



2017 NEEDS ASSESSMENT

WV INFRASTRUCTURE AND JOBS DEVELOPMENT COUNCIL

DECEMBER 2017

TABLE OF CONTENTS

Introduction	4
Executive Summary	5
I. State Wide Inventory	7
A. Public Water Utilities	7
B. Public Sewer Utilities	7
1. Wastewater Systems	7
2. Combined Sewer Overflows	7
II. Assessment of Current Needs	8
A. Public Water Systems	8
B. Public Sewer Systems	8
C. Combined Sewer Overflow Communities	8
D. Summary of Current Needs	11
III. Future Needs	12
IV. Obstacles, Issues and Related Problems	13
A. Financial Concerns	13
B. Physical and Geographical Concerns	14
V. Recommendations	15
VI. References	16
Appendix A	Existing Water Systems and Customers
Appendix B	Existing Sewer Systems and Customers
Appendix C	Current Needs – Water Project Applications
Appendix D	Current Needs – Sewer Project Applications
Appendix E	Infrastructure Funding Agencies
Appendix F	Number of Served and Unserved Structures in West Virginia
Appendix G	Served and Unserved Areas by County

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INTRODUCTION

The West Virginia Infrastructure and Jobs Development Council was established in 1994 under the West Virginia Infrastructure and Jobs Development Act, Chapter 31-15A of the West Virginia Code. The Council is a governmental instrumentality of the State. Its primary role is to evaluate requests from project sponsors seeking to plan, acquire, design, and construct water, sewer, and economic development projects within the State and to approve funding for those projects.

This assessment was conducted pursuant to the requirements contained in Chapter 31-15A-6(b) of the WV Code:

- 1) The Council is required to develop a comprehensive Statewide inventory of water supply systems and sewage treatment systems and an assessment of current and future needs;
- 2) The assessment identifies the areas of the State which do not have adequate public water or sewage systems;
- 3) Offers recommendations for the construction of new facilities or the extension or expansion of existing facilities to meet the identified needs;
- 4) It includes an identification of the obstacles, issues and problems which prevent or inhibit development of adequate infrastructure throughout the State, including financial, governmental, physical, or geographical factors and make recommendations that the Council considers appropriate regarding the obstacles, issues or problems identified; and
- 5) The comprehensive inventory and assessment shall be updated at least once in every three-year period beginning in 1996.

In 2011 the Council, in conjunction with the West Virginia Water Development Authority, implemented a statewide Geographic Information System (GIS) to achieve the following goals related to water and sewer infrastructure:

- Establish a database for existing water and sewer facilities, general locations, and service areas;
- Provide a means to continually update the database as new facilities are proposed and constructed;
- Provide an electronic tracking mechanism for funding applications and project status; and
- Provide the Council with situational awareness to support its decision-making process.

This assessment relies heavily on the data acquired from the GIS system in its inventory of existing water and sewer systems.

Data relied upon in this report is current as of December 31, 2017.

EXECUTIVE SUMMARY

Use of the GIS database

In conjunction with its GIS implementation, the Council collected location data on all known existing public (government and privately owned) water and sewer systems within the State. This data includes the location of treatment facilities, as well as the general locations of water distribution and sewer collection lines. The water distribution and sewer collection lines data is available to the public via the Council's website at www.wvinfrastructure.com. Although the GIS data provides the State with the most accurate information obtained to-date, the following limitations must be noted for purposes of this assessment:

- 1) The GIS relies on the location of known structures (addressable structures which are updated periodically, at least every three years) to approximate the served and unserved population. Therefore, the accuracy may be impacted by structures that are uninhabited, removed or built between updates;
- 2) In establishing the locations of existing water and sewer lines, the GIS relies on records obtained from utilities who own and/or operate those facilities. In some areas, data gaps remain because of missing, unreliable, or unavailable utility records;
- 3) The data provides the location of existing water and sewer lines generally. It does not provide a resolution of detail required to conduct design analysis, i.e., locate manholes, valves, pump stations, pipe sizes, storage tanks, or hydraulic information;
- 4) The Council updates the existing inventory database whenever a project application is filed by requiring Project Sponsors to provide preliminary maps of the project, and the public IJDC website portal is updated to show the project location (blue spigot for water and red outfall for sewer). By clicking on the project, the public can find out the project description, estimated cost, funding scenario, number of new customers served, and project team members by company name and telephone number. However, not all water and sewer projects are required to be filed with the Council and therefore many projects may not be added to the database during the Council's application approval process. The Council is working with others to obtain this GIS information for water and sewer systems in order to be able to provide a more complete database.

Served and Unserved Areas

Public water systems - approximately 62% of the State's structures are served by a public water system. The number of customers served by public water utilities in West Virginia is approximately 652,228.

Public sewer systems – approximately 46% of the State's structures are served by a public sewer system. The number of customers served by public sewer utilities in West Virginia is approximately 449,449.

The unserved areas within the State vary considerably between Counties. Appendix F provides a summary of served and unserved structures within the State, while GIS data is provided graphically in Appendix G.

Current/Future Needs

Current funding needs for water and sewer infrastructure based on applications filed with, and approved by, the Council are approximately \$296M for water projects and \$395M for sewer projects. In addition, based on the list of Long-Term Control Plans (LTCPs) filed with WVDEP as of 12/31/17, the requirement to satisfy the State's Combined Sewer Overflows (CSOs) need exceeds \$1.6 Billion. Since many of the LTCPs involve construction of sanitary sewers which qualify for Council funding, and the combined sewers then become stormwater sewers, the estimate is over \$1.0 Billion to satisfy CSOs need.

Projected future needs assume a goal of serving every customer in the State. Based on assumptions made, the cost of providing water service to every remaining unserved household in the State is approximately \$2.3 Billion. For sewer service, the estimate is approximately \$10.7 Billion. If rehabilitation work is considered in the estimate, the need may be approaching approximately \$17 Billion.

EXISTING SYSTEM INVENTORIES

Public Water Utilities

A list of existing water systems and the customers served by each are provided in Appendix A. In total, there are 326 public water utilities operating in the State serving approximately 652,228 customers.

In terms of structures, the number of structures within the State that have water service available is approximately 610,742.

Public Sewer Utilities

A list of existing sewer systems and the customers served by each are provided in Appendix B. In total, there are 293 public sewer utilities operating in the State serving approximately 449,449 customers.

The number of structures within the State that have sewer service available is approximately 450,748.

The following table provides a summary of existing systems (utilities) throughout the State:

	WATER	SEWER
Existing utilities ¹	326	293
Customers served ¹	652,228	449,449
Served structures	610,742	450,748
Unserved structures	366,142	526,136
Percent structures served	62%	46%

Also provided in Appendix F is a listing of served and unserved structures in the State, organized by the following geographical and political boundaries:

- x County
- x Congressional Districts
- x Regional Planning and Development Council Areas
- x Senatorial Districts
- x House Districts

ASSESSMENT OF CURRENT NEEDS

Public Water Systems

Current applications

A list of water project applications received as of 12/31/17 is provided in Appendix C. This includes all preliminary applications approved by the Council as technically feasible, but without committed funding as of 12/31/17. The total estimated costs of these projects exceed \$302M, where approximately \$6M has been committed from other funding sources. The total estimate of current needs for water systems; therefore, is approximately \$296M.

Public Sewer Systems

Current applications

A list of sewer project applications approved as of 12/31/17 is provided in Appendix D. This includes all preliminary applications approved by the Council as technically feasible, but without committed funding as of 12/31/17. The total estimated cost of these projects exceed \$398M, where approximately \$3M has been committed from other funding sources. The total estimate of current needs for sewer projects; therefore, is approximately \$395M.

Combined Sewer Overflow Communities

Combined Sewer Overflows (CSOs)²

Based on the list of Long-Term Control Plans filed with WVDEP as of 12/31/17, the requirement to satisfy CSOs need exceeds \$1.0 Billion. Although the LTCPs currently estimate the cost to meet State requirements at \$1.6 Billion, only sanitary sewers qualify for Council funding. Since stormwater sewers do not qualify for Council funding, a portion of the improvements needed will not involve the construction of sanitary sewers and the combined sewers becoming stormwater sewers. Therefore, since many of the LTCPs involve the construction of sanitary sewers and the combined sewers becoming stormwater sewers, the estimate is over \$1.0 Billion to satisfy CSOs need. Below is a list of CSO communities and their estimated total needs for compliance. Communities listed without an estimate did not have an approved LTCP filed with the DEP or did not have a cost listed in their LTCP.

<u>UTILITY</u>	<u>ESTIMATED NEED (\$)</u>
Barrackville	5,743,960
Beckley	10,000,000
Belington	6,551,377
Benwood	6,756,200
Bethany	-
Boone Co PSD	1,500,000
Bridgeport	6,900,000
Buckhannon	3,786,876
Cameron	1,887,400
Cedar Grove	6,000,000
Charleston	256,318,000
Clarksburg	55,020,000
Davis	-
Dunbar	35,000,000
Elkins	23,252,000
Fairmont	-
Farmington	3,287,500
Fayetteville	-
Flatwoods-Canoe Run	33,000,000
Follansbee	6,306,915
Grafton	4,500,000
Greater Paw Paw PSD	11,493,800
Hinton	7,513,250
Huntington	584,617,186
Kenova	1,710,948
Keyser	9,882,000
Kingwood	13,000,000
Logan	77,000,000
Marlinton	2,100,000
Marmet	1,812,594
Martinsburg	-
McMechen	3,379,000
Monongah	6,356,007
Montgomery	2,068,000
Moorefield	-
Morgantown	172,990,000
Moundsville	9,770,400
Mullens	465,000
New Martinsville	58,223,836
Nutter Fort	-
Nitro	16,592,538
Parsons	1,275,000

Philippi	14,920,800
Piedmont	-
Point Pleasant	5,000,000
Princeton	6,500,000
Richwood	8,691,000
St. Albans	107,726
Shinnston	2,139,775
Sistersville	11,952,000
Smithers	1,400,000
Thomas	4,799,950
Wayne	740,000
Welch	22,691,961
Wellsburg	8,399,400
West Union	2,865,700
Weston	3,634,531
Westover	1,940,000
Wheeling	<u>80,000,000</u>
 TOTAL ESTIMATED COST	 \$1,621,842,630

Summary of Current Needs

Current funding needs for water and sewer infrastructure based on applications filed with, and approved by the Council, are approximately \$296M for water projects and \$395M for sewer projects. In addition, based on the list of Long-Term Control Plans filed with WVDEP as of 12/31/17, the requirement to satisfy the State's Combined Sewer Overflows (CSOs) need exceeds \$1.0 Billion.

FUTURE NEEDS

Definition

For purposes of this assessment, “future needs” are an estimate of the costs needed to serve the remaining unserved households/prospective customers of the State.

Methodology

In the absence of large preliminary studies with an enormous scope of work, placing a dollar cost on future needs is highly speculative and requires several assumptions, mainly relating to the following:

- x Average cost of serving each household/prospective customer
- x The number of unserved households/prospective customers
- x The manner in which each household/prospective customer would be served

The average cost of serving each household/prospective customer assumes that the remaining unserved households/prospective customers would be provided service through a typical line extension. It does not necessarily take into account the addition of treatment or storage requirements on a per customer basis, which differs greatly for each locale and therefore is not easily estimated on such a broad scale. It also does not take into account alternate methods for providing service, such as decentralized systems.

For water service, a cost per customer of \$26,250 is assumed (\$25,000 assumed in 2013 x CPI³).
For sewer service, a cost per customer of \$36,750 is assumed (\$35,000 assumed in 2013 x CPI³).

Finally, the number of unserved households/prospective customers must be estimated. This assessment uses the difference between the number of households based on US Census data, and the number of customers served based on statistical data filed with the PSC. It should also be noted that a strict count of utility customers will also include non-residential entities, such as businesses, industries, etc. and this must be considered when attempting to estimate the number of unserved households/prospective customers.

Since a significant portion of current applications are for rehabilitation or contain rehabilitation work, it can be assumed that future needs may be understated by as much as \$4 Billion. Therefore, if rehabilitation work is considered in the estimate, the need may be approaching approximately \$17 Billion (\$2.3 Billion plus \$10.7 Billion from table below plus 4 Billion).

COST TO SERVE EVERY HOUSEHOLD/PROSPECTIVE CUSTOMER

	WATER	SEWER
Number of Households ⁴	740,890	740,890
Customers served ¹	652,228	449,449
Difference (unserved)	88,662	291,441
Avg. cost per customer to serve	\$26,250	\$36,750
Overall need	\$2.3 Billion	\$10.7 Billion

OBSTACLES, ISSUES AND PROBLEMS

FINANCIAL CONCERNS

Available Funding Levels

The current status of funding sources is summarized below:

- The EPA State Revolving Fund (SRF) programs are largely driven by Congressional budgeting and funding for both the Clean Water State Revolving Fund (CWSRF) and Drinking Water Treatment Revolving Fund (DWTRF), and funding for these programs has been relatively stable the last few years. However, there is no guarantee that will continue. In addition to the federally allocated funds and the state match provided by the IJDC, both programs receive payments of principal and interest that are used to fund projects. The CWSRF receives approximately \$33 million annually from this funding stream. The DWSRF program receives \$15 Million annually for projects from repayments.
- The Community Development Block Grant (CDBG) program was allocated \$12,288,766 for FY2017. FY2018 funding is unknown at the present time and will remain unknown until Congress passes an appropriations bill or a revised budget.
- The Appalachian Regional Commission (ARC) is estimating approximately \$5 Million will be available for FY2018 grant awards as a “best-case” scenario.
- The Abandoned Mines Lands and Reclamation (WVDEP-AML) Waterlines Program budget for Calendar Year 2018 is estimated to be approximately \$19 Million available for waterline construction. The \$19 Million budgeted amount includes unspent AML Waterlines grant funds carried over from previous grant years. AML anticipates that in future years, unspent waterlines grant funds will not be carried forward, but will instead be redirected to AML Reclamation projects. Current Federal legislation mandates that the coal tax and resultant federal funds will end in 2021, and additional AML Waterlines Program funds may not be available after that time.
- The US Department of Agriculture – Rural Utility Services (USDA-RUS) anticipates having the same allocation for FY2018 as in FY2017, which was approximately \$17,260,000 for loans and \$5,528,000 for grants.
- WV Infrastructure & Jobs Development Council (Council) - During the 2017 Legislative Session, the Enrolled Senate Bill 1013 passed on June 16, 2017 which restored the cuts to the Infrastructure Fund from excess lottery revenues to a maximum of \$40 Million which will be utilized in fiscal year 2019. This restoration of the cuts from the previous year which was a deposit of \$20 Million collected during fiscal year 2017 and used to fund projects in fiscal year 2018.

Availability of Grant Funds

The most sought-after form of funding for water and sewer infrastructure projects is grants. This is also the least available of fund types, due mainly to the fact that the largest funding programs were established as revolving funds and therefore rely on loan repayments to replenish and sustain themselves. The amount of grant funding available actually serves to make many projects viable and hence proceed to construction. A review of the Infrastructure Fund’s project financing closings between FY2015 and FY2017 reflects that approximately 79% of those projects had Council grants in their funding

packages. Had those grants not been available it is quite possible that most of the projects funded through the Infrastructure Fund over the last three years would not have proceeded to construction, or would have proceeded with reduced project scopes.

User Rates

Water and sewer user rates continue to rise in order to meet current utility expense increases and evolving regulatory requirements. Accordingly, the income available for utilities to service the debt associated with borrowing public funds is less. Every utility undertaking a capital project must determine the maximum user rates it is willing to accept in order to construct a project. Although this amount is different for each utility (and project), it will be capped as a direct function of the rates its customers are willing to pay and/or what the management of the utility is willing to accept. As rates approach these “unacceptable” levels, project sponsors (utilities) may be less willing to take on additional debt (loans) and may only undertake capital projects if grant funds are available. Another probable outcome is that, in the absence of grant funds, utilities will undertake only those projects with a high urgency, such as those designed to ensure compliance with regulatory standards and consent decrees versus projects that are not being mandated by law or regulation, such as extensions of service to unserved areas.

PHYSICAL AND GEOGRAPHIC CONCERNS

West Virginia’s geography and geology mandate relatively higher costs for underground infrastructure, such as water and sewer projects. This impact exists not only for new construction, but for replacement and rehabilitation projects as well. Real estate to construct new treatment facilities can be difficult and expensive to acquire, which sometimes creates added controversy over plant and pump/lift station siting proposals.

Typically, existing systems will expand service to more accessible areas first. As time progresses, the remaining unserved areas will be located in more remote, rugged, and less densely populated areas. This results in higher costs, both on a per-customer and per-mile basis.

RECOMMENDATIONS

- 1) The need for infrastructure investments and improvements far outweighs the funds available.
Determining which projects receive funding commitments must be based on objective, uniform criteria; among the most important of these criteria is a project's readiness to proceed to construction after receiving its funding commitments. This incentivizes project Sponsors to maintain timely project schedules;
- 2) Ensure that the "utilization rates" of the State's existing available funds are as close to 100% as possible, where "utilization" is defined as a formal, binding commitment of funds. Once the available funds are 100% utilized, then planning for additional procurement of funding, i.e., bond issues, leveraging, etc. should be considered;
- 3) Funding agencies must continue to coordinate their efforts in order to maximize the effectiveness of the State's limited funds available;
- 4) Continue to provide matches for both EPA-SRF funds administered by the State (CWSRF and DWTRF); and
- 5) Ensure that all federal funds are utilized and matched when necessary by State funds. Other than the Infrastructure Fund, all other primary funding agencies for water and sewer projects in the State receive their funds primarily from federal sources. Therefore, almost every funding agency in the State partnering with the Infrastructure Fund can be considered as requiring a "federal match" in order to ensure its projects are fully funded.

REFERENCES

- 1) 2016 Statistical Report, Public Service Commission of West Virginia
- 2) Combined Sewer Overflow (CSO) Long Term Control Plans, WV Department of Environmental Protection
- 3) Consumer Price Index (CPI) for 2015 - 2017 from the US Bureau of Labor Statistics
- 4) US Census Data for 2010 updated from American Community Survey for 2015

Appendix A

Existing Water Systems and Customers - Private Water Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Alpine Lake Public Utilities Company	517
Beckley Water Company	22,551
Bellwood Community Facilities Imp. Corp.	43
Cave Road Utilities, LLC	-
Cheat Mountain Water Company, Inc.	606
Fox Glen Utilities, Inc.	253
Hampton Roads Water System	-
Jefferson Utilities, Inc.	2,585
Lakewood Utilities, Inc.	172
Mountain View Water System LLC	54
Newell Company, Inc., The	651
Otsego Community Water System	28
P & P Enterprises Utilities, LLC	2
Springer Run Park, LLC	-
Sunny View Acres Water Project	28
Timberline Four Seasons Utilities, Inc.	428
Valley Water & Sewer Services, Inc.	121
West Logan Water Company	417
West Virginia Resorts LLC	53
West Virginia-American Water Co.	167,366
Total	<u>195,875</u>
 TOTAL SERVED BY WATER IN STATE	 652,228

Source: 2016 Statistical Report, Public Service Commission of WV

Appendix A

Existing Water Systems and Customers - Municipal Water Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Albright	151
Alderson	711
Anmoore	476
Athens	1,777
Beech Bottom	216
Belington	942
Belmont	440
Benwood	592
Berkeley Springs (Bath)	1,369
Bethlehem	1,142
Beverly	1,072
Bradshaw	71
Bridgeport	4,723
Bruceton	82
Buckhannon	4,003
Burnsville	383
Cairo	163
Camden-on-Gauley	170
Cameron	402
Capon Bridge	323
Carpendale	373
Cedar Grove	438
Ceredo	626
Chapmanville	922
Charles Town	5,951
Chester	1,789
Clarksburg	8,242
Clay	562
Davis	438
Davy	189
Delbarton	142
East Bank	399
Elizabeth	858
Elkins	4,021
Fairmont	13,784
Fairview	477
Falling Springs (Renick)	101
Farmington	208
Follansbee	3,624
Fort Gay	631
Franklin	713
Gary	479

Appendix A

Existing Water Systems and Customers - Municipal Water Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Gilbert	743
Glasgow	355
Glen Dale	1,108
Glenville	872
Grafton	2,657
Grant Town	-
Grantsville	308
Harman	95
Harpers Ferry	812
Harrisville	1,137
Hartford	272
Hillsboro	105
Hurricane	3,574
Huttonsville	77
Junior	382
Kenova	3,838
Kermit	533
Keyser	2,399
Keystone	80
Kingwood	1,425
Lester	266
Lewisburg	4,892
Logan	1,991
Lumberport	684
Man	446
Mannington	935
Marlinton	740
Martinsburg	6,504
Mason	762
Masontown	921
Matewan	897
Matoaka	125
McMechen	839
Meadow Bridge	253
Middlebourne	516
Mill Creek	389
Milton	2,519
Monongah	1,413
Moorefield	1,182
Morgantown	25,748
Moundsville	4,499
Mount Hope	677
New Cumberland	591

Appendix A

Existing Water Systems and Customers - Municipal Water Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
New Haven	682
New Martinsville	2,701
Newburg	430
Northfork	163
Nutter Fort	835
Oceana	1,204
Paden City	1,263
Parkersburg	16,053
Parsons	781
Paw Paw	231
Pax	-
Pennsboro	626
Petersburg	1,259
Philippi	1,596
Piedmont	289
Pine Grove	-
Pineville	1,145
Pocahontas	450
Point Pleasant	2,436
Rainelle	908
Ravenswood	1,886
Reedy	179
Rhodell	-
Richwood	1,066
Ridgeley	317
Ripley	2,456
Rivesville	685
Romney	884
Ronceverte	1,038
Rowlesburg	240
Rupert	489
Salem	799
Shepherdstown	1,684
Shinnston	2,306
Sistersville	952
Spencer	2,150
St. Albans	6,133
St. Marys	1,094
Star City	931
Stonewood	934
Summersville	2,699
Terra Alta	774

Appendix A

Existing Water Systems and Customers - Municipal Water Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Thomas	354
Triadelphia	517
Tunnelton	418
Union	387
Valley Grove	317
Vienna	5,480
War	-
Wardensville	367
Wayne	2,393
Weirton	9,440
Welch	1,118
Wellsburg	1,612
West Hamlin	995
West Milford	271
West Union	716
Wheeling	13,304
White Sulphur Springs	1,877
Williamson	1,678
Williamstown	1,529
Womelsdorff	109
Worthington	460
Totals	<u>248,826</u>

Appendix A

Existing Water Systems and Customers - Public Service Districts (Water)

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Adrian Public Service District	1,946
Armstrong Public Service District	800
Berkeley County Public Service District	22,346
Big Bend Public Service District	-
Bingamon Public Service District	545
Birch River Public Service District	441
Bluewell Public Service District	2,998
Boone County Public Service District	-
Boone-Raleigh Public Service District	-
Branchland-Midkiff Public Service District	1,176
Brenton Public Service District	-
Brooke County Public Service District	114
Buffalo Creek Public Service District	1,121
Central Barbour Public Service District	1,057
Central Boaz Public Service District	651
Central Hampshire Public Service District	1,628
Century Volga Public Service District	1,021
Cheat View Public Service District	3,669
Chestnut Ridge Public Service District	1,152
Clay Battelle Public Service District	1,644
Clay County Public Service District	654
Clay-Roane Public Service District	850
Claywood Park Public Service District	3,782
Clover Public Service District	419
Cool Ridge-Flat Top Public Service District	1,796
Coon's Run Public Service District	417
Cottageville Public Service District	1,338
Cowen Public Service District	1,308
Craigsville Public Service District	1,930
Crum Public Service District	1,269
Cumberland P.S.D. c/o WV-American Water	97
Danese Public Service District	936
Downs Public Service District	442
East View Public Service District	228
Eastern Wyoming Public Service District	1,381
Elkins Road Public Service District	1,096
Ellenboro-Lamberton Public Service District	251
Enlarged Hepzibah Public Service District	843
Fenwick Mountain Public Service District	210
Flatwoods-Canoe Run Public Service District	1,860
Fountain Public Service District	435
Frankfort Public Service District	2,750

Source: 2016 Statistical Report, Public Service Commission of WV

Appendix A

Existing Water Systems and Customers - Public Service Districts (Water)

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Friendly Public Service District (Tyler County)	949
Gap Mills Public Service District	191
Gauley River Public Service District	1,359
Gilmer County Public Service District	-
Glen Dale Heights Public Service District	228
Glen Rogers Public Service District	95
Glen White-Trap Hill Public Service District	1989
Grandview-Doolin Public Service District	1032
Grant County Public Service District	2,713
Grant Public Service District	903
Greater Harrison County Public Service District	3,450
Green Valley-Glenwood Public Service District	4,364
Greenbrier County Public Service District No. 2	469
Hammond Public Service District	916
Hamrick Public Service District	729
Hardy County Public Service District	1,985
Hodgesville Public Service District	1,203
Hundred-Littleton Public Service District	274
Huttonsville Public Service District	1,238
Ice's Run Route 250 Public Service District	473
Jane Lew Public Service District Water Division	649
Jefferson County Public Service District	113
Jumping Branch-Nimitz Public Service District	-
Justice Public Service District	227
Kanawha Falls Public Service District	985
Kopperston Public Service District	-
Lashmeet Public Service District	-
Lavalette Public Service District	3,807
Leadsville Public Service District	643
Lincoln Public Service District	2,210
Little Creek Public Service District	902
Logan County Public Service District	10,042
Lubeck Public Service District	4,536
Mannington Public Service District	556
Marianna Public Service District	11
Marshall County Public Service District No. 1	1,311
Marshall County Public Service District No. 2	655
Marshall County Public Service District No. 3	1,170
Marshall County Public Service District No. 4	1,706
Mason County Public Service District	5,976
McDowell County Public Service District	3,064
Midland Public Service District	1,434
Mineral Wells Public Service District	2,547

Source: 2016 Statistical Report, Public Service Commission of WV

Appendix A

Existing Water Systems and Customers - Public Service Districts (Water)

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Mingo County Public Service District	4,119
Monumental Public Service District	868
Mountain Top Public Service District	887
Mt. Zion Public Service District	516
Nettie-Leivasy Public Service District	1,375
New Haven Public Service District	-
Northern Jackson County Public Service District	1081
Norton-Harding-Jimtown Public Service District	689
Oakland Public Service District	935
Oakvale Road Public Service District	-
Ohio County Public Service District	4,243
Page-Kincaid Public Service District	650
Paw Paw Rt 19 Public Service District	538
Pendleton County Public Service District	742
Pleasant Hill Public Service District	669
Pleasant Valley Public Service District	947
Pleasants County Public Service District	229
Pocahontas County Public Service District	272
Preston County Public Service District No. 1	1,461
Preston County Public Service District No. 2	1,405
Preston County Public Service District No. 4	1459
Putnam Public Service District	9,589
Queen Shoals Public Service District	-
Raleigh County Public Service District	4,653
Ravencliff-McGraws-Saulsville Public Service Dist	1,269
Red Sulphur Public Service District	2,207
River Road Public Service District	781
Salt Rock Public Service District	-
Short Line Public Service District	1,169
Southern Jackson County Public Service District	2,441
Southwestern Water District	2,040
Sugar Creek Public Service District	585
Summit Park Public Service District	424
Sun Valley Public Service District	1,217
Taylor County Public Service District	1,081
Tomlinson Public Service District	923
Union-Williams Public Service District	3,212
Valley Falls Public Service District	1,659
Walton Public Service District	826
Washington Pike Public Service District	1,382
Wetzel County Public Service District No. 1	709
Wilderness Public Service District	2,038
Totals	<hr/> 194,995

Source: 2016 Statistical Report, Public Service Commission of WV

Appendix A

Existing Water Systems and Customers - Water Associations and Authorities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Arthurdale Water Association	109
Clinton Water Association, Inc.	3,602
Coal Mountain Water Company	41
Coolfont Mountainside Association, Inc.	120
Crumpler Community Water Association, Inc.	85
Denver Water Association	142
Gallipolis Ferry Water Association, Inc.	433
Garwood Water Maintenance Association	-
Green Camp Community Water Association	19
Hardy County Rural Development Authority	80
Herndon Water Works	-
Hiawatha Water Association	-
Hughes River Water Board	3
Hutchinson Community Water Association	151
J-2-Y-35 Water Association, Inc.	513
Lincoln Heights Improvement Association	85
Little Laurel Run Improvement Association	35
Ministers Run Water Association	147
Montana Water Association	301
Mount Hope Water Association	1,202
Mountain View Water Association	873
New Creek Water Association, Inc.	1,374
O'Toole Water Association, Inc.	-
Pleasants County Development Authority	-
Route 16 Water Corporation	584
Sugar Lane Water Association Inc	79
Tri-County Water Association	1,087
Webster County Economic Development Authority	208
Whitmer Water Association, Inc.	-
Windmill Gap Water Association	-
Woods Homeowners Association, Inc., The	1,259
Total	<u>12,532</u>

Appendix B

Existing Sewer Systems and Customers - Private Sewer Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Alpine Lake Public Utilities Company	516
Big Bend Sewer Association, Inc.	-
Butcher Bend Lagoon Maintenance Association	19
Carney Park Landowners/Homeowners Association	59
C & J Utilities, LLC	32
Cacapon South Utility Association, Inc.	84
Cave Road Utilities, LLC	-
Chestnut Point Property Owners Association, Inc.	75
Circle Drive Estates Association	41
Coolfont Mountainside Association Inc.	120
Eastwood Systems, Inc.	-
Fountainhead Homeowners Association	-
Graham Meadows Service District, Inc.	55
Green Acres Utilities	109
Hidden Valley Treatment, Inc.	84
Holiday Park Leisure Acres Association, Inc.	-
HPSD, LLC	211
Hubbard Heights Subdivision H.O. Association	-
Lakewood Utilities, Inc.	172
Linmont Sanitation System, Inc.	81
Little Kanawha Service Company	58
Moorefield/Hardy County Wastewater Authority	3
Mountaineer Village	-
Newell Company, Inc., The	449
Ogden Sewer Company	82
P & P Enterprises Utilities LLC	36
Sewage Systems, Inc.	-
Shenandoah Junction Public Sewer, Inc.	166
Spring Valley Home Owners Association, Inc.	-
Springer Run Park, LLC	-
Timberline Four Seasons Utilities, Inc.	743
Vitech Enterprises, Inc.	-
Wastewater Management, Inc.	50
West Virginia Resorts, LLC	54
West Virginia-American Water Company	1,056
Williamsburg Sewer System, Inc.	209
Wood County Parks and Recreation Commission	17
Total	<u>4,581</u>

Appendix B

Existing Sewer Systems and Customers - Municipal Sewer Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Albright	101
Alderson	523
Anmoore	408
Ansted	607
Athens	451
Barboursville	1,886
Barrackville	655
Beckley	7,416
Belington	825
Belle	579
Belmont	402
Benwood	565
Bethany	216
Bethlehem	1,111
Beverly	807
Blacksville	103
Bluefield	7,775
Bradshaw	129
Bridgeport	4,692
Buckhannon	3,104
Buffalo	502
Burnsville	214
Cairo	155
Camden-on-Gauley	103
Cameron	396
Capon Bridge	323
Carpendale	371
Cedar Grove	381
Ceredo	777
Chapmanville	815
Charles Town	3,244
Charleston	23,008
Chesapeake	649
Chester	1,692
Clarksburg	7,492
Clay	303
Clearview	253
Davis	429
Delbarton	429
Dunbar	3,453
Durbin	168
East Bank	403

Appendix B

Existing Sewer Systems and Customers - Municipal Sewer Utilities

	AVG. #
<u>NAME OF UTILITY</u>	<u>CUSTOMERS</u>
Eleanor	969
Elizabeth	432
Elkins	3,063
Fairmont	9,694
Farmington	252
Flemington	269
Follansbee	2,421
Fort Gay	313
Franklin	457
Gary	422
Gilbert	302
Glasgow	332
Glen Dale	1,108
Glenville	738
Grafton	2,380
Grantsville	329
Granville	340
Handley	111
Harman	78
Harrisville	822
Hartford	198
Hillsboro	160
Hinton	1,246
Huntington	19,103
Hurricane	1,964
Junior	196
Kenova	1,327
Kermit	138
Keyser	2,278
Kingwood	1,596
Leon	117
Logan	850
Lumberport	598
Man	387
Mannington	937
Marlinton	591
Marmet	647
Martinsburg	5,997
Mason	473
Masontown	515
Matewan	836
Matoaka	125
McMechen	823

Appendix B

Existing Sewer Systems and Customers - Municipal Sewer Utilities

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Meadow Bridge	335
Middlebourne	555
Milton	1,895
Monongah	573
Montgomery	677
Moorefield	1,351
Morgantown	22,124
Moundsville	4,439
Mount Hope	523
Mullens	-
New Cumberland	455
New Haven	675
New Martinsville	2,578
Newburg	152
Nitro	4,459
North Hills	314
Nutter Fort	835
Oak Hill	3,303
Oceana	1,582
Paden City	1,200
Parkersburg	15,396
Parsons	694
Paw Paw	231
Pax	159
Pennsboro	544
Petersburg	1,261
Philippi	1,258
Piedmont	289
Pine Grove	-
Poca	682
Point Pleasant	2,108
Pratt	226
Princeton	4,025
Ranson	1,705
Ravenswood	1,810
Reedsville	321
Reedy	98
Richwood	878
Ridgeley	316
Ripley	2,259
Romney	1042
Ronceverte	805
Rowlesburg	232

