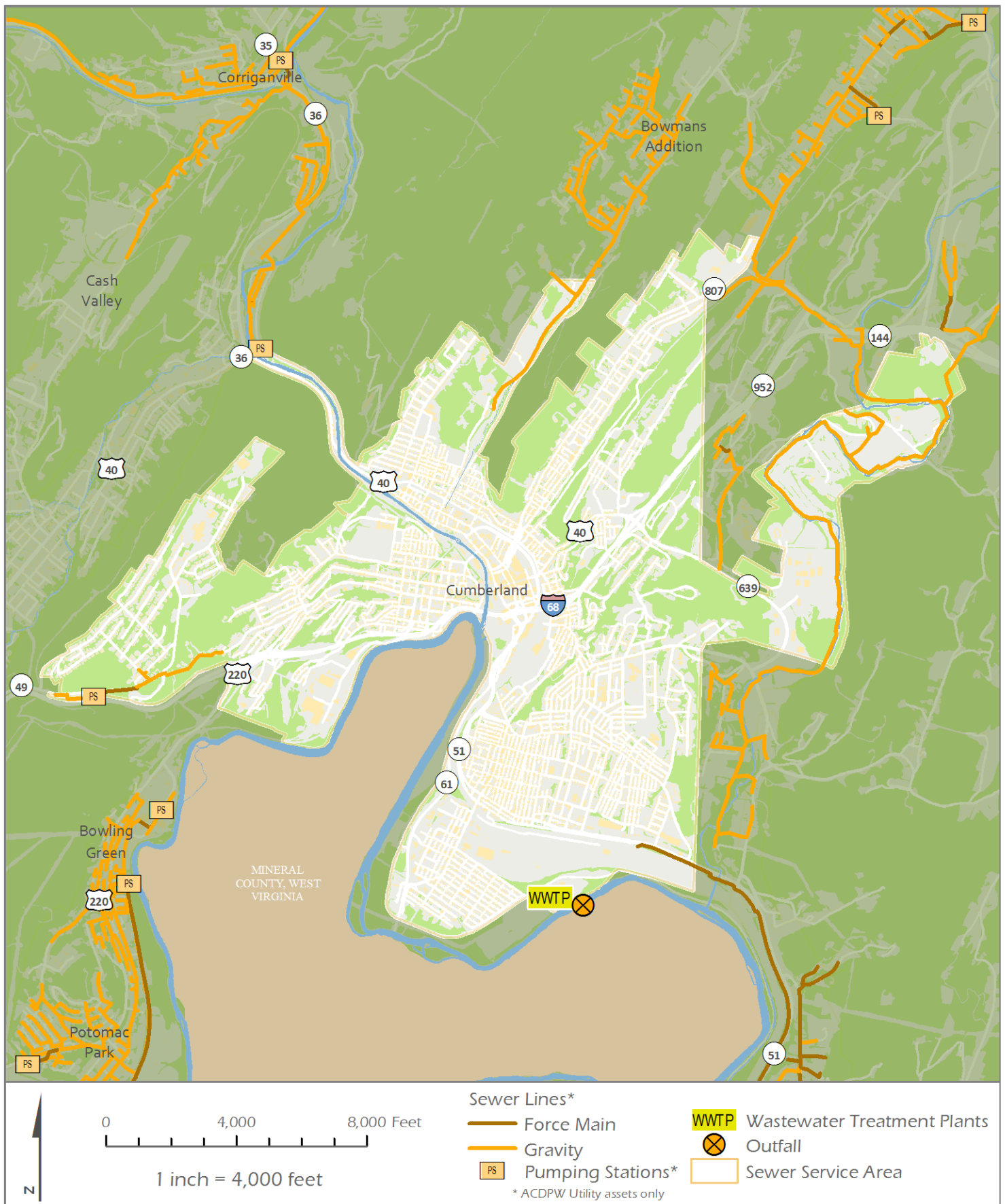


Figure 50. Cumberland Sewer Service Area

4.01.01.02 LaVale Service Area

The LaVale sewer service area serves approximately 2,180 customers, and is shown in Figure 51. The system is operated by the LaVale Sanitary Commission. The LaVale sewer service area conveys wastewater not only from customers within the service area, but also from the Braddock Run, Jennings Run, and Frostburg service areas. Therefore, the service area has a design average flow of 2.5 MGD and design peak flow of 8.8 MGD. The system is a combined system and is also under a MDE consent order. The CSO outfalls are located on Braddock Run.

The transmission pipes are generally in poor condition. The LaVale Sanitary Commission will use American Reinvestment and Recovery Act funding in addition to MDE/USDA grants and loans to finance improvements to the transmission infrastructure. Project specific details are available in Sections 4.04 and 4.09.

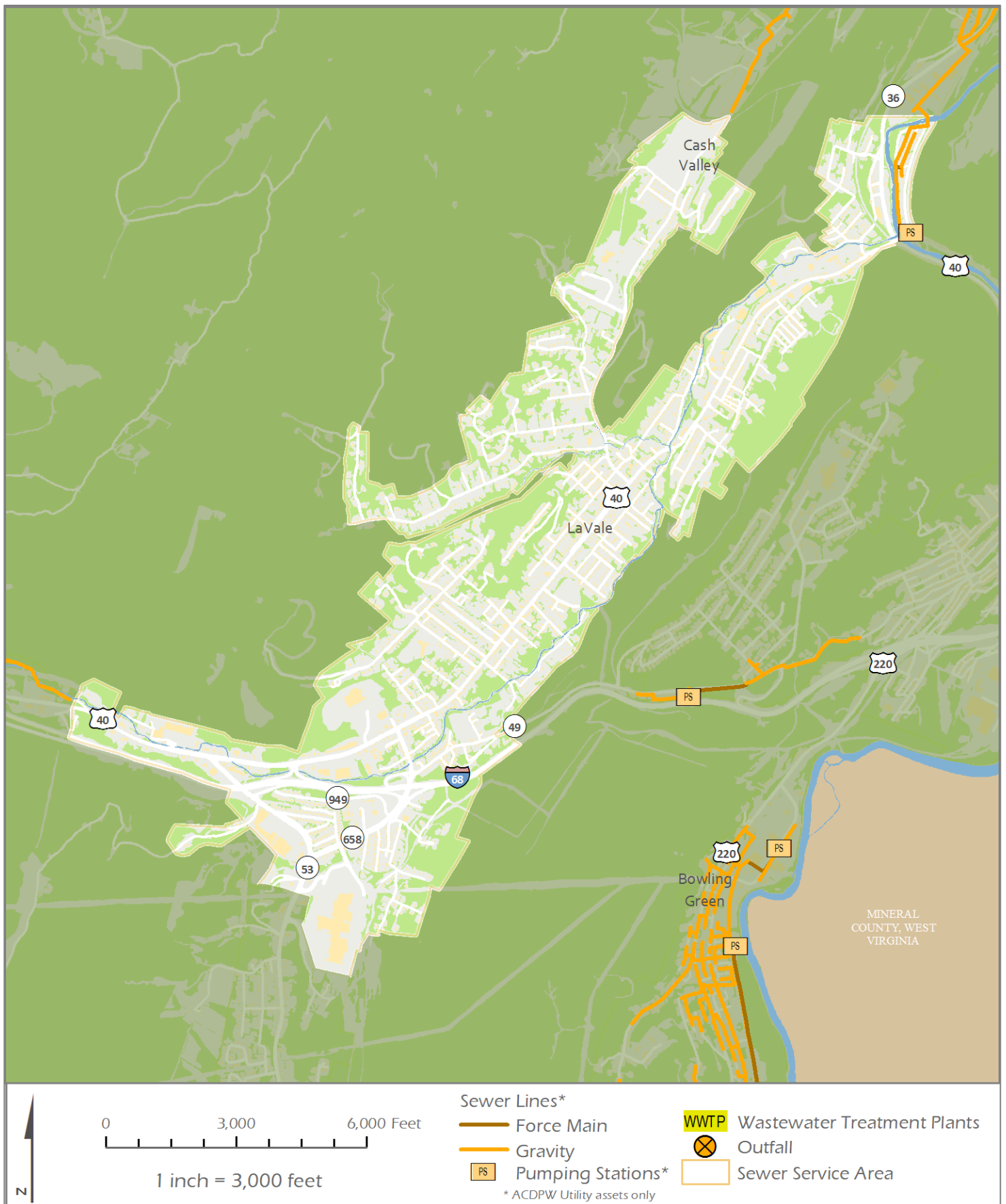


Figure 51. LaVale Sewer Service Area

4.01.01.03 Frostburg Service Area

The Frostburg sewer service area is operated by the City of Frostburg and serves a population of approximately 9,000, which includes Frostburg State University. The service area is mapped in Figure 52. The service area has a design average (dry weather) flow of 1 MGD. The operation and maintenance cost for the collection system is \$1,200,000. In general, the condition of the transmission pipes is fair.

The service area is a combined system and the City of Frostburg is currently under a consent order issued by MDE for CSO elimination. In 2003, the City of Frostburg has started the process of separating the stormwater from sanitary sewer and continues to do so. The funding sources for these improvements are loans, grants, and city fee rates and surcharges. This project is planned to be completed by 2023.

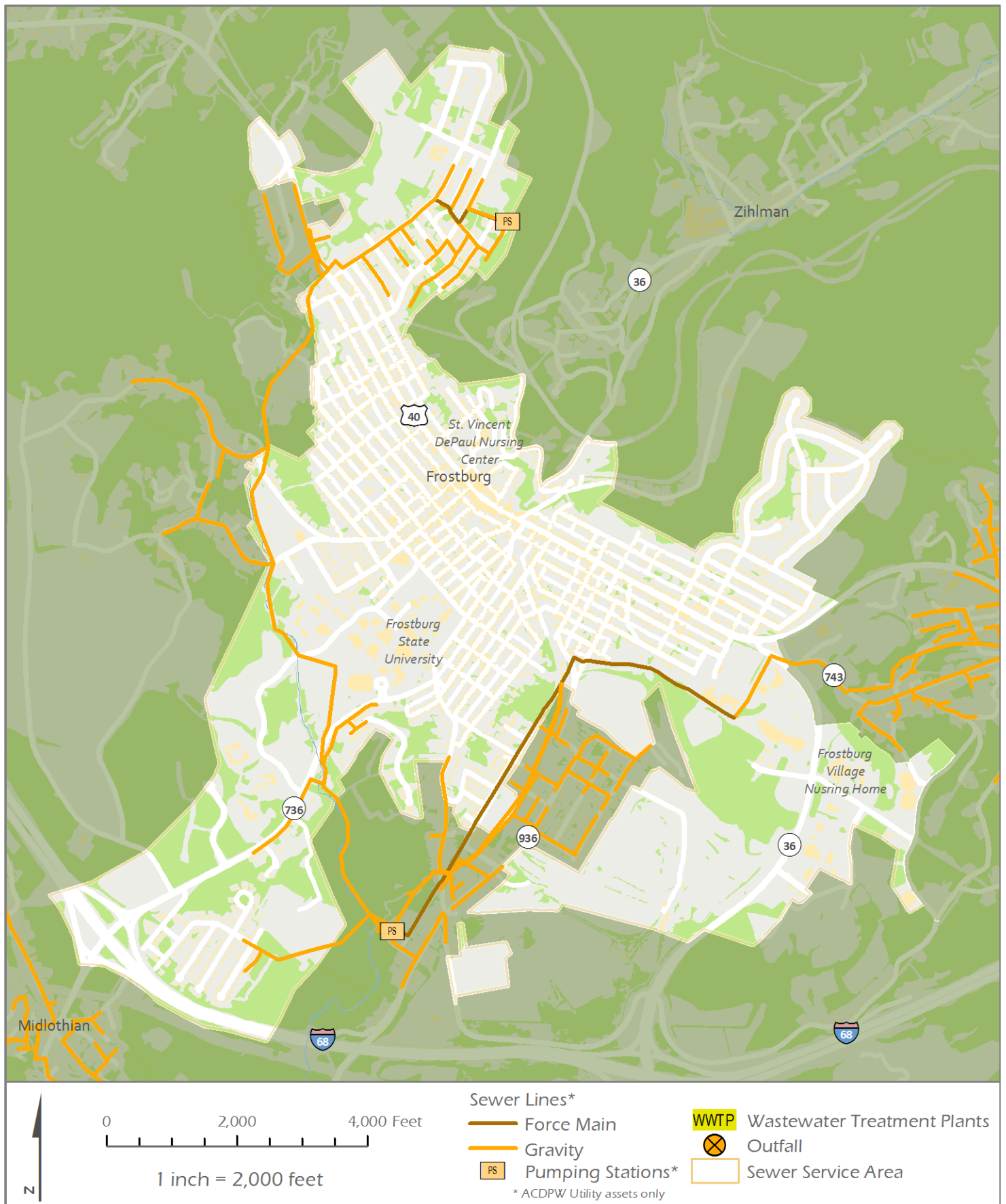


Figure 52. Frostburg Sewer Service Area

4.01.01.04 Jennings Run/Wills Creek Service Area

The Jennings Run/Wills Creek sewer service area serves approximately 1,230 customers and is operated by the Allegany County Utilities Division. The Jennings Run section of the service area is located along Jennings Run, which roughly parallels MD Route 36 from Mount Savage to Corriganville where it confluences with Wills Creek. The Wills Creek section of the service area is located along Wills Creek, which roughly parallels MD Route 35 and runs from Ellerslie south towards Cumberland. The service area terminates where it meets the Cumberland service area (Figure 53). Wastewater is treated by the City of Cumberland's Wastewater Treatment Plant in the manner described in Section 4.01.01. Operation and maintenance costs for the Jennings Run/Wills Creek service area are \$76/quarter. There is also an ad valorem rate of \$0.052 per \$100 of assessed property value and front footage fees of \$0.15/foot of frontage for debt payment. Cash Valley Road area customers are charged an ad valorem rate of \$0.186/\$100 assessed value to pay system debt costs.