Appendix B

Existing Sewer Systems and Customers - Municipal Sewer Utilities

	AVG. #
<u>NAME OF UTILITY</u>	<u>CUSTOMERS</u>
Salem	742
Sand Fork	58
Shepherdstown	1,105
Shinnston	1,039
Sistersville	952
Smithers	380
Sophia	832
South Charleston	7,080
Spencer	1,559
St. Albans	6,147
St. Marys	913
Star City	915
Stonewood	922
Summersville	1,662
Terra Alta	657
Thomas	304
Triadelphia	497
Tunnelton	131
Union	302
Vienna	5,472
War	458
Wardensville	351
Wayne	761
Weirton	9,282
Welch	867
Wellsburg	1,460
West Hamlin	396
West Union	556
Weston	2,707
Westover	2,249
Wheeling	12,578
White Sulphur Springs	1,680
Williamson	1,281
Williamstown	1,416
Winfield	1,110
Worthington	312
Total	<hr/> 297,346

Appendix B

Existing Sewer Systems and Customers - Public Service Districts (Sewer)

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Arbuckle Public Service District	575
Armstrong Public Service District	784
Berkeley County Public Service Sewer District	21,928
Big Bend Public Service District	-
Bluewell Public Service District	1,258
Boone County Public Service District	1,833
Boone-Raleigh Public Service District	-
Bradley Public Service District	1,592
Bramwell Public Service District	200
Brooke County Public Service District	1029
Buffalo Creek Public Service District	1,248
Canaan Valley Public Service District	4
Center Public Service District	746
Central Boaz Public Service District	483
Central Hampshire Public Service District	766
Claywood Park Public Service District	1,700
Colfax Public Service District	137
Cottageville Public Service District	228
Cowen Public Service District	573
Crab Orchard-MacArthur Public Service District	4,192
Craigsville Public Service District	976
Culloden Public Service District	1,204
Deckers Creek Public Service District	1,866
East View Public Service District	349
Elk Valley Public Service District	4,684
Ellenboro-Lamberton Public Service District	166
Enlarged Hepzibah Public Service District	824
Flatwoods-Canoe Run Public Service District	1,286
Frankfort Public Service District	1,560
Glen Rogers Public Service District	97
Greater Harrison County Public Service District	2,164
Greater Marion Public Service District	423
Greater Paw Paw Sanitary District	1,360
Greater St. Albans Public Service District	2,104
Green Valley-Glenwood Public Service District	4,382
Greenbrier County Public Service District No. 2	2,398
Greenbrier Public Service District No. 1	2,717
Hamlin Public Service District	712
Hamrick Public Service District	458
Hancock County Public Service District	1,379
Harpers Ferry-Bolivar Public Service District	752
Hundred-Littleton Public Service District	205

Source: 2016 Statistical Report, Public Service Commission of WV

Appendix B

Existing Sewer Systems and Customers - Public Service Districts (Sewer)

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Huttonsville Public Service District	945
Jane Lew Public Service District	898
Jefferson County Public Service District	2,565
Kanawha Falls Public Service District	1,064
Kanawha Public Service District fka Chelyan PSD	2,614
Kingmill Valley Public Service District	1,390
Lake Floyd Public Service District	153
Leadsville Public Service District	780
Logan County Public Service District	1,589
Lubeck Public Service District	2,362
Malden Public Service District	3,282
Marshall County Sewerage District	726
Mason County Public Service District	271
Meadow Creek Public Service District	-
Midland Public Service District	884
Mineral Wells Public Service District	1,785
Mingo County Public Service District	419
Mountain Top Public Service District	299
Mt. Zion Public Service District	132
New Creek Public Service District	1,062
North Beckley Public Service District	3,881
Northern Jackson County Public Service District	121
Northern Wayne County Public Service District	2,774
Norton-Harding-Jimtown Public Service District	689
Oakvale Road Public Service District	1,765
Ohio County Public Service District	2,043
Page-Kincaid Public Service District	405
Pea Ridge Public Service District	4,797
Pleasant View Public Service District	159
Pocahontas County Public Service District	596
Preston County Public Service District	244
Prichard Public Service District	196
Putnam Public Service District	10,668
Red Sulphur Public Service District	1,224
Salt Rock Public Service District	1,588
Shady Spring Public Service District	4,303
Sissonville Public Service District	1,637
Southern Jackson County Public Service District	770
Spring Valley Public Service District	508
Summit Park Public Service District	566
Sun Valley Public Service District	727
Tennerton Public Service District	885
Tyler County Public Service District (Friendly PSD)	290

Appendix B

Existing Sewer Systems and Customers - Public Service Districts (Sewer)

<u>NAME OF UTILITY</u>	<u>AVG. # CUSTOMERS</u>
Union Public Service District	5,315
Union Williams Public Service District	1,810
Warm Springs Public Service District	1,424
Webster Springs Public Service District	641
West Dunbar Public Service District	724
White Oak Public Service District	956
Whitehall Public Service District	1,254
Totals	<hr/> 147,522

Appendix C

Current Needs - Approved Water Applications Requiring Funding

As of 12/31/17 (By County)

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Chestnut Ridge PSD	This project intends to serve approximately 10 new customers on County Route 92/18 and approximately 27 additional customers along Teter Creek Road. This project also intends to replace approximately 15,700 LF of existing troublesome water line as well as replace approximately 59 service lines which are all located along Route 92.	Barbour	2016W-1636	2,531,000.00	
Boone County PSD	To provide potable water to the Woodville, Morrisvale and Cameo areas of Boone and Lincoln Counties	Boone	2013W-1460	3,900,000.00	313,260.00
Boone County PSD	To provide potable water to the residents and businesses of Prenter, Boone County. The area is served by an untreated well and is on the brink of failing to provide service.	Boone	2017W-1711	2,150,000.00	400,000.00
Flatwoods Canoe Run PSD	The project is to extend water to 59 new residents as well as provide additional fire flow service to the Flatwoods Factory Outlet and to support future development in the I-79/Flatwoods interchange area.	Braxton	2014W-1563	3,136,600.00	
Flatwoods Canoe Run PSD	This project is to extend services and provide quality and dependable potable water and fire protection service to approximately 39 customers in the Holly and Otter Magisterial Districts of Braxton County, West Virginia.	Braxton	2016W-1626	2,498,027.00	
Salt Rock PSD	The SRWPSD is proposing to extend their distribution system to provide safe, reliable water service to 106 new customers in the vicinity of WV Rt. 2 to Frontage Rd. near the Cabell/Mason county line, Upper Tom's Creek, Big Cabell Creek, Lower Heath Creek, Raccoon Creek, and Cavill Creek and vicinity.	Cabell	2017W-1714	3,660,000.00	
Pleasant Hill PSD	Extension of public water service to the Leaf Bank, Back Fork, Anamoriah, Leading Creek, and Norman Ridge areas of Calhoun	Calhoun	2013W-1394	2,415,000.00	

Appendix C

Current Needs - Approved Water Applications Requiring Funding

As of 12/31/17 (By County)

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Grantsville Town of	Required improvements to the Town of Grantsville's Water Treatment Plant.	Calhoun	2015W-1588	2,097,920.00	
Clay Town of	To provide potable water to approximately 40 customers in the Blue Knob area of Clay County. The project consists of 23,000 LF of waterline, a storage tank and booster station.	Clay	2014W-1506	2,100,000.00	
Birch River PSD	The Birch River Public Service District desires to extend public water service to approximately 30 new customers in the Rockcamp and Wilson Ridge areas of Clay County, West Virginia. The project includes the installation of one booster station and one pressure reducing station.	Clay	2017W-1685	1,667,870.00	344,000.00
Doddridge County PSD	The Big Flint Water Line Extension will serve approx. 339 new customers. Will tie-in to Town of Salem existing system at 1,000 feet SE of US Rt 50 & Rt 23 intersection. Current residents utilize wells, springs & cisterns as sources of drinking water. This will require approx. 70,435 LF of 8", 30,525 LF of 6", 5,815 LF of 2", 65 gate valves, 60 fire hydrants, 12 automatic air release valves, 339 3/4" meters, one booster pump station, one water storage tank, & necessary appurtenances	Doddridge	2016W-1634	7,919,435.00	
Page Kincaid PSD	PKPSD received a DWTRF design grant to perform a system wide contamination/leak study. The proposed water system improvements project will address the identified leaks and address deficiencies noted in the 10-19-2010 study conducted by BPH	Fayette	2012W-1378	1,400,000.00	
Armstrong PSD	Replacement of Powellton water storage tank with an apx 150,000 gal storage tank, upgrade apx 10,000 LF of existing waterline in the Powellton area & apx 9,000 existing waterline in the Deepwater area, as well as providing fire protection to the Deepwater area.	Fayette	2016W-1628	2,515,000.00	
Page Kincaid PSD	Water Treatment Plant, Booster Station and Water Storage Tank upgrades	Fayette	2016W-1668	3,534,000.00	

Appendix C**Current Needs - Approved Water Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Lewisburg City of	The City of Lewisburg has decided to undertake a water system improvements project that includes a new treatment plant, new raw water intake and line, distribution system work that will include new water storage tanks and/or renovation of the existing tanks and the abandonment of 2 existing booster stations.	Greenbrier	2014W-1536	31,678,317.50	1,589,350.50
Central Hampshire PSD	The project includes the following four components: Green Spring WTP upgrade, Springfield Rehabilitation, Grace Cabin Water Line Extension and Various Tank Re-paintings.	Hampshire	2017W-1710	3,000,000.00	
Weirton Water Board	Water plant and line improvements to prevent loss of water service due to main line disruption as happened in the past.	Hancock	2015W-1580	6,900,000.00	
Lumberport Municipal Water Works	The Project will involve upgrading the Town's aging and deteriorating distribution system and improvements to the WTP, in effort to eliminate substantial problems in the system due to age and material types in place.	Harrison	2013W-1456	2,100,000.00	
Greater Harrison County PSD	Greater Harrison County PSD plans to extend water service to customers along Hoop Pole Run Road, Long Run Road and Steven's Run Road,	Harrison	2015W-1566	2,326,000.00	
Salem City of	Proposed upgrades/line replacements to the city's potable water distribution system and water storage facilities to include construction of a 350,000 water storage at a new location and approximately 10,000 LF of water line replacement/upgrade varying in size from 4" to 8".	Harrison	2017W-1676	1,520,000.00	20,000.00
Jefferson County PSD	Purchase of Jefferson Utilities Inc. Water Systems in Jefferson Co. & upgrade of their Water Systems in Westridge Hills, Harpers Ferry Campsites & Keyes Ferry Acres	Jefferson	2014W-1537	22,650,000.00	
Branchland-Midkiff PSD	Ranger; Construction of approximately 28,990 lf of 6" and smaller water mains, one booster station with bladder tanks, hydrants and valves	Lincoln	2011W-1298	2,320,000.00	

Appendix C

Current Needs - Approved Water Applications Requiring Funding

As of 12/31/17 (By County)

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Lincoln PSD	Replaced 2010W-1178; Hamlin, construction of approximately 93,600 feet of 8" and smaller water main, one 100,000 gallon tank, fire hydrants, valves and other related items.	Lincoln	2013W-1393	5,980,000.00	175,000.00
Lincoln County PSD	Lower Mud River Water Extension Project Phase II will make service available to approximately 70 potential residents and small commercial customers in the Lincoln County communities of Lower Mud River, Buffalo Creek, Little Buffalo Creek, and surrounding areas. Water for the project will be purchased from the West Virginia American Water Company's Water System at Hamlin.	Lincoln	2017W-1671	2,337,000.00	
Chapmanville Muncipal Water	The proposed project will improve reliability and enhance service to approx. 173 existing residential and commercial customers. Construction includes 16,100 l.f. of 6" and smaller diam. water main, hydrants, valves, indiv. cust. svcs., and related items.	Logan	2013W-1440	2,529,000.00	
Logan County PSD (Water)	The project consists of 7,160 lf of 6" and smaller water main; fire hydrants, valves and other related appurtenances. Project will serve six potential customers (15 persons) in the Logan County community of Frye Hollow.	Logan	2013W-1458	870,000.00	11,000.00
Logan County PSD	Big Harts Phase IV Waterline Extension is the final phase of the Big Harts project. This phase will make service available to approximately 163 potential new customers (410 persons) and 140 existing customers in the Mud Fork Area. The project consists of approximately 69,040 linear feet of 8" and smaller diameter water main, one 151,000 gallon water storage tank, one 150 gpm booster pump station, two pressure reducing stations, valves, fire hydrants, individual customer services, and other related appurtenances.	Logan	2017W-1684	5,560,000.00	200,000.00

Appendix C**Current Needs - Approved Water Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Rivesville Town of (prior 2013W-1428)	Proposed project will replace the water supply line from the Bellview master meter in Fairmont to the meters at Hawkinberry Hollow outside of Rivesville.	Marion	2017W-1677	2,417,895.00	300,000.00
Farmington Town of (Prior 2015W-1570)	Water line replacement in the northwest area in the Town of Farmington and for Little Laurel Run Water Assoc., installation of a telemetry system to control the operation of Little Laurel Run booster pump station and monitor storage tank water levels. This project also proposes to renovate the existing 100,000 gallon water storage tank and upgrading the existing water booster pump station for the Little Laurel Run system. This project description amends the original project by not replacing the water lines in the Lincoln Heights Improvement Association. This is due to the Lincoln Heights water system being in good shape.	Marion	2017W-1681	1,025,000.00	
Cameron City of	Make improvements to the City's Water System and Extend Water Service approximately 1.6 miles along Green Valley and Tunnel Hill Roads to serve 52 new customers	Marshall	2013W-1448	1,710,951.24	103,161.24
Marshall County PSD	The Marshall County PSD No. 4 proposes to extend water service to 16 households in the Adaline area of Fish Creek that are currently served by private wells or cisterns. Additionally, the PSD will purchase and install 1,742 new radio read meters to all existing customers and replace the Riggs Knob 53,000 gallon water storage tank with a new 69,000 gallon water storage tank, and provide a top coat of paint on the exterior walls and roof of the Fork Ridge #1 Tank	Marshall	2016W-1651	1,367,300.00	100,000.00
Welch City of	Renovations to the City of Welch water treatment facility.	McDowell	2013W-1446	3,850,088.00	
McDowell County PSD	To replace the current water systems in the Towns of Northfork and Keystone in McDowell County, WV.	McDowell	2014W-1513	6,000,000.00	

Appendix C**Current Needs - Approved Water Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Welch City of	Due to fairly recent mudslides and lack of accessibility, the City of Welch wants to upgrade and relocate lines along Riverside Drive and McDowell Street within city limits. The upgrade and replacement of these lines will benefit customers within the City and customers within the County.	McDowell	2014W-1551	3,782,500.00	80,000.00
Lashmeet PSD	Mary Branch; construct a water distribution system and water storage tank to serve the Mary Branch area, conduct water loss study and connect to the existing Matoaka Water System, and extend waterline to the Matoaka area.	Mercer	2011W-1302	6,447,822.00	860,000.00
Bluewell PSD	Provide water to Mercer County Airport and other potential residential and commercial customers along Route 52 and Airport Road.	Mercer	2015W-1617	3,494,000.00	
Bluewell PSD	Provide water service to customers in the Browning-Lambert Mountain and Montcalm areas in Mercer County, provide improved fire hydrant coverage to the existing Montcalm Elementary school and additional existing customers in the vicinity, and put new facilities in place that will position the PSD for future extensions to customers in the Rock and Crystal area.	Mercer	2016W-1629	3,520,000.00	
Mingo County PSD	Replaced 2009W-1125; Wharncliffe; extend water service to approx. 309 customers in Ben Creek area, including areas of County Route 8/1, 8/9, and sections of CR 8 and CR 10/1.	Mingo	2012W-1327	4,756,000.00	
Mingo County PSD	The proposed Beech Creek Water Main Extension Project is being implemented by the Mingo County Public Service District (MCPSD) and is necessary to provide quality and dependable potable water and fire protection service to approximately 252 residences in the Magnolia Magisterial District of Mingo County, West Virginia. This project will be supplied via the Mingo County PSD's Naugatuck Water Treatment Plant.	Mingo	2014W-1550	4,798,000.00	

Appendix C

Current Needs - Approved Water Applications Requiring Funding

As of 12/31/17 (By County)

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Williamson City of	Upgrade of Williamson's water system including construction of 15,100 l.f. of 24in and smaller water main, three 2,500gpm treatment plant high service pumps, 500gmp booster station, four new water storage tanks, rehab of existing tank, numerous pressure reducing stations, back up generators, telemetry, hydrants, valves and related appurtenances.	Mingo	2015W-1587	12,578,000.00	
Gilbert Waterworks Town of	The proposed River Bend Road Waterline Extension Project will make service available to approximately thirty three potential residential and small commercial customers (82 persons) between the Mingo County communities of Verner and Paynter Bottom. The project consists of the construction of approximately 13,210 linear feet of 8-inch and smaller diameter water main, one 250 gallon per minute booster station, one 200 gallon per minute booster station, fire hydrants, valves, individual customer services and other related appurtenances.	Mingo	2015W-1605	2,229,000.00	
Mingo County PSD	The Twisted Gun Water Extension Project will consist of the construction of approximately 10,600 feet of 8-inch diameter and smaller water line, a sixty gallon per minute booster pumping station, a one-hundred-thousand-gallon elevated water storage tank and other related appurtenances. The project could be supplied by either the recently completed Ben Creek Phase I water main extension project or the proposed Ben Creek Phase II water main extension project.	Mingo	2016W-1659	1,740,600.00	350,000.00
Clay Battelle PSD	Replace main pump sta.; booster sta. in Pedlar Run; Telemetry; Flow meters & pressure gauges; 4 backup generators; Paint & fence 3 ex. tanks; Line upgrade/new tank n Wadestown; Office/shop; Map system; Ext. for 5 cust. n Mahogany Run area & 5 n Sine Hollo	Monongalia	2013W-1399	5,379,958.00	

Appendix C**Current Needs - Approved Water Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
River Road PSD	The project proposes to replace water lines in the Booth Area and Birchfield Area; replace the Old Steel Harmony Grove Tank; install controls to improve water storage turnover at Hildebrand Tank; and upgrade piping at the existing booster pump station.	Monongalia	2015W-1565	2,546,000.00	
Union Town of	Extension of Water Service from The Town of Union two miles north on US Rt. 219 to the UTC Aerospace Systems Plant in Monroe County.	Monroe	2015W-1560	2,530,000.00	
Union Town of	Extension of water line to approximately 89 customers in the community of Pickaway, north of Union on U. S. Route 219.	Monroe	2015W-1577	2,320,000.00	
Red Sulphur PSD	Extension of water line to 77 potential customers on Adair Road north of U. S. Route 219 and west of State Route 12, between Peterstown and Cashmere in Monroe County, WV.	Monroe	2015W-1578	2,170,000.00	
Bath/Berkley Springs Town of	The project involves the replacement of additional existing water lines in the Town of Bath. Including replacing @ 15,575 feet of water lines ranging in size from ¾" to 6". The project will include replacing @ 100 existing meter services and miscellaneous valves and road repairs. The goal of the project is to reduce water loss and enable the Berkeley Springs Waterworks to be more sufficient.	Morgan	2016W-1638	2,000,000.00	500,000.00
Fenwick Mountain Public Service District	Construct (1) 50,000 gal water storage tank, rehab (1) booster, replacement of (1) booster, adding valves, water meters & telemetry	Nicholas	2013W-1421	1,459,000.00	
Richwood City of (IJDC Soft Cost)	he City of Richwood is proposing to extend public water service to approximately 118 customers in the Hinkle Mt./Little Laurel communities outside the corporate limits; limited existing water quantities and quality. Health Department requirements upgrades at plant.	Nicholas	2014W-1529	6,530,000.00	100,000.00

Appendix C**Current Needs - Approved Water Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Craigsville PSD	Project will provide water service to the residents along County Rt 3 beginning where it intersects with Lick Fork (Route 3/5) & runs to the community of Tioga. Also includes Horse Run, Delphi Rd, Bear Pen Rd, Big Run Rd & Lick Fork Rd. Project will serve apx 110 customers.	Nicholas	2015W-1584	3,738,210.00	
Craigsville PSD	Upgrade to existing water treatment plant, new 50,000 gal water storage tank, dedicated water distribution line from upgraded plant to existing storage tanks	Nicholas	2015W-1590	8,068,000.00	
Nettie Levisay PSD	Rehab to two elevated 125,000 gal storage tanks (1971 era), replacement of nine pressure reducing stations & replacement of 750 water meters (38 or more yrs old).	Nicholas	2015W-1596	2,500,000.00	
Pleasants County PSD	Eureka, extension of public water service to approx. 60 new customers in the Hebron and Rock Run areas.	Pleasants	2012W-1340	1,725,000.00	
Putnam County Building Comm	To serve 39 residences along Manila Ridge with potable water. This project consists of approximately 30,000 lineal feet of 6 inch waterline.	Putnam	2013W-1465	1,676,000.00	76,000.00
Walton PSD	For the Walton PSD, Roane County, to extend its potable water service along Quarry Road and Wolf Run and also provide fire service to the Camp Shepard 4-H Campsite.	Roane	2015W-1564	2,349,550.00	
Clay Roane PSD (Prior 2013W-1	Clay Roane PSD water extension to serve Garner Branch and Pine Grove areas, two new tanks, plus various system improvements and upgrades.	Roane	2017W-1688	2,854,960.00	
Reedy Town of	This project will extend water service to approximately 70 new households in the Middle Fork area of Roane County.	Roane	2017W-1692	1,985,000.00	
Parsons City of	This project is to provide an emergency connection between two water systems (City of Parsons and Hamrick PSD)that will provide a secondary water source for each system. This project will allow compliance with Senate Bill 373.	Tucker	2015W-1573	575,000.00	

Appendix C

Current Needs - Approved Water Applications Requiring Funding

As of 12/31/17 (By County)

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Davis Town of	This project will make improvements to the Town's water distribution system by replacing their old, deteriorated water lines.	Tucker	2016W-1633	2,335,000.00	85,000.00
Tyler PSD	Extension of Tyler PSD's water service around the Town of Middlebourne, serving 43 proposed residential customers along WV Rt. 18 South to A.I. Boreman Elementary and 20 additional customers in the Friendly Hill and Clark Ridge areas.	Tyler	2015W-1575	1,919,800.00	
Elkins Road PSD	This project will make improvements to Elkins Road PSD's existing water distribution system and extend potable water to Beech Run, Hawkins Road, Upper Childers Run, Jackson Road/Winery Road, Wolfe Ridge Road, Fortney/Snyder Road (Upper Sand Run), Audra Road/Braddock Lane, Radabaugh Ridge/Handy Camp Road, Kedron Road and Osborne Run Road.	Upshur	2016W-1632	6,500,000.00	
Crum PSD	Genoa; Project will extend water service to approx. 162 customers in the Wayne County community of Sidney, including WV Route 152, and County Routes: 32, 32/1, 52/14, 52/55, 52/72, 52/15, 30, 52/16, and 52/17.	Wayne	2012W-1326	4,330,000.00	
Kenova Citry of	The proposed Prichard Water Line Extension project is necessary to provide fire protection service and quantity of water needed to serve the Heartland Intermodal Gateway (HIG) in Prichard, Wayne County, WV. Water will be supplied via the Kenova Municipal Water Works (KMWW) Water Treatment Plant. The existing waterline to the Prichard area is inadequately sized to provide the amount of flow needed for the intermodal facility.	Wayne	2015W-1599	4,752,000.00	
Cowen PSD	Waterline extension to households in the area of Rt. 82 in Webster County. Households are currently served by inadequate wells.	Webster	2014W-1525	3,438,000.00	

Appendix C**Current Needs - Approved Water Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Camden on Gauley Town of	The proposed project will extend the existing water distribution system of the Camden on Gauley Water Works to the areas of Cranberry Ridge and Gauley Mills in Webster County, West Virginia. Approximately 84 potential new customers, who are currently not served with public water, are to be serviced by this project. The project will construct approximately 17,500 LF of new water mains, and will include one booster station.	Webster	2016W-1627	1,355,000.00	
Cowen PSD	The Cowen PSD 300,000+ gallons Webster County High School Tank has experienced a roof support failure and the H-Beams inside the tank holding up the roof have dropped into the tank. The roof is in danger of collapsing. Complete replacement of the tank or replacement of the roof and complete repainting of the tank is imperative for continued water and fire service to the high school, as well as to many customers, including the new customers of the ongoing Erbacon construction project.	Webster	2017W-1708	395,000.00	
Hundred -Littleton PSD	Extend water service approximately 5.8 miles along Rt. 250 and Rt 7 to serve 81 new customers in the Rush Run, Cottonwood, Burton and Pogue Run areas of Wetzel County.	Wetzel	2013W-1441	1,500,000.00	
Wetzel County PSD #1	An approximate 6.5 miles of waterline extensions from the end of the existing system near Jacksonburg on Route 20 to Smithfield. Extension will serve approximately 38 homes. Project includes a pump station to serve an existing tank.	Wetzel	2017W-1701	1,954,000.00	
Lubeck PSD	Extension of public water service to approximately 207 households in the Belleville area of Wood County	Wood	2013W-1462	3,923,000.00	

Appendix C**Current Needs - Approved Water Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Claywood Park PSD	Project entails miscellaneous water system improvements to enhance hydraulic capacity in two separate parts of the system; provide emergency preparedness through the addition of power generation at the water treatment plant and construction of additional system storage; replacement of old lines that are in the heart of the system; repainting of three tanks and the replacement of two tanks; a small water line extension serving 11 customers; and new equipment at two booster stations.	Wood	2014W-1535	5,043,944.00	
Mineral Wells PSD	Make improvements to the Mineral Wells PSD water distribution system, complete water transmission improvements, and site improvements.	Wood	2017W-1700	3,311,000.00	
Eastern Wyoming PSD	Phase II, Extension of water to serve 130 potential residential/small commercial customers on Barkers Ridge. Includes 78,140 lf of waterline, 100 gpm booster, 130,000 gal tank.	Wyoming	2012W-1388	2,939,945.00	
Eastern Wyoming PSD	Project consists of construction of approximately 134,700' of 6" and smaller diameter water main, one 53,000 gallon water tank, one 74,000 gallon water tank, one 50 gallons per minute booster station, 31 fire hydrants, valves, individual customer services, and other related appurtenances.	Wyoming	2016W-1648	9,410,000.00	
Oceana Town of	Upgrade antiquated pumps and valves at the water treatment plant and replace dilapidated water lines along Route 10, throughout the Town to help reduce water loss.	Wyoming	2017W-1675	4,800,000.00	

Appendix C

Current Needs - Approved Water Applications Requiring Funding

As of 12/31/17 (By County)

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Logan County PSD	To provide service to potential customers in the Upper Huff Creek, Brush Fork, and Road Fork areas of northern Wyoming County. This project consists of construction of approximately 25,640' of 6" and small diameter waterline, one conventional booster station, one constant run booster station, one 54,000 gallon water storage tank, valves, fire hydrants, customer services, and other related appurtenances.	Wyoming	2017W-1690	2,539,000.00	150,000.00

301,864,692.74

5,756,771.74

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Century Volga PSD	This sewer system project will evaluate the area of Century/Volga for a new sewer system that would eliminate failing private systems and direct discharges from the area as well as potentially serve 63 customers.	Barbour	2015S-1611	2,870,000.00	
Berkeley County PSSD	The Timberwalk Sewer Extension project will consist of approximately 7500 LF of 8" gravity sewer mains and approximately 35 manholes, that will serve approximately 49 customers and could serve an approximate additional 60 customers in the future due to proposed future development in the Timberwalk and Tanbridge Drive areas	Berkeley	2017S-1689	966,420.00	
Boone County PSD	To Upgrade the current wastewater treatment plant near Danville and rehabilitate the sanitary sewer lines in West Madison	Boone	2013S-1420	4,370,000.00	34,200.00
Burnsville Town of	This project will make improvements to the Town of Burnsville's wastewater collection system.	Braxton	2017S-1678	2,839,000.00	
Wellsburg Sanitary Board	Separation of combined sewers along 6th, 7th and 8th Streets in Wellsburg and sewer treatment plant upgrades	Brooke	2013S-1449	4,000,000.00	
Brooke County PSD	This project will extend sewer service further into the Eldersville Road and St. John's Road area of Brooke County that was considered in the design of the Phase I project. The Phase I project was completed in 2012 and served over 400 customers while the Phase IIA project completed in 2016 served approximately 90 additional customers. This project is expected to serve approximately 122 additional customers without any additional pump stations. These customers will gravity feed into the interceptor installed in the 2016 project.	Brooke	2017S-1680	2,760,000.00	20,000.00

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Pea Ridge PSD	This project will include the construction of a gravity collection system to extend sanitary sewer service to approximately 714 residential and 45 commercial customers along Little 7 Mile Road, through the Kyle Lane Industrial Park Area, to Cox Landing. The project also includes upgrades at the PSD's A Plant to increase treatment capacity required for the additional wastewater flows created by the increased customer base.	Cabell	2017S-1674	29,280,000.00	
Culloden PSD	Project consists of demolishing the existing Wastewater Treatment plant, replacing the Sovine Lift Station with a new (Claxton) Lift Station, along with replacing sewer lines along Virginia avenue and a crossing under route 60. This project was previously project number 2012S-1367 but required a scope change.	Cabell	2017S-1693	2,086,163.00	
Grantsville, Town of	The Town of Grantsville is under a WVDEP order to remedy the system's I&I issues. Approximately 2,600 LF of pipe will be replaced/installed as well as a new grinder station, installation of an aerator in the sludge tank, and structural repairs to WWTP	Calhoun	2013S-1397	1,200,000.00	
Mt Zion PSD	Rehabilitate portions of the Mt. Zion PSD treatment plant and its system's components.	Calhoun	2017S-1702	2,310,000.00	
Montgomery City of	Replacement and relocation of 6th Ave Sewage Pumping station	Fayette	2013S-1478	782,324.00	
Arbuckle PSD (Sewer)	Rehabilitation of the existing Arbuckle Collection and Pumping System to include over 1,500 repairs & renovations to the collection system manholes, reconstruction of 2 main line failures, complete replacement of 9 existing manholes, upgrading of equipment & refurbishing of 4 existing pump stations & the complete replacement of 1 badly deteriorated existing pump station.	Fayette	2014S-1553	3,922,442.00	
Page Kincaid PSD	Extend wastewater service to apx 52 customers in the Robson area	Fayette	2015S-1581	3,000,000.00	

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Pax Town of	Sewer extension to serve approximately 52 customers in the Willis Branch area just outside the Town of Pax, as well as improvements to the existing treatment lagoon.	Fayette	2015S-1589	2,325,000.00	
Oak Hill City of	Pursuant to an agreement between OHSB & Arbuckle PSD, project proposes consolidation of APSD's dilapidated sewer system with OHSB, including rehab of APSD's system to reduce I/I, construction of a sewage pumping station with force main to transport flows to OHSB's treatment facility & decommissioning of the existing APSD WWTP.	Fayette	2015S-1621	3,500,000.00	
Mount Hope City of	Repair to EQ Basin, pump stations	Fayette	2017S-1673	3,200,000.00	
Kanawha Falls PSD	Improvements to existing WWTP by replacing/repairing old, dilapidated equipment, piping, lighting, etc; rehab of existing collection system lift stations; replace force main #4; purchasing rolling equipment, portable emergency pumps & installing emergency pumping connections on existing lift stations; installing flow meters to property bill City of Smithers & Armstrong PSD for treatment of their wastewater.	Fayette	2017S-1683	6,707,000.00	
Smithers City of (Replaces 2013S-1422)	Separating storm sewer from sanitary sewer to reduce CSO, line replacement, including service laterals, drop inlets, etc.	Fayette	2017S-1698	1,377,549.00	
Sand Fork Town of	This project will make improvements to the Town's sanitary sewer collection and treatment system.	Gilmer	2016S-1662	2,500,000.00	
Romney City of	The City of Romney is proposing a project to replace sewer lines and manholes in Bolton Street, Rannels Acres and Washington Street due to excess I&I	Hampshire	2017S-1672	1,500,000.00	
Greater Harrison County PSD (Enterprise)	Enterprise area addition of customers and collection system.	Harrison	2014S-1510	8,819,000.00	

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Clarksburg City of	Phase IV of the Long Term Control Plan consists of the installation of a septage receiving station at the wastewater treatment plant (WWTP), abandonment of the ash lagoon at the WWTP, separation of combined sewer lines in the areas of Glen Elk, Lower Broad Oaks, East End, Stealey, Broadway, and Route 50. The total project cost is \$7,500,000.00 The project is proposed to be funded with a WVDEP SRF Loan.	Harrison	2016S-1655	7,500,000.00	
Cottageville	Approximately 13,700 lf of 8" gravity sewer line, 15,000 lf of 6" force main, 105 manholes, one pumping station to existing WWTP.	Jackson	2012S-1338	2,700,000.00	
Harpers Ferry Bolivar PSD	Harpers Ferry-Bolivar PSD Wastewater Treatment Plant Improvements Phase II	Jefferson	2014S-1487	2,011,695.00	
Jefferson County PSD	Sewer Transmission Upgrade	Jefferson	2014S-1538	7,150,000.00	
Nitro Sanitary Board	Sewer extension to Blakes Creek, Eastwood Acres, Cochrane Lane. Replace Lines on Bailes Drive. Replace Pump Station 6. Telemetry for 8 pump stations. Separation of storm and sanitary sewer in pump station 7 area. Reline 42 inch combined line. New Press	Kanawha	2013S-1427	8,350,000.00	
Elk Valley PSD	To provide sewer service to 265 residences in the Blue Creek/Rt.119, Reamer, and Young's Bottom area of the Elk Valley Public Service District of Kanawha County	Kanawha	2013S-1429	5,973,509.00	
Charleston Sanitary Board	Make improvements within Porter's Hollow sewer shed area: which generally includes apprx. 42,000-lf of replacement san. sewer and apprx. 5,000-lf of san sewer lining. This is part of CSB's CSO LTCP.	Kanawha	2014S-1521	14,934,300.00	
Kanawha PSD	To provide sanitary sewer service from the Marmet WWTP to the 220 Residences and businesses along Route 94 to the Boone County Line.	Kanawha	2016S-1625	5,100,000.00	
Union PSD	Rocky Fork Sanitary Sewer Extension and WWTP Upgrade	Kanawha	2016S-1646	8,637,000.00	