Transmission mains in the service area are generally in poor condition. The service area (along with the Bedford Road service area) is under consent order from the Maryland Department of the Environment to undertake studies to make repairs to transmission mains to reduce sanitary sewer overflows (SSO) into Jennings Run and Wills Creek. The Allegany County Utilities Division has received grant and loan funding from United States Department of Agriculture – Rural Development for sewer rehabilitation within the Mount Savage portion of the service area. The Mount Savage area was selected because of its high priority for repair work as a result of a Sanitary Sewer Evaluation Study (SSES) performed in 2009 by consulting firm Stearns & Wheeler GHD. The sewer rehabilitation project will be constructed concurrent with the Mount Savage Water Distribution Project in an effort to avoid unnecessary disturbance to Allegany County roads. Total collection system repairs are estimated at \$30 to \$40 million. Design for the replacement of the Corriganville Pump Station is also underway. More information about this project can be seen on project sheet DPW-S-7 as part of the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

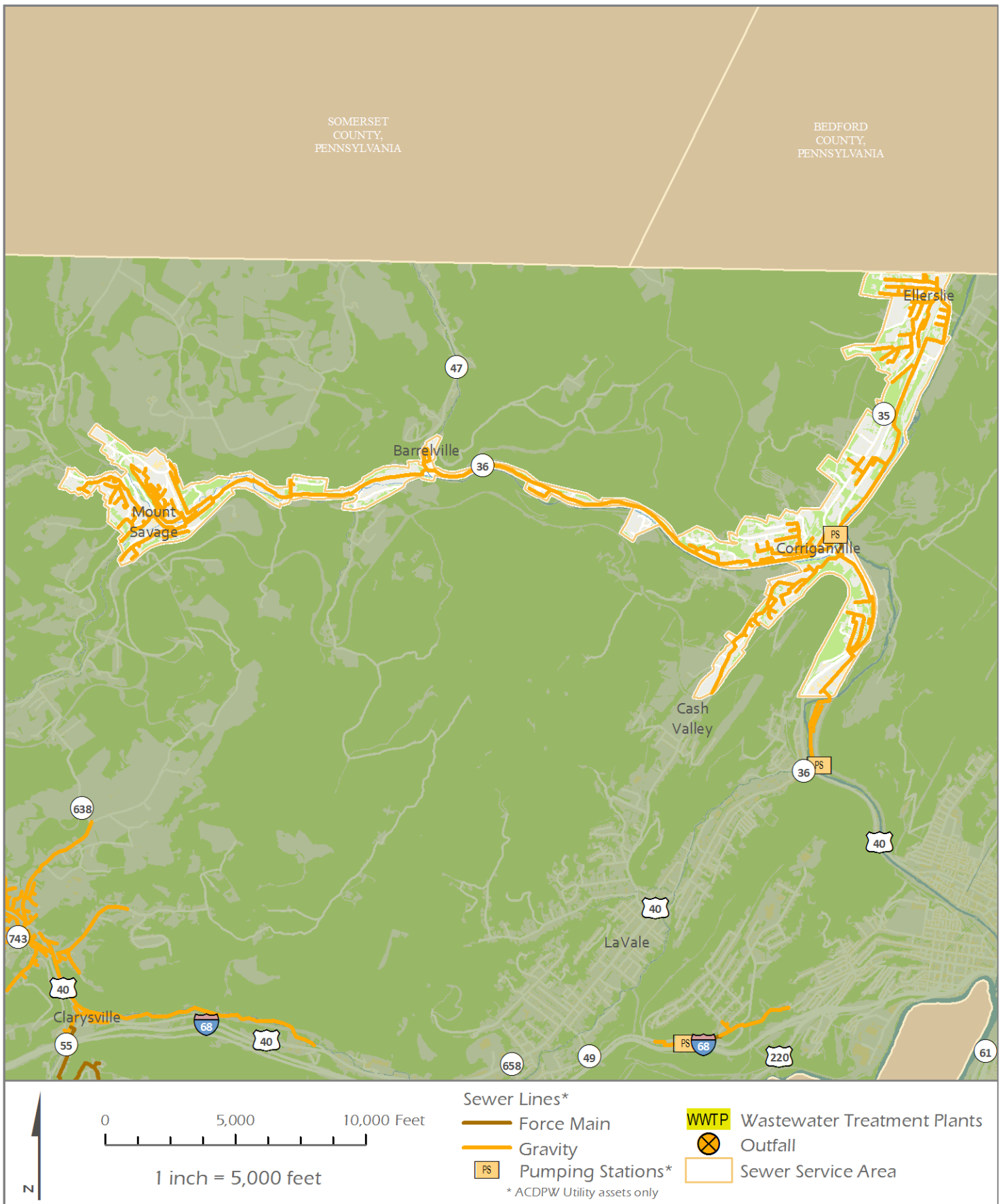


Figure 53. Jennings Run/Wills Creek Sewer Service Area

4.01.01.05 Bedford Road Service Area

The Bedford Road sewer service area serves approximately 1,300 customers and is operated by the Allegany County Utilities Division. The service area is located north of Cumberland along Bedford Road (Old U.S. Route 220). There are two smaller, additional portions of this service area located to the west and south of the larger Bedford Road sewer service area (Figure 54). Wastewater is treated by the City of Cumberland in the manner described in Section 4.01.01. Operation and maintenance costs for the Bedford Road service area are \$76/quarter plus an ad valorem rate of \$0.10 per \$100 of assessed property value to pay system debt costs.

Transmission mains in the service area are generally in poor condition. The service area (along with the Jennings Run/Wills Creek service area) is under consent order from the Maryland Department of the Environment to undertake studies to make repairs to transmission mains to reduce sanitary sewer overflows (SSO) into Evitts Creek. The Allegany County Utilities Division has received grant and loan funding from United States Department of Agriculture – Rural Development for sewer rehabilitation within the Ioka Drive Pumping Station area of the overall service area. The Ioka Drive area was selected because of its high priority for repair work as a result of a Sanitary Sewer Evaluation Study (SSES) performed in 2009 by consulting firm Stearns & Wheeler GHD. The sewer rehabilitation project will consist of the replacement of the existing gravity sewer system and pumping station and with a low-pressure gravity sewer system for approximately 70 homes. Total collection system repairs are estimated at \$30 to \$40 million. More information about this project can be seen on project sheet DPW-S-2 as part of the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

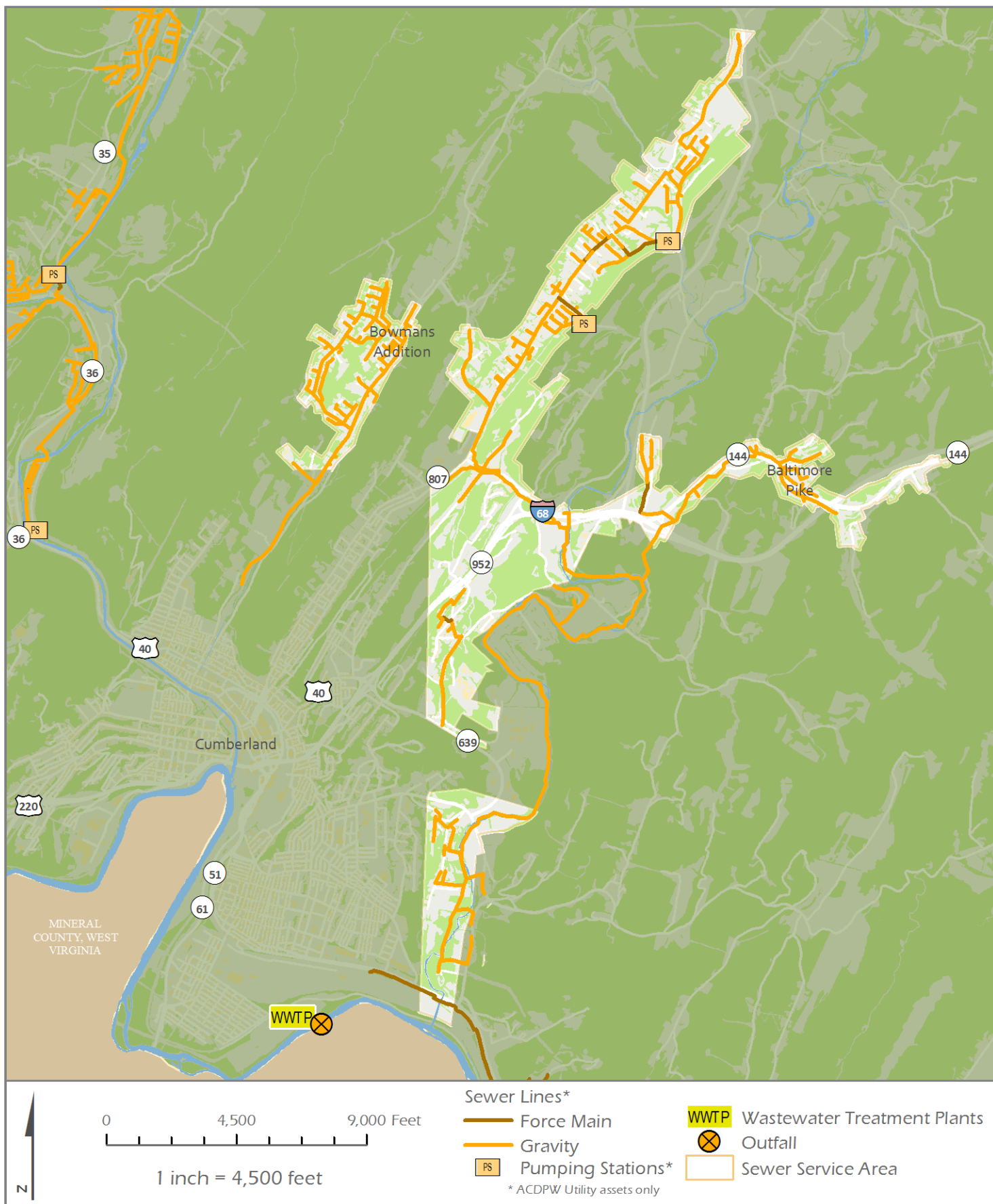


Figure 54. Bedford Road Sewer Service Area

4.01.01.06 Oldtown Road Service Area

The Oldtown Road sewer service area serves approximately 300 customers and is operated by the Allegany County Utilities Division. The service area is located southeast of Cumberland along MD Route 51, as delineated in Figure 55. Wastewater is treated by the City of Cumberland in the manner described in Section 4.01.01. Operation and maintenance costs for the Oldtown Road service area are \$76/quarter plus an ad valorem rate of \$0.077 per \$100 of assessed property value to pay system debt costs.

Transmission mains in the service area are generally in good condition. No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.



Figure 55. Oldtown Road Sewer Service Area

4.01.01.07 Mexico Farms Service Area

The Mexico Farms sewer service area serves approximately 150 residential customers in addition to the businesses and Federal Correctional Institution located within the North Branch Industrial Park. The service area is located southeast of Cumberland along Mexico Farms Road (Figure 56) and is operated by the Allegany County Utilities Division. Wastewater is treated by the City of Cumberland in the manner described in Section 4.01.01. Operation and maintenance costs for the Mexico Farms service area are \$76/quarter plus an ad valorem rate of \$0.06 per \$100 of assessed property value to pay system debt costs.

Transmission mains in the service area are generally in good condition. No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.



Figure 56. Mexico Farms Sewer Service Area

4.01.01.08 Braddock Run Service Area

The Braddock Run sewer service area serves approximately 1,000 customers and is operated by the Allegany County Utilities Division. The service area is located east of Frostburg and follows MD Route 40. There are additional portions of the service area south of Frostburg (Grahamtown) and west of Frostburg (Consol) which are eventually pumped to the larger Braddock Run service area. Wastewater is treated by the City of Cumberland and treated in the manner described in Section 4.02.01. Operation and maintenance costs for the Braddock Run service area are \$76/quarter plus an ad valorem rate of \$0.007 per \$100 of assessed property value to pay system debt costs.