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Elk Valley PSD	To reconstruct the areas of Hizer Trucking Slip, Reynolds Avenue Permanent Repair, and Reynolds Avenue Mitigation using 75% FEMA funding and the remainder of state and local funding	Kanawha	2017S-1706	1,658,490.00	
Lincoln PSD	Lincoln PSD proposes to build a new wastewater treatment plant and provide sewer service to approximately 224 residential and commercial customers in and around Alum Creek.	Lincoln	2016S-1642	7,900,000.00	
Chapmanville	Replaced 2011S-1301; Chapmanville: Modify and upgrade WWTP, increase capacity, replacement of 15 manholes, 3 pump stations, 1 grinder pump station, and 6,500 lf of gravity sewer line	Logan	2012S-1352	6,821,850.00	
Greater Paw Paw Sanitary District (Soft Cost)	The proposed project will rehabilitate areas of the Sanitary Board's sewer system in accordance with its Long-term Control Plan. Currently these deteriorating areas are allowing inflow and infiltration into the system.	Marion	2013S-1425	3,020,000.00	
Colfax PSD	Colfax is decommissioning there WWTP and extending their sewer lines to Kingmill Valley PSD who will send their sewage to the Fairmont WWTP. Colfax will also be working on I & I reduction.	Marion	2014S-1520	2,141,500.00	
Farmington Town of	This project proposes several upgrades to the existing WWTP and collection system to reduce the amount of I&I in the system and to better treat the influent. Improvements to the plant include replacing the bar screen at the headworks, installing a new flow meter at the headworks, rehabilitation of the oxidation ditch and clarifiers, replacing equipment and adding a new pump to the RAS/WAS holding tank, and general improvements to the building and electrical systems. Collection system improvements consist of manhole rehabilitation and collection pipe cleaning, inspection and installation of Cure-In-Place-Pipe (CIPP) to address I&I.	Marion	2017S-1705	1,410,000.00	

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Cameron City of	The City of Cameron proposes to complete upgrades to the Waste Water Treatment Plant and separate sections of combined sewer system to bring the sewer system in compliance with their WVNPDES permit.	Marshall	2017S-1704	935,880.00	
Welch City of	This project will upgrade the existing wastewater treatment plant at North Welch and extend service to a total of 98 new sewer customers for the City of Welch.	McDowell	2014S-1489	6,280,000.00	250,000.00
McDowell County PSD	New collection system and package plant for 60 customers (59 dwellings and 1 store)mainly along Route 16 in Coalwood, WV.	McDowell	2015S-1571	1,950,000.00	
McDowell County PSD	To provide service to approximately 112 potential customers in the Town of Iaeger and surrounding areas in McDowell County. Construction consists of approximately 12,000' of 8" and smaller diameter gravity pipe, 11,940' of 4" and smaller diameter force main, 1,920' of 4" service laterals, 4 pumping stations, 3 grinder pump stations, 1 60,000 GPD Wastewater Treatment Plant, 76 manholes, cleanouts, and other related appurtenances.	McDowell	2016S-1631	6,400,000.00	
Oakvale Road PSD	This project is to extend sewer service to portions of the areas of Hill Top Drive, Halls Ridge Road and Melrose Lane East of Princeton, WV.	Mercer	2017S-1713	4,505,680.00	250,000.00
Matewan Town of	The project consists of the construction of approximately 19,000' of 8" gravity pipe, 1,000' of 6" force main, 100 manholes, 2 major pumping stations, service laterals and other related appurtenances. Treatment will be provided by the Town of Matewan's existing wastewater treatment plant. In the Mingo County community of Upper Mate Creek.	Mingo	2015S-1574	5,600,000.00	
Morgantown UB	1. Star City WWTP Upgrades: modifications to headworks, primary treatment, and activated sludge; new silo digester, MBR secondary treatment and UV disinfection; upgrade office/control building; electrical upgrades. 2. Upgrade Poponoe Run Interceptor.	Monongalia	2015S-1600	102,338,289.00	2,200,000.00

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Durbin Town of	Sewage treatment plant upgrade, replacement of disinfection system, replacement of sanitary & storm sewer mains to reduce CSO	Pocahontas	2013S-1464	2,623,805.00	
Pocahontas PSD	Sewer extension to apx 110 customers in the communities of Frank & Bartow.	Pocahontas	2017S-1707	3,640,000.00	
Albright Town of	The proposed project is to rehabilitate portions of their existing sanitary sewer system and extend service to 32 new customers.	Preston	2015S-1567	1,500,000.00	
Preston County PSD (Soft Cost Only)	The project consists of upgrades to the existing collection system and construction of a new wastewater treatment plant. Upgrades to the existing system will consist of upgrading existing sewer lines, decommissioning the Brandonville Pump Station and the Dosing Siphon Station and replacing them with new lift staions and multiple customer service lateral river crossings will be replaced with one single forcemain river crossing. A new SBR plant will be constructed on the site of the existing Bruceton Mills WWTP. New headworks, new basins and equipment, new chlorination basin and equipment, chemical addition for metals removal and a plant office with storage will be constructed.	Preston	2015S-1614	4,225,000.00	
North Beckley PSD	The proposed project is to extend sewer service into the unserved area Piney View along WV Route 41 and Stonewall Road. As well as to alleviate failing septic systems which often percolate well and pollute local streams.	Raleigh	2015S-1576	5,510,600.00	
Crab Orchard MacArthur PSD	Construction of new sewer treatment plant at Holly Hills near Fairdale and the extension of sewer service to approximately 265 new customers in the communities of Glen Daniel - Marsh Fork area of Raleigh County	Raleigh	2015S-1593	13,000,000.00	
Shady Spring PSD	To extend and provide new sewer service in the Pluto Road/Fire Trail areas of Raleigh County West Virginia.	Raleigh	2015S-1609	5,375,171.00	

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Sophia Town of	Extension of sewer service from Sophia to Coal City Mobile Home Park and Coal City to serve 458 new customers. There will be a new "green" sewer plant included as part of this project.	Raleigh	2016S-1658	14,742,000.00	
Beverly Town of	Renovations and upgrades of existing sewage treatment plant, pump stations, and rehabilitation of existing manholes.	Randolph	2013S-1482	6,905,390.00	
Norton Harding Jimtown PSD	This project will extend sewer service to approximately 43 customers in and around the Norton area of Randolph County, WV.	Randolph	2016S-1663	1,200,000.00	
Cairo	This project is necessary due to the Town's wastewater treatment system's integrity being compromised. Several pumping stations' capacity has been exceeded, manholes have failed, pumping equipment needs replaced and corrosion has damaged the treatment plant, and that corrosion is getting progressively worse. To prevent any effluent violations and maintain DEP Compliance, the Town has proposed to make improvements to the wastewater treatment plant and rehabilitate any line or facilities as necessary.	Ritchie	2014S-1503	2,503,325.00	
Ellenboro Lamberton PSD	Improvements to the wastewater collection and treatment system.	Ritchie	2016S-1654	1,845,000.00	
Spencer City of	Spencer's collection system is in need of remediation due to infiltration and inflow issues. Improvements will be made to the wastewater treatment works and crucial equipment replacements throughout the system	Roane	2013S-1438	1,200,000.00	
Reedy Town of	Project consists of improvements to the Town of Reedy's wastewater collection system and treatment plant.	Roane	2014S-1507	632,000.00	
Hinton City of	The City of Hinton will be addressing issues stated in their sewer long-term CSO Plan. This involves upgrades and replacement of sections of sewer lines in the City limits.	Summers	2015S-1585	3,550,000.00	

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Canaan Valley PSD	This project is an extension of sanitary sewer services that will provide sewer service to the customers in the area of Winwood Fly-In Resort, Deerfield Village and Canaan Village. This project is the next phase (Zone B and Zone E) of Canaan Valley PSD's comprehensive sewer plan.	Tucker	2015S-1604	2,350,000.00	
Northern Wayne County PSD	Sewer upgrade for approximately 256 current customers in the Docks Creek drainage area as well as new line extensions for 90 to 95 unsewered homes in the Pine Hill Subdivision area.	Wayne	2014S-1534	237,500.00	
Webster Springs PSD	Replaced 2012S-1372; Construct sanitary sewer collection and treatment system in Bergoo.	Webster	2012S-1384	2,456,650.00	25,000.00
Cowen PSD	Upper Glade Sewer System Extension & Upgrades Phase II - To construct sewer collection system to serve apx 161 new customers & Camp Caesar 4H Camp	Webster	2014S-1515	4,500,000.00	
Pine Grove Town of	Phase II of the Town's Sewer improvements project to replace problem areas served by vacuum systems with grinder pumps and gravity type service	Wetzel	2013S-1431	1,500,000.00	
Elizabeth Town of	Improvements to the Town's wastewater collection system.	Wirt	2016S-1652	3,386,500.00	
Vienna City of	Improvements to the existing 12th Street Lift Station, including pump and internal piping replacement; electrical and controls upgrades; building improvements and bypass structure	Wood	2012S-1358	1,863,590.00	
Williamstown Municipal Sewer	Project entails the replacement of a deteriorated 12" sanitary sewer line crossing WV Route 14 and CSX railroad by boring a new pipe crossing parallel to the existing crossing	Wood	2013S-1439	300,000.00	
Oceana, Town of	The Town of Oceana's current wastewater treatment facilities is producing 177,000 gallons per day over its current design capacity of 500,000 gallons per day. The Town wishes to upgrade the plant to a 750,000 gallons per day facility	Wyoming	2013S-1426	5,370,250.00	

Appendix D**Current Needs - Approved Sewer Applications Requiring Funding****As of 12/31/17 (By County)**

SPONSOR	PROJECT DESCRIPTION	COUNTY	IJDC #	PROJECT COST	COMMITTED FUNDS
Center PSD	Replacement of approximately 1,250' of 15" pipe, 4,812' of 12" pipe, and 38 existing manholes. Along with improvements at the waste water treatment plant including installing a rotary fan press, changing pre-treatment screens motor replacement	Wyoming	2013S-1434	3,624,983.00	

TOTAL**397,674,855.00 2,779,200.00**

Appendix E

Infrastructure Funding Agencies in West Virginia

WV Bureau for Public Health (WVBPH)

Programs: Drinking Water Treatment Revolving Fund (DWTRF)
Contact: Robert Decrease, 304-356-4301

WV Development Office (WVDO)

Programs: Appalachian Regional Commission Grant (ARC)
Small Cities Block Grant (SCBG)
Contact: Todd Goddard, 304-558-2234

WV Department of Environmental Protection (WVDEP)

Programs: Abandoned Mine Lands (AML)
Clean Water State Revolving Fund (CWSRF)
Contact: CWSRF - Kathy Emery, 304-926-0440
AML - Roger Earle, 304-926-0499

WV Infrastructure and Jobs Development Council (WVIJDC)

Contact: Wayne Morgan, 304-414-6501

US Department of Agriculture - Rural Utilities Service (USDA-RUS)

Contact: Janna Lowery, 304-284-4886

US Army Corps of Engineers (USACOE)

Programs: COE 571 and COE 340
Contact: Sharanna Romans, 304-399-5025

WV Water Development Authority (WVWDA)

Contact: Marie Prezioso, 304-414-6500

County	Water				Sewer			
	Unserved	Served	% no	% yes	Unserved	Served	% no	% yes
Barbour	2992	7220	29%	71%	7559	2653	74%	26%
Berkeley	7915	18192	30%	70%	13273	12834	51%	49%
Boone	1708	10590	14%	86%	9664	2634	79%	21%
Braxton	10994	5392	67%	33%	14290	2096	87%	13%
Brooke	9065	10912	45%	55%	7774	12203	39%	61%
Cabell	1373	19890	6%	94%	5766	15497	27%	73%
Calhoun	1635	1087	60%	40%	2212	510	81%	19%
Clay	4940	4828	51%	49%	9284	484	95%	5%
Doddridge	7373	1732	81%	19%	8396	709	92%	8%
Fayette	5118	18446	22%	78%	11213	12351	48%	52%
Gilmer	2661	1541	63%	37%	3550	652	84%	16%
Grant	3712	4169	47%	53%	6008	1873	76%	24%
Greenbrier	12874	9166	58%	42%	11327	10713	51%	49%
Hampshire	12398	3221	79%	21%	12883	2736	82%	18%
Hancock	4766	10471	31%	69%	2998	12239	20%	80%
Hardy	2638	2220	54%	46%	3869	989	80%	20%
Harrison	6446	31440	17%	83%	15841	22045	42%	58%
Jackson	9399	6476	59%	41%	10225	5650	64%	36%
Jefferson	19330	6149	76%	24%	15398	10081	60%	40%
Kanawha	15156	83909	15%	85%	19141	79924	19%	81%
Lewis	8169	12319	40%	60%	14370	6118	70%	30%
Lincoln	5616	6038	48%	52%	10178	1476	87%	13%
Logan	4608	20372	18%	82%	20284	4696	81%	19%
Marion	6526	31227	17%	83%	15073	22680	40%	60%
Marshall	4620	3938	54%	46%	4195	4363	49%	51%
Mason	2542	4927	34%	66%	5146	2323	69%	31%
McDowell	7017	13764	34%	66%	17044	3737	82%	18%
Mercer	7218	26625	21%	79%	15054	18789	44%	56%
Mineral	4672	2495	65%	35%	2931	4236	41%	59%
Mingo	3856	15374	20%	80%	13082	6148	68%	32%
Monongalia	5175	46231	10%	90%	14900	36506	29%	71%
Monroe	1848	1847	50%	50%	2764	931	75%	25%
Morgan	13901	2595	84%	16%	13543	2953	82%	18%
Nicholas	4967	12088	29%	71%	12569	4486	74%	26%
Ohio	4591	14586	24%	76%	5331	13846	28%	72%
Pendleton	4174	1762	70%	30%	5486	450	92%	8%
Pleasants	3519	2851	55%	45%	4754	1616	75%	25%
Pocahontas	6668	1653	80%	20%	6920	1401	83%	17%
Preston	3968	4663	46%	54%	6336	2295	73%	27%
Putnam	3939	12498	24%	76%	6612	9825	40%	60%
Raleigh	8605	13812	38%	62%	9711	12706	43%	57%
Randolph	11432	5497	68%	32%	10230	6699	60%	40%
Ritchie	9233	3189	74%	26%	9609	2813	77%	23%
Roane	9990	6601	60%	40%	14560	2031	88%	12%
Summers	10791	5943	64%	36%	14635	2099	87%	13%
Taylor	947	3176	23%	77%	2884	1239	70%	30%
Tucker	5991	2495	71%	29%	5881	2605	69%	31%
Tyler	2521	3454	42%	58%	3401	2574	57%	43%
Upshur	3603	10225	26%	74%	9095	4733	66%	34%
Wayne	10633	20670	34%	66%	21825	9478	70%	30%
Webster	2154	2312	48%	52%	2782	1684	62%	38%
Wetzel	5604	3950	59%	41%	4720	4834	49%	51%
Wirt	3492	3086	53%	47%	5380	1198	82%	18%
Wood	23471	19241	55%	45%	9183	33529	21%	79%
Wyoming	7588	12187	38%	62%	14997	4778	76%	24%

Served/Unserved Structures (by Congressional District)

Congressional District	Water				Sewer			
	Unserved	Served	% no	% yes	Unserved	Served	% no	% yes
1	117853	208981	36%	64%	141324	185510	43%	57%
2	143105	186057	43%	57%	179851	149311	55%	45%
3	105184	215704	33%	67%	204961	115927	64%	36%

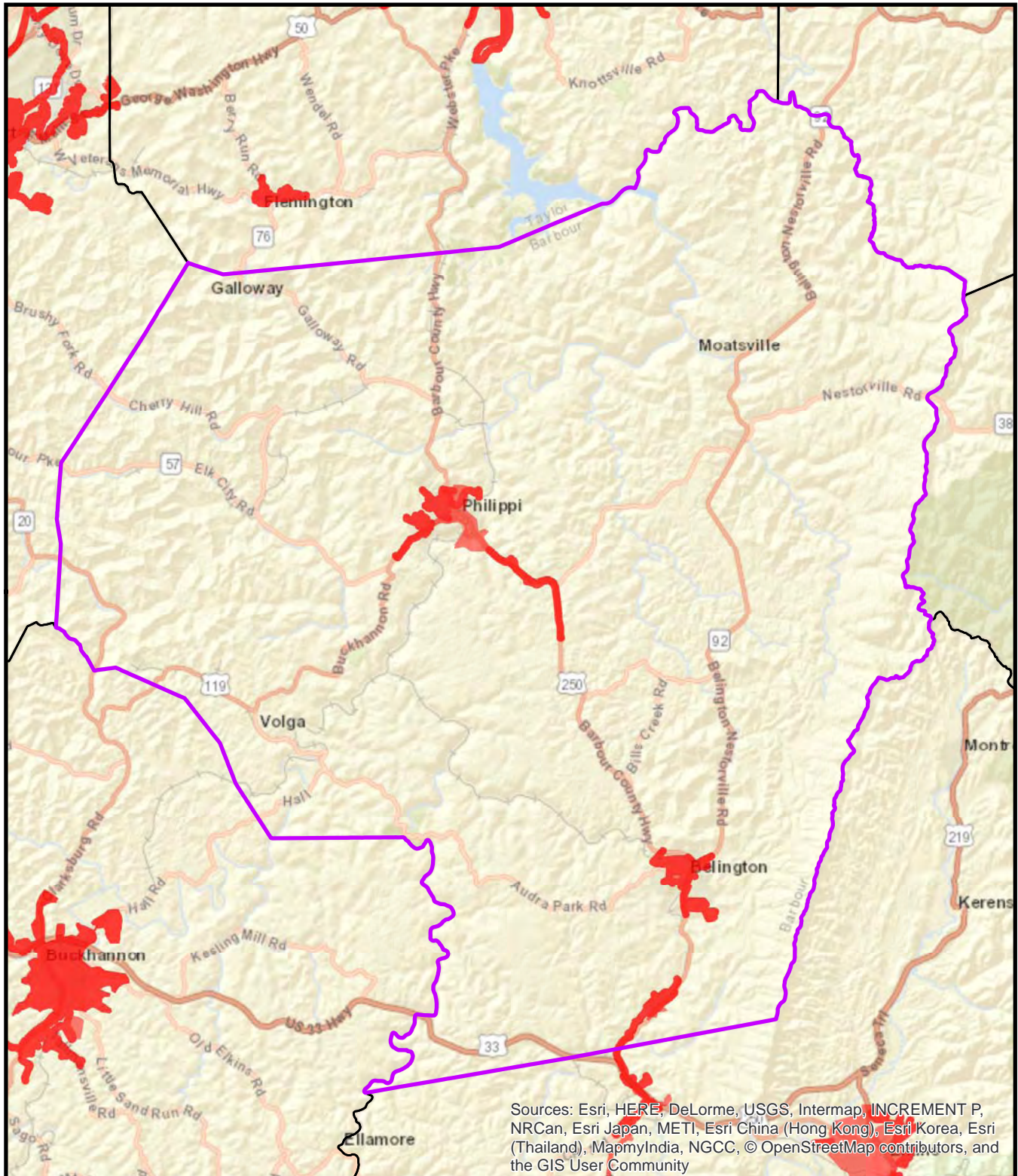
Served/Unserved Structures (by Region)

	Water				Sewer			
Region	Unserved	Served	% no	% yes	Unserved	Served	% no	% yes
1	43067	74178	37%	63%	74205	43040	63%	37%
2	28628	87271	25%	75%	76281	39618	66%	34%
3	25743	111825	19%	81%	44701	92867	32%	68%
4	31781	43665	42%	58%	44811	30635	59%	41%
5	63260	45985	58%	42%	59324	49921	54%	46%
6	30435	118469	20%	80%	63430	85474	43%	57%
7	45842	44689	51%	49%	64975	25556	72%	28%
8	27594	13867	67%	33%	31177	10284	75%	25%
9	41146	26936	60%	40%	42214	25868	62%	38%
10	14815	22474	40%	60%	14246	23043	38%	62%
11	13831	21383	39%	61%	10772	24442	31%	69%

Served/Unserved Structures (by Senatorial Districts)

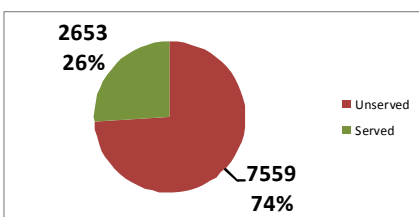
Senate District	Water				Sewer			
	Unserved	Served	% no	% yes	Unserved	Served	% no	% yes
1	19138	36674	34%	66%	16980	38832	30%	70%
2	37150	31326	54%	46%	45328	23148	66%	34%
3	34649	27946	55%	45%	26032	36563	42%	58%
4	20615	22509	48%	52%	26288	16836	61%	39%
5	3965	26896	13%	87%	8642	22219	28%	72%
6	20578	56568	27%	73%	48971	28175	63%	37%
7	17027	48157	26%	74%	53376	11808	82%	18%
8	5163	48863	10%	90%	12616	41410	23%	77%
9	16631	27695	38%	62%	26585	17741	60%	40%
10	30632	35398	46%	54%	39940	26090	60%	40%
11	35390	36474	49%	51%	50947	20917	71%	29%
12	30970	54740	36%	64%	54453	31257	64%	36%
13	5443	58487	9%	91%	14876	49054	23%	77%
14	21361	26619	45%	55%	33461	14519	70%	30%
15	35119	15283	70%	30%	39662	10740	79%	21%
16	21200	16823	56%	44%	17871	20152	47%	53%
17	11073	40276	22%	78%	10062	41287	20%	80%

Delegate District	Water				Sewer			
	Unserved	Served	% no	% yes	Unserved	Served	% no	% yes
1	6733	15170	31%	69%	4024	17879	18%	82%
2	7300	6514	53%	47%	7251	6563	52%	48%
3	3295	13741	19%	81%	3748	13288	22%	78%
4	5714	4482	56%	44%	5275	4921	52%	48%
5	5918	4265	58%	42%	5349	4834	53%	47%
6	10347	5184	67%	33%	12250	3281	79%	21%
7	12285	6039	67%	33%	13895	4429	76%	24%
8	4221	5204	45%	55%	3563	5862	38%	62%
9	4683	8221	36%	64%	8614	4290	67%	33%
10	18060	8902	67%	33%	2387	24575	9%	91%
11	10960	7667	59%	41%	16444	2183	88%	12%
12	6929	2915	70%	30%	6488	3356	66%	34%
13	3101	9923	24%	76%	7883	5141	61%	39%
14	2277	2676	46%	54%	3392	1561	68%	32%
15	623	3663	15%	85%	366	3920	9%	91%
16	1547	10930	12%	88%	3395	9082	27%	73%
17	326	9217	3%	97%	1965	7578	21%	79%
18	276	3759	7%	93%	1934	2101	48%	52%
19	10529	17978	37%	63%	21499	7008	75%	25%
20	1387	10194	12%	88%	8164	3417	70%	30%
21	8702	8017	52%	48%	13921	2798	83%	17%
22	8187	8997	48%	52%	13834	3350	81%	19%
23	966	7860	11%	89%	6201	2625	70%	30%
24	3854	19888	16%	84%	19816	3926	83%	17%
25	5363	10132	35%	65%	12769	2726	82%	18%
26	3989	12492	24%	76%	12146	4335	74%	26%
27	6024	25242	19%	81%	12927	18339	41%	59%
28	13308	9865	57%	43%	17350	5823	75%	25%
29	1612	4020	29%	71%	3442	2190	61%	39%
30	3518	1639	68%	32%	182	4975	4%	96%
31	925	5958	13%	87%	4036	2847	59%	41%
32	6476	21741	23%	77%	14027	14190	50%	50%
33	7617	6271	55%	45%	12738	1150	92%	8%
34	11706	6178	65%	35%	15292	2592	86%	14%
35	7159	26790	21%	79%	2547	31402	8%	92%
36	3853	23376	14%	86%	6329	20900	23%	77%
37	224	11181	2%	98%	10	11395	0%	100%
38	414	8259	5%	95%	1328	7345	15%	85%
39	1480	8553	15%	85%	4312	5721	43%	57%
40	2135	7839	21%	79%	5305	4669	53%	47%
41	3832	8400	31%	69%	9991	2241	82%	18%
42	14621	9145	62%	38%	13067	10699	55%	45%
43	17803	7060	72%	28%	16763	8100	67%	33%
44	4422	6879	39%	61%	7188	4113	64%	36%
45	2453	7983	24%	76%	6342	4094	61%	39%
46	8484	13383	39%	61%	15109	6758	69%	31%
47	5320	7480	42%	58%	9169	3631	72%	28%
48	6490	31712	17%	83%	16156	22046	42%	58%
49	1601	3889	29%	71%	4251	1239	77%	23%
50	6262	30728	17%	83%	14310	22680	39%	61%
51	4432	45430	9%	91%	13356	36506	27%	73%
52	1551	2987	34%	66%	3283	1255	72%	28%
53	6079	3913	61%	39%	7325	2667	73%	27%
54	6118	5030	55%	45%	8962	2186	80%	20%
55	5257	3672	59%	41%	7490	1439	84%	16%
56	3338	1478	69%	31%	1532	3284	32%	68%
57	7443	3386	69%	31%	7683	3146	71%	29%
58	13280	2795	83%	17%	13043	3032	81%	19%
59	7434	2097	78%	22%	8211	1320	86%	14%
60	2251	2300	49%	51%	3669	882	81%	19%
61	412	4414	9%	91%	417	4409	9%	91%
62	1727	3319	34%	66%	3979	1067	79%	21%
63	1084	2996	27%	73%	1251	2829	31%	69%
64	1059	3167	25%	75%	1749	2477	41%	59%
65	7548	1570	83%	17%	2769	6349	30%	70%
66	7166	712	91%	9%	6581	1297	84%	16%
67	4614	3867	54%	46%	6046	2435	71%	29%



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

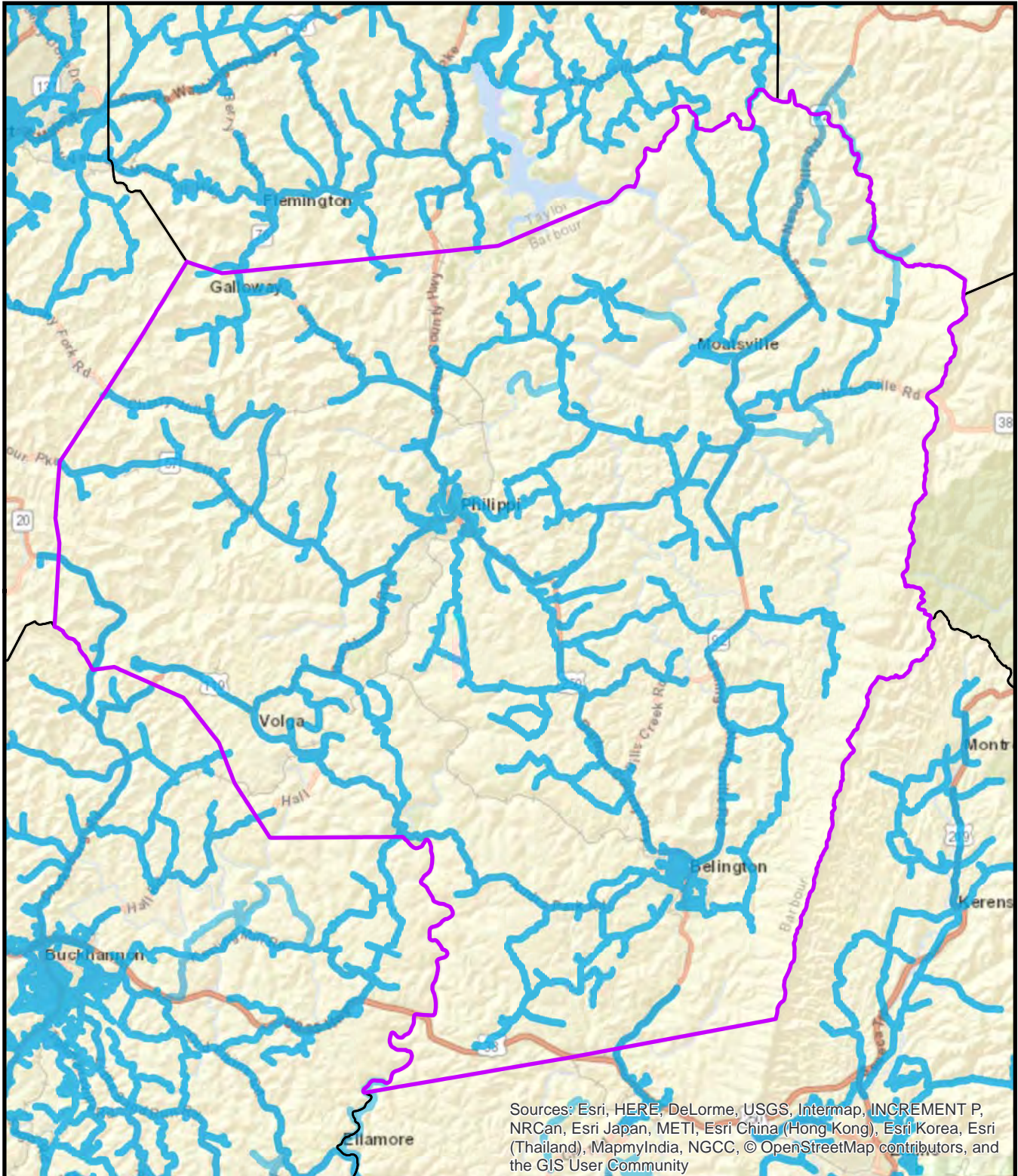
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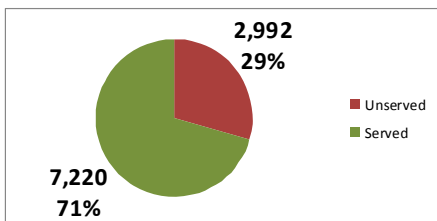
0 1.5 3 6 Miles

Served Area

Sewer Service Area Barboursville



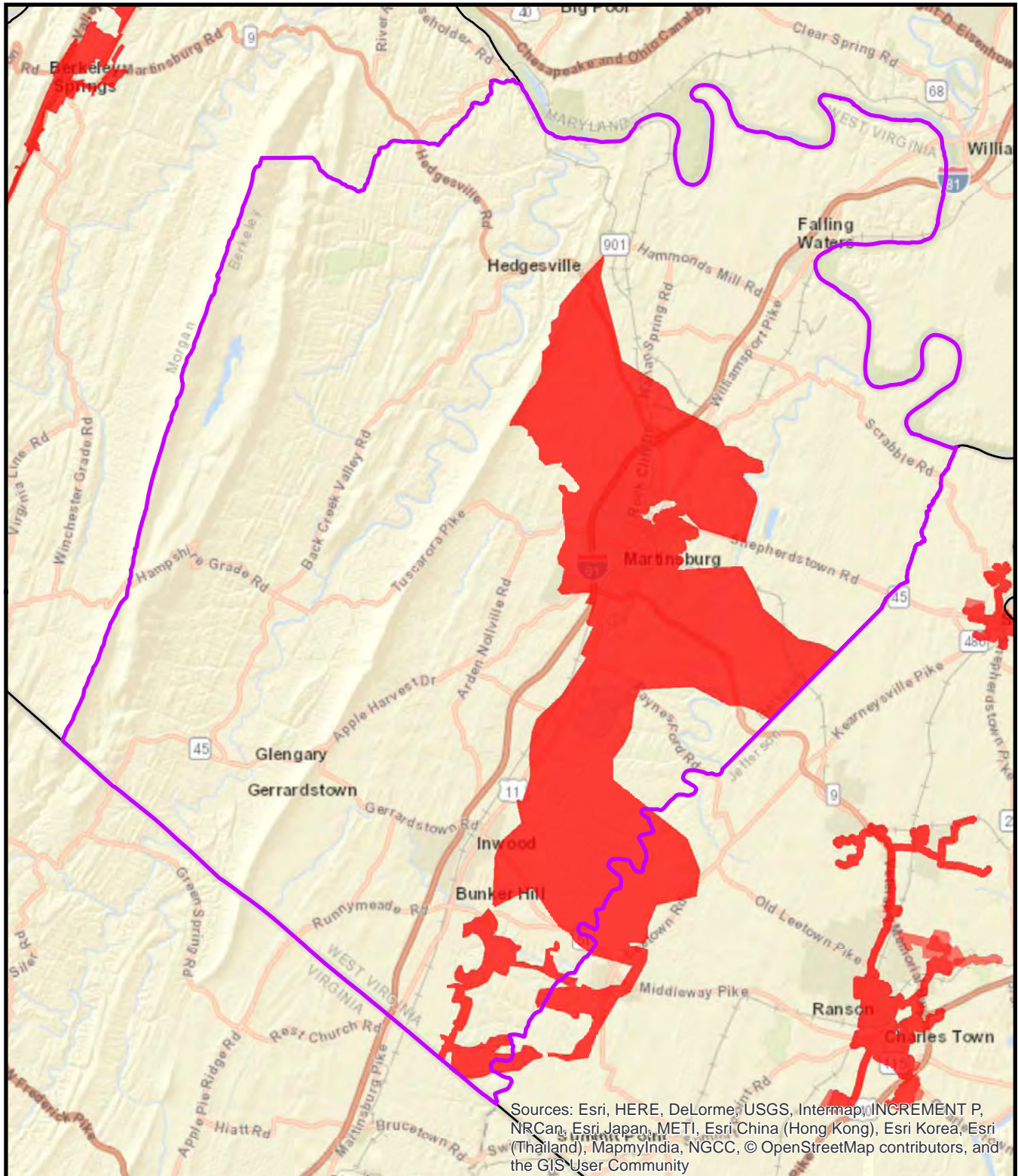
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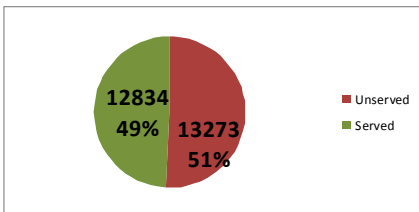
 Served Area

Water Service Area Barbour County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

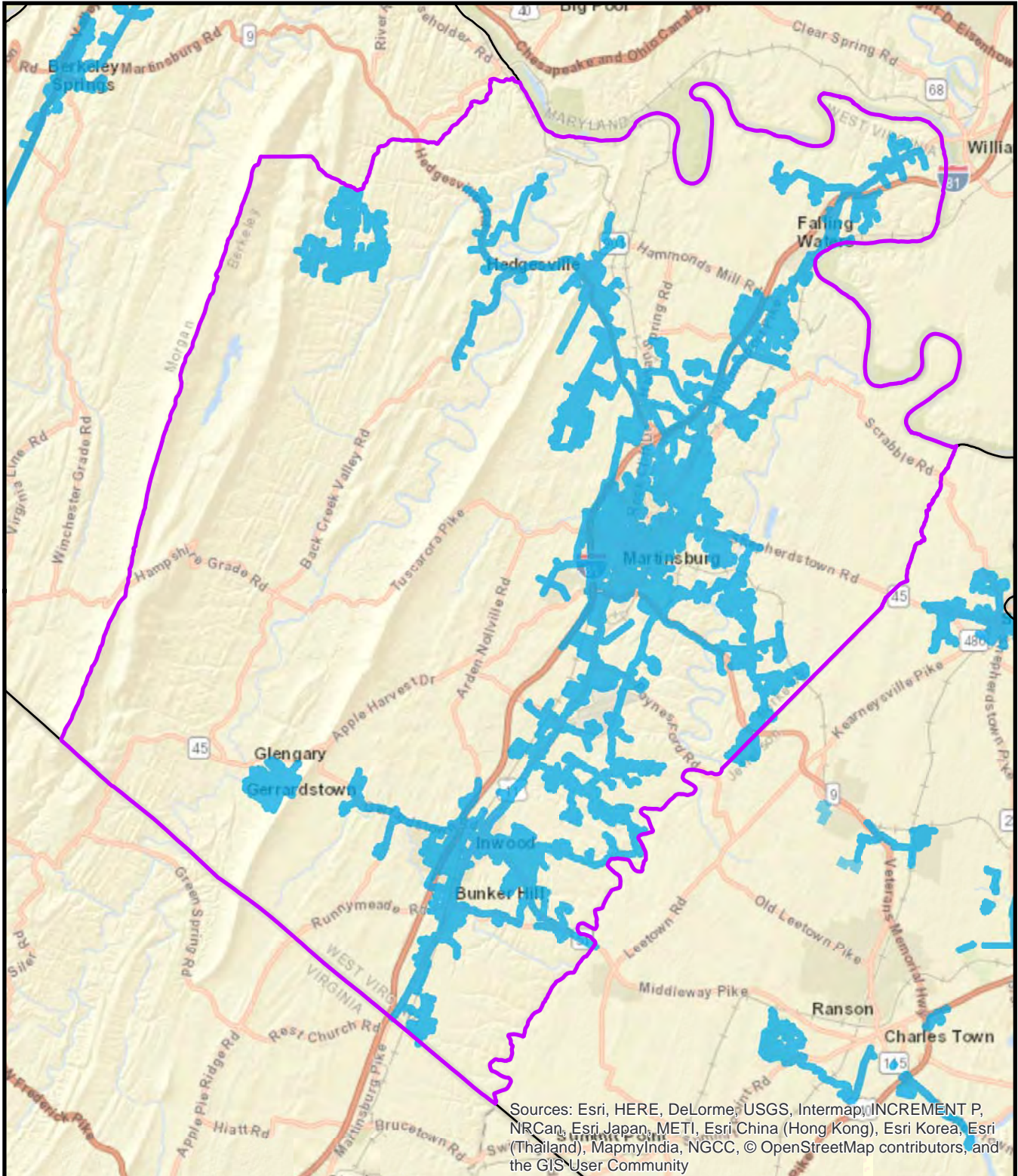
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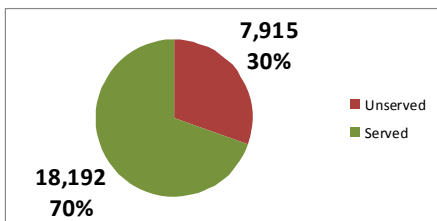
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Served Area

Sewer Service Area Berkeley County



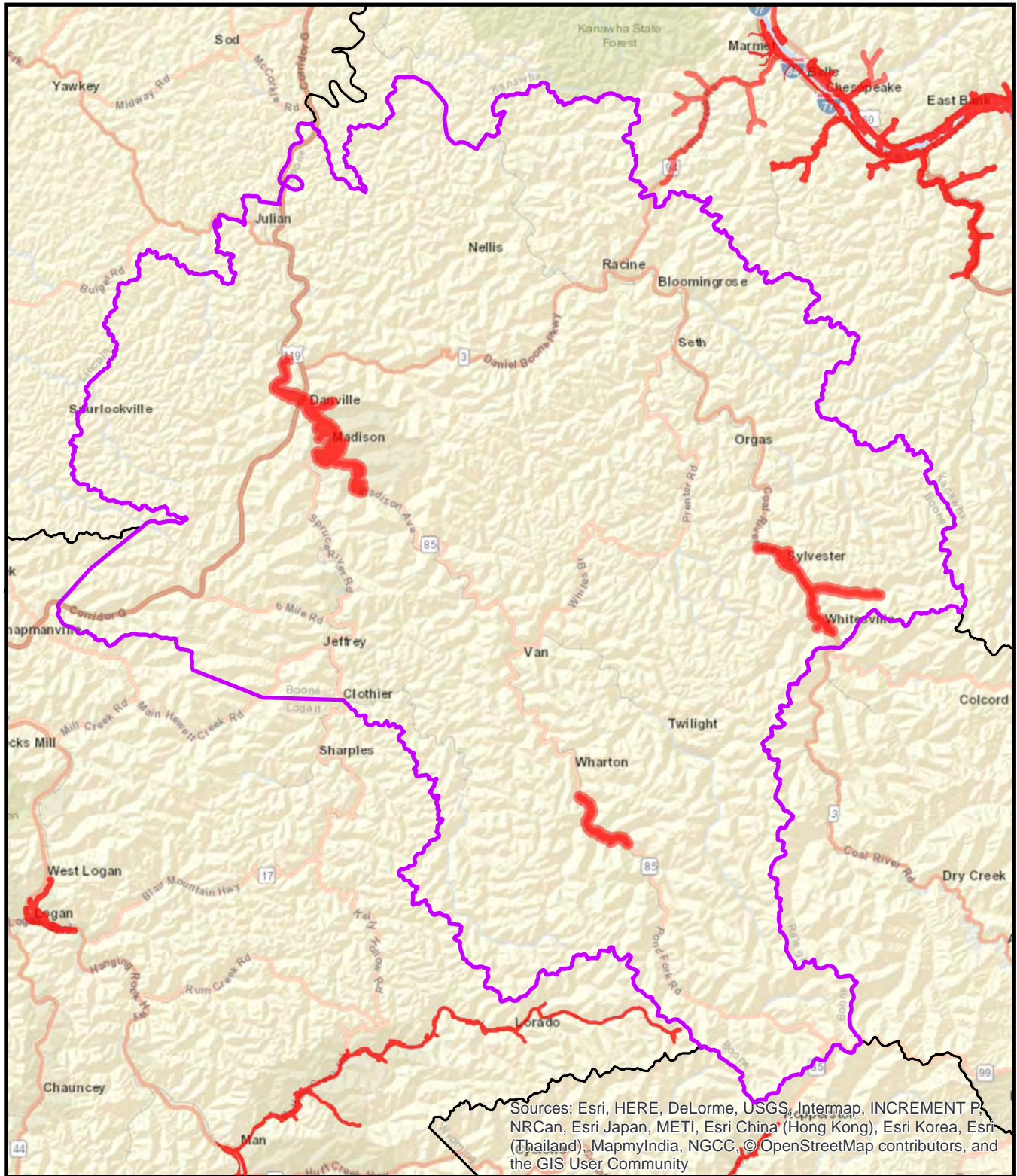
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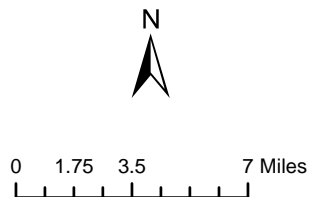
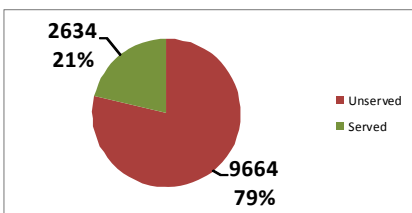
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 Served Area

Water Service Area Berkeley County

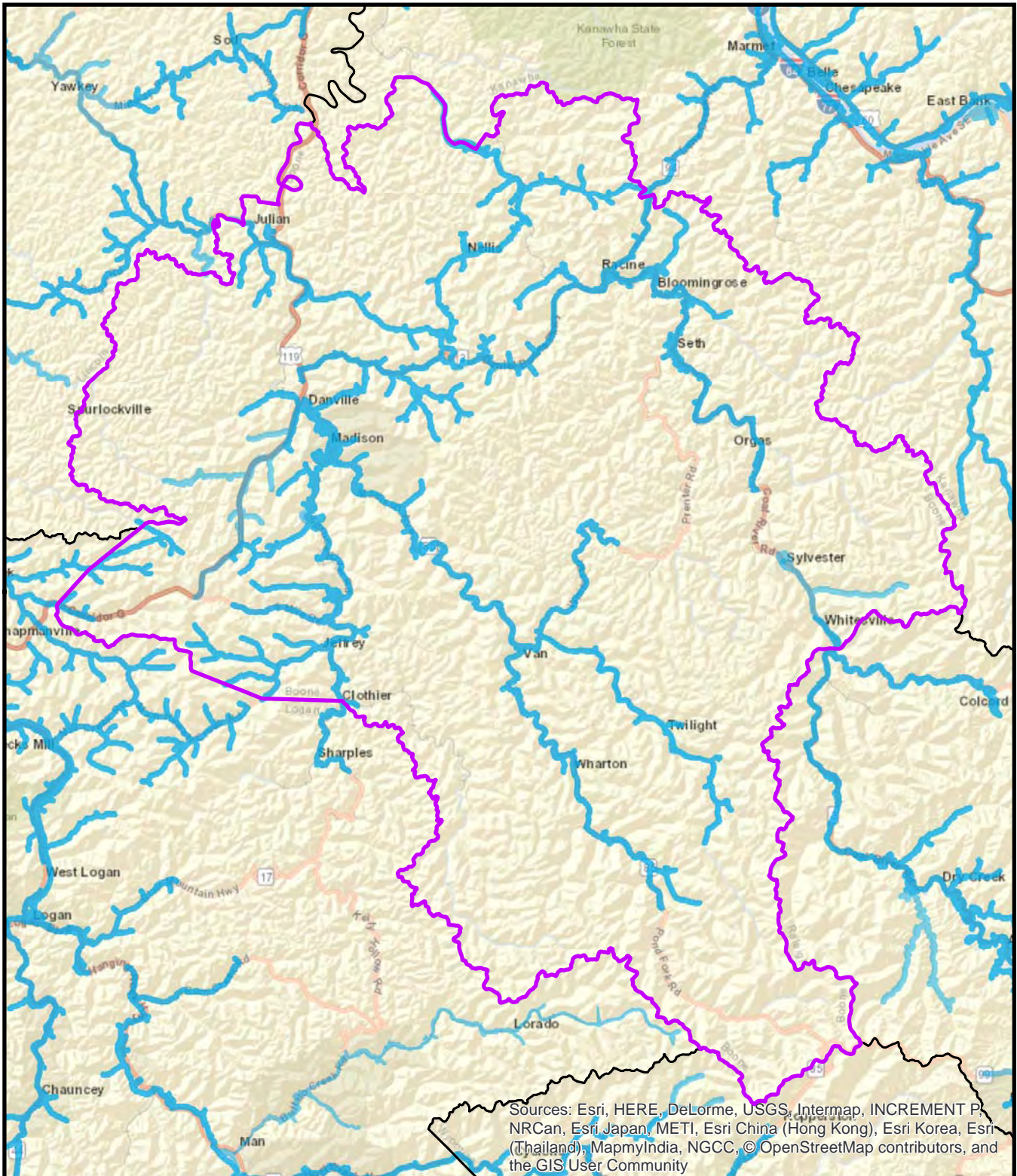


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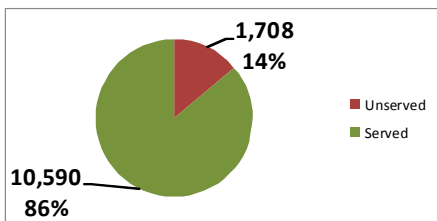


Served Area

Sewer Service Area Boone County



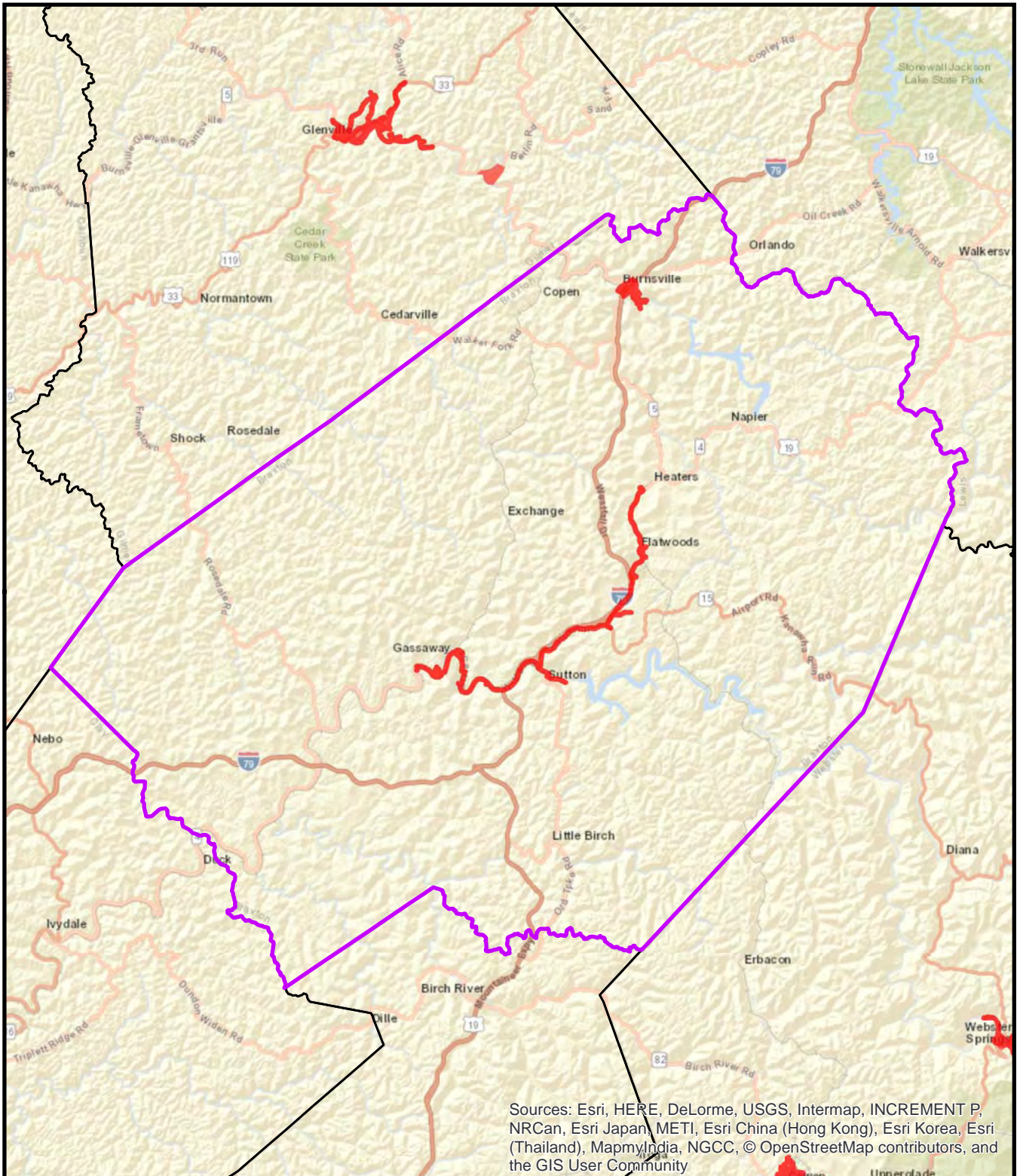
Distribution of Service to Structures



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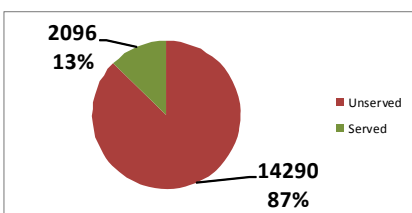
 Served Area

Water Service Area Boone County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures

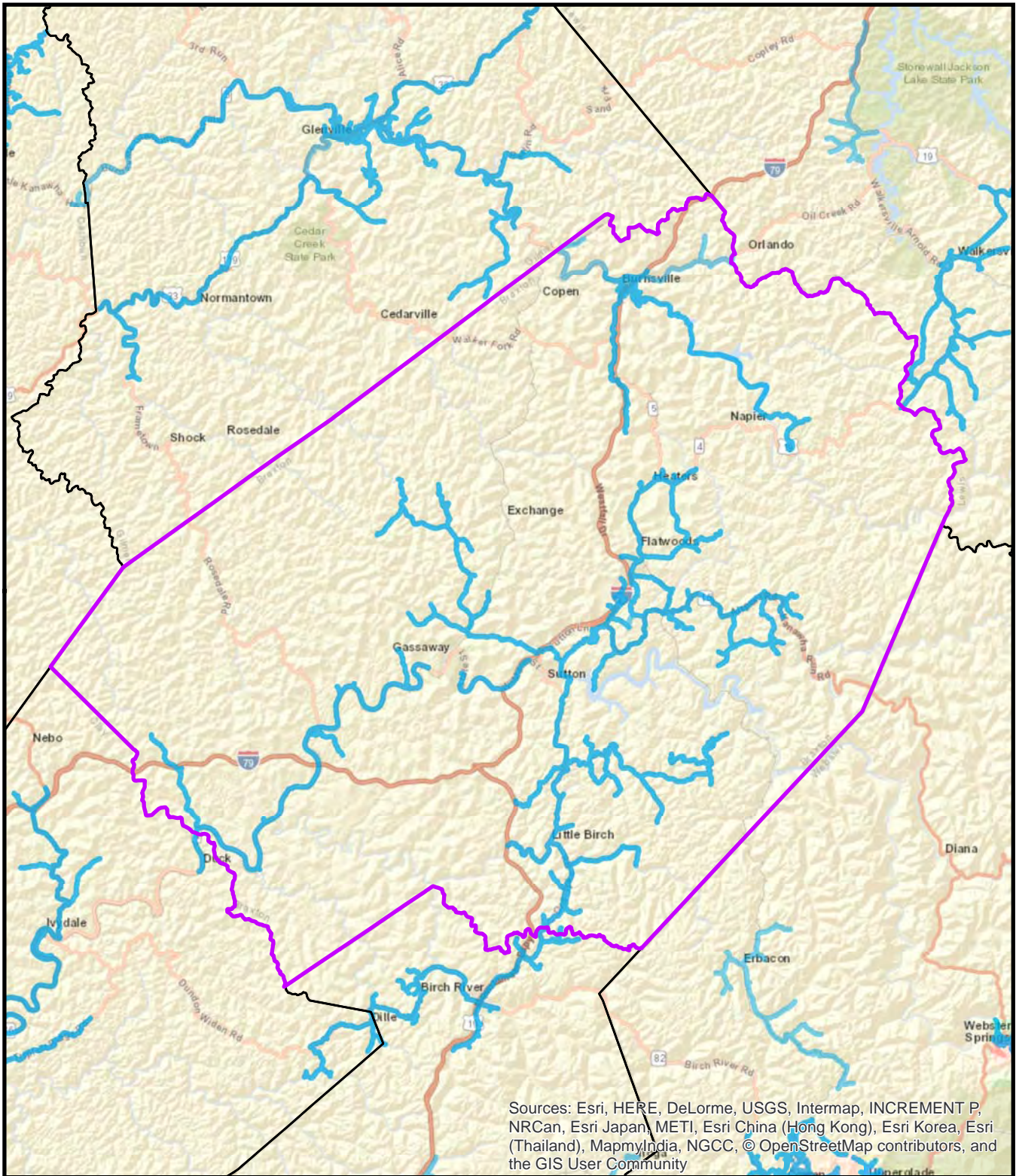


0 2 4 8 Miles

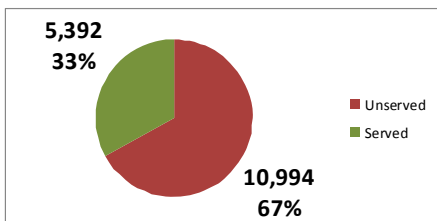
Served Area

Sewer Service Area Braxton County





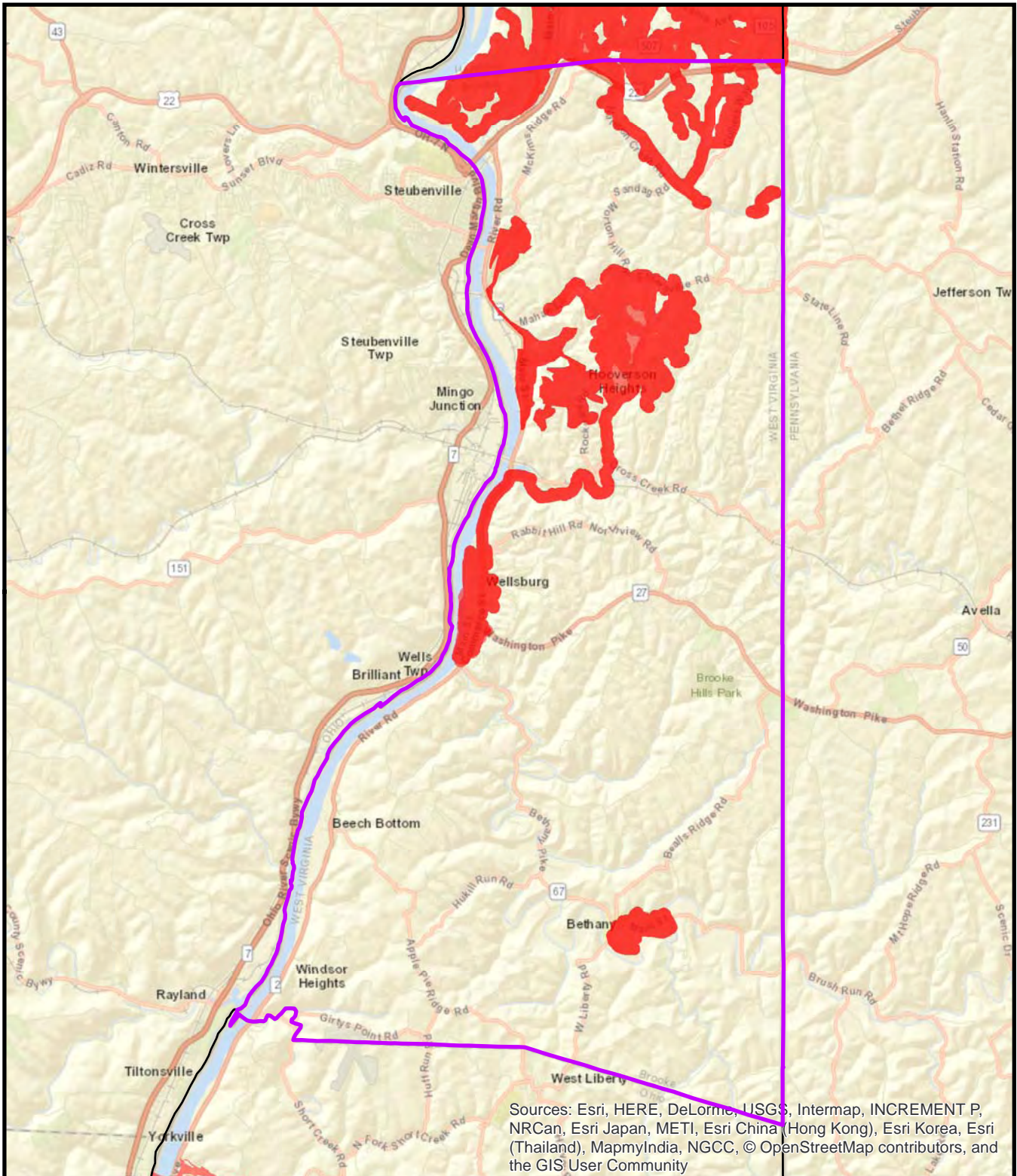
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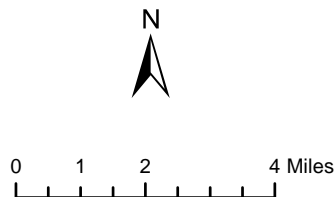
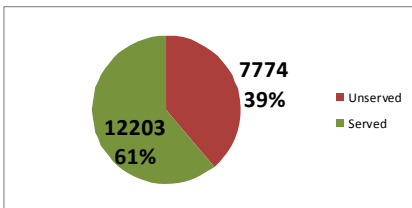
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 Served Area

Water Service Area Braxton County

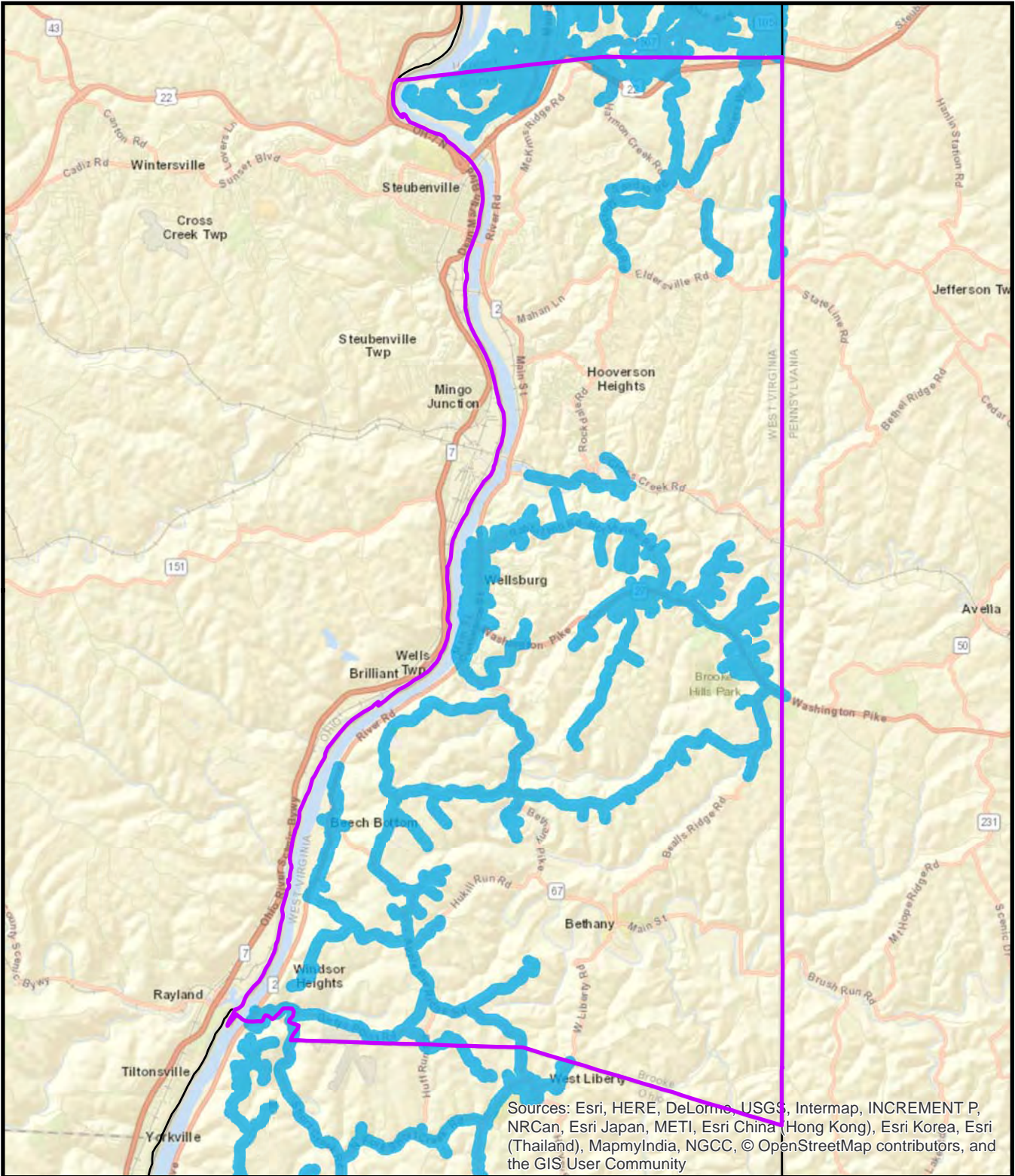


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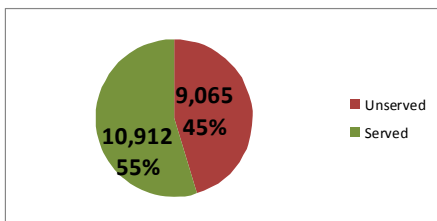


Served Area

Sewer Service Area Brooke County



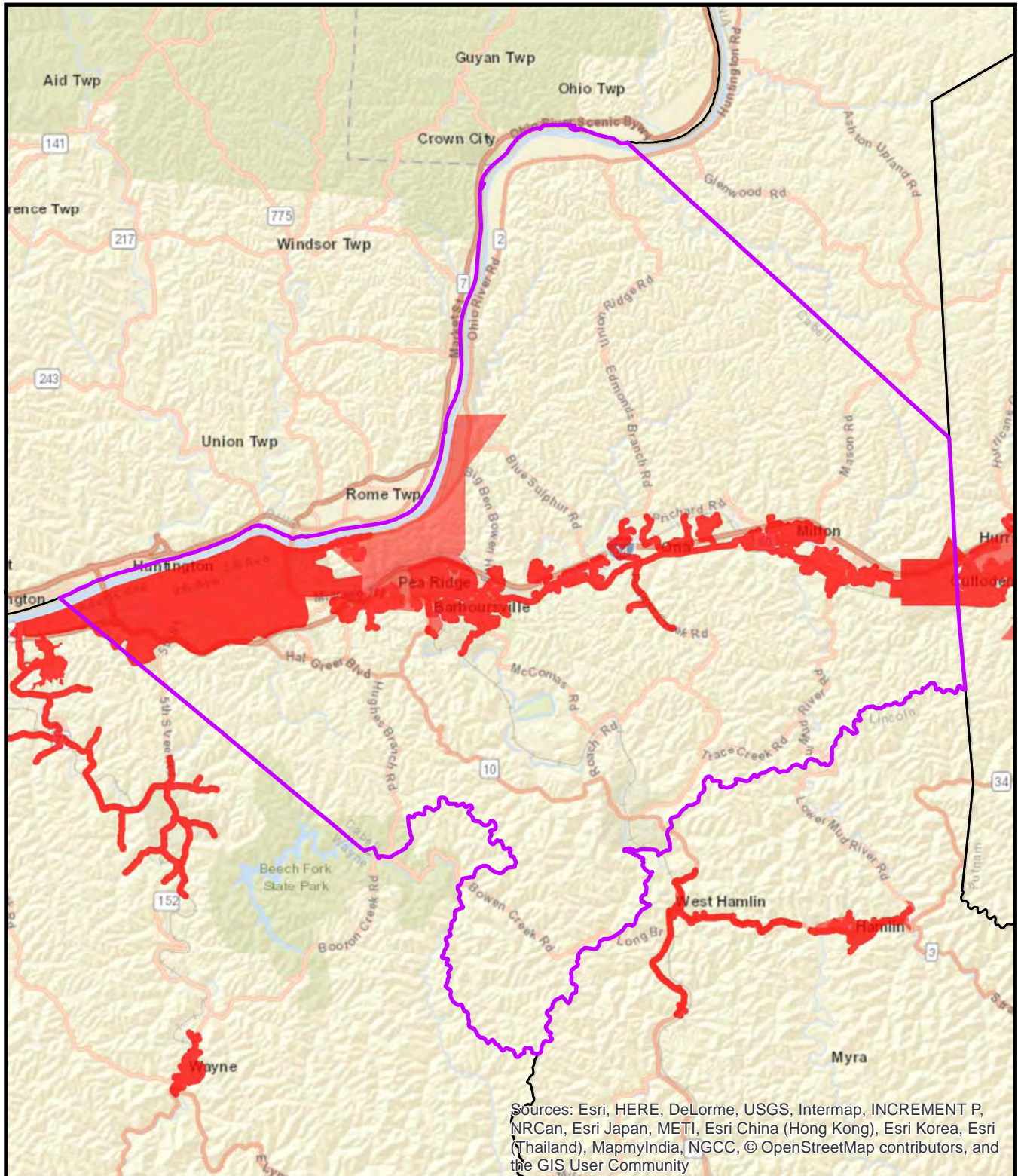
Distribution of Service to Structures



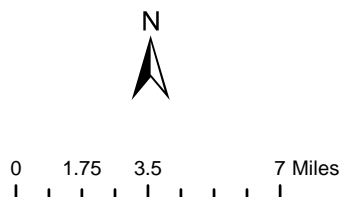
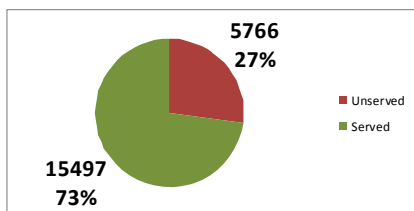
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 Served Area