Transmission mains in the service area are generally in poor condition. There are improvement projects both currently ongoing and planned for the future. Currently under construction is the Braddock Run Interceptor project. This project consists of replacing or rehabilitating a 15" interceptor line from Eckhart (just east of Frostburg) to LaVale to reduce Sanitary Sewer Overflows (SSO) by eliminating infiltration in the system. Project costs are estimated at \$1,520,000, in which \$500,000 is funded through a grant from Maryland Department of the Environment and the remainder through a United States Department of Agriculture – Rural Development grant. More information about this project can be seen on project sheet DPW-S-1 as part of the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

Closed-circuit television (CCTV) monitoring was recently completed for three areas within the Braddock Run service area. Grahamtown, Consol, and Eckhart sewer line systems were inspected for defects. Possible repairs are being prioritized by Allegany County Utilities Division staff. Funding for the CCTV work was obtained through a Predevelopment Planning Grant (PPG) from United States Department of Agriculture – Rural Development. Based on recommendations made by Allegany County Utilities Division staff, a Preliminary Engineering Report, Environmental Report, and funding applications will be completed and applications for funding assistance for future Braddock Run sewer improvement projects will be submitted. More information about this project can be found on project sheets regarding the various CCTV locations as a part of the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

Another ongoing project entails improvements to the Wrights Crossing Pump Station (in the Grahamtown portion of the Braddock Run service area). Project components include operation improvement of the pump stations grit removal as well as elimination of one SSO. Total project cost is expected to be approximately \$1.35 million dollars. Approximately \$15,000 has been spent by Allegany County on the project, with the remaining funding to be covered through grants and loans from United States Department of Agriculture – Rural Development. More information about this project can be seen on project sheet DPW-S-16 as part of the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

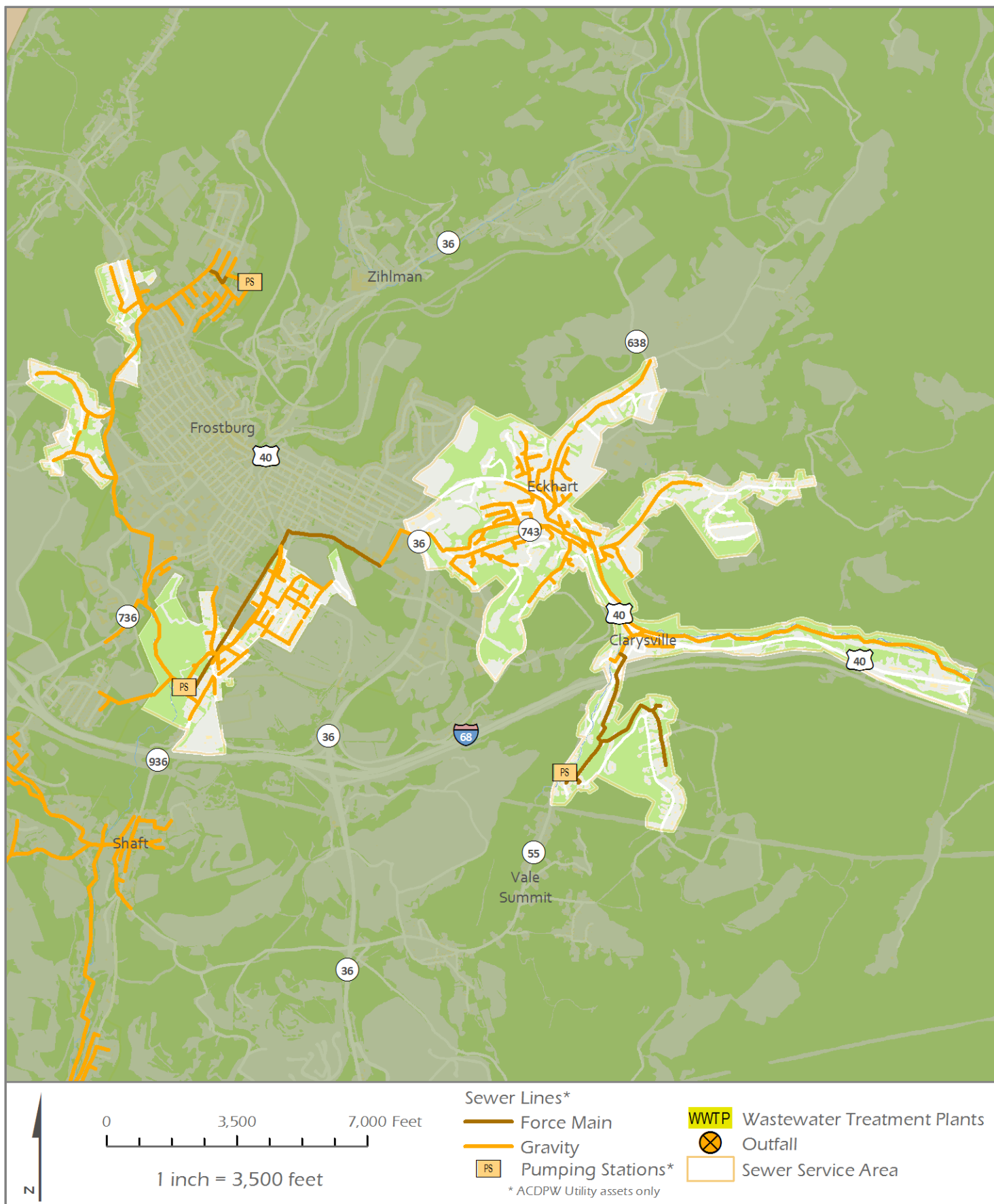


Figure 57. Braddock Run Sewer Service Area

4.01.02 Celanese System

The Celanese sewer system is served by the Celanese Wastewater Treatment Plant (WWTP), which is owned and operated by the Allegany County Utilities Division. The Celanese WWTP is designed to treat an average of 2.86 million gallons per day (MGD). The average daily flow for FY 2010 was 1.542 MGD with a peak daily flow of 3.291 MGD from January 2010. The plant is currently permitted at 2.0 MGD. This will ultimately increase to the design flow of 2.86 MGD. Also the 2.0 MGD permit flow provides the Allegany County Utilities Division with the option of receiving additional flows from ongoing construction at the Cumberland Chase development. The Rawlings Sewer System is currently being studied by the Allegany County Utilities Division for potential system improvements in the future. Flow from Rawlings could be received at the Celanese WWTP and the increase in plant capacity could accommodate the improvements.

Currently, the Celanese WWTP is designed for Biological Nutrient Removal and Enhanced Nutrient Removal (BNR/ENR). The plant's only planned improvement project is for a clarifier replacement. A new concrete clarifier is needed to replace a poorly-performing 20-year-old steel clarifier. An estimated project cost of \$1,500,000 will be split evenly between grants from Maryland Department of the Environment and United States Department of Agriculture – Rural Development. More information about this project can be found on project sheet DPW-S-14 as part of the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

The current location of discharge for the Celanese WWTP is the Lower North Branch of the Potomac River. There are no new proposed points of discharge. Sludge disposal is accomplished through a process of aerobic digestion, onsite cleansing and dewatering by belt filter press, and transport to the Mountainview Landfill south of Frostburg on Maryland Route 36. The Celanese WWTP serves approximately 2,000 customers with public sewer service. Contributing service areas include Bowling Green, Cresaptown, and LaVale-Winchester Road. The Celanese WWTP also received wastewater from the North Branch Correctional Institution and the Western Correctional Institution through a direct line from the facilities to the plant.

4.01.02.01 Bowling Green Service Area

The Bowling Green sewer service area serves approximately 930 customers and is operated by the Allegany County Utilities Division. The service area is located southwest of Cumberland along U.S. Route 220, as mapped in Figure 58. Wastewater is treated by the Allegany County Utilities Division at the Celanese Wastewater Treatment Plant in the manner described in Section 4.02.02. Operation and maintenance costs for the Bowling Green service area are 75% of a customer's water bill plus a County surcharge of \$7.25/quarter plus an ad valorem rate of \$0.29 per \$100 of assessed property value to pay system debt costs.

Transmission mains in the service area are generally in poor condition. This collection system is under a consent order with MDE to reduced system SSO's. System investigations and rehabilitation/replacement projects will continue as necessary. More information about this project can be seen on project sheet DPW-S-10 as part of the Allegany County Capital Improvement Program for FY 2011 through FY 2015.

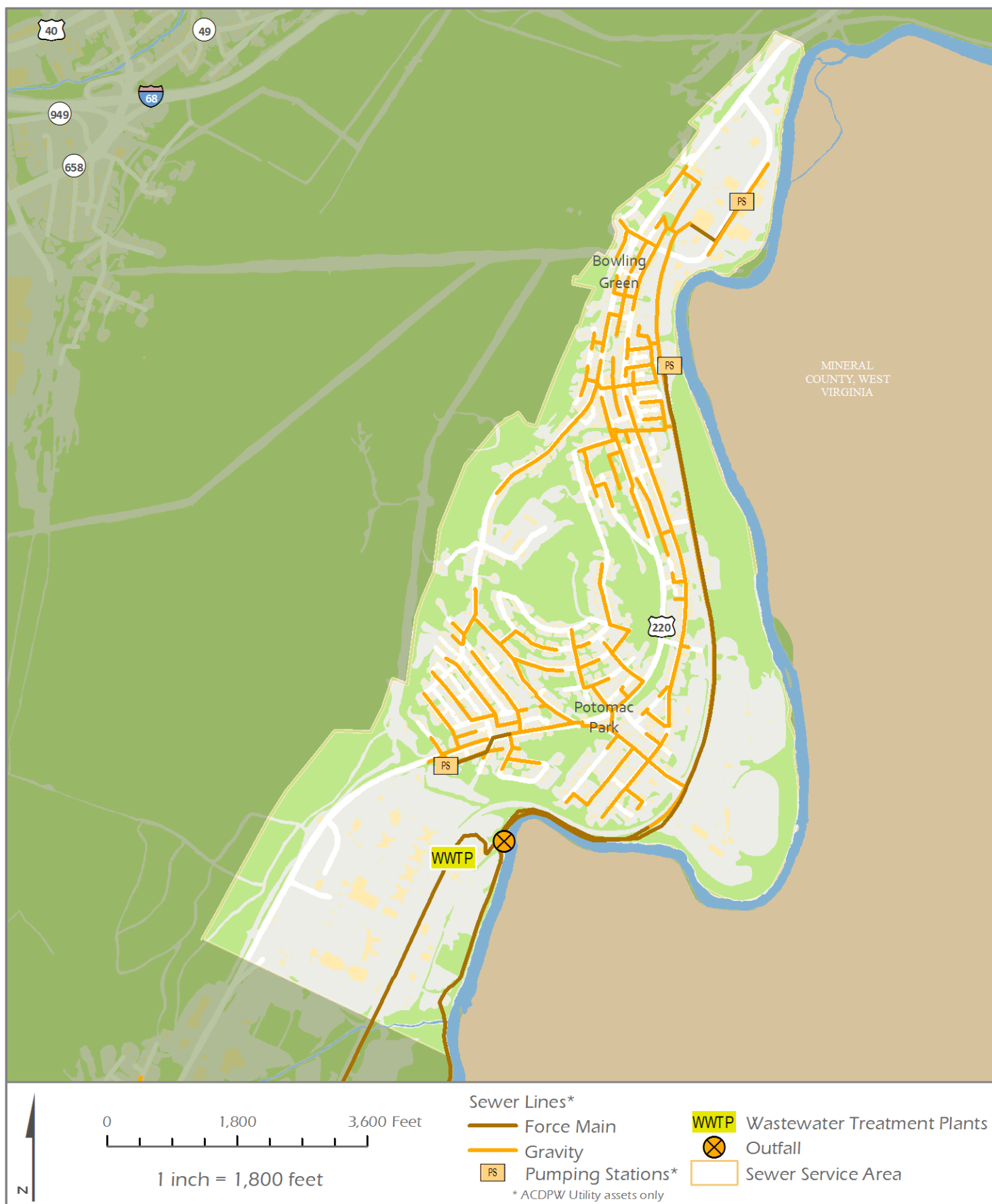


Figure 58. Bowling Green Sewer Service Area

4.01.02.02 Cresaptown Service Area

The Cresaptown sewer service area serves approximately 860 customers and is operated by the Allegany County Utilities Division. The service area is located in Cresaptown at the intersection of Winchester Road and McMullen Highway (U.S. Route 220) (Figure 59). Wastewater is treated by the Allegany County Utilities Division at the Celanese Wastewater Treatment Plant in the manner described in Section 4.02.02. Operation and maintenance costs for the Cresaptown service area are \$76/quarter plus a County surcharge of \$7.25/quarter plus an ad valorem rate of \$0.29 per \$100 of assessed property value to pay system debt costs.

Transmission mains in the service area are generally in poor condition. This collection system is under a consent order with MDE to reduce system SSO's. System investigations and rehabilitation/replacement projects will continue as necessary. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.

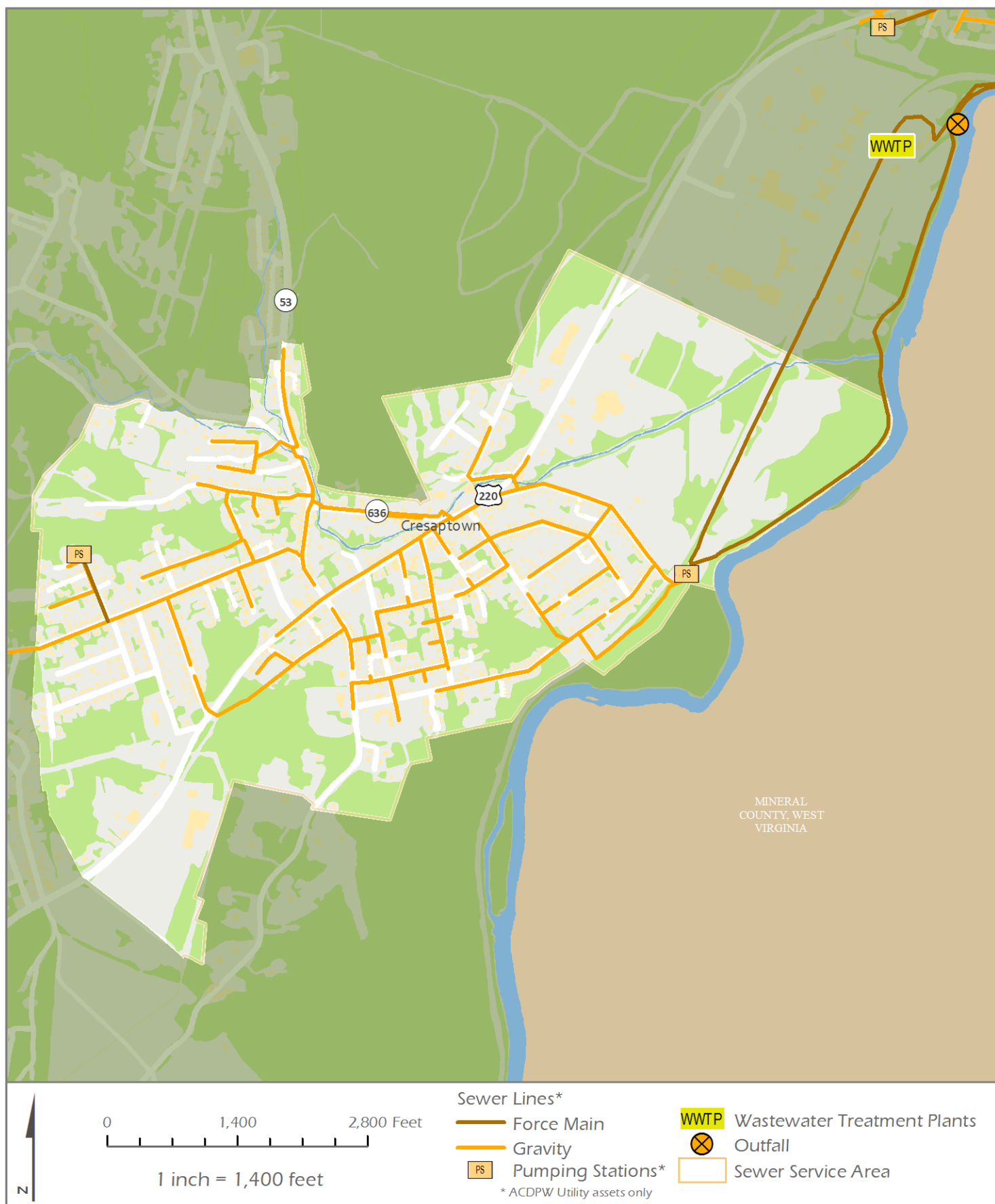


Figure 59. Cresaptown Sewer Service Area

4.01.02.03 LaVale-Winchester Road Service Area

The LaVale-Winchester Road Service Area is operated by the LaVale Sanitary Commission. It serves the portion of the LaVale community along Winchester Road, south of the Vocke Road intersection (Figure 6o). There are approximately 330 customers within the service area. The average flow through the system is 150,000 gpd, which is gravity fed to Cresaptown where it enters the Allegany County system and is conveyed to the Celanese WWTP.