Water Service Area Brooke County

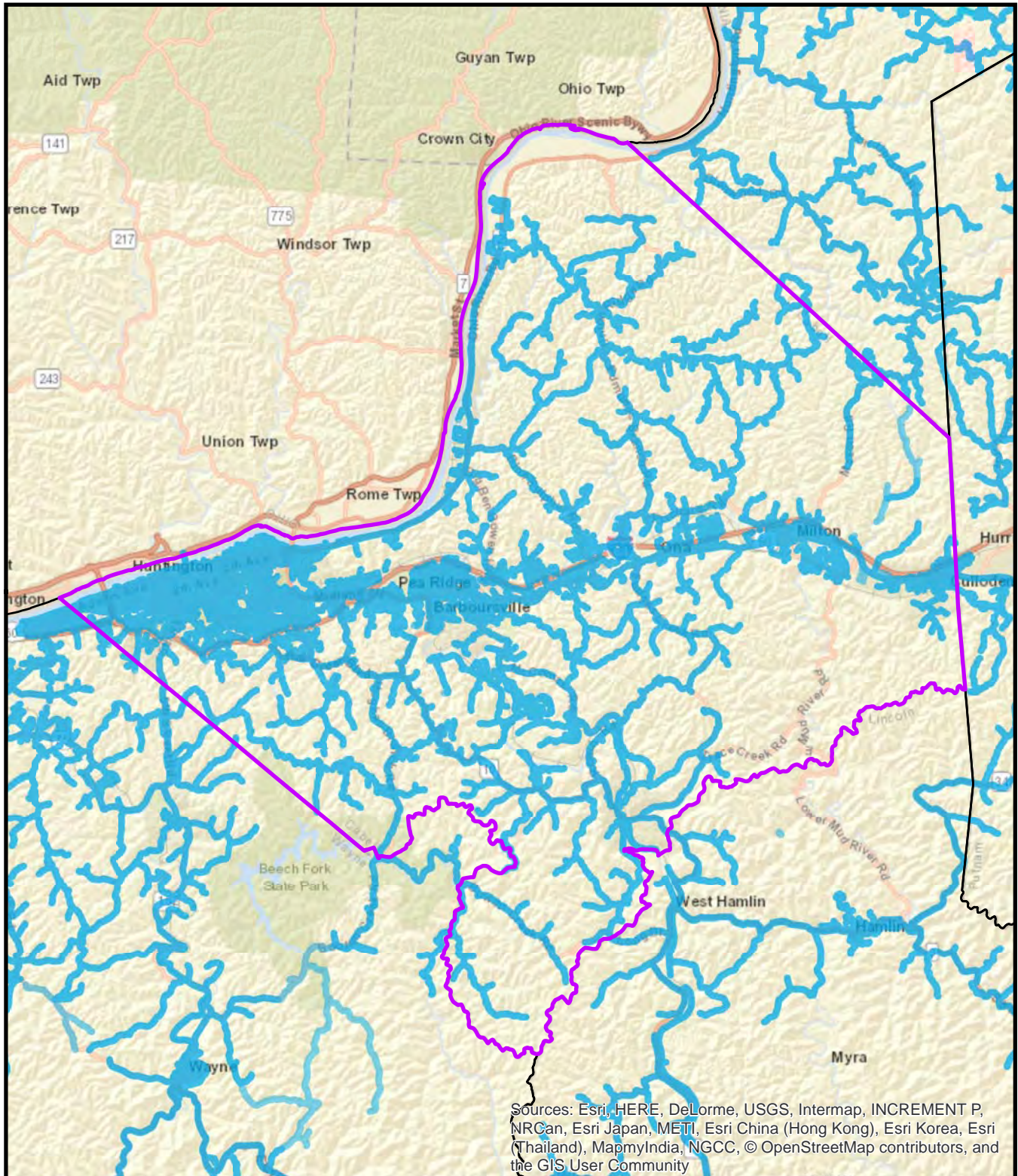


Distribution of Service to Structures

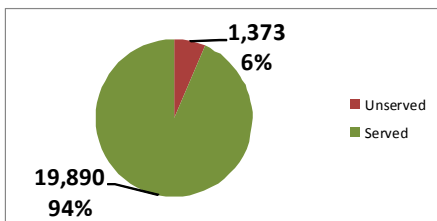


Served Area

Sewer Service Area Cabell County



Distribution of Service to Structures

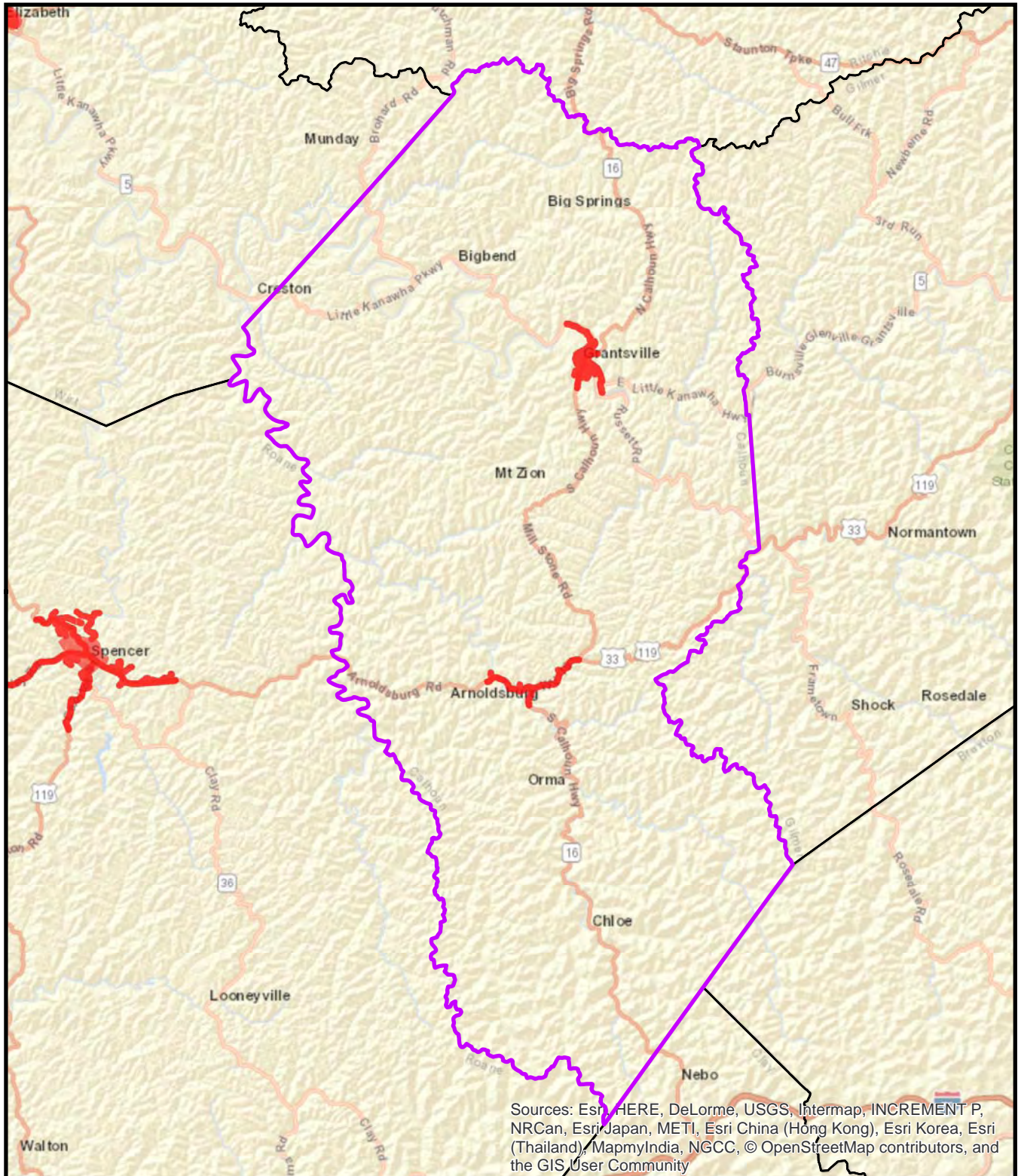


0 1.75 3.5 7 Miles

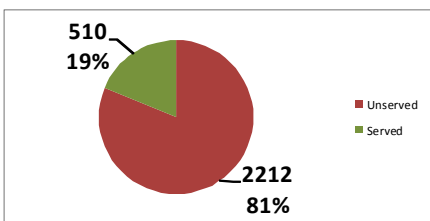
 Served Area

Water Service Area Cabell County





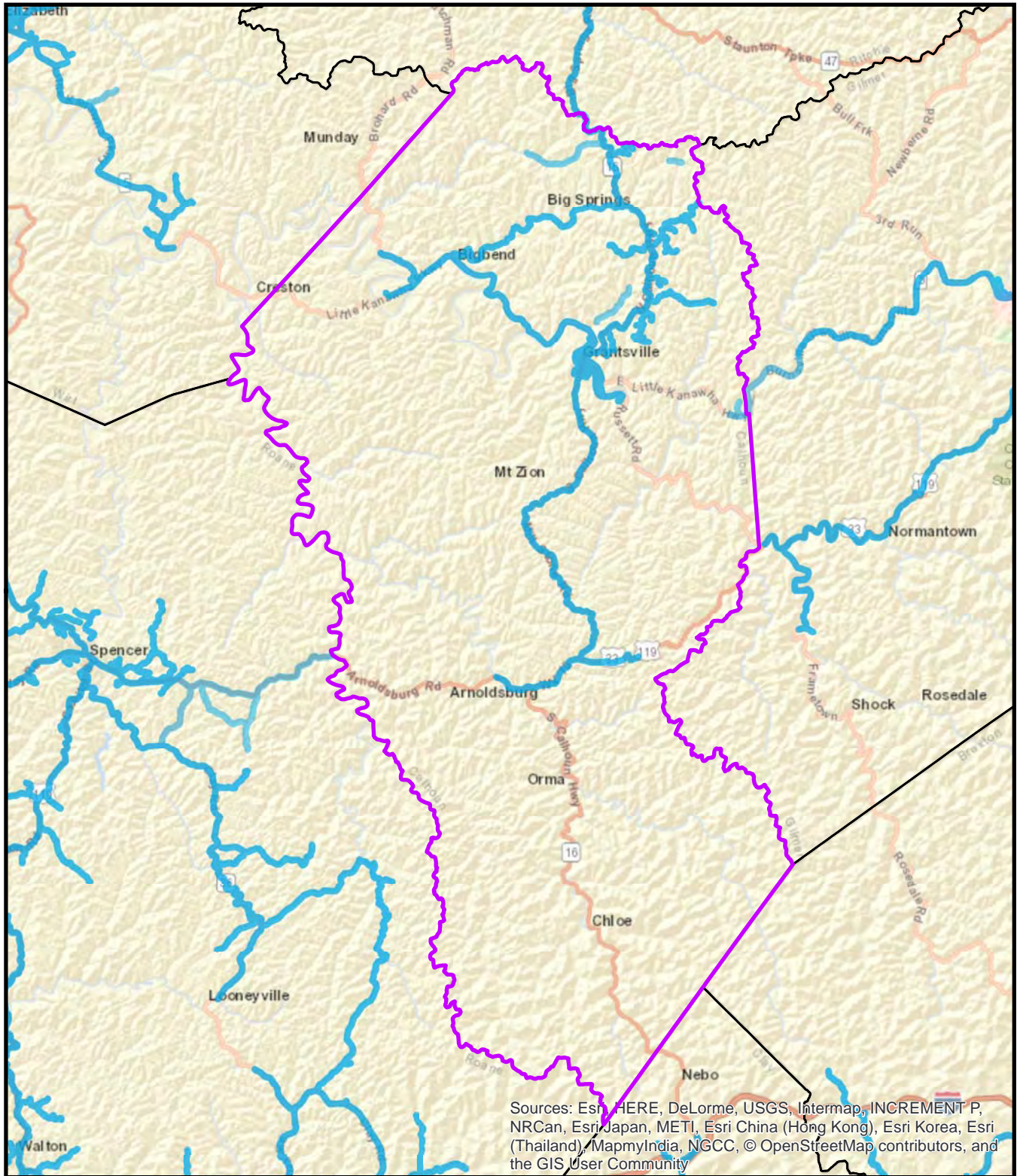
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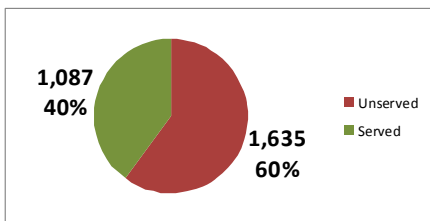
0 1.75 3.5 7 Miles

Served Area

Sewer Service Area Calhoun County



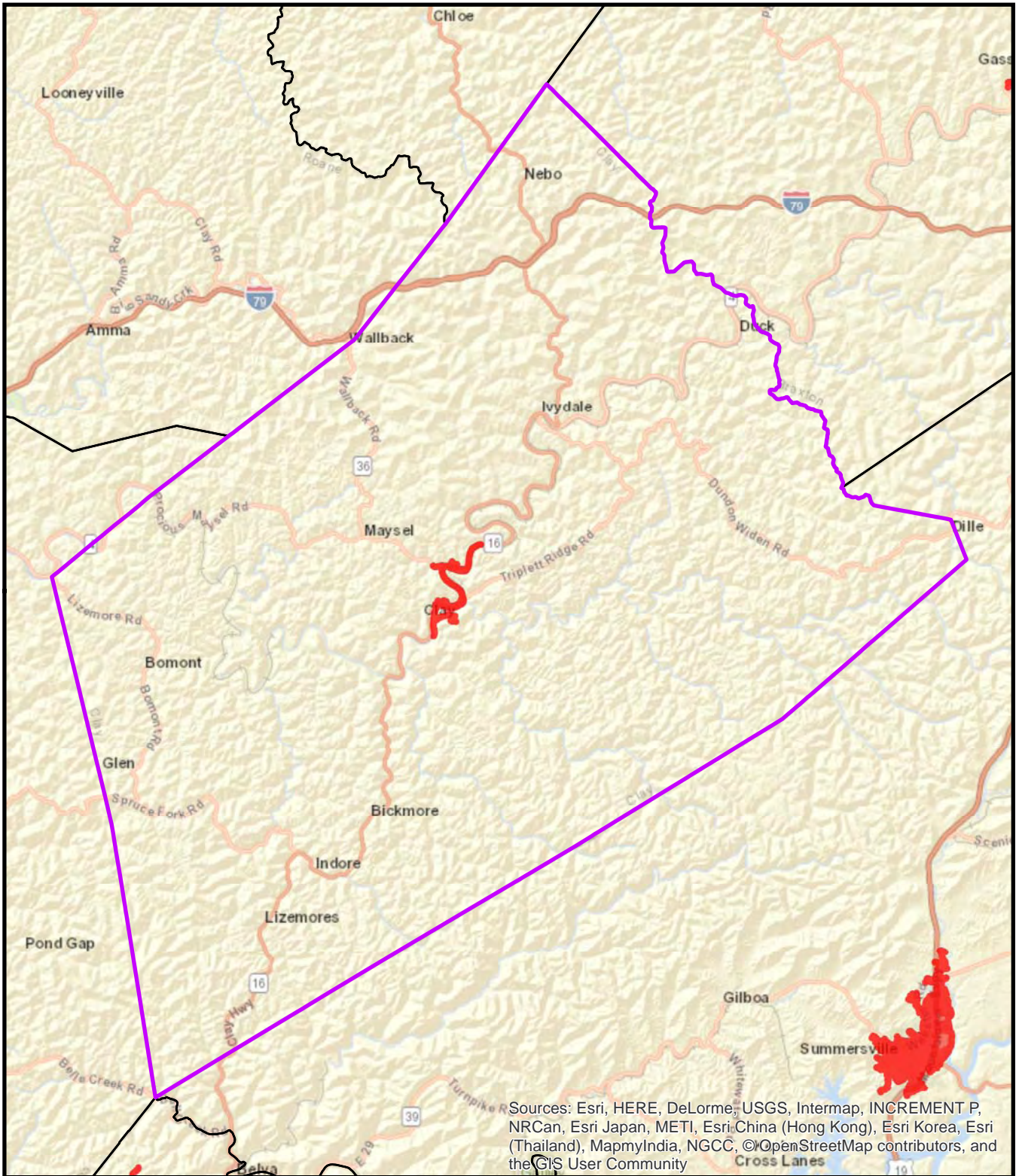
Distribution of Service to Structures



0 1.75 3.5 7 Miles

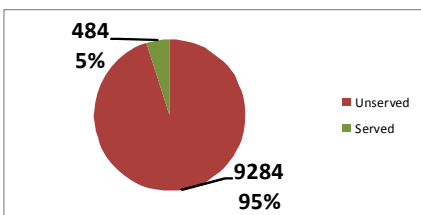
 Served Area

Water Service Area Calhoun County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, ©OpenStreetMap contributors, and the GIS User Community

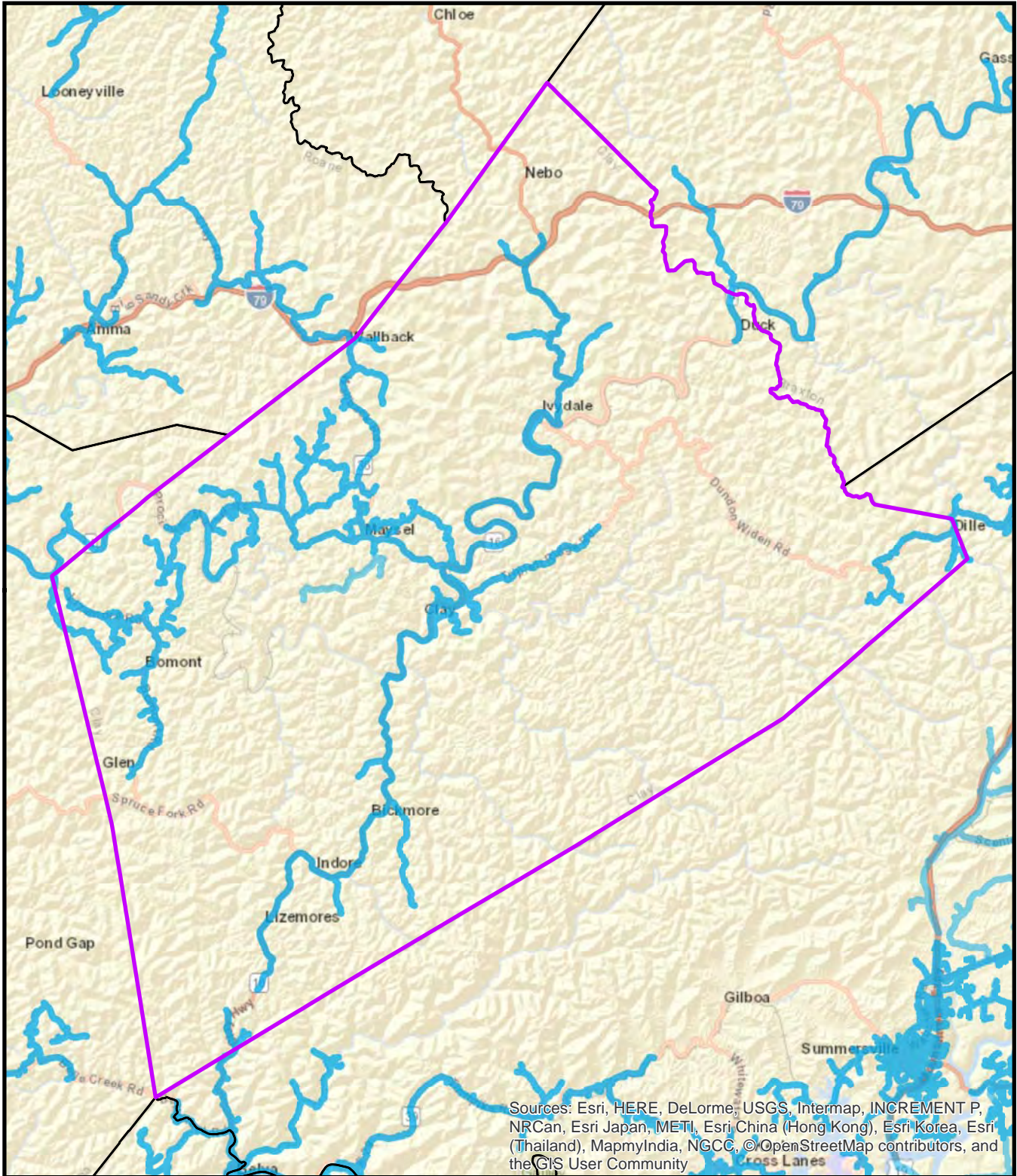
Distribution of Service to Structures



0 1.75 3.5 7 Miles

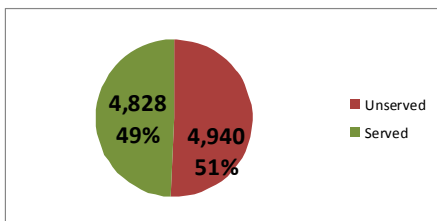
Served Area

Sewer Service Area Clay County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, ©OpenStreetMap contributors, and the GIS User Community

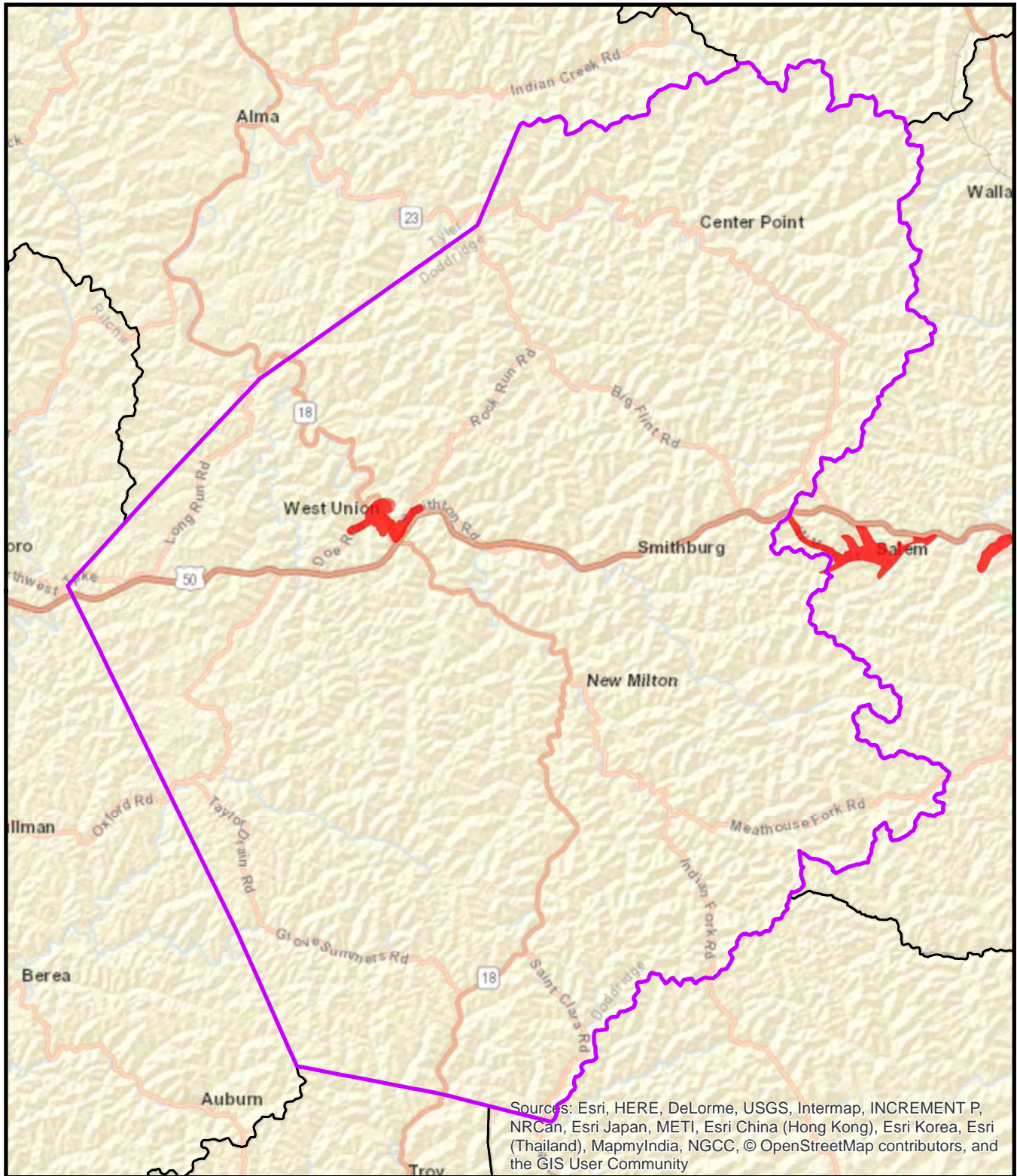
Distribution of Service to Structures



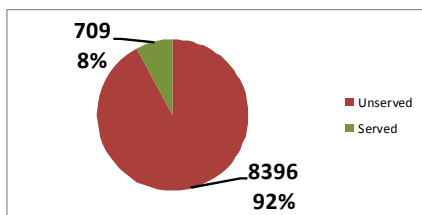
0 1.75 3.5 7 Miles

 Served Area

Water Service Area Clay County



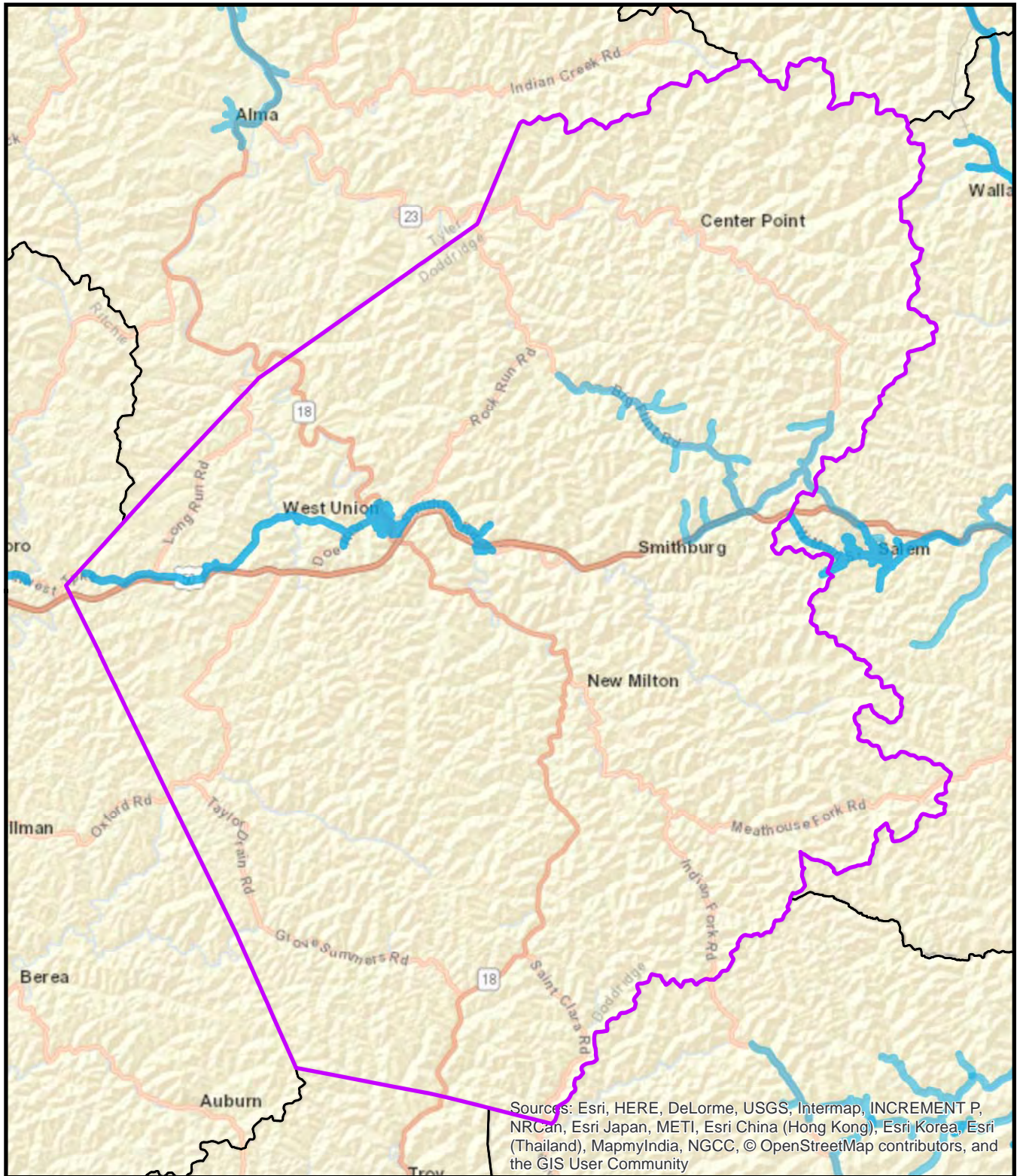
Distribution of Service to Structures



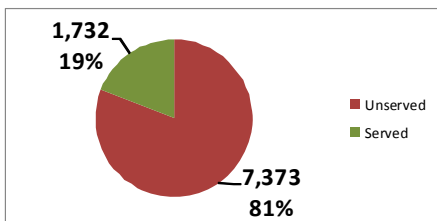
0 1.5 3 6 Miles

Served Area

Sewer Service Area Doddridge County



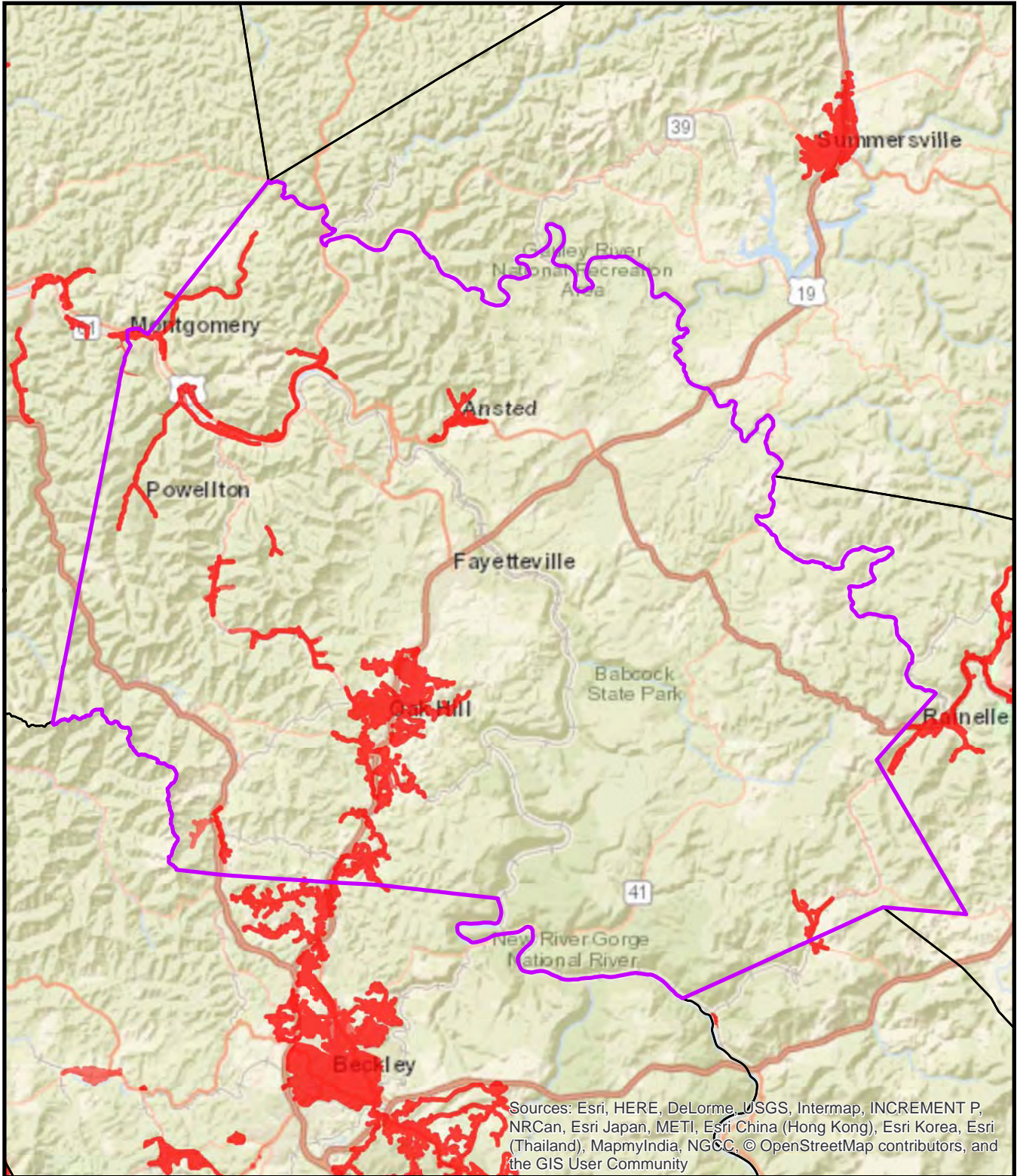
Distribution of Service to Structures



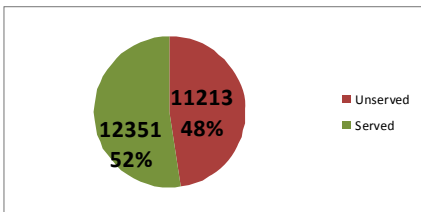
0 1.5 3 6 Miles

 Served Area

Water Service Area Doddridge County



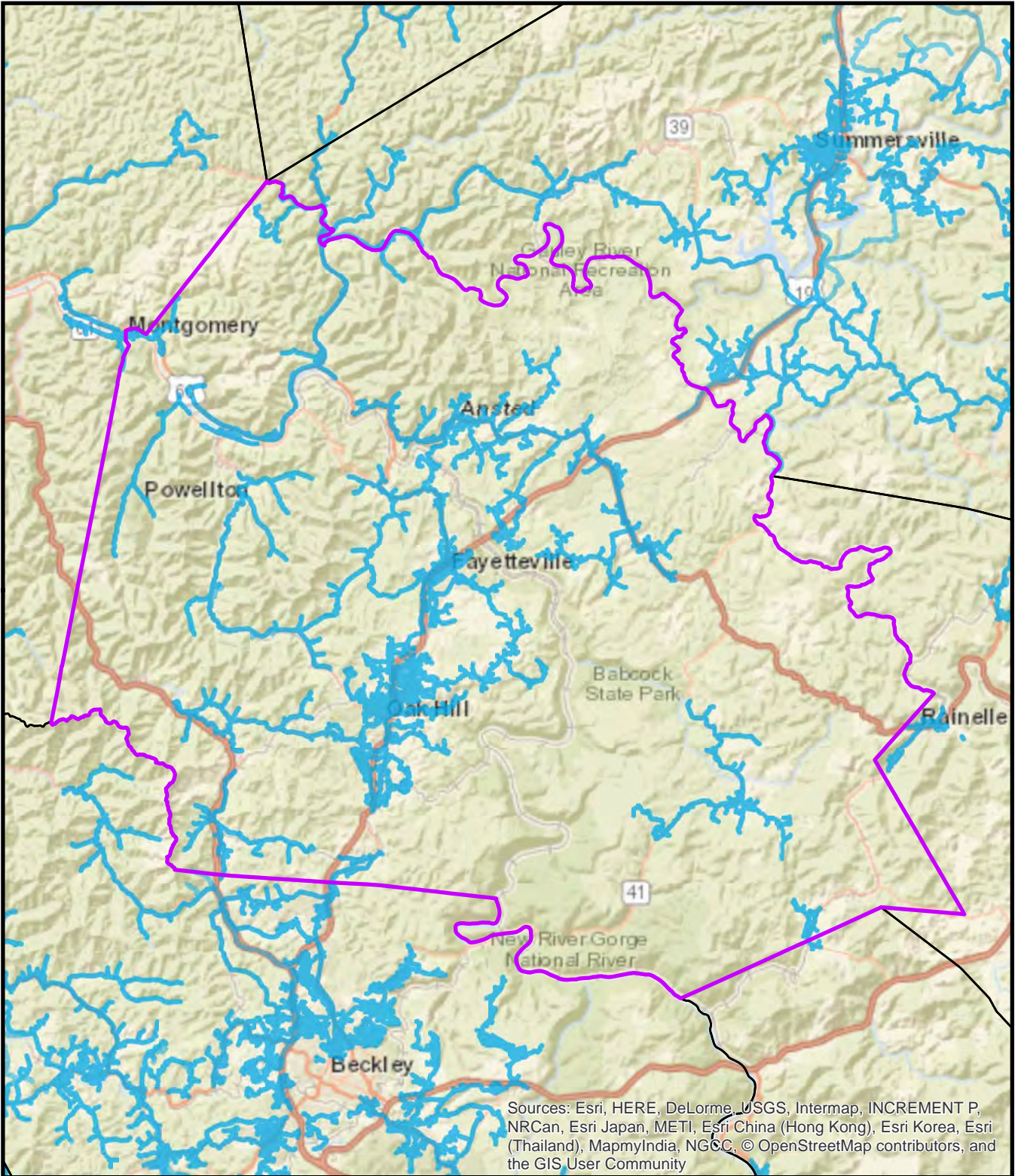
Distribution of Service to Structures



0 2.25 4.5 9 Miles

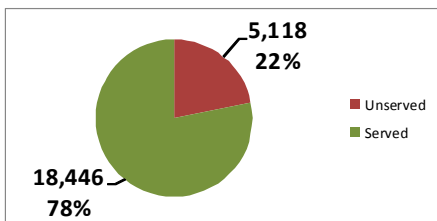
 Served Area

Sewer Service Area Fayette County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