The condition of the transmission pipes is poor, and to fund improvements, the LaVale Sanitary Commission proposes funding from MDE and USDA grants and loans.

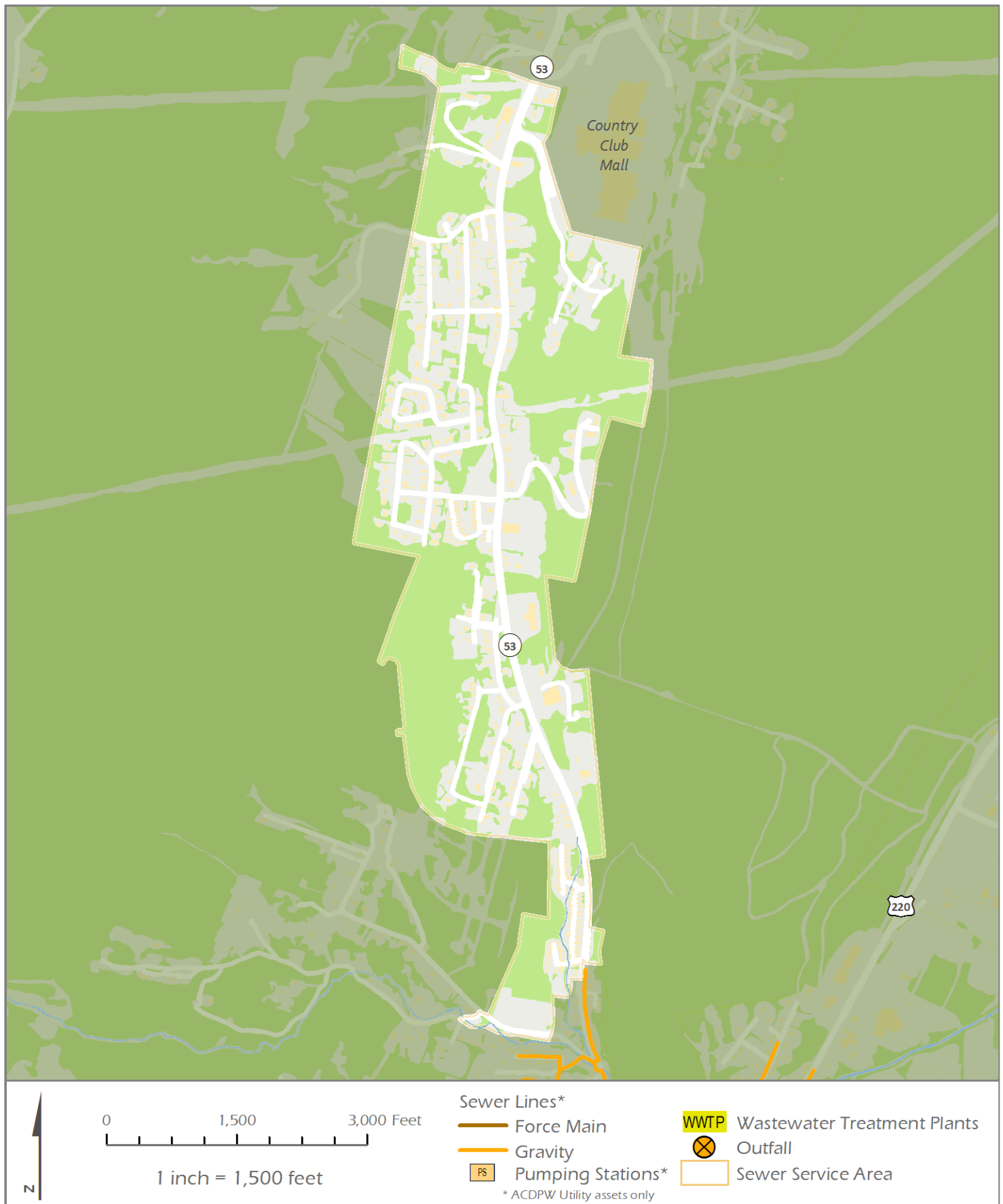


Figure 60. LaVale-Winchester Road Sewer Service Area

4.01.03 Upper Potomac System

The Upper Potomac System is located in southwest Allegany County. The wastewater treatment plant that serves the system is operated by the Upper Potomac River Commission. The system serves the NewPage Mill, in addition to the Towns of Luke, Westernport, and Franklin/Brophytown, Maryland. The plant also receives wastewater from Piedmont, West Virginia. The wastewater from the paper mill constitutes 20 MGD of the wastewater treated daily at the Upper Potomac River Commission WWTP; an additional 0.5 to 1.5 MGD of wastewater is from the towns mentioned above. The WWTP has a design average flow of 21 MGD, and a design peak flow of 30 MGD. The WWTP uses the activated sludge process for treatment and the plant is in good condition. The plant does not include nutrient removal. The WWTP outfall is the North Branch Potomac River. The sewage sludge is used for surface mine land reclamation. NewPage Inc. (owner of Luke Paper Co.) funds the majority of upgrades to the plant; the Upper Potomac River Commission has an annual budget of \$4.5 million to operate the WWTP.

The planned capacity is expected to remain the same through 2030. At this time, there are no major issues with the WWTP operated by the Upper Potomac River Commission. This may change as the Chesapeake Bay TMDL is developed. The pending outcome may impact future permits at the Upper Potomac wastewater treatment facility.

4.01.03.01 Franklin/Brophytown Service Area

The Franklin/Brophytown sewer service area serves approximately 80 customers and is operated by the Allegany County Utilities Division. The service area is located just north of the town of Westernport along MD Route 36 (Figure 61). Wastewater is treated by the Upper Potomac River Commission Wastewater Treatment Plant in the same manner described in Section 4.02.03. Operation and maintenance costs for the Franklin/Brophytown service area are \$76/quarter plus an ad valorem rate of \$0.019 per \$100 of assessed property value to pay system debt costs.

Transmission mains in the service area are generally in good condition. No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.



Figure 61. Franklin/Brophytown Sewer Service Area

4.01.03.02 Westernport Service Area

The Westernport Service Area includes the Town of Westernport and the Town of Luke, as shown in Figure 62. Westernport's collection system serves a population of approximately 2,200 people, and is maintained by the Town of Westernport. It is a combined system and the condition of the transmission pipes is poor. The Town of Westernport is currently under a consent order with MDE to reduce CSO's and is currently replacing portions of the trunk line. The Towns of Westernport, Luke, and Piedmont, West Virginia, collectively have an average daily flow of 0.95 MGD. The maximum monthly average is 1.87 MGD which occurred in March 2010. Peak flows of 3.4 MGD have been recorded.



Figure 62. Westernport Sewer Service Area

4.01.04 Georges Creek System and Service Area

The Georges Creek Sewer System is located in the western part of Allegany County along MD Route 36 (Figure 63). The wastewater treatment plant serving the system is operated by the Allegany County Utilities Division. The system serves the small communities of Midlothian, Shaft, Carlos, Midland, Lonaconing, and Barton. Receiving wastewater from these communities is the Georges Creek Wastewater Treatment Plant (WWTP). The Georges Creek WWTP is designed to treat an average of 0.70 million gallons per day (MGD). The average daily flow for FY 2010 was 0.554 MGD with a peak daily flow of 1.306 MGD from April 2010. The plant's permitted and design capacity was recently increased from 0.60 MGD to 0.70 MGD. The increase came as a result of the State of Maryland requiring a \$28.4 million dollar upgrade for Biological Nutrient Removal and Enhanced Nutrient Removal (BNR/ENR) in an effort to reduce total phosphorus loading and total nitrogen loading into waters that eventually discharge into the Chesapeake Bay.

Currently, the Georges Creek WWTP is designed for Biological Nutrient Removal and Enhanced Nutrient Removal (BNR/ENR). There are no planned improvement projects.

The current location of discharge for the Georges Creek WWTP is Georges Creek, which is adjacent to the WWTP. There are no new proposed points of discharge. Sludge disposal is accomplished through a process of aerobic digestion and dewatering by belt filter press, and transport to the Mountainview Landfill south of Frostburg along Route 36. The only contributing service area is the Georges Creek service area.

The Georges Creek sewer service area serves approximately 2,200 customers and is operated by the Allegany County Utilities Division. Operation and maintenance costs for the Georges Creek service area are \$76/quarter. There is also an ad valorem rate of \$0.47 per \$100 of assessed property value and front footage fee of \$0.34/foot of frontage to pay system debt costs.

Transmission mains in the service area are generally in fair condition. This system is under a consent order with MDE to reduce system SSO's. System investigations and rehabilitation/replacement projects will continue as necessary. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.

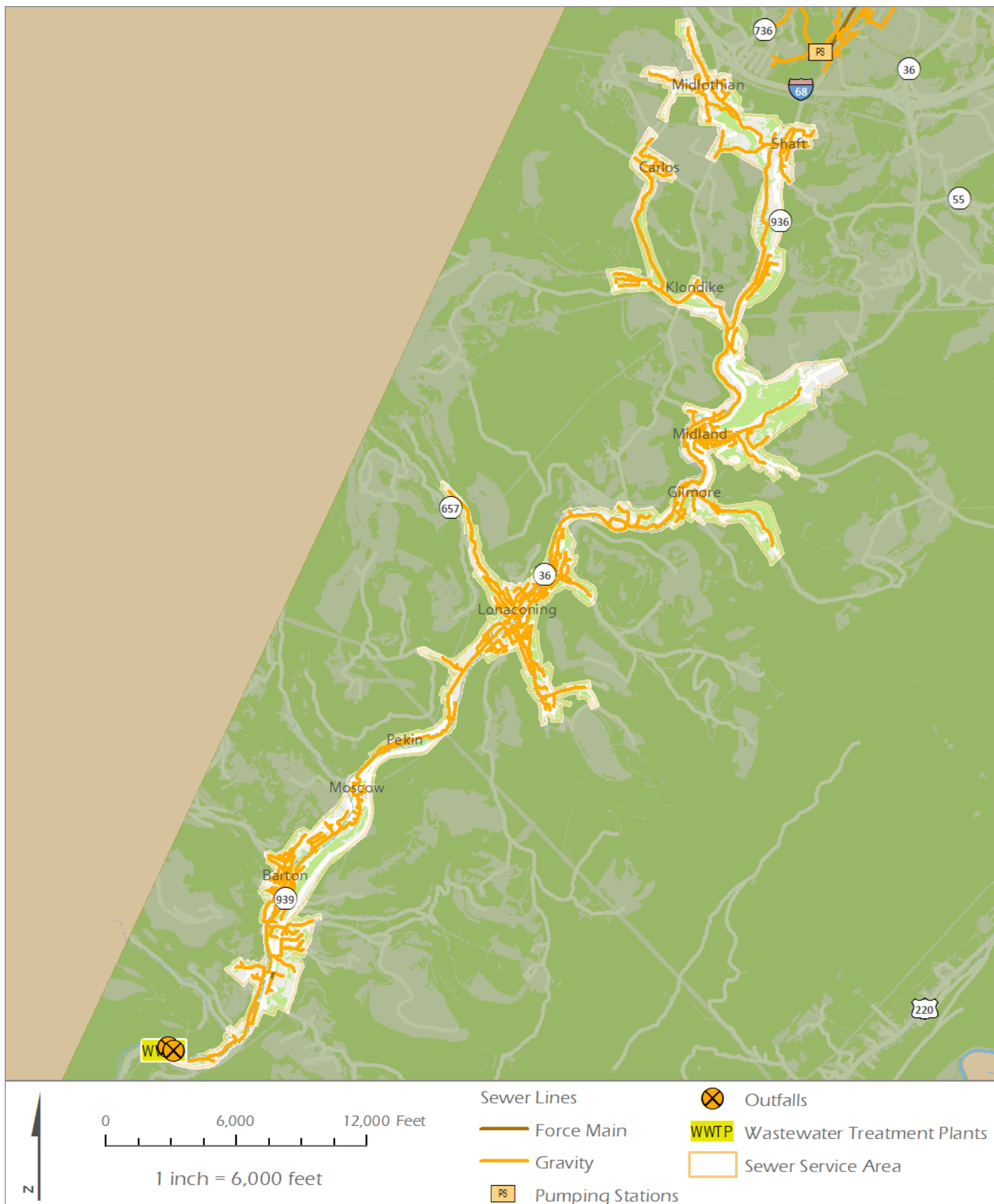


Figure 63. Georges Creek Sewer Service Area

4.01.05 McCoolle System and Service Area

The McCoolle System is located in southwestern Allegany County, across the North Branch Potomac River from Keyser, West Virginia, and is shown in Figure 64. The McCoolle sewer service area serves approximately 225 customers in Allegany County and is operated by the Allegany County Utilities Division. Operation and maintenance costs for the McCoolle service area are \$76/quarter. There is also an ad valorem rate of \$0.07 per \$100 of assessed property value and a front footage fee of \$0.35/foot of frontage to pay system debt costs.

The wastewater from the McCoolle system is pumped to the Keyser WWTP for treatment. Transmission mains in the service area are generally in good condition. The Keyser WWTP is operated by the City of Keyser and is designed for an average flow of 2.1 MGD and a peak flow of 8.0 MGD. The collection system used by the City of Keyser is a combined system, and it serves a total 2,017 people. The sewage treated per day varies from 1.2 to 2.0 MGD; the treatment used is a Class 2 Lagoon System. The current demand for the system is 2.4 MGD. The outfall is located in the North Branch Potomac River. To finance improvements, the City of Keyser will likely use grants, loans, and/or increase sewer rates.

A problem currently facing the Keyser WWTP is that the lagoons are exceeding life expectancy. To correct this issue, sludge will have to be removed from the lagoons. A contractor that specializes in sludge removal will have to be hired.

There is another wastewater treatment plant in the vicinity of the McCoolle service area that is currently not in operation. However, permitting has been kept current at the plant should future development in the area of the Tri-Towns Plaza warrant its use. The Tri-Towns Wastewater Treatment Plant serves the now-vacant Tri-Towns Industrial Plaza, located along MD Route 135 between Westernport and McCoolle. This plant treats by extended aeration and its discharge point is the North Branch of the Potomac River. Its design capacity is 0.003 million gallons per day (MGD).



Figure 64. McCoolle Sewer Service Area

4.01.06 Rawlings System and Service Area

The Rawlings system serves the community of Rawlings, along US Route 220, south of Cresaptown (Figure 65). The system is privately owned by the Rawlings Improvement Association and serves approximately 300 customers. The Rawlings system uses separated collection, and treats to a primary level using a lagoon. The design average flow for the system is 0.143 MGD. The Rawlings Improvement Association WWTP is operated by Miller Environmental Inc., and the operation costs for the plant were \$51,720 for 2010. The average flow for the WWTP in 2009 was 0.070 MGD; the maximum flow of 0.320 MGD occurred on May 5, 2009. The outfall of the WWTP discharges into the North Branch Potomac River. There is no additional capacity currently needed, because building in the Rawlings area is restricted due to a moratorium from MDE. No new water taps can be made, therefore additional sewer taps will not be needed until the consent order is resolved. Currently, any improvements needed for the system will be funded through tap and use fees.

Transmission mains in the service area are in poor condition. Closed-circuit television (CCTV) monitoring was recently completed for the Rawlings service area. Sewer line systems were analyzed for defects. Possible repairs are being prioritized by Allegany County Utilities Division staff. Funding for the CCTV work was obtained through a Predevelopment Planning Grant (PPG) from United States Department of Agriculture – Rural Development. Based on recommendations made by Allegany County Utilities Division staff and with the approval of the Rawlings Improvement Association, a Preliminary Engineering Report, Environmental Report, and funding applications will be completed in order to receive funding assistance for a future Rawlings Sewer System Improvements project. Preliminary investigations indicate the need for system replacement.



Figure 65. Rawlings Sewer Service Area

4.01.07 Barton Business Park System

The Barton Business Park System is located southwest of Cumberland along U.S. Route 220. The wastewater treatment plant serving the system is the Barton Business Park WWTP and is operated by the Allegany County Utilities Division. The Barton Business Park WWTP is designed and permitted to treat an average of 0.05 million gallons per day (MGD). The average daily flow for FY 2010 was 0.007 MGD with a peak daily flow of 0.036 MGD from January 2010.

Currently, the Barton Business Park WWTP treats wastewater with a Sequencing Batch Reactor (SBR). There are no planned improvement projects.

The current location of discharge for the Barton Business Park WWTP is the North Branch of the Potomac River. There are no new proposed points of discharge. Sludge disposal is accomplished through a process of aerobic digestion, transport to the Celanese WWTP for dewatering by belt filter press, and transport to the Mountainview Landfill south of Frostburg along Route 36. The WWTP serves 34 total customers with public sewer service. Contributing service areas are the Barton Business Park service area and the Biers Lane service area.

4.01.07.01 Barton Business Park Service Area

The Barton Business Park sewer service area serves 2 industrial customers and is operated by the Allegany County Utilities Division. The service area is located immediately within the Barton Business Park along U.S. Route 220. Wastewater is treated at the Barton Business Park WWTP in the manner described in Section 4.01.07.

Transmission mains in the service area are generally in good condition. No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment and Maryland Department of Business and Economic Development. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.

There is another wastewater treatment plant which was abandoned in 2009 in the vicinity of the Barton Business Park. However, permitting has been kept current at the plant should a business or development need arise. The Biers Lane WWTP previously served the Biers Lane community, south of the Barton Business Park, as described in the following section.



Figure 66. Barton Business Park Sewer Service Area

4.01.07.02 Biers Lane Service Area

The Biers Lane sewer service area serves 32 residential customers and is operated by the Allegany County Utilities Division. The service area is located just southwest of the Barton Business Park along U.S. Route 220 (Figure 67). Wastewater is treated at the Barton Business Park Wastewater Treatment Plant in the manner described in Section 4.01.07. Operation and maintenance costs for the Biers Lane service area are \$82/quarter plus a County surcharge of \$7.25/quarter.

The previous wastewater treatment plant for the Biers Lane Service Area has been removed. The Biers Lane WWTP permit is currently active awaiting modification to the Barton Business Park WWTP permit which now treats Biers Lane wastewater flows.

Transmission mains in the service area are generally in fair condition. No improvement projects are currently planned for this service area. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.



Figure 67. Biers Lane Sewer Service Area

4.01.08 Pinto System and Service Area

The Pinto system serves the communities of Bel Air, Pinto, and Glen Oaks (Figure 68). The system is privately owned and is operated by Maryland Water Service. The service area is served by a separated collection system and is treated by an aerated lagoon with chlorination and dechlorination processes. The design average flow for the system is 0.450 MGD.

The Pinto system serves a population of approximately 2,450. The sewage treated per day is 0.300 MGD. The collection system pipes are in fair to good condition and the WWTP is in good condition. The WWTP treats an average flow of 0.271 MGD, and a maximum flow of 0.411 MGD has been recorded. The point of discharge from the WWTP is the North Branch Potomac River.

The operation and maintenance costs for the Pinto service area are estimated to be \$150,000 to \$200,000. Improvements will be funded through bank financing.



Figure 68. Pinto Sewer Service Area

4.01.09 Oldtown System and Service Area

The Oldtown sewer system is located in the southeastern part of Allegany County along MD Route 51 in the community of Oldtown, MD (Figure 6g). The Oldtown WWTP wastewater treatment plant serves the system and is operated by the Allegany County Utilities Division. The system serves approximately 50 customers in the Oldtown area. The Oldtown WWTP is designed to treat an average of 0.040 million gallons per day (MGD). The average daily flow for FY 2010 was 0.007 MGD with a peak daily flow of 0.066 MGD in December 2009.

Currently, the Oldtown WWTP treats wastewater by Extended Aeration. There are no planned improvement projects for the immediate future, however the plant is nearing the end of its useful life and a replacement will be needed within the next fifteen years. The current location of discharge for the Oldtown WWTP is Mill Run. There are no new proposed points of discharge. Sludge disposal is accomplished through a process of aerobic digestion, transport to the Celanese WWTP for dewatering by belt filter press, and transport to the Mountainview Landfill south of Frostburg along Route 36. The only contributing service area is the Oldtown service area.

Operation and maintenance costs are \$76/quarter. There is an ad valorem rate of \$0.08 per \$100 of assessed property value and a front footage fee of \$0.45/foot of frontage to pay system debt costs.

Transmission mains in the service area are generally in good condition. Any proposed projects would likely seek funding assistance through grants and loans from United States Department of Agriculture – Rural Development as well as Maryland Department of the Environment. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.



Figure 69. Oldtown Sewer Service Area

4.01.10 Flintstone System and Service Area

The Flintstone Sewer System is located in the northeastern part of Allegany County along Interstate 68 in the community of Flintstone. The Flintstone WWTP serves approximately 80 customers and is operated by the Allegany County Utilities Division and serves the community of Flintstone. The Flintstone WWTP is designed to treat an average of 0.045 million gallons per day (MGD). The average daily flow for FY 2010 was 0.058 MGD with a peak daily flow of 0.190 MGD from March 2010. The only contributing service area is the Flintstone service area.

Currently, the Flintstone WWTP treats wastewater by Extended Aeration. The current location of discharge for the Flintstone WWTP is Town Creek. There are no new proposed points of discharge. Sludge disposal is accomplished through a process of aerobic digestion, transport to the Celanese WWTP for dewatering by belt filter press, and transport to the Mountainview Landfill south of Frostburg along Route 36. The Flintstone wastewater treatment plant has reached the end of its designed life expectancy. One solution is to install a new treatment facility identical to the current facility. The current facility could then undergo rehabilitation and be placed back online as a backup for periods of heavy flow and to allow for improved reliability and redundancy. As maintenance to the existing plant is difficult, this project should be prioritized.

The collection system is generally in poor condition. MDE currently has a building moratorium on the Flintstone System. An inflow and infiltration reduction project will be required in the next ten years. Any proposed projects would likely seek funding assistance through grants and loans from the United States Department of Agriculture – Rural Development office as well as the Maryland Department of the Environment office. Funding assistance would be pursued in similar means to projects ongoing for Jennings Run/Wills Creek Sanitary District.

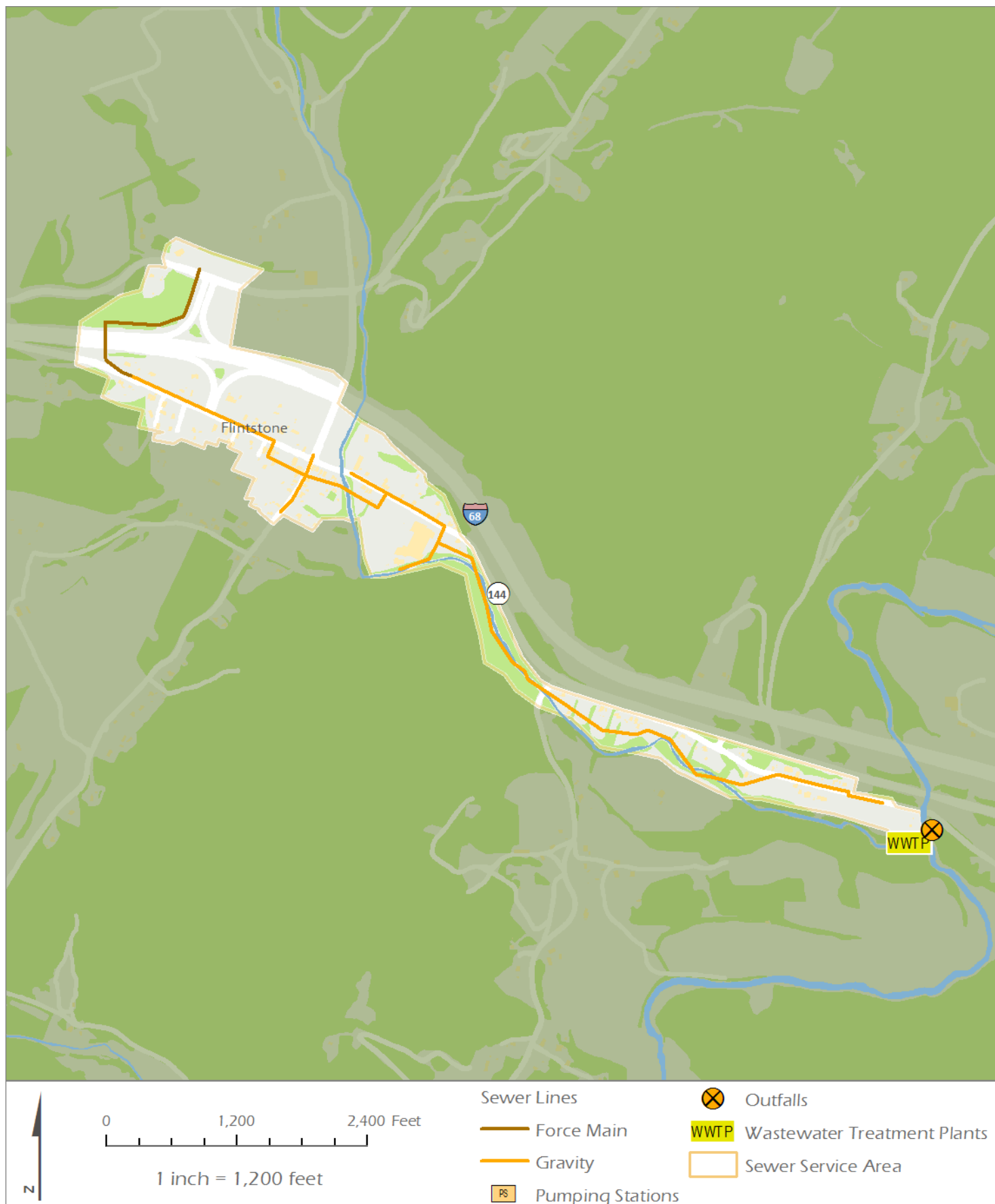


Figure 70. Flintstone Sewer Service Area

Section 4.02 Multi-use Sewerage Systems

There are three multi-use sewerage systems in Allegany County, defined in COMAR 26.03.01.01 as any single system serving a single lot, whether owned operated by an individual or group of individuals under private or collective ownership and serving a group of individuals for the collection and disposal of sewage or industrial wastes of a liquid nature, including various devices for the treatment of sewage and having a treatment capacity in excess of 5,000 GPD.

4.02.01 Rocky Gap System and Service Area

The Rocky Gap System serves the Rocky Gap State Park, Lodge, and Golf Resort, all of which are facilities operated by MD DNR (Figure 71). In 2007, the attendance to the Park was 820,000 persons. Maryland Environmental Service (MES) operates the wastewater collection and treatment plant. In 2007, the average sewage flows were 43,356 gpd and the peak flow was 200,000 gpd. The WWTP is rated for a design flow of 120,000 gpd, and the plant includes primary treatment, biological treatment (package plant), and filtration. Rocky Gap Run receives the effluent from the WWTP.