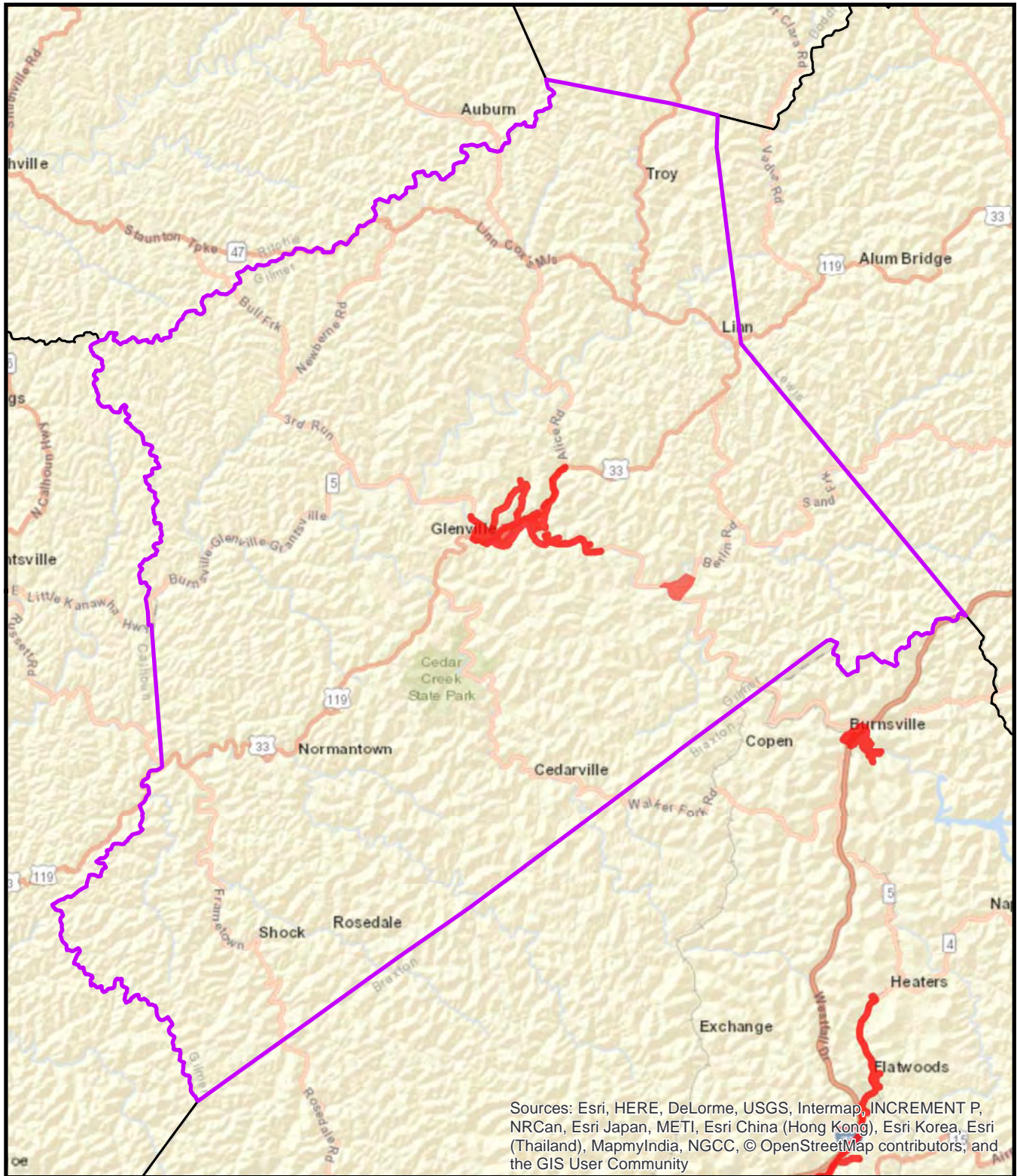
Distribution of Service to Structures



0 2.25 4.5 9 Miles

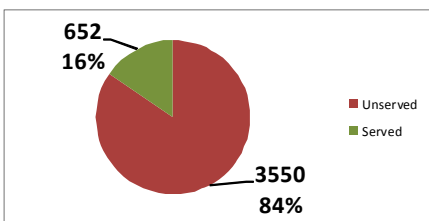
 Served Area

Water Service Area Fayette County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