MES is planning to upgrade and expand the existing wastewater treatment facility for an average design flow of 150,000 gpd. The proposed treatment process will employ Membrane Bio Reactor (MBR) technology. The effluent discharge location into Rocky Gap Run will remain unchanged.



Figure 71. Rocky Gap Sewer Service Area

4.02.02 Green Ridge Boys Camp System and Service Area

The Green Ridge Boys Camp System is located in eastern Allegany County and is a facility that is operated by Maryland Department of Juvenile Services (Figure 72). The system is in operation year round and averages a population of 35 students and 2-10 staff members. The wastewater collection system and treatment plant are both operated by Maryland Environmental Service. The average wastewater flows are 2,731 gpd, and peak flow has reached 32,000 gpd. The WWTP is rated to treat 8,000 gpd and is comprised of six septic tanks (which function as settling tanks and flow equalizers), a pump station, eight slow sand filters and Ultraviolet disinfection units. The treated water is discharged into Fifteen Mile Creek.

The plant has been upgraded to a Sequential Batch Reactor, as the existing system was outdated and needed to meet the requirements of the 2010 NPDES permit which specifies ammonia concentrations that are lower than what could be reached with the previous system. Improvements are funded through capital improvements and critical maintenance requests.



Figure 72. Green Ridge Boys Camp Sewer Service Area

10 Apr 2014

4.02.03 Little Orleans Campground System and Service Area

The Little Orleans Campground System is located in eastern Allegany County, near the confluence of Fifteen Mile Creek and the Potomac River, as show in Figure 73. The Little Orleans sewer system serves 200 campsites. The system owned by Little Orleans Campground and Park Area Inc. and is operated by Environmental Quality & Standards. It is designed for an average flow of 20,000 gpd, but is currently permitted for 10,000 gpd. The actual flows for the system are 10,000 gpd for 30 to 60 days; a total of 600,000 gallons are treated per year. The wastewater treatment plant consists of two lagoons, with a capacity of 2.5 million gallons, and chlorination treatment. The WWTP and the transmission pipers are in good condition. Little Orleans Campground and Park Area Inc. will be seeking additional capacity for the WWTP as there are plans to expand the number of camping sites on the property.



Figure 73. Little Orleans Campground Sewer Service Area

Section 4.03 Future Sewer Service Areas

There are proposed expansions to existing sewer systems which are delineated as future service areas on the Sewer Service Area map found as an enclosure at the end of this Plan. These proposed service areas are being considered for several different reasons, which include, but are not limited to, new subdivisions in which utilities are to be constructed to county specifications or the need to replace aging and/or failing septic systems, and therefore reduce nutrient loading. All but one of the proposed new service areas are adjacent to existing service areas and will utilize existing capacity present within the current wastewater treatment system.

4.03.01 Terrapin Run

The Terrapin Run development was approved by the Allegany County Board of Zoning Appeals as a 4,300 unit Planned Residential Development. This area is not currently supported by any type of wastewater treatment system. Through their review and approval of the 2007 Master Water & Sewer Plan, the Planning & Zoning Commission reduced the scope of this development by nearly 80 percent (from 4,300 to 930 units). Additionally, these units were to be sequenced in such a manner that no more than 360 would be constructed within the first 10 years.

Development of this project has been delayed by the economy, lawsuits, and appeals and its future is unclear. However, it is certain that this development will not have a significant landscape-level impact and development activities will be on a minor scale utilizing onsite wastewater treatment technology or community wastewater system. A scale of development that exceeds the reduced scope will necessitate some type of wastewater treatment plant that must be engineered and financed through private means.

Additionally, it should be noted that any wastewater treatment plan that involves effluent discharge to Fifteen Mile Creek will be required to pursue a Tier II Anti-Degradation permit from MDE.

Section 4.04 Sewer Projects

This section identifies projects that have been completed in the time frame since the adoption of the 2007 Mater Water and Sewer Plan Update. All known proposed projects scheduled to take place within the next ten years are listed, whether publicly or privately funded. The public projects are also described and mapped in Section 4.09. Private projects are italicized and are subject to approval by required permitting agencies.

Completed Projects

- Braddock Run Interceptor
- Jennings Run I & I Study
- Bedford Road I & I Study
- Biers Lane Sewer
- Cumberland CSO SCADA
- Cumberland WWTP ENR and Plant Upgrade
- Evitts Creek Pump Station Improvements
- Evitts Creek CSO Pipe Improvements
- Howard Street CSO Improvements
- Cumberland System Rehabilitation & Extension
- Frostburg CSO Separation (50% complete)

S-2, Final Planning Stages

- Braddock Run Interceptor
- Bedford Road Sewer Rehabilitation Project
- Jennings Run Sewer Rehabilitation Project
- Braddock Run Sanitary District Improvements
- Allegany County Utilities SCADA
- Replace Clarifier - Celanese WWTP
- Wrights Crossing Pump Station Improvements
- Rawlings Sewer Study
- Braddock Run Interceptor Upgrade
- Frostburg - CSO Separation, Phase VII B, Phase VII C
- LaVale - Interceptor Repairs
- LaVale – Construction
- Koontz Plant Backwash Drain Line
- Biers Lane Collector System
- Rocky Gap State Park – 0.15 MGD Wastewater Treatment Plant Upgrade*
- Cumberland Chase Subdivision (near Pinto)*

S-3, Immediate Priority

- Rawlings Sewer System Improvements
- Cumberland - Evitts Creek CSO Pipe Improvements to WWTP
- Cumberland - WWTP CSO Storage Facility/Tank
- Cumberland - Industrial Blvd./Cedar Street Sewer Improvements
- Cumberland - Wastewater Treatment Plant Rehabilitation/Improvements

Cumberland – WWTP Egg-shaped Digester Repair/Replacement/Installation
 Braddock Run Pump Station
 Bowling Green Equipment Garage
Sand Spring Subdivision, Phase II (Frostburg)
Morgan Farm Subdivision (near Frostburg)

S-4, Six-Year Period

Flintstone Sewer Rehab
 Cumberland - Evitts Creek CSO pipe improvements from WMHS to Pump Station
 Cumberland - Mill Race CSO Storage/Pipeline Improvements (at C&O Canal)
 Cumberland - North-end System Mechanic/Centre CSO Pipe Upgrades
 Cumberland - City-Wide Sewer System Rehab & Extension
 Cumberland - Combined Sewer Rehabilitation (improve capacity)
 Frostburg – CSO Separation
Prichard Farms Subdivision (Frostburg)
Exit 33, I-68 at Braddock Road (Frostburg)
Exit 34, I-68 at Route 36 (Frostburg)
Braddock Estates Phase III (Frostburg)

S-5, Ten Year Period

Evitts Creek Interceptor
 Vale Summit Sewer Project
 Borden/Zihlman Sewer Project
 Flintstone WWTP Upgrade/Improvements/Replacement
 Cumberland - McNamee Area Sewer Improvements/Upgrades
 Cumberland - Willowbrook Road Corridor Sewer System Expansion
 Cumberland – UV Disinfection at WWTP
 Frostburg – CSO Separation (Final Phases)
Cumberland Chase Subdivision (later Phases)

Cumberland –TMDL –CSO projects (all years)
 Cumberland- Nutrient Trading (all years)
 Georges Creek System Rehab and Extension (10 + years)
 Oldtown System Rehab and Extension (10+ years)

Section 4.05 Inventory of Existing Sewage Treatment Plants

WWTP Owner	Treatment Type	Point of Discharge*	Existing (MGD) Capacity	Flows (MGD) Average Peak	Planned or Expected Abandonment Date	Operating Agency
Public						
City of Cumberland Riverside	BNR, 02.2011- ENR	North Branch Potomac	15	12.8	n/a	City of Cumberland
Maryland Water Service	Aerated lagoon w/ chlorination & dechlorination	North Branch Potomac	0.45	0.271/0.411	n/a	Maryland Water Service
Upper Potomac River Commission	Activated Sludge	North Branch Potomac		21/30	n/a	UPRC
Rawlings Improvement Association Inc.	aerated disinfection	North Branch Potomac	0.143	0.07/0.320	n/a	Rawlings Improvement Association
Celanese	BNR/ENR	Lower North Branch Potomac	2.86	1.542/3.291	n/a	Allegany County Utilities Division
Biers Lane	Constructed Wetlands, Aeration, UV Disinfection	Lower North Branch Potomac	0.0095	0/0	abandoned 2009	Allegany County Utilities Division
Oldtown	Extended Aeration	Mill Run	0.04	.007/.066	n/a	Allegany County Utilities Division
Flintstone	Extended Aeration	Town Creek	0.045	.058/.190	n/a	Allegany County Utilities Division
Tri-Towns	Extended Aeration	North Branch Potomac	0.003	0/0	(currently not in use)	Allegany County Utilities Division
Barton Business Park	SBR	Lower North Branch Potomac	0.05	.007/.036	n/a	Allegany County Utilities Division
Georges Creek	BNR/ENR	Georges Creek	0.7	.554/1.306	n/a	Allegany County Utilities Division
Keyser	Class 2 Lagoon System	North Branch Potomac	2.1	2.1/8.0	n/a	City of Keyser
Private Community						
Rocky Gap State Park	Primary treatment, biological (package plant) treatment, tertiary treatment	Rocky Gap Run	0.12	0.044/0.20	n/a	Maryland Environmental Service
Green Ridge Boys Camp	Septic Tanks, slow sand filters, UV disinfection units	15 Mile Creek	0.008	.0027/.032	n/a	Maryland Environmental Service
Private Non-Community						
Little Orleans Campground PA Inc.	Lagoons	15 Mile Creek	0.01	0.0016	n/a	Environmental Quality & Standards

Section 4.06 Problem Areas Inventory-Individual and Community

Service Area	Problem Description	Location	Population	Acres	Treatment Capacity	Treatment Demand	Planned Correction Date if Known
Rocky Gap	WTP upgrades will cause create need for WWTP upgrade				.239 MGD	0.3 MGD	interim improvements as funding is available
Frostburg	Combined Sewer System in process of separation		7,569		-	-	sewer separation 2003-2023
Cumberland	Combined Sewer Overflows						CSO storage tank by 2015
Westernport	Combined Sewer Overflows						
Borden/ Zihlman	Septic System Failures	between Frostburg and Mt. Savage					provide area with public sewer- 2016-2020
McCoole-Keyser	Lagoons are existing life expectancy			7.6			have sludge removed from lagoons
Flintstone, Braddock Run	Aging Lines - Inflow & Infiltration	County - wide					ongoing rehab
Bedford Road, Jennings Run, Georges Creek	Sanitary Sewer Overflows	County - wide					ongoing rehab

Section 4.07 Water Quality Problem Due to Storm Drainage Outfalls and Non-point Sources

Service Area	Problem Description	Location	Reach Affected
Frostburg	CSO Outfalls		Georges Creek

Section 4.08 Projected Sewerage Demands and Planned Capacity

Service Area	2010				
	Population		GPCD	Capacity (MGD)*	
	Total	Served	gallons	existing capacity	demand
Biers Lane	73	73	96.4	0.010	0.007
Bowling Green	2,116	2,116	198.5	1.200	0.420
Cresaptown	1,957	1,957	191.1	1.200	0.374
LaVale-Winchester Rd	756	756	198.4	0.300	0.150
Bedford Road	2,894	2,894	204.2	0.650	0.591
Braddock Run	2,293	2,293	218.1	2.000	0.500
Jennings Run/ Wills	2,792	2,792	222.4	0.650	0.621
Mexico Farms	1,915	1,915	212.5	0.450	0.407
Oldtown Road	695	695	72.0	1.500	0.050
Cumberland	21,849	21,849	341.3	8.000	7.457
Frostburg	7,569	7,569	145.3	1.500	1.100
LaVale	4,946	4,946	248.7	2.000	1.230
Flintstone	177	177	327.6	0.045	0.058
Georges Creek	5,142	5,142	107.7	0.700	0.554
McCoole	506	506	138.3	0.500	0.070
Oldtown	118	118	59.3	0.040	0.007
Pinto	2,442	2,442	122.9	0.450	0.300
Rawlings	681	681	124.8	0.143	0.085
Franklin/ Brophytown	336	336	178.7	0.080	0.060
Westernport	2,168	2,168	203.0	0.500	0.440
Green Ridge Boys Camp	40	40	67.5	0.003	0.003
Little Orleans Campground	200	200	5.0	0.008	0.001
Rocky Gap	820,000	820,000	0.1	0.120	0.043

* Capacity may be a reflection of the service area pump stations and pipe diameters, not necessarily the capacity of the WWTP. Should significant development take place in any one or more of these service areas, capacity at the service area level in addition to system capacity should be carefully scrutinized.

Large industrial usage has been removed from Cumberland Service Area, all other service areas may include any industrial use.

Service Area	2020				
	Population		GPCD	Capacity (MGD)*	
	Total	Served	gallons	demand	planned
Biers Lane	73	73	100.0	0.007	0.010
Bowling Green	2,127	2,127	190.0	0.404	1.200
Cresaptown	1,967	1,967	190.0	0.374	1.200
LaVale-Winchester Rd	760	760	195.0	0.148	0.150
Bedford Road	2,910	2,910	200.0	0.582	0.650
Braddock Run	2,305	2,305	200.0	0.461	2.000
Jennings Run/ Wills	2,807	2,807	200.0	0.561	0.650
Mexico Farms	1,925	1,925	215.0	0.414	0.450
Oldtown Road	698	698	50.0	0.035	1.500
Cumberland	21,967	21,967	350.0	7.688	8.000
Frostburg	7,609	7,609	140.0	1.065	1.500
LaVale	4,973	4,973	230.0	1.144	2.100
Flintstone	178	178	300.0	0.053	0.045
Georges Creek	5,169	5,169	110.0	0.569	0.700
McCoole	509	509	140.0	0.071	0.500
Oldtown	119	119	60.0	0.007	0.040
Pinto	2,455	2,455	130.0	0.319	0.450
Rawlings	685	685	125.0	0.086	0.143
Franklin/ Brophytown	338	338	180.0	0.061	0.080
Westernport	2,180	2,180	205.0	0.447	0.500
Green Ridge Boys Camp	40	40	70.0	0.003	0.003
Little Orleans Campground	275	275	5.0	0.001	0.200
Rocky Gap	860,000	860,000	0.1	0.086	0.120

Service Area	2030				
	Population		GPCD	Capacity (MGD)*	
	Total	Served	gallons	demand	planned
Biers Lane	74	74	100.0	0.007	0.010
Bowling Green	2,153	2,153	180.0	0.388	1.200
Cresaptown	1,991	1,991	180.0	0.358	1.200
LaVale-Winchester Rd	769	769	190.0	0.146	0.150
Bedford Road	2,945	2,945	185.0	0.545	0.650
Braddock Run	2,333	2,333	195.0	0.455	2.000
Jennings Run/ Wills	2,841	2,841	175.0	0.497	0.650
Mexico Farms	1,948	1,948	215.0	0.419	0.450
Oldtown Road	707	707	55.0	0.039	1.500
Cumberland	22,231	22,231	350.0	7.781	8.000
Frostburg	7,701	7,701	135.0	1.040	2.000
LaVale	5,033	5,033	225.0	1.132	2.200
Flintstone	180	180	290.0	0.052	0.045
Georges Creek	5,231	5,231	110.0	0.575	0.700
McCoole	515	515	140.0	0.072	0.500
Oldtown	120	120	60.0	0.007	0.040
Pinto	2,485	2,485	130.0	0.323	0.450
Rawlings	693	693	120.0	0.083	0.143
Franklin/ Brophytown	342	342	180.0	0.061	0.080
Westernport	2,206	2,206	205.0	0.452	0.500
Green Ridge Boys Camp	41	41	70.0	0.003	0.003
Little Orleans Campground	275	275	5.0	0.001	0.200
Rocky Gap	920,000	920,000	0.1	0.092	0.120

Service Area	2040				
	Population		GPCD	Capacity (MGD)*	
	Total	Served	gallons	demand	planned
Biers Lane	75	75	100.0	0.008	0.010
Bowling Green	2,196	2,196	180.0	0.395	1.200
Cresaptown	2,031	2,031	180.0	0.366	1.200
LaVale-Winchester Rd	784	784	190.0	0.149	0.150
Bedford Road	3,004	3,004	185.0	0.556	0.650
Braddock Run	2,379	2,379	190.0	0.452	2.000
Jennings Run/ Wills	2,898	2,898	175.0	0.507	0.650
Mexico Farms	1,987	1,987	215.0	0.427	0.450
Oldtown Road	721	721	55.0	0.040	1.500
Cumberland	22,675	22,675	350.0	7.936	8.000
Frostburg	7,855	7,855	135.0	1.060	3.000
LaVale	5,133	5,133	220.0	1.129	2.300
Flintstone	184	184	290.0	0.053	0.045
Georges Creek	5,336	5,336	110.0	0.587	0.700
McCoole	525	525	140.0	0.074	0.500
Oldtown	123	123	60.0	0.007	0.040
Pinto	2,534	2,534	130.0	0.329	0.450
Rawlings	707	707	120.0	0.085	0.143
Franklin/ Brophytown	348	348	180.0	0.063	0.080
Westernport	2,250	2,250	205.0	0.461	0.500
Green Ridge Boys Camp	42	42	70.0	0.003	0.003
Little Orleans Campground	275	275	5.0	0.001	0.200
Rocky Gap	1,000,000	1,000,000	0.1	0.100	0.120

Section 4.09 Immediate, 5, and 10 Year Priorities for Sewerage Development

Project Locations: Figure 74

Project Number	Project Area	County Priority Assigned	Description	Cost (in thousands)			Project Status/Const. Start	
				Total	Other Federal	Local	Immediate Priority Projects	5 and 10 year Period Projects
1	Allegany County	S-2	Braddock Run Interceptor	1520	1520	0	X	
2	Allegany County	S-2	Bedford Road Sewer Rehabilitation Project	745	745	0	X	
3	Allegany County	S-2	Jennings Run Sewer Rehabilitation Project	3000	3000	0	X	
4	Allegany County	S-2	Braddock Run Sanitary District Improvements	3200	3200	0	X	
5	Allegany County	S-2	Wrights Crossing Pump Station Improvements	1350	1335	0	X	
6	Rawlings	S-2	Rawlings Sewer Study	33	25	0	X	
7	Cumberland	S-2	Cumberland WWTP ENR Upgrade	~37000	?	?	X	
8	Allegany County	S-2	Braddock Run Interceptor Upgrade	~1400	?	?	X	
9	Frostburg	S-2	CSO Separation, Phase VII B, Phase VII C	?	?	?	X	
10	LaVale	S-2	Interceptor Repairs	1372	1372		X	
11	Allegany County	S-2	Replace Clarifier - Celanese WWTP	1500	1500	0	X	
12	Allegany County	S-2	Utilities SCADA	250	0	250	X	
13	LaVale	S-2	Construction	650			X	
14	Georges Creek	S-2	Koontz Plant Backwash Drain Line				X	
15	Allegany County	S-2	Biers Lane Collector System				X	
16	Rawlings	S-3	Rawlings Sewer System Improvements	?	?	?	X	
17	Cumberland	S-3	Evitts Creek CSO pipe improvements to WWTP	8510	8510		X	
18	Cumberland	S-3	WWTP CSO storage facility/tank	24200	24200		X	
19	Cumberland	S-3	Industrial Blvd./Cedar Street sewer improvements	950	950		X	

Project Locations: Figure 74

Project Number	Project Area	County Priority Assigned	Description	Cost (in thousands)			Project Status/Const. Start	
				Total	Other Federal	Local	Immediate Priority Projects	5 and 10 year Period Projects
20	Cumberland	S-3	WWTP Egg-Shaped Digester Repair/Replacement/ Installation	~4000				X
21	Frostburg	S-3	CSO Separation, Phase VIII				X	
22	Allegany County	S-3	Bowling Green Equipment Garage					X
23	Cumberland	S-3-5	Wastewater Treatment Plant Rehabilitation/Improvements (Blanketed coverage for projects regulatory/safety related)				X	X
24	Allegany County	S-4	Flintstone Sewer Rehab					X
25	Cumberland	S-4	Evitts Creek CSO pipe improvements from WMHS to Pump Station	8140	8140		X	X
26	Cumberland	S-4	Mill Race CSO Storage/pipeline improvements (at C&O Canal)	19319	19319		X	
27	Cumberland	S-4	North-end system Mechanic/Centre CSO pipe upgrades				X	
28	Cumberland	S-4	City-wide sewer system rehab & extension				X	X
29	Frostburg	S-4	CSO Separation					X
30	Cumberland	S-4, S-5	Combined sewer rehabilitation (improve capacity)				X	X
31	Allegany County	S-5	Evitts Creek Interceptor	2300	2300	0		X
32	Allegany County	S-5	Flintstone WWTP Upgrade/ Improvement/Replacement					X
33	Allegany County	S-5	Vale Summit Sewer Service					X
34	Allegany County	S-5	Borden/Zihlman Sewer Service					X

Project Number	Project Area	County Priority Assigned	Description	Total	Other Federal	Local	Immediate Priority Projects	5 and 10 year Period Projects
35	Cumberland	S-5	McNamee area sewer improvements/upgrade					X
36	Cumberland	S-5	Willowbrook Road corridor sewer system expansion	1300	1300			X
37	Cumberland	S-5	UV Disinfection at WWTP	~2400				X
38	Frostburg	S-5	CSO Separation (Final Phases)					X
39	Cumberland		TMDLs (CSO related projects)				X	X
40	Cumberland		Nutrient Trading				X	X

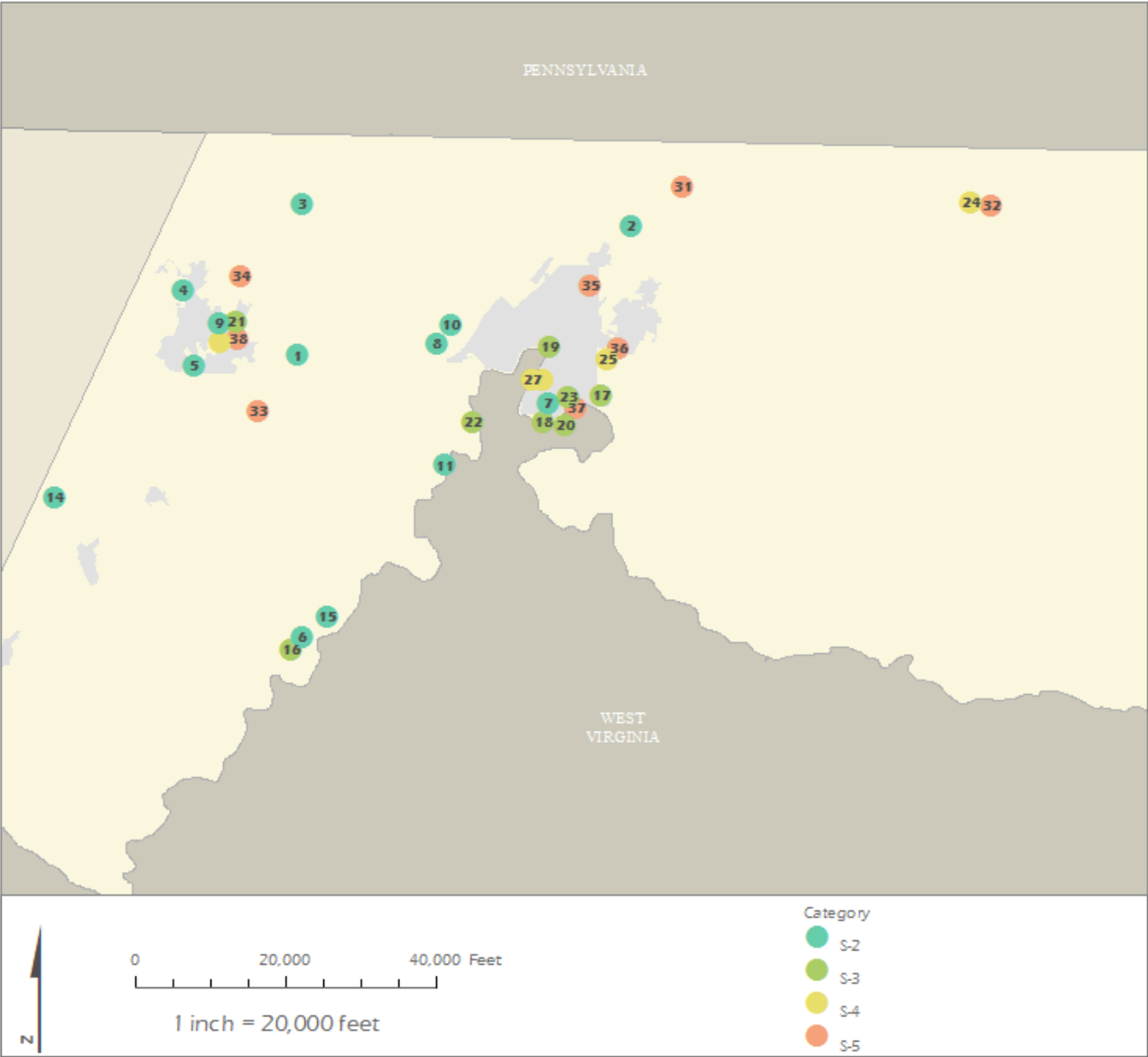


Figure 74. Planned County Sewer Projects

Section 4.10 Flow Data – Wastewater Treatment Plants

Name/Service Area	Design Parameters			Flow		Development Occupancy Units			
	Hydraulic (MGD)	Organic (ppm)		Avg. Daily* (mgd)	Max. Day & Date**	Existing*	Anticipated BPI***		PWA
		BOD	SS				UC	NUC	
Cumberland	35			12.8	38.95 (04.21.08)	11,143	137	2,184	
Pinto	0.45			0.271	0.411	977	0	0	0
North Branch				0.95	3.0 - 4.0 March 2010				
Rawlings	0.143	30		0.07	.320 (05.05.09)				
Celanese WWTP	2.86	30	30	1.542	3.291 - Jan 2010				
Biers Lane WWTP	0.0095	45	45	0	0 - N/A				
Oldtown WWTP	0.04	30	30	0.007	0.066 - Dec 2009				
Flintstone WWTP	0.045	30	30	0.058	0.190 - Mar 2010				
Tri-Towns WWTP	0.003	45	45	0	0 - N/A				
Barton Business Park WWTP	0.05	30	30	0.007	0.036 - Jan 2010				
Georges Creek WWTP	0.7	30	30	0.554	1.306 - Apr 2010				
Little Orleans Campground	0.04			.001 (60 days)		200	0	75 campsites	
Rocky Gap	0.12	30	30	0.043	0.2	278 campsite/240 room hotel		0	0
Green Ridge Boys Boys Camp	0.008	30	30	0.0027	0.032	dormitory (35-45 ppl)	0	0	0

Section 4.11 Flow Data- Collector Sewers, Interceptors, Pumping Stations, and Force Main Sewers

Key: Blue – Pump Red – Line System

Bedford Road Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
Ioka PS	S-10	780	6"	765.42	768.5	770.5	(2) 40 HP	770.25	12918 IRENE DRIVE	1968
Mill Run PS	S-10	731.5	8"	706.6	710	712		712.25	13605 BEALLS MILL ROAD	1968
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Bedford Road	I, FM	4, 6, 8, 10, 15		0.591	N/A	N/A	N/A			

Biers Lane Service Area						
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)	Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)
Biers Lane	FM	4	0.007	N/A	N/A	N/A

Bowling Green Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
Bowling Green PS	S-2	643	8"	612.75	616.25	615.75			11510 BIRCH AVE.	1963
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Bowling Green	I, FM	4, 6, 8, 10, 12, 15, 18		.420	1.200	N/A	N/A			