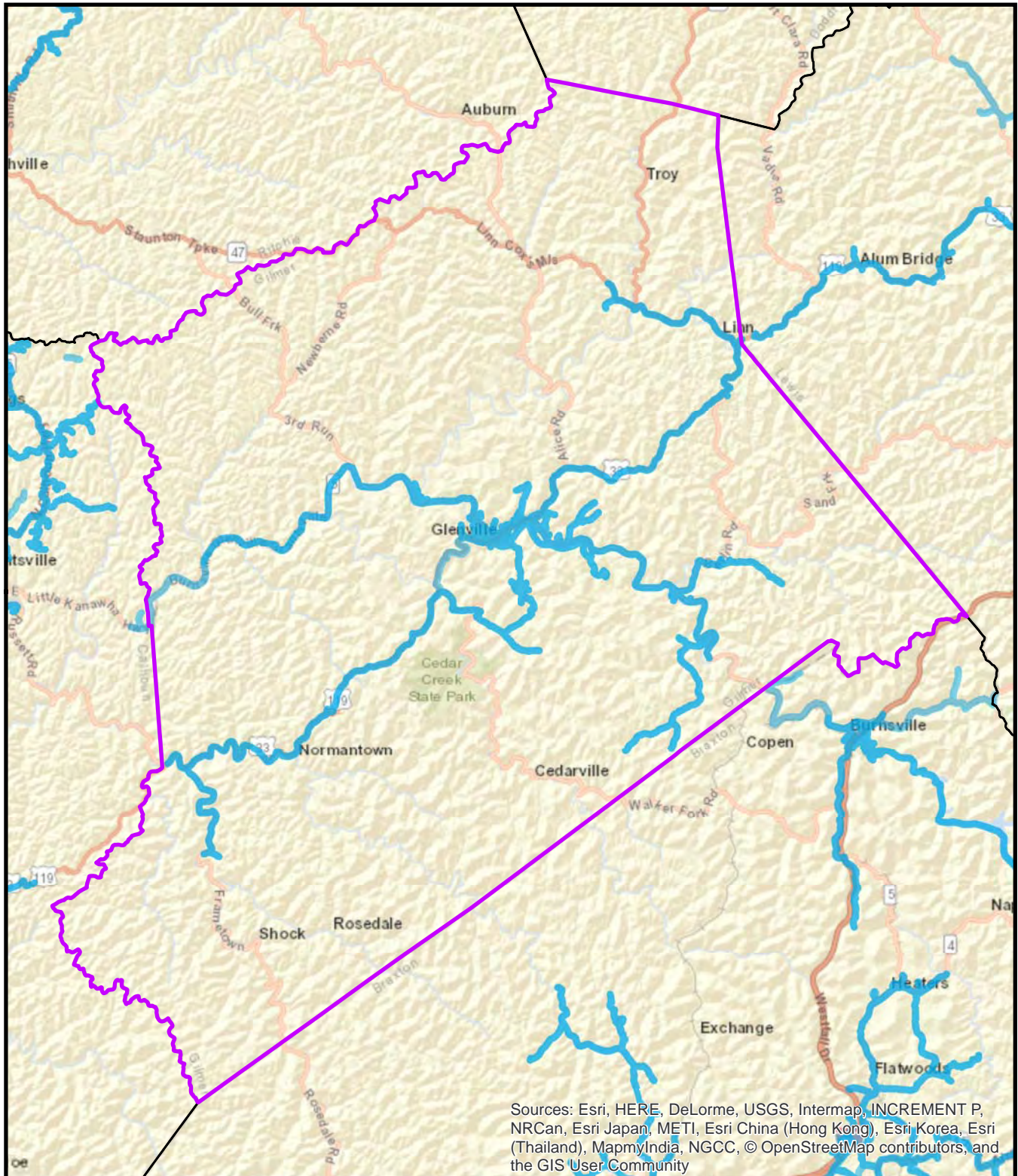
Distribution of Service to Structures



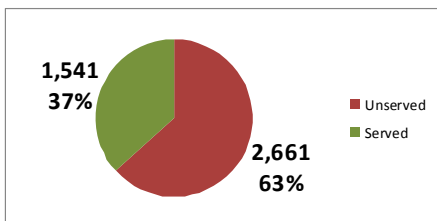
0 1.5 3 6 Miles

Served Area

Sewer Service Area Gilmer County



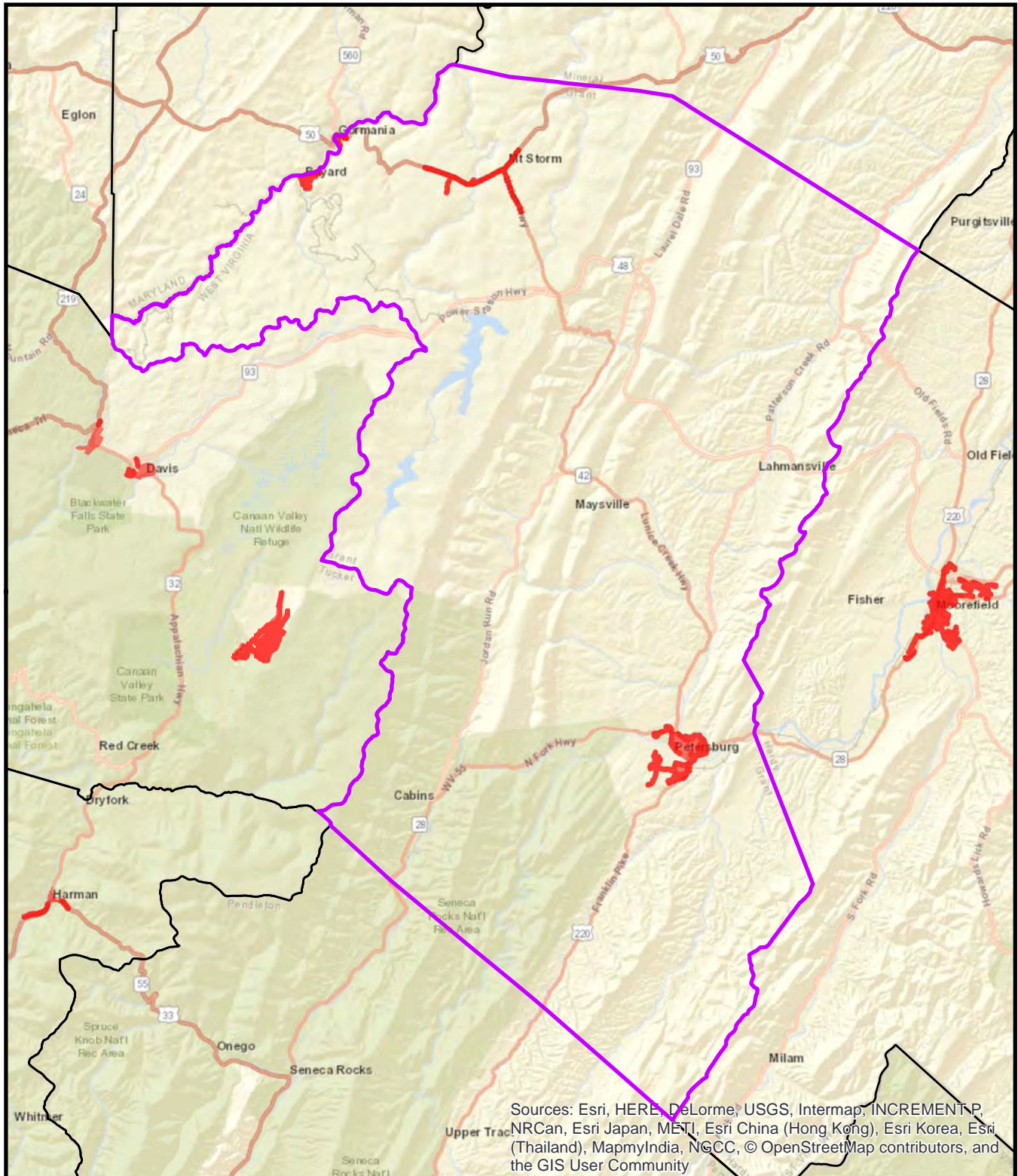
Distribution of Service to Structures



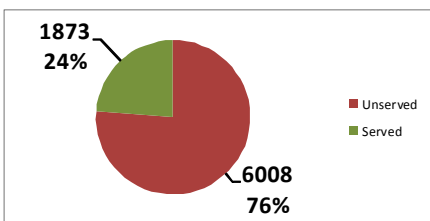
0 1.5 3 6 Miles

 Served Area

Water Service Area Gilmer County



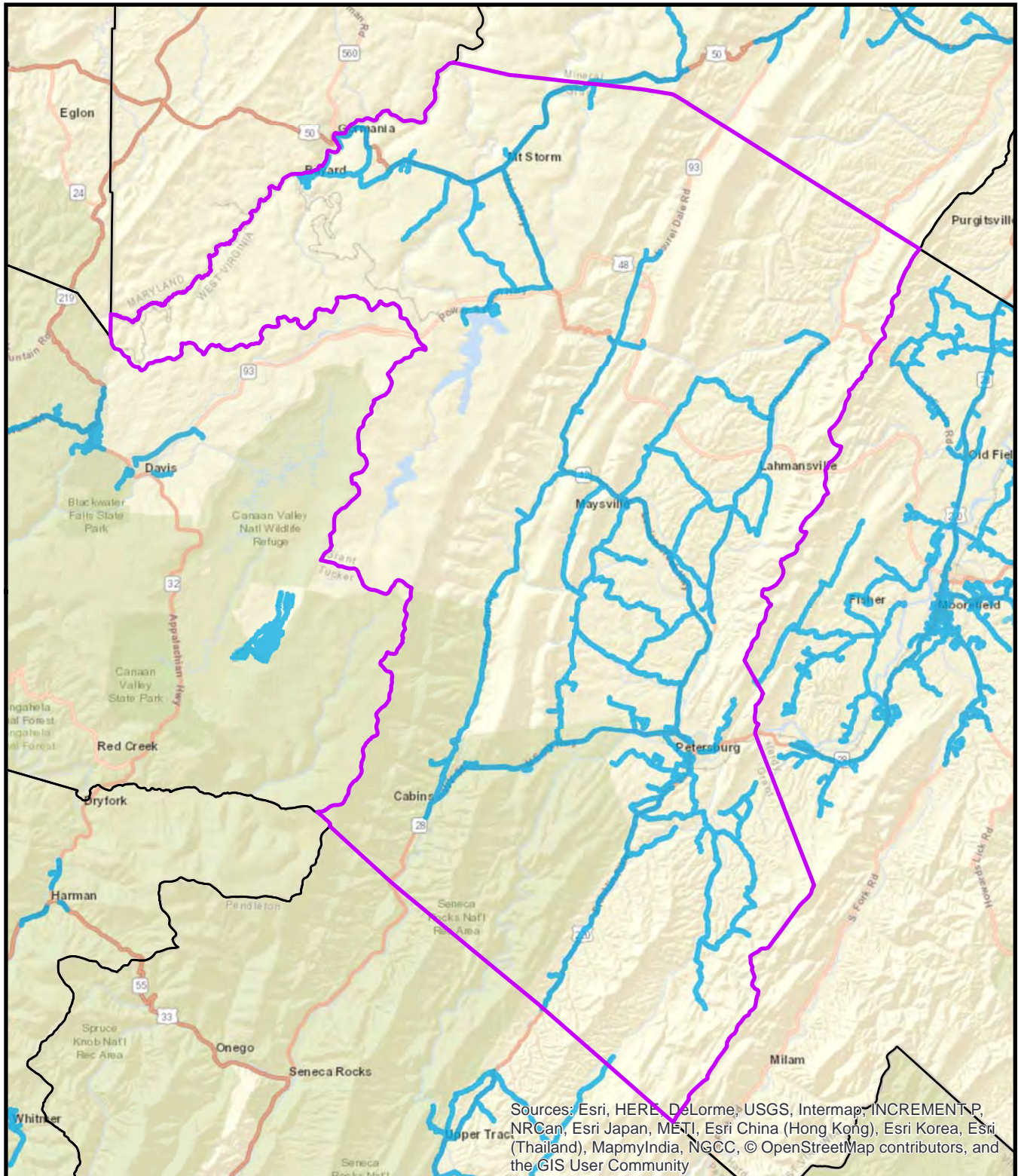
Distribution of Service to Structures



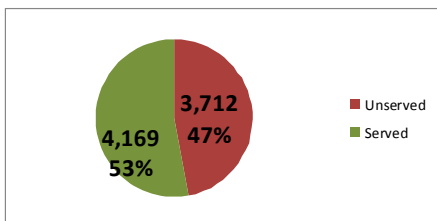
0 2 4 8 Miles

Served Area

Sewer Service Area Grant County



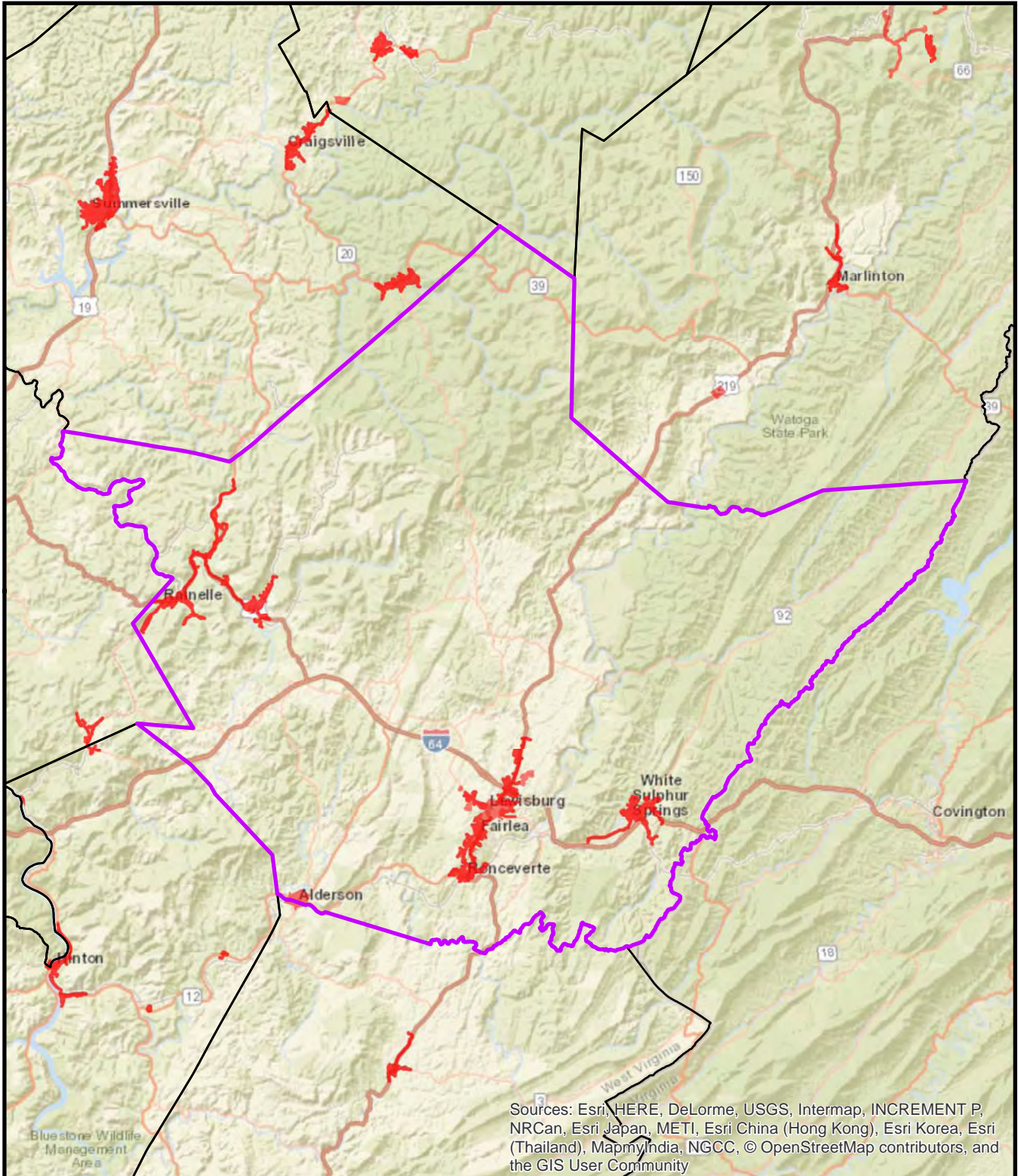
Distribution of Service to Structures



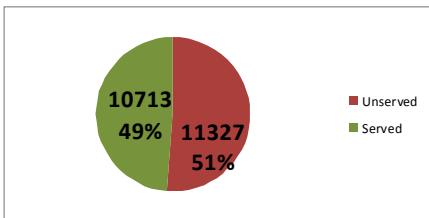
0 2 4 8 Miles

 Served Area

Water Service Area Grant County



Distribution of Service to Structures

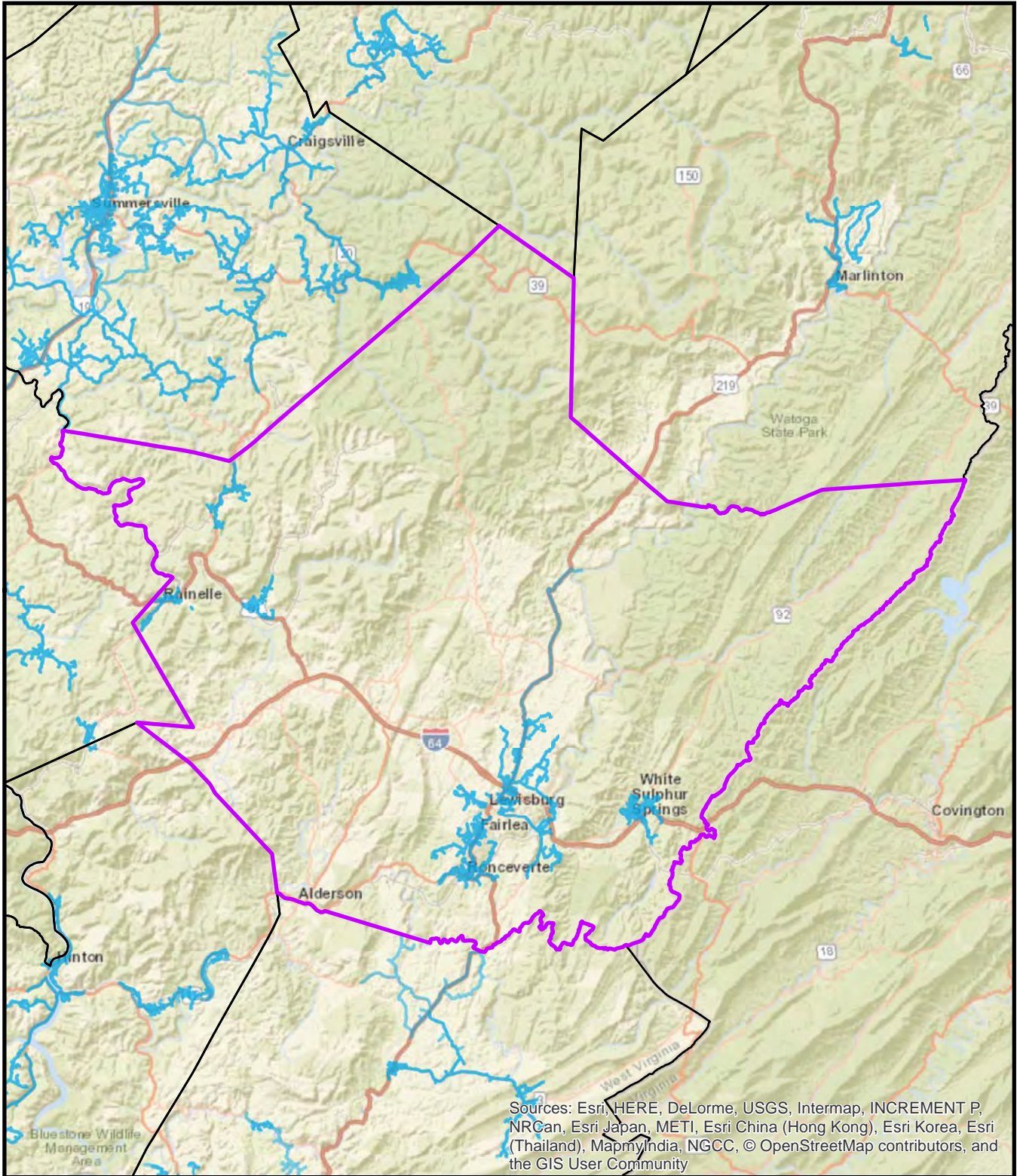


0 3.25 6.5 13 Miles

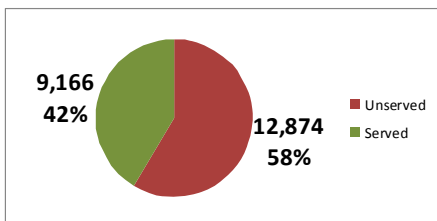
 Served Area

Sewer Service Area Greenbrier County





Distribution of Service to Structures

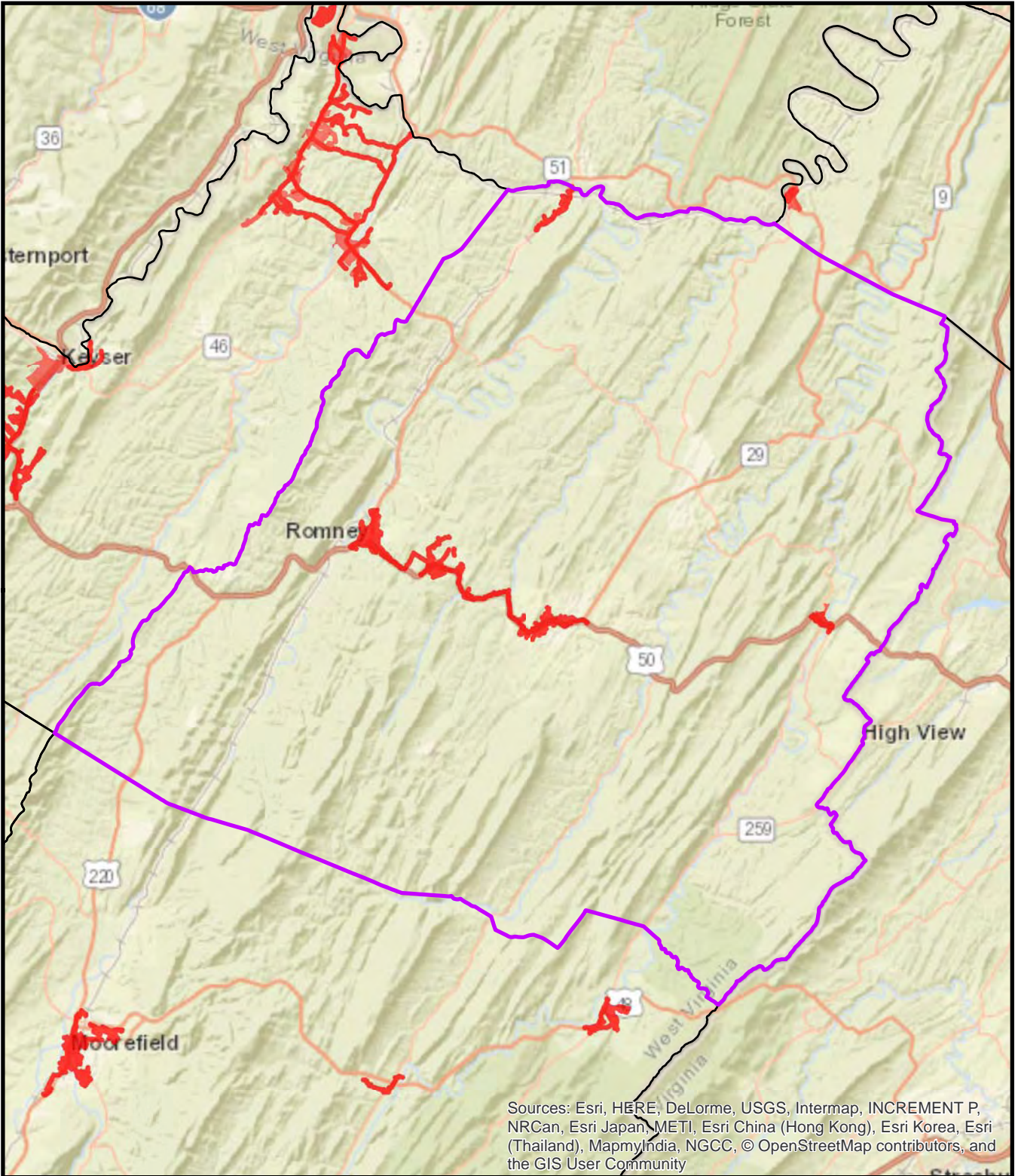


0 3.25 6.5 13 Miles

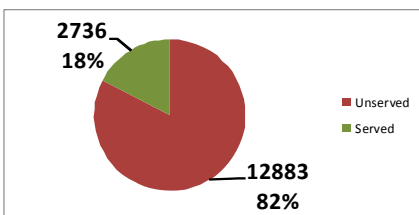
 Served Area

Water Service Area Greenbrier County





Distribution of Service to Structures

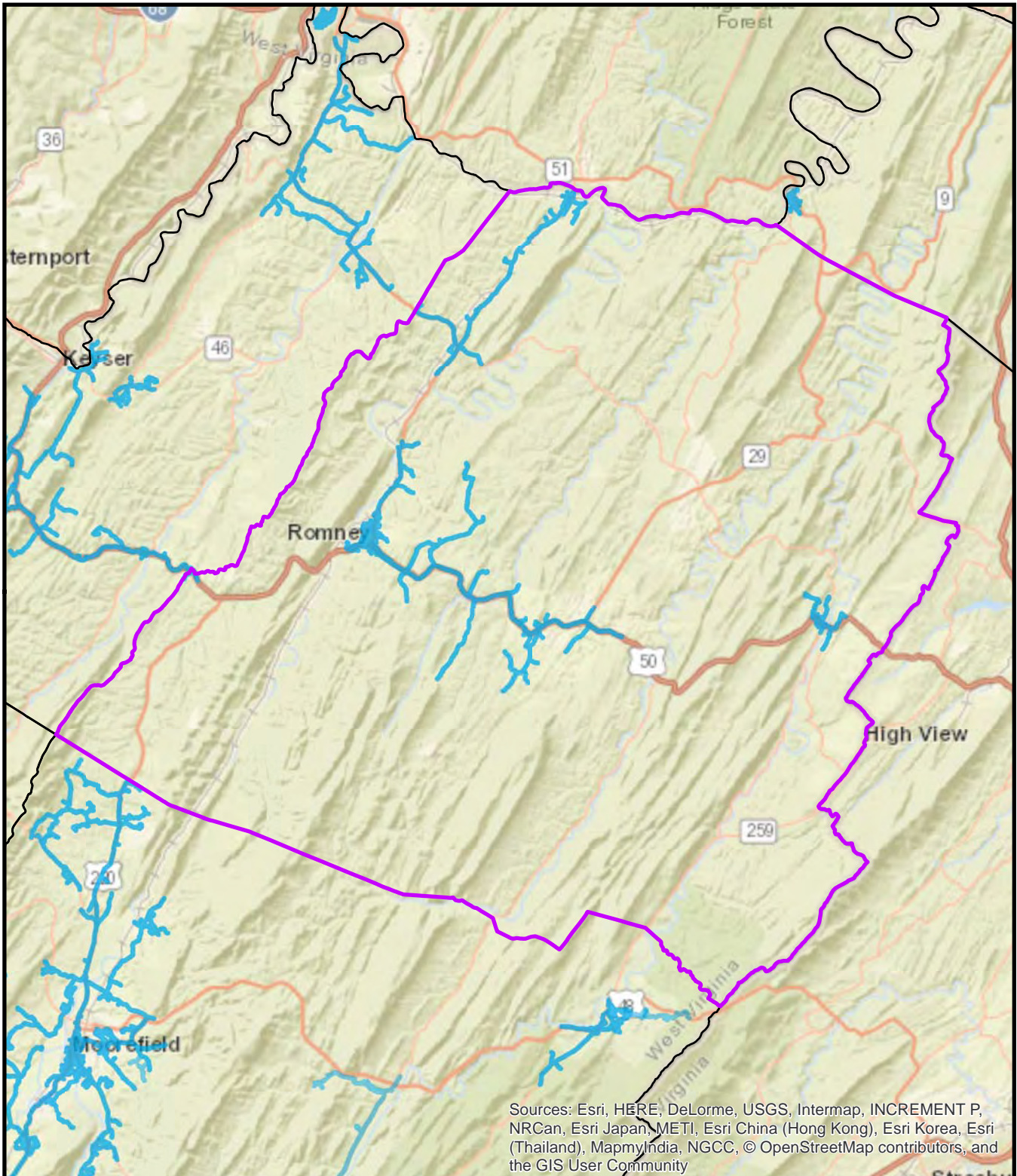


0 2.25 4.5 9 Miles

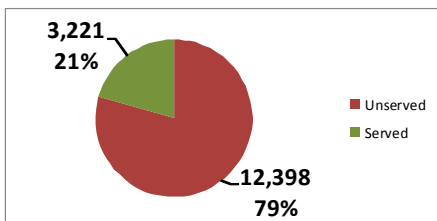
Served Area

Sewer Service Area Hampshire County





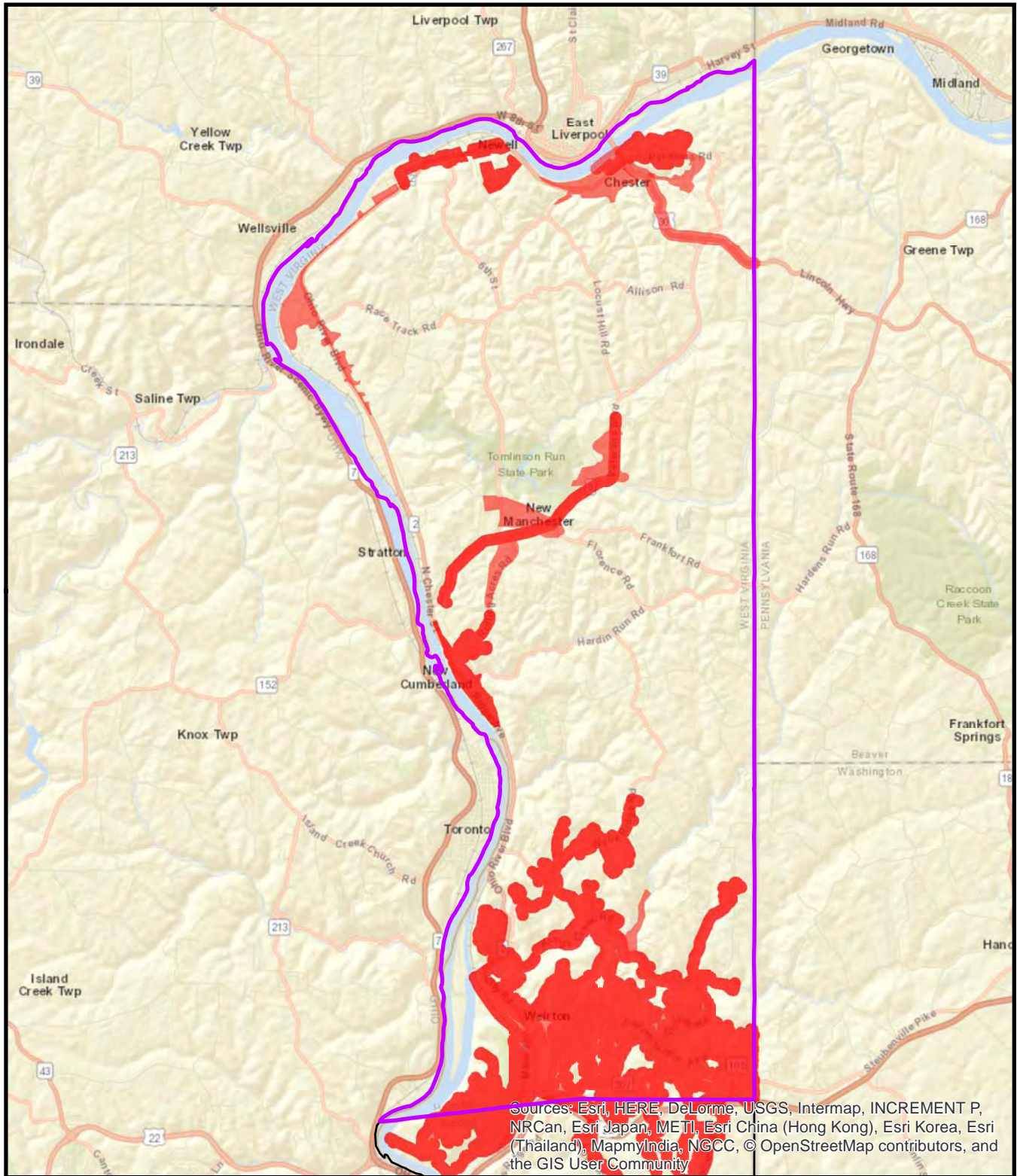
Distribution of Service to Structures



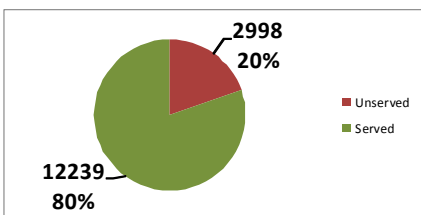
0 2.25 4.5 9 Miles

 Served Area

Water Service Area Hampshire County



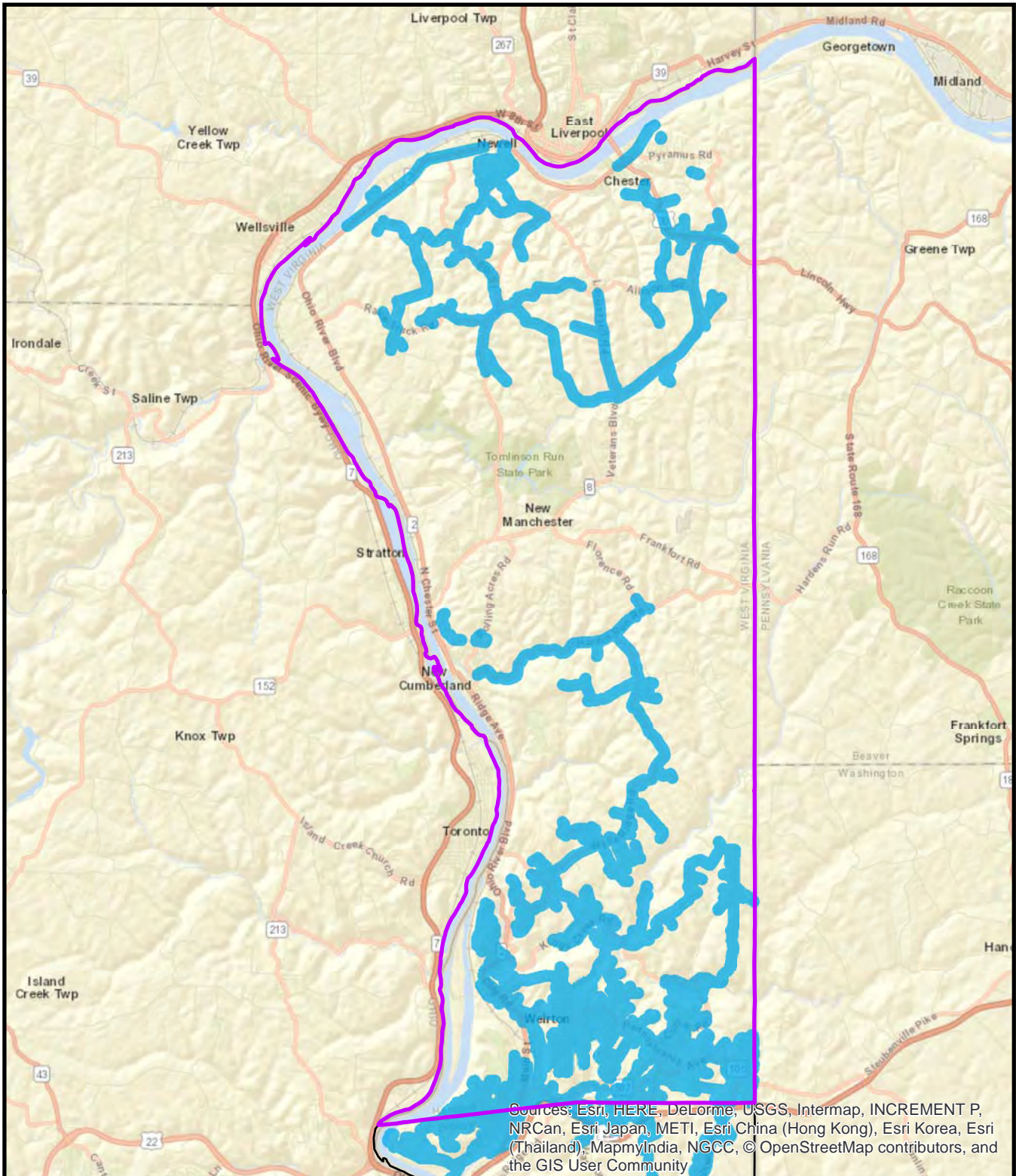
Distribution of Service to Structures



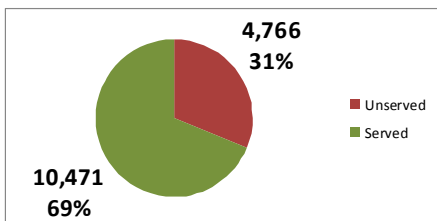
0 1 2 4 Miles

Served Area

Sewer Service Area Hancock County



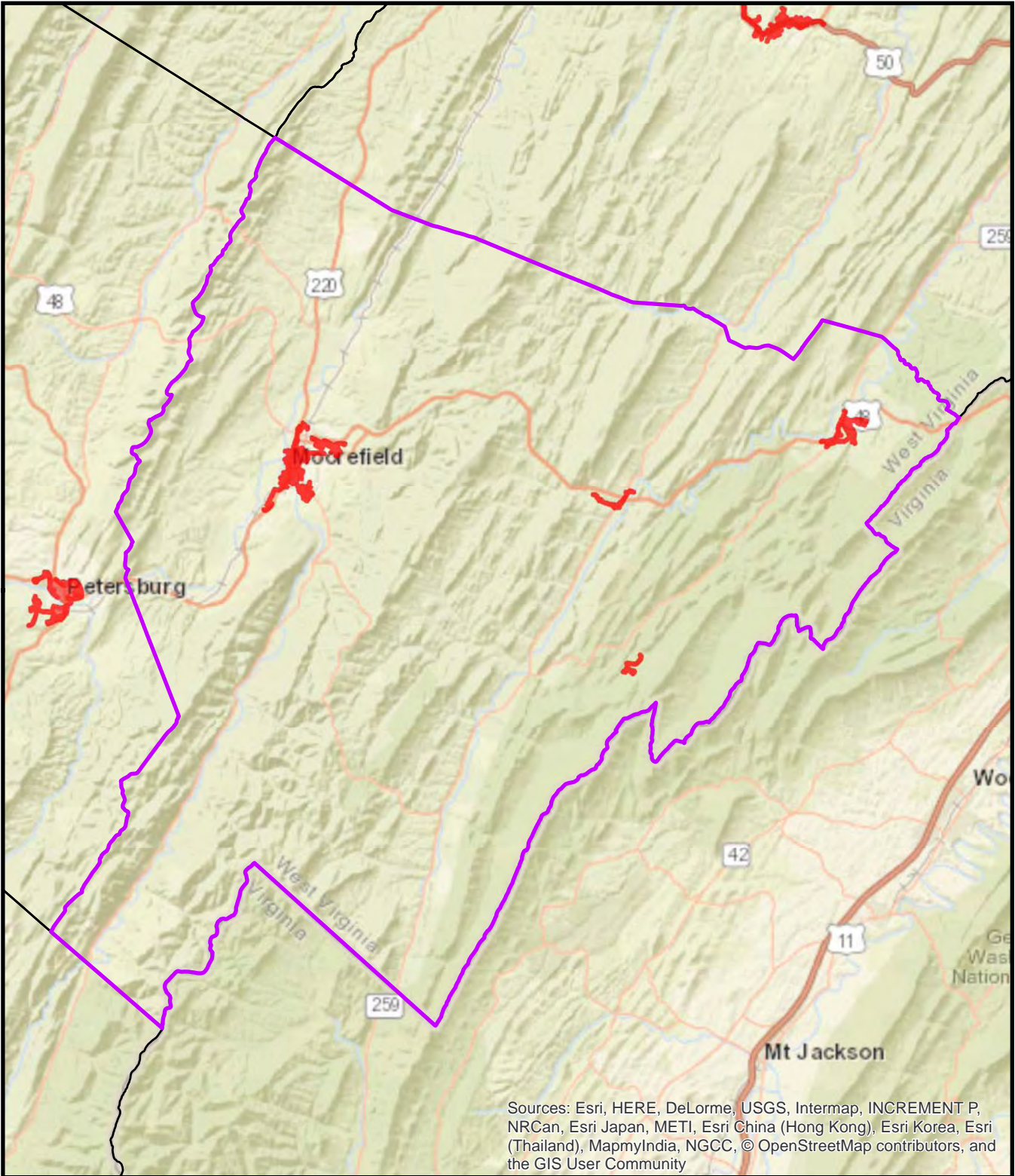
Distribution of Service to Structures



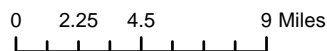
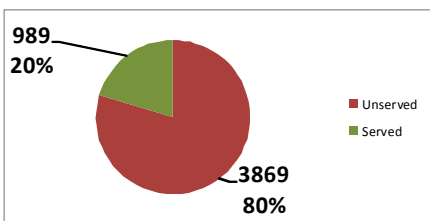
0 1 2 4 Miles

Served Area Served Area

Water Service Area Hancock County

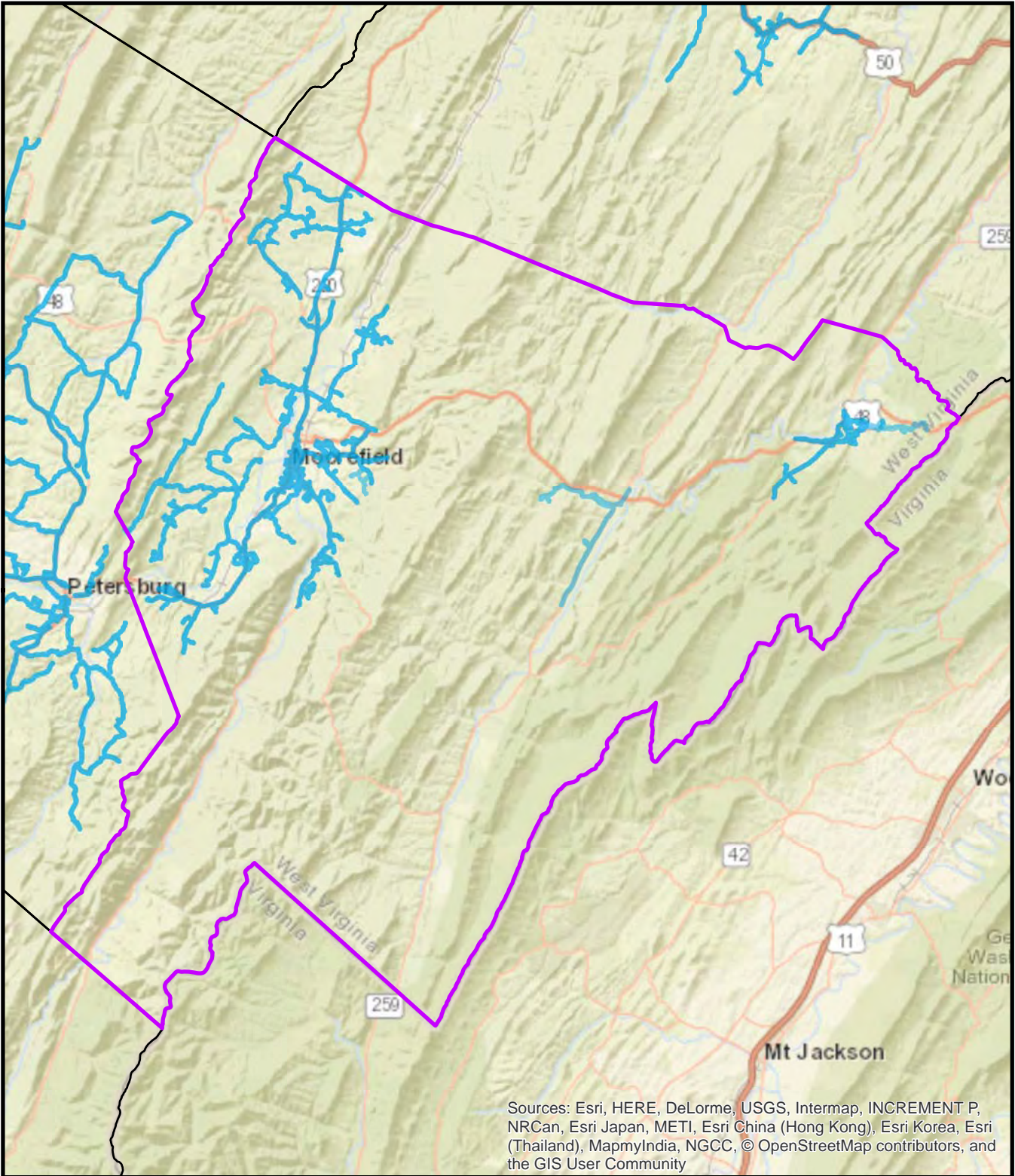


Distribution of Service to Structures

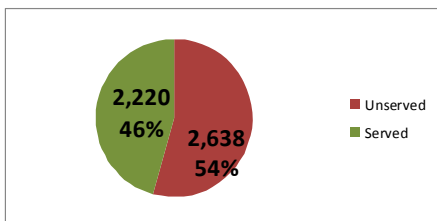


 Served Area

Sewer Service Area Hardy County



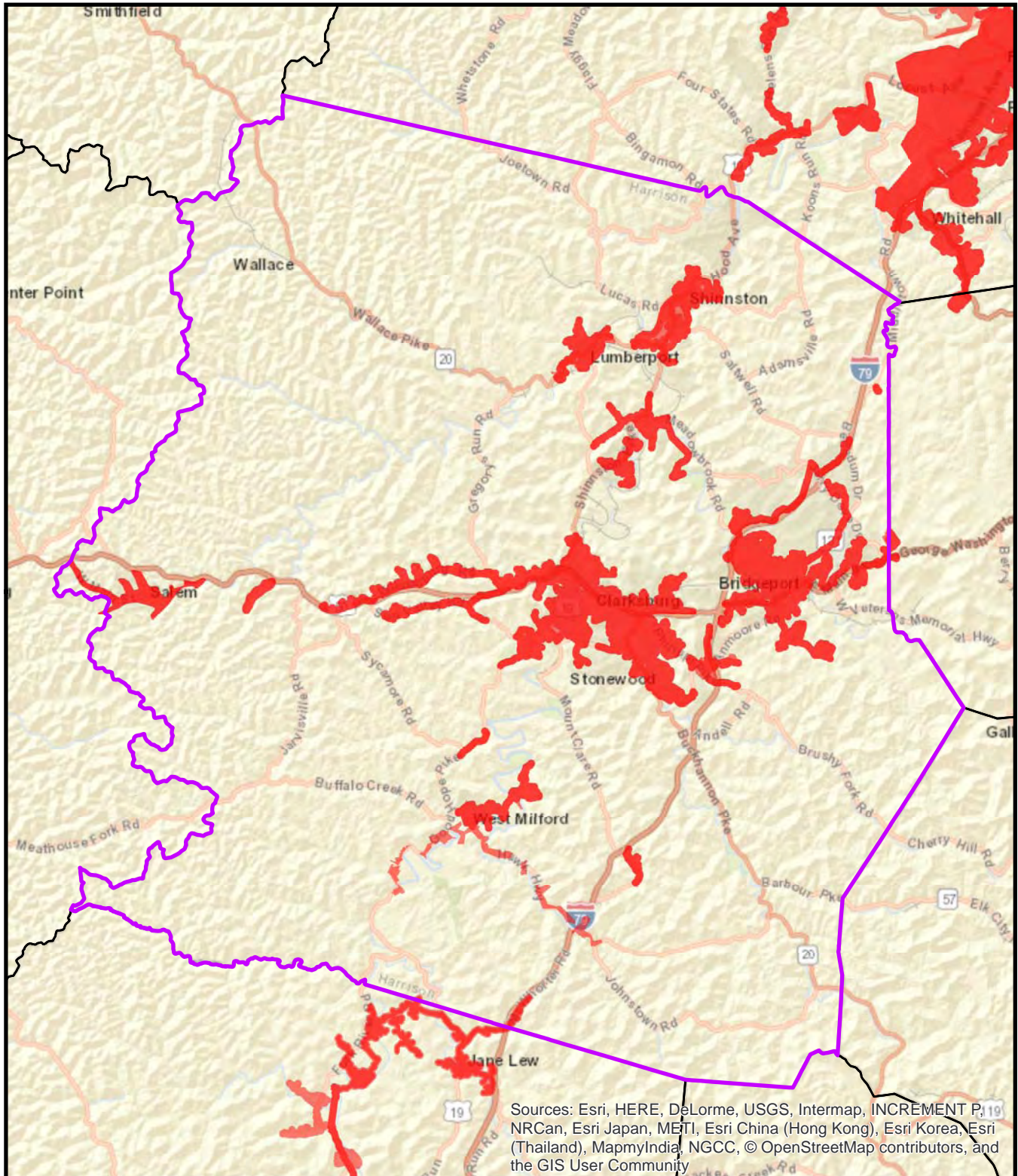
Distribution of Service to Structures



0 2.25 4.5 9 Miles

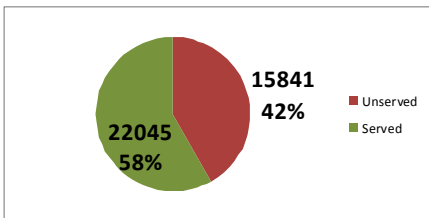
 Served Area

Water Service Area Hardy County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