Braddock Run Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
Wrights Crossing PS	S-7	1840.5	16"	1818	1821.5		(2) 125 HP	1829	11427 UPPER GEO. CREEK RD	1965
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Braddock Run Interceptor	I, FM	2, 4, 6, 8, 12, 15, 16, 18		1.60	8.8	5	1500			

Cresaptown Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
Darrows Lane PS	S-4	650	8"		626.87	626.37	(2) 20 HP	631.37	12525 DARROWS LANE	1964
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Cresaptown	I, FM	4, 6, 8, 10, 12		0.374	1.20	N/A	N/A			

Flintstone Service Area										
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Flintstone	I, FM	3, 6, 8		0.058	N/A	N/A	N/A			

Franklin/Brophytown Service Area										
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Franklin/Brophytown	I	8		0.06	N/A	N/A	N/A			

Georges Creek Service Area						
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)	Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)
Georges Creek	I	1.5, 6, 8, 10, 12	0.554	N/A	N/A	N/A

Jennings Run/Wills Creek Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
Locust Grove PS	S-23	661	12"	637.8	644.5	640.75	(2) 30 HP 870 RPM	645.5	10804 LOCUST GROVE ROAD	1975
Corriganville PS	S-23	714	12"	685.25	692	688	(2) 30 HP 870 RPM	693	12530 BEACHVIEW DR	1975
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Jennings Run/Wills Creek	I, FM	6, 8, 10, 12, 15, 18		0.621	N/A	N/A	N/A			

LaVale/Winchester Road Service Area						
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)	Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)
Winchester Rd. Sewer Main	I	8	0.15	N/A	N/A	N/A

LaVale Service Area						
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)	Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)
LaVale	I	15-24	2	8.8	5	1500 each

McCoole System Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
McCoole PS	S-28	824.54	6"	800.12	804.12	802.12		807.12	21304 QUEENS POINT ROAD	1978
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
City of Keyser	I, FM	16, 24		2.1	2.4	4	1175			

Mexico Farms Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
Mexico Farms PS	S/W-52	617.25	6"	606.5	610.5	608.5	(2) 10 HP @ 1760 RPM		11419 MEXICO FARMS ROAD	1993
North Branch PS	S-51	612.25	16"	591.53	600	596		601	11600 PPG ROAD	1991
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Mexico Farms	I, FM	1.5, 2, 2.5, 3, 4, 6, 8, 10, 12, 15		0.407	N/A	N/A	N/A			

Oldtown Service Area										
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Oldtown	I	6, 8, 10		0.007	N/A	N/A	N/A			

Oldtown Road Service Area										
Name of Pump Station	Allegany County Contract #	P.S. Floor Elevation	Discharge Pipe Diameter	Wet Well Invert	First Pump On - Elevation	Pumps Off - Elevation	Pumps - Count and Size	High Water Alarm - Elevation	Street Address	Year Built
Oldtown Road PS	S-55A	618	3"	606.5	609.25	608.5	(3) 5 HP @ 3450 RPM	677.8	12503 GOLDENS AVE.	1999
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)		Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)			
Oldtown Road	I, FM	1.5, 2, 2.5, 3, 4, 8		0.050	N/A	N/A	N/A			

Pinto Service Area						
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)	Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)
Pinto Lift Station	I, FM	4, 6, 8	0.0014	0.288	2	80

Rawlings Service Area						
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)	Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)
Rawlings	I	1.5, 2, 2.5, 3, 6, 8	0.085	N/A	N/A	N/A

Westernport Service Area						
Name of Sewer Line System	Type: Interceptor (I), Force Main (FM), etc.	Diameters Present (inches)	Average Daily Flow (MGD)	Design Flow (MGD)	Number of Pumps	Maximum Pump Capacity (gpm)
Westernport	N/A	N/A	0.50	N/A	N/A	N/A

Chapter V Individual Water Supply and Sewerage Systems

Section 5.01 Individual systems not permitted where community facilities are available.

Throughout the county individual well and onsite septic systems have been permitted in accordance with COMAR as it relates to the economic feasibility of construction.

Reference: COMAR 26.04.03.A

Section 5.02 Interim individual systems are allowed.

- Rawlings water service moratorium has resulted in private wells until the problems are corrected and the moratorium is lifted.
- Flintstone community sewerage system moratorium has resulted in individual on-site septic system installation.
- Water line extension covering Oaklawn Ave. Ext., LaVale
- Water line extension covering Ore Banks Rd., LaVale

Section 5.03 Individual systems are allowed where community systems are not planned.

Rural areas of the county where water and wastewater infrastructure construction is not economically feasible or contains engineering issues that prevents public services from being considered, including:

- Little Orleans
- Green Ridge
- Irons Mountain
- Oldtown
- Pumpkin Center
- East Cumberland area

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Chapter VI Financial Management of Public Sewerage Systems

Allegany County Utilities Division works closely with the Allegany County Finance Division to financially manage the public sewerage systems owned and operated by Allegany County Utilities Division.

For information regarding the finances of the Allegany County public sewerage systems, please refer to the following documents:

Allegany County 2011 Adopted Budget

<http://gov.allconet.org/finance/reporting/Adopted%20Budget%202011.pdf>

Allegany County Comprehensive Annual Financial Report

http://gov.allconet.org/finance/reporting/AlleganyCountyMD_CAFR.pdf

Allegany County Capital Improvement Program

<http://www.gov.allconet.org/finance/reporting/cip2010.pdf>

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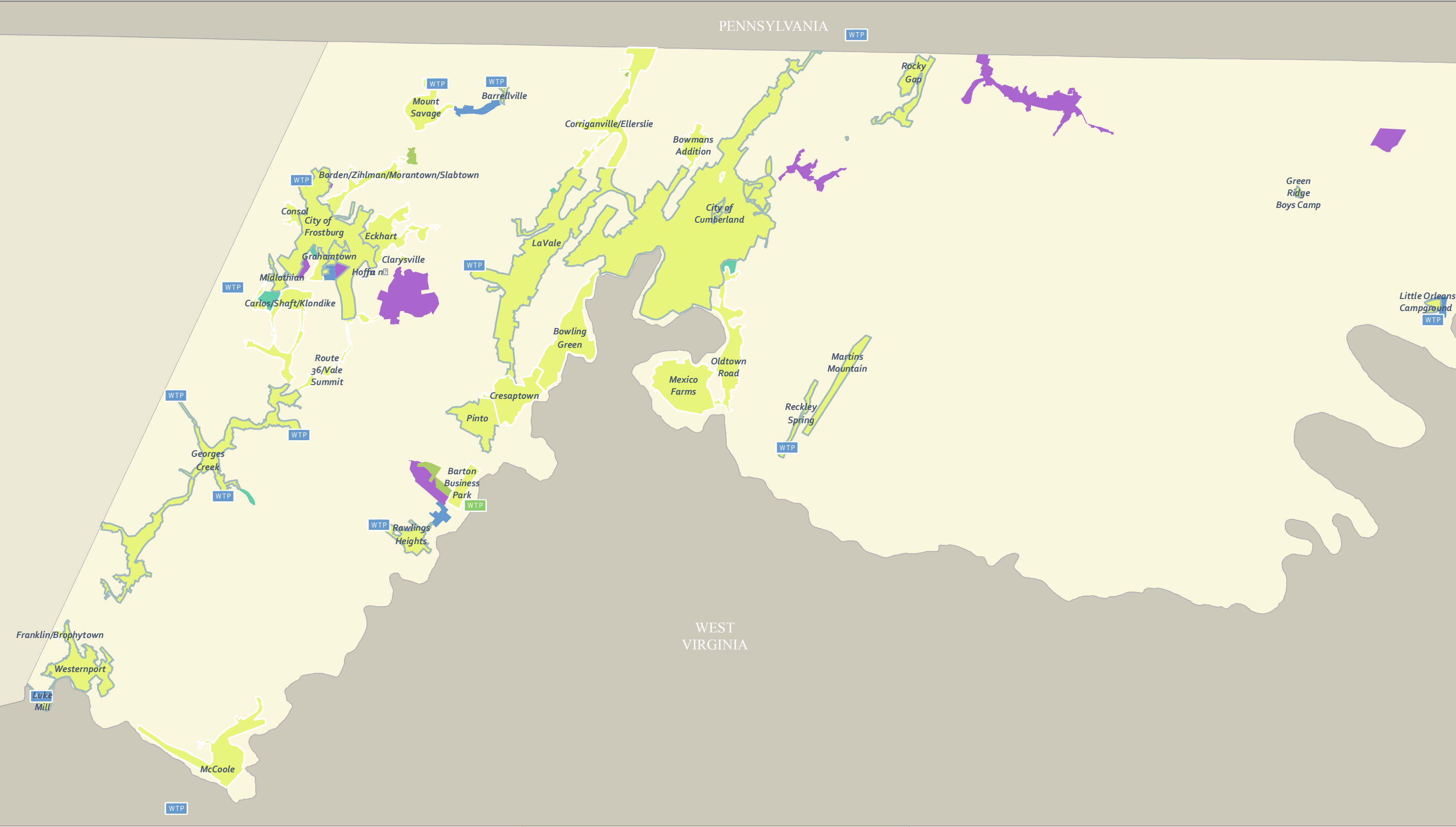
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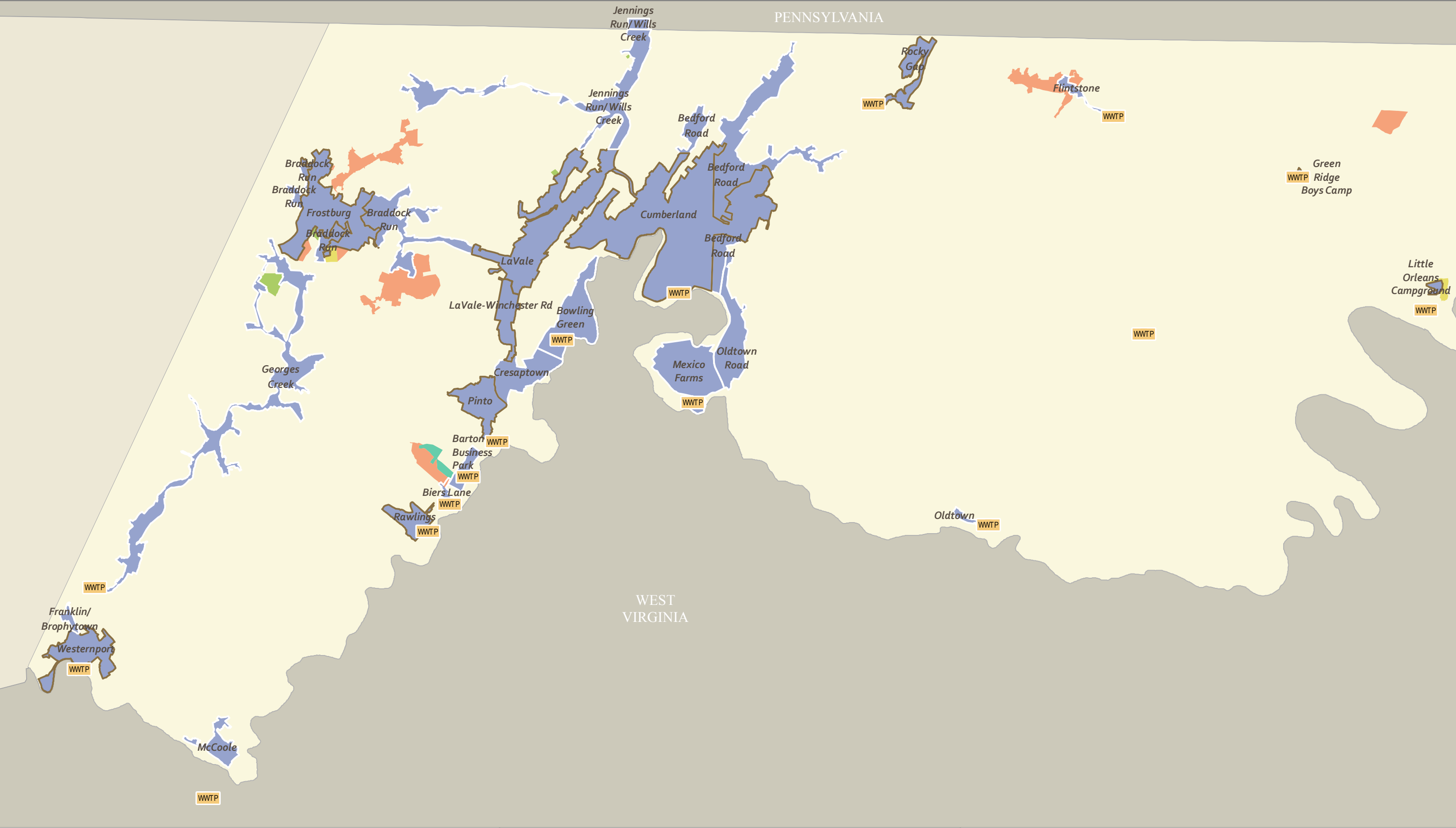


Appendix A. Allegany County Water Service Areas

- | | |
|---------------------------------|------------------------------------|
| Existing Water Treatment Plants | W1 Existing Service Area |
| Planned Water Withdraw | W2 Final Planning Stages |
| Denied Access | W3 Immediate Priority (1 to 2 yrs) |
| Utility | W4 Three to Six Years |
| Other | W5 Seven to Ten Years |
| Allegany County DPW Utilities | |

0 12,000 24,000 Feet
1 inch = 12,000 feet





Appendix B.
Allegheny County
Sewer Service Areas

WWTP	WWTP	W1 Existing Service Area
Utility	Utility	W2 Final Planning Stages
Other	Other	W3 Immediate Priority (1 to 2 yrs)
Allegheny County Utilities	Allegheny County Utilities	W4 Three to Six Years
		W5 Seven to Ten Years

0 12,000 24,000 Feet

1 inch = 12,000 feet