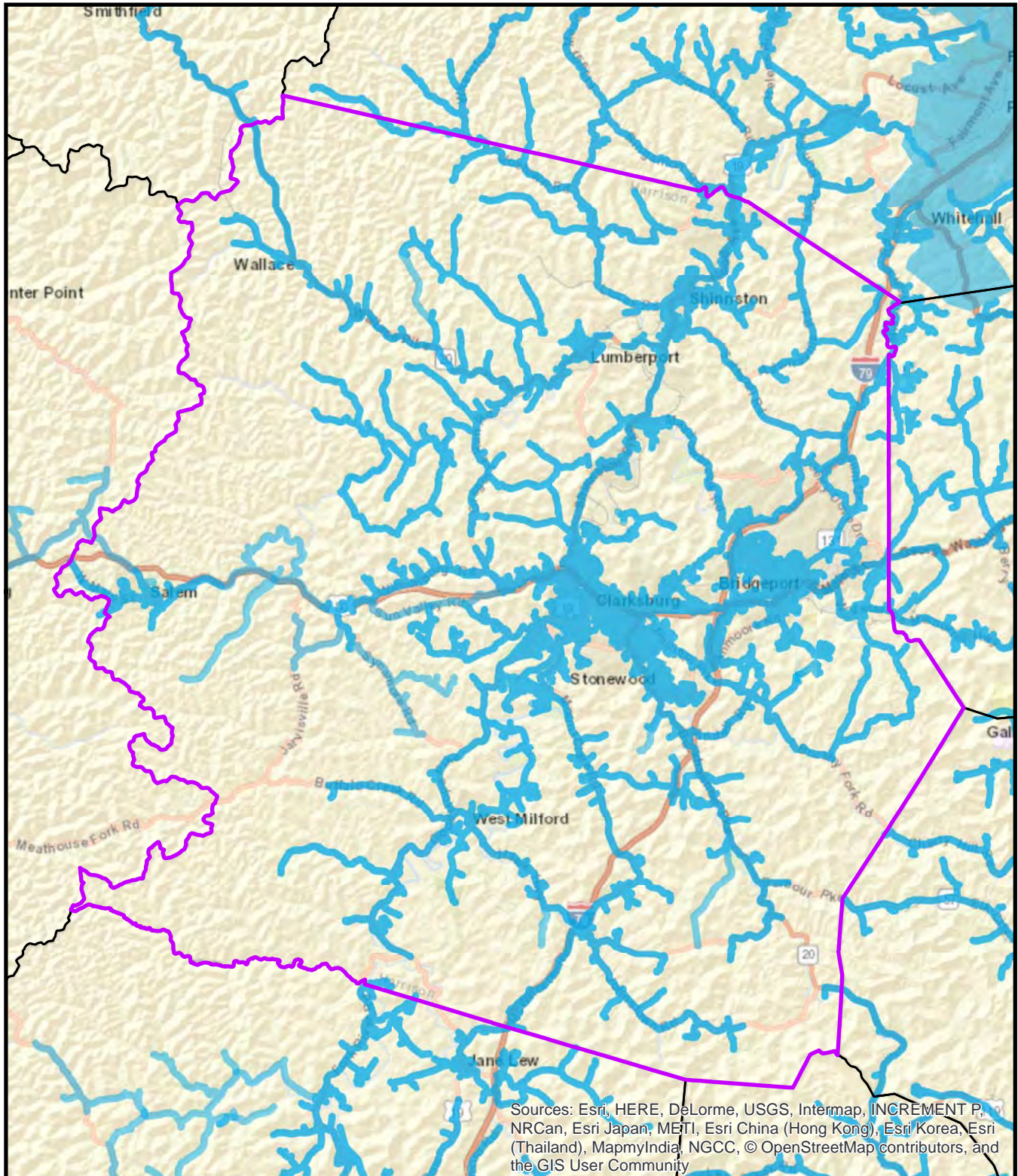
Distribution of Service to Structures



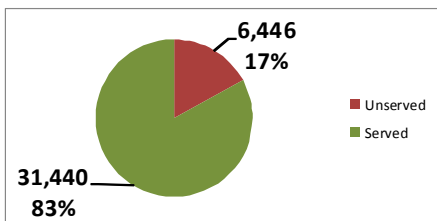
0 1.5 3 6 Miles

Served Area

Sewer Service Area Harrison County



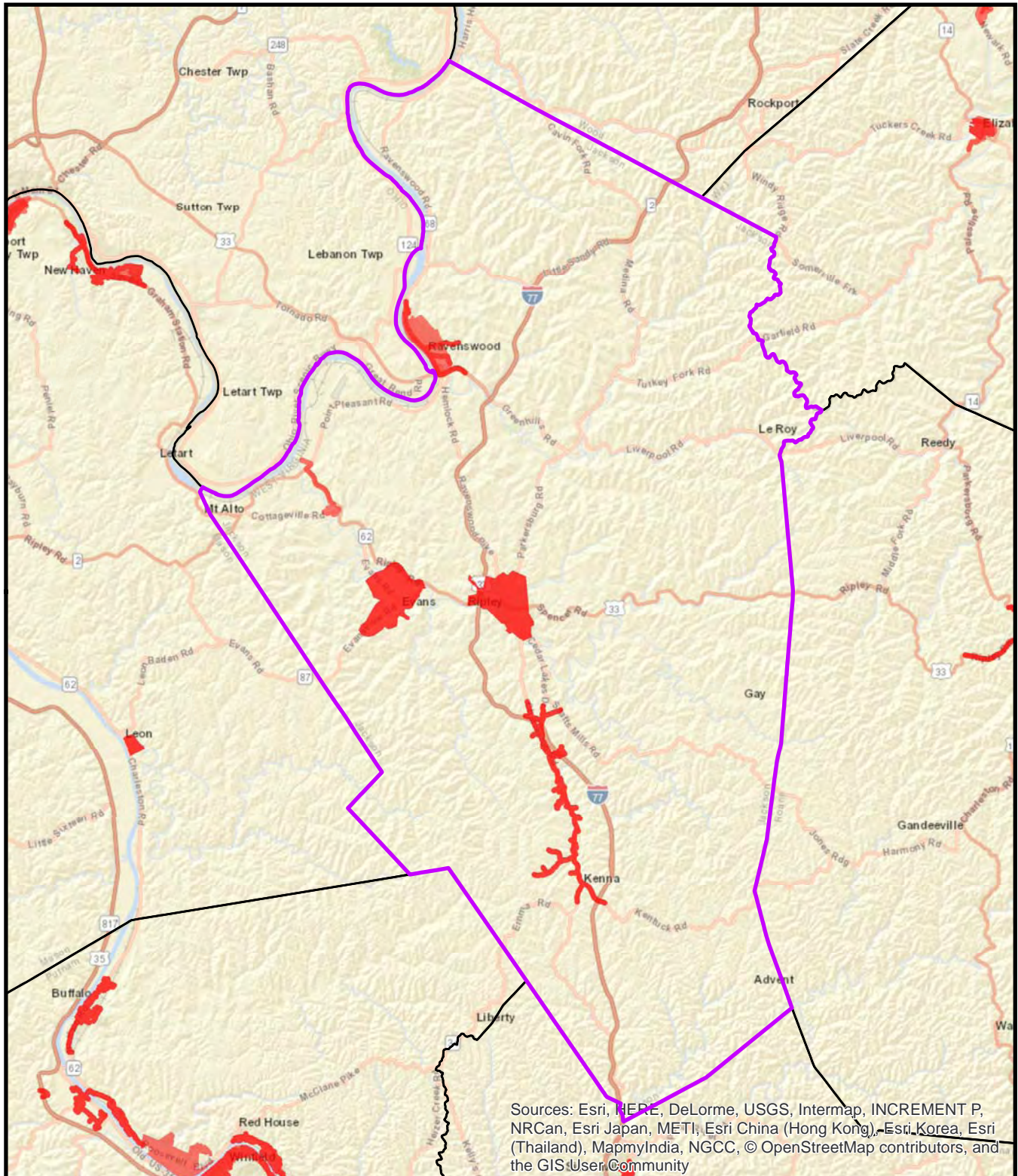
Distribution of Service to Structures



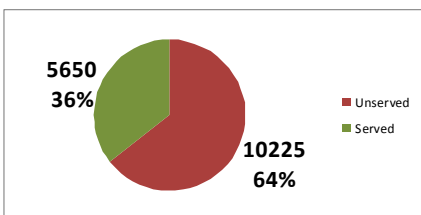
0 1.5 3 6 Miles

 Served Area

Water Service Area Harrison County



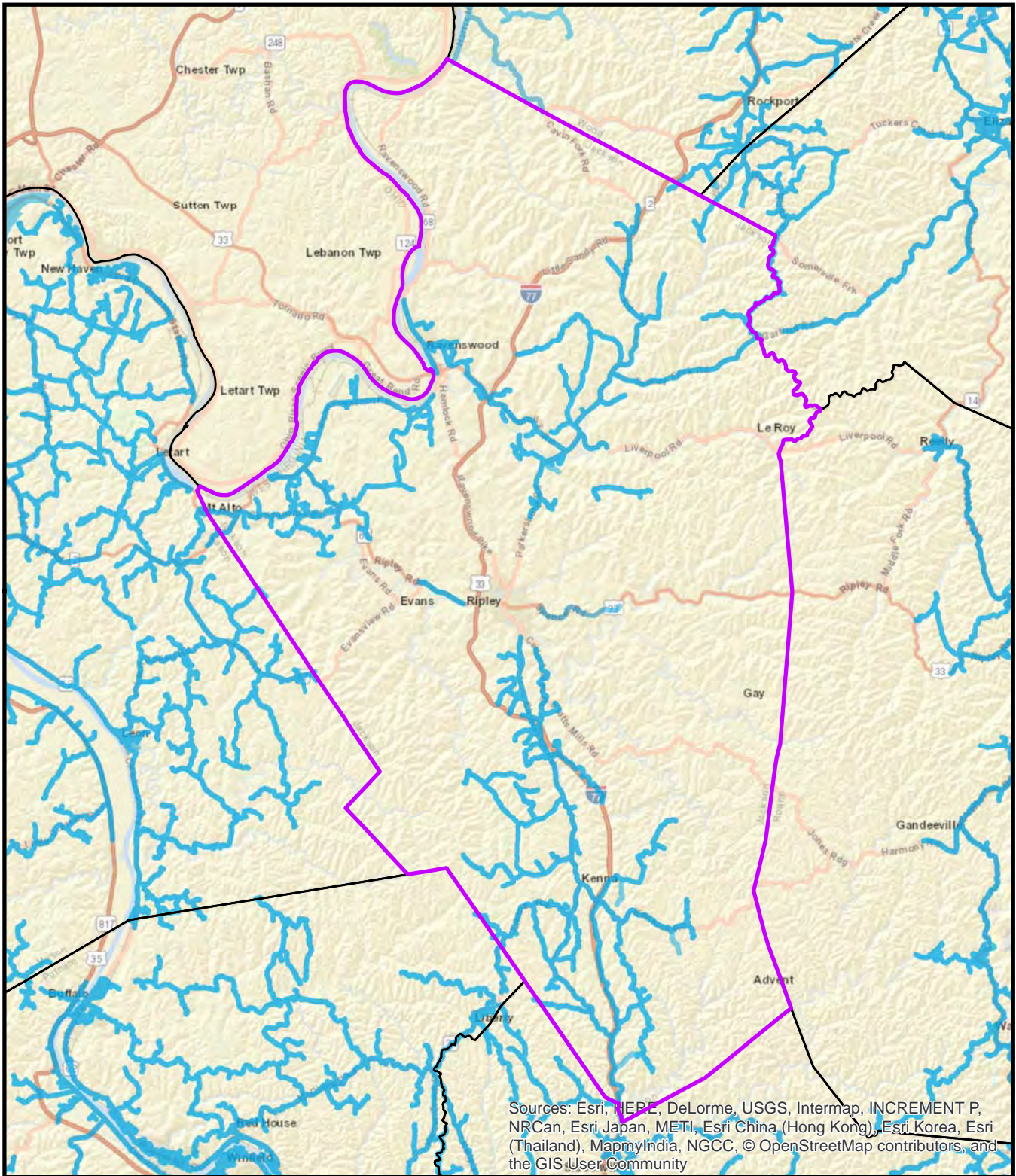
Distribution of Service to Structures



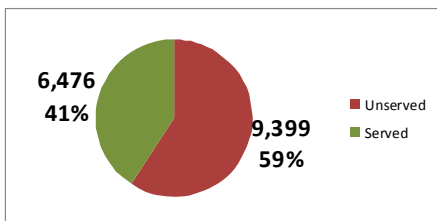
0 2.25 4.5 9 Miles

 Served Area

Sewer Service Area Jackson County



Distribution of Service to Structures

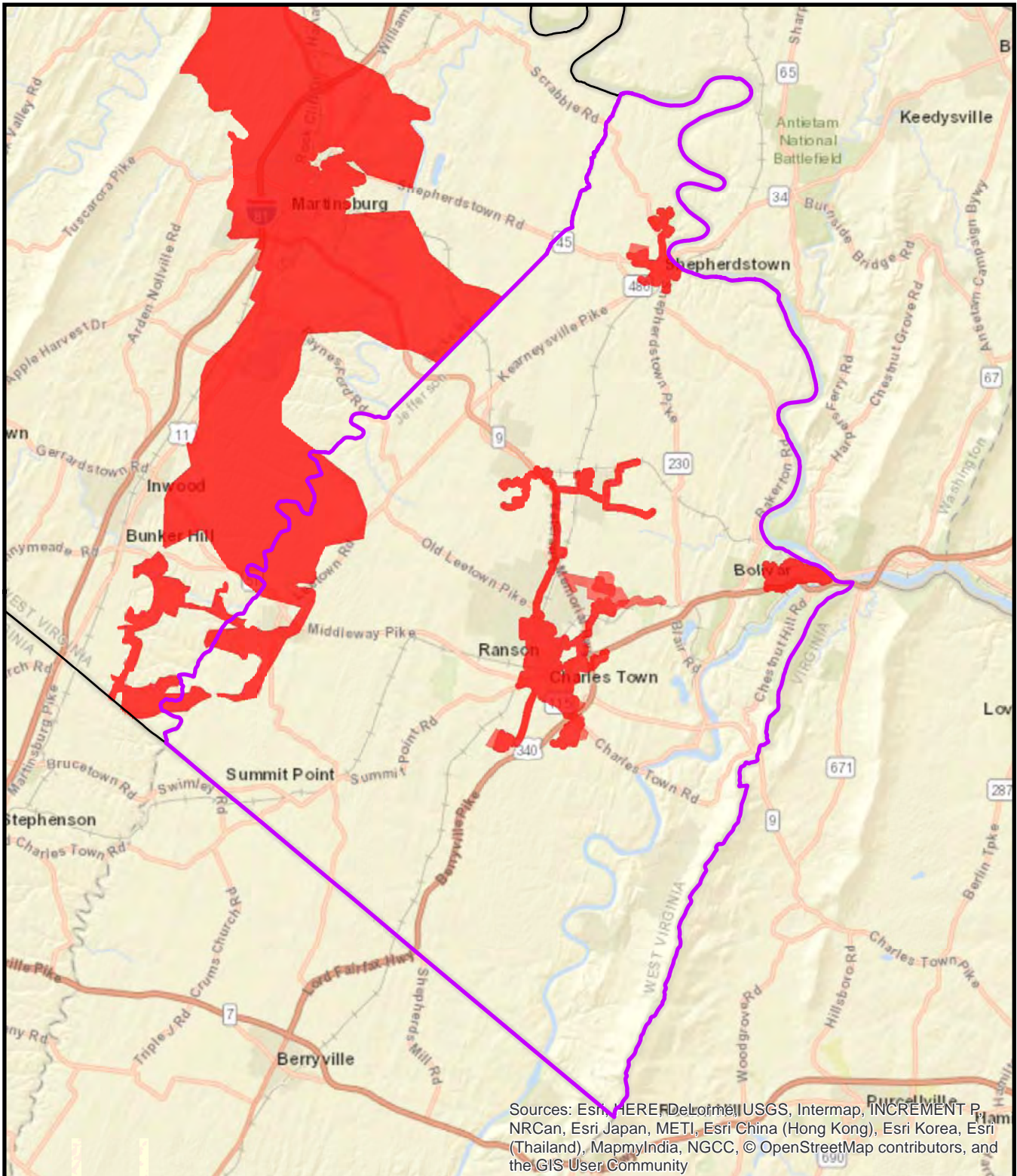


0 2.25 4.5 9 Miles

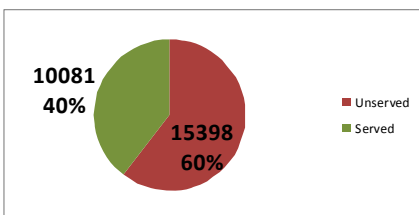
 Served Area

Water Service Area Jackson County





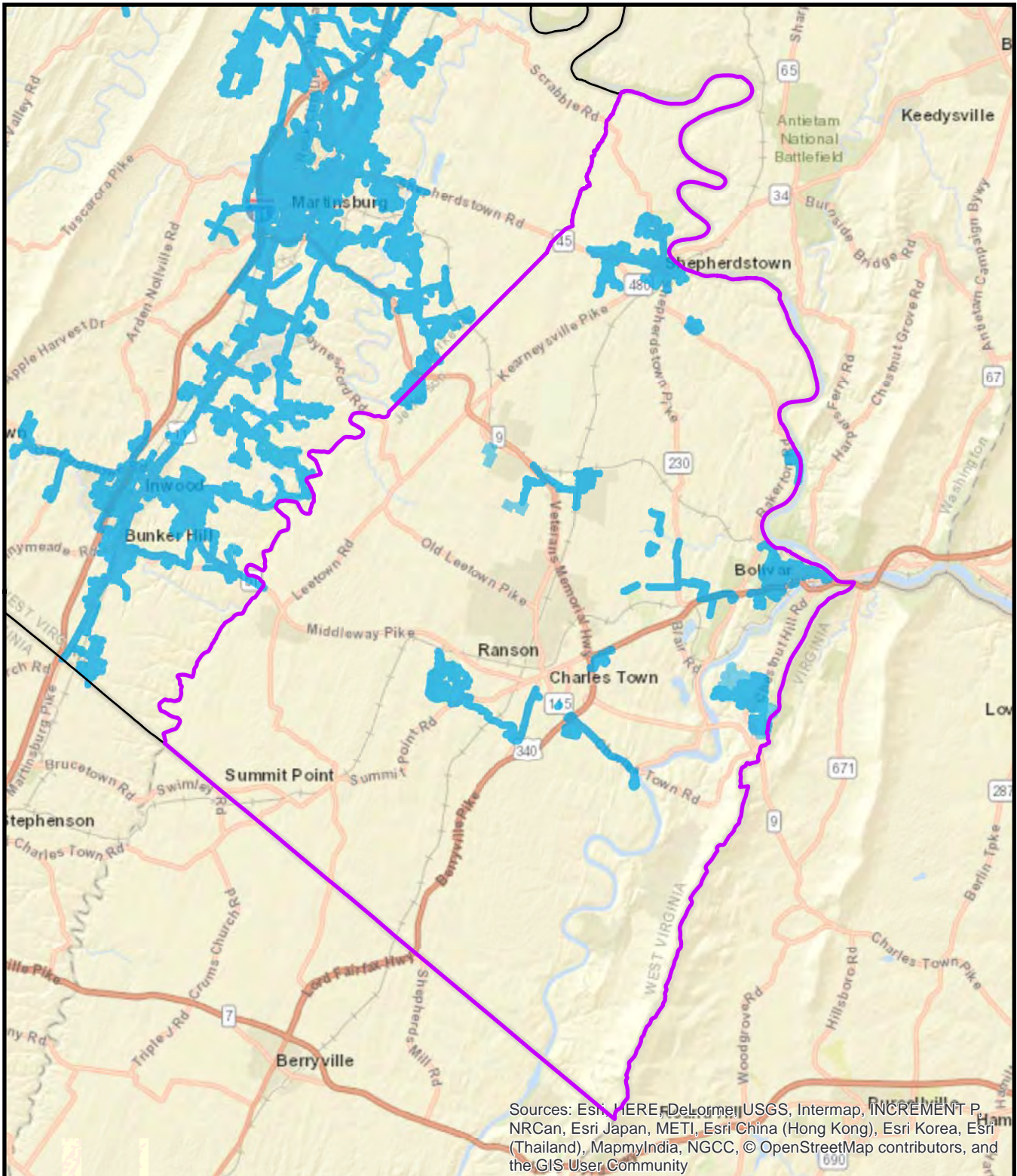
Distribution of Service to Structures



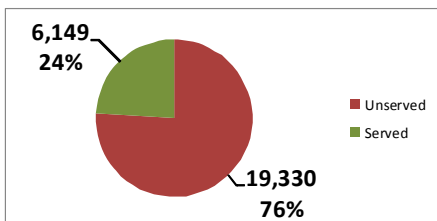
0 1.5 3 6 Miles

Served Area

Sewer Service Area Jefferson County



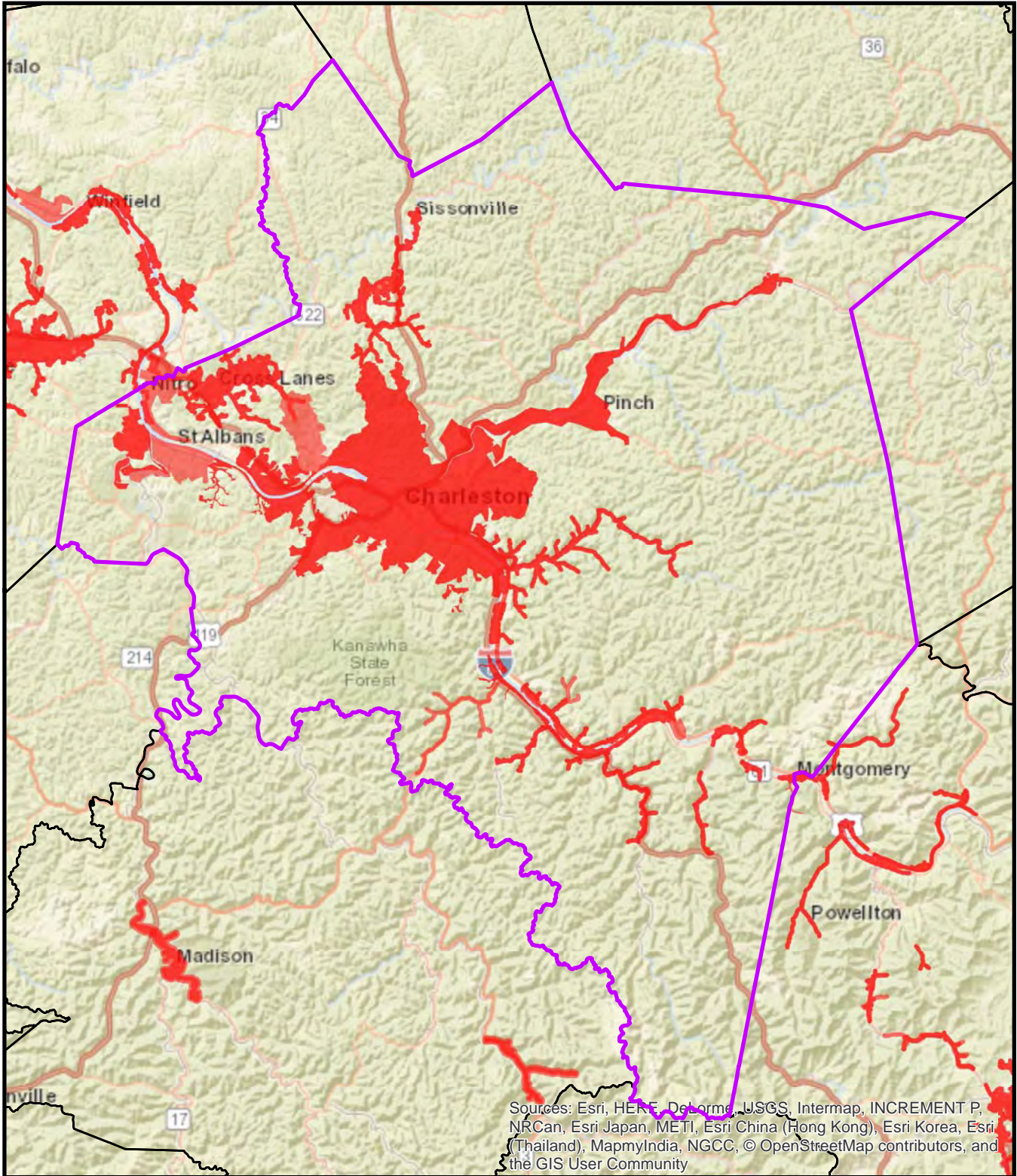
Distribution of Service to Structures



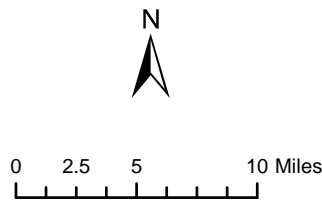
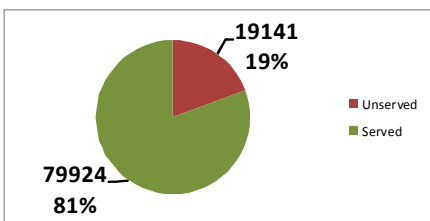
0 1.5 3 6 Miles

 Served Area

Water Service Area Jefferson County

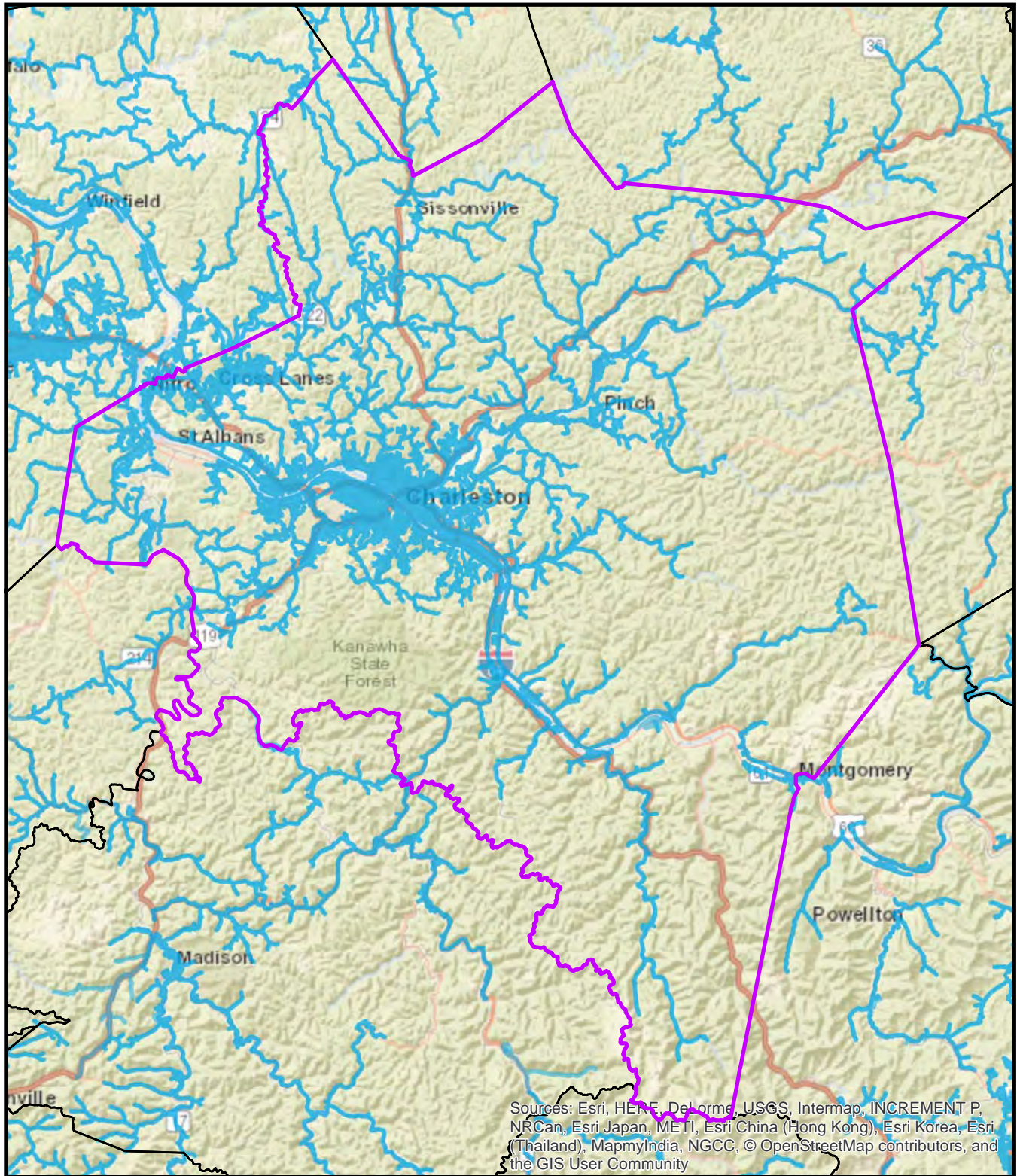


Distribution of Service to Structures

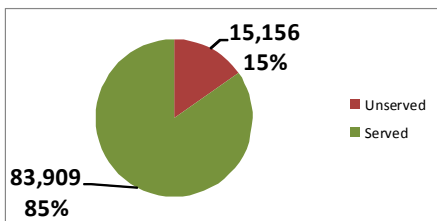


Served Area

Sewer Service Area Kanawha County



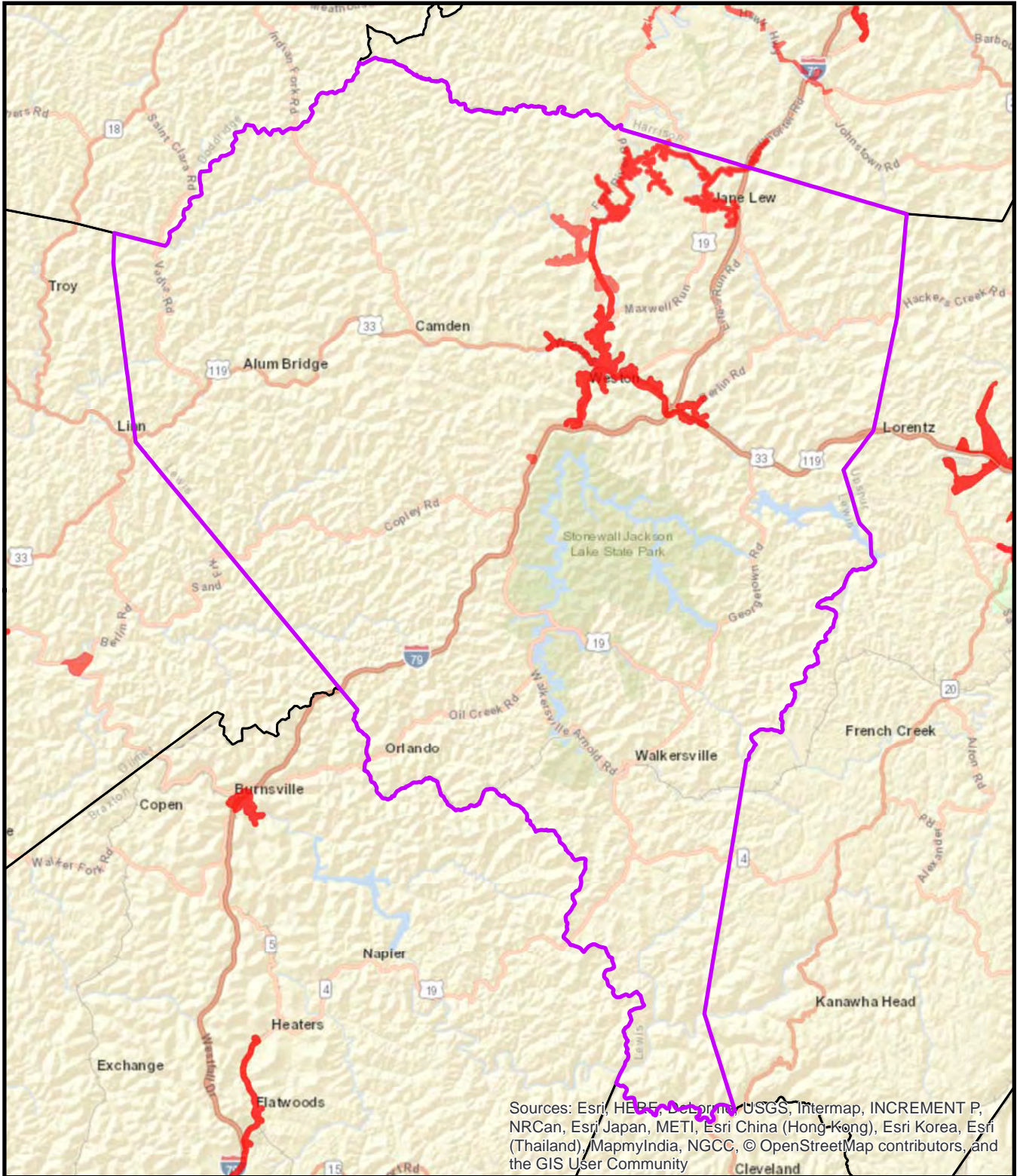
Distribution of Service to Structures



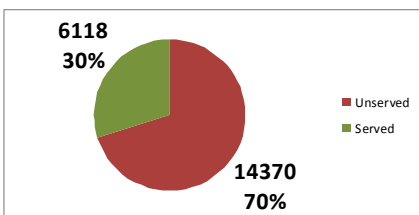
0 2.5 5 10 Miles

 Served Area

Water Service Area Kanawha County



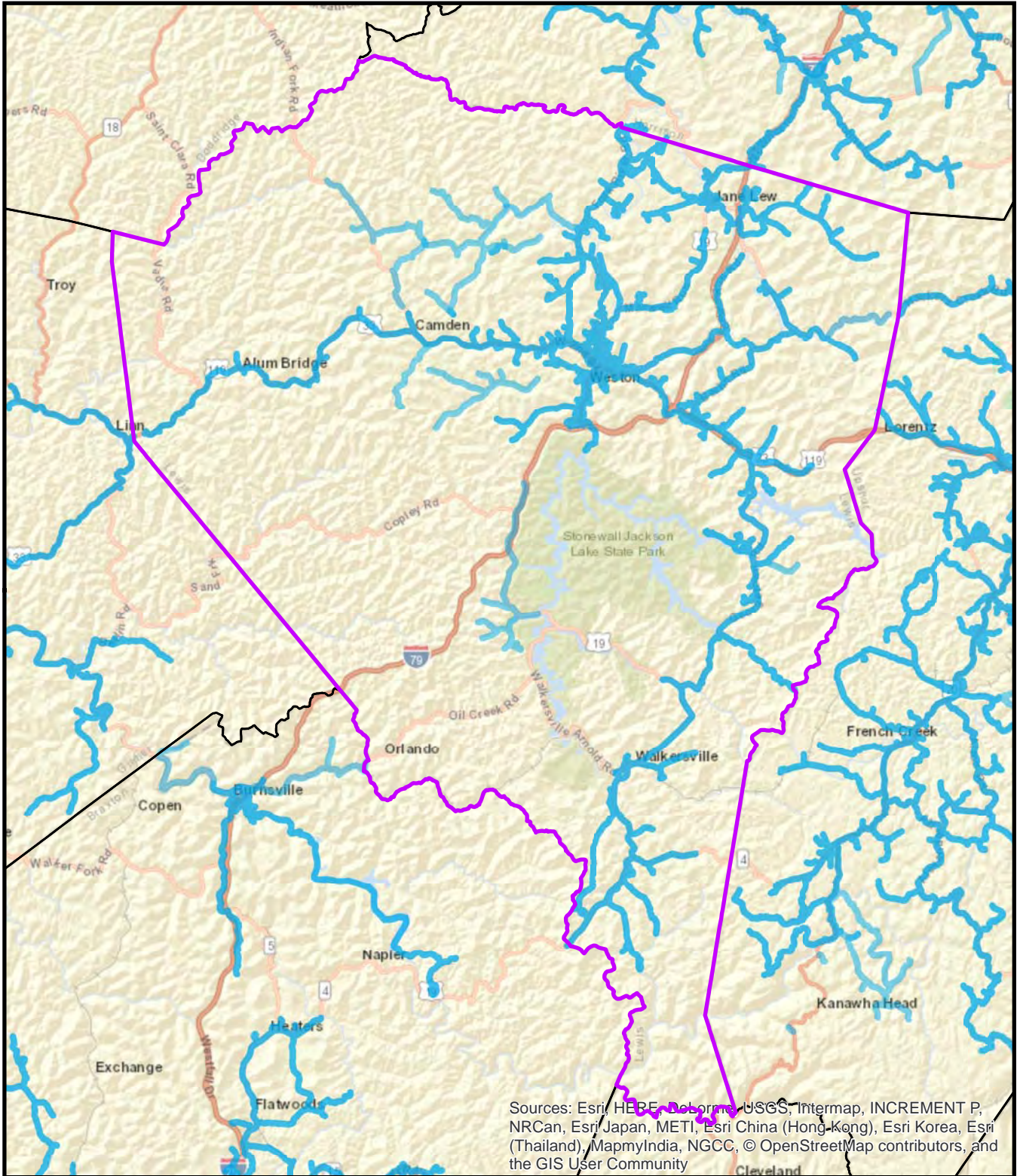
Distribution of Service to Structures



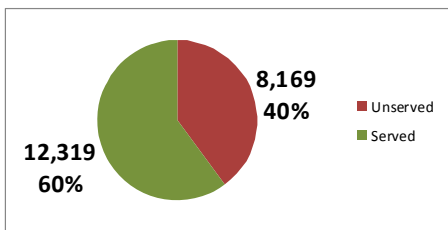
0 1.75 3.5 7 Miles

 Served Area

Sewer Service Area Lewis County



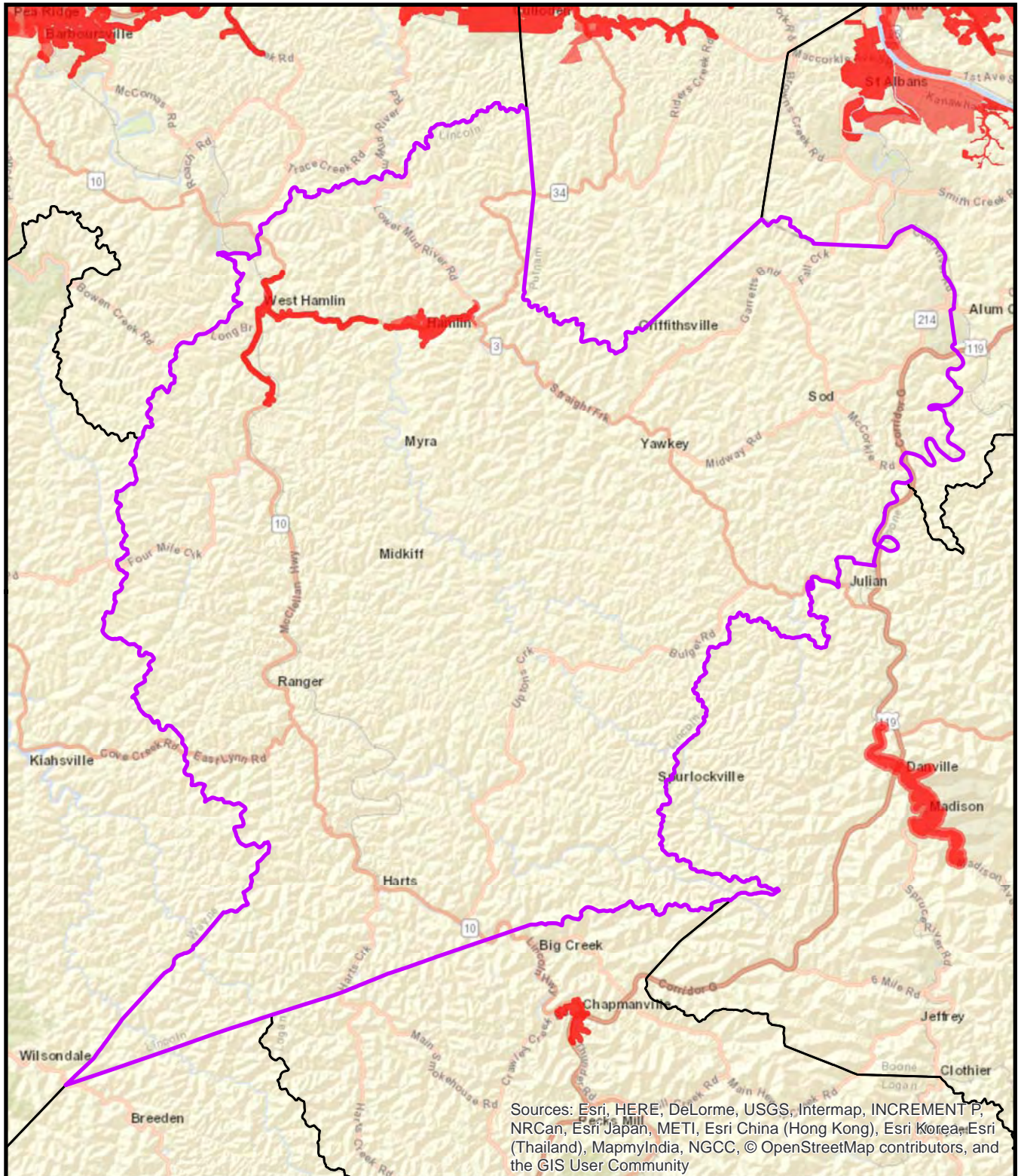
Distribution of Service to Structures



0 1.75 3.5 7 Miles

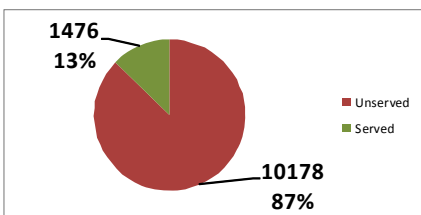
 Served Area

Water Service Area Lewis County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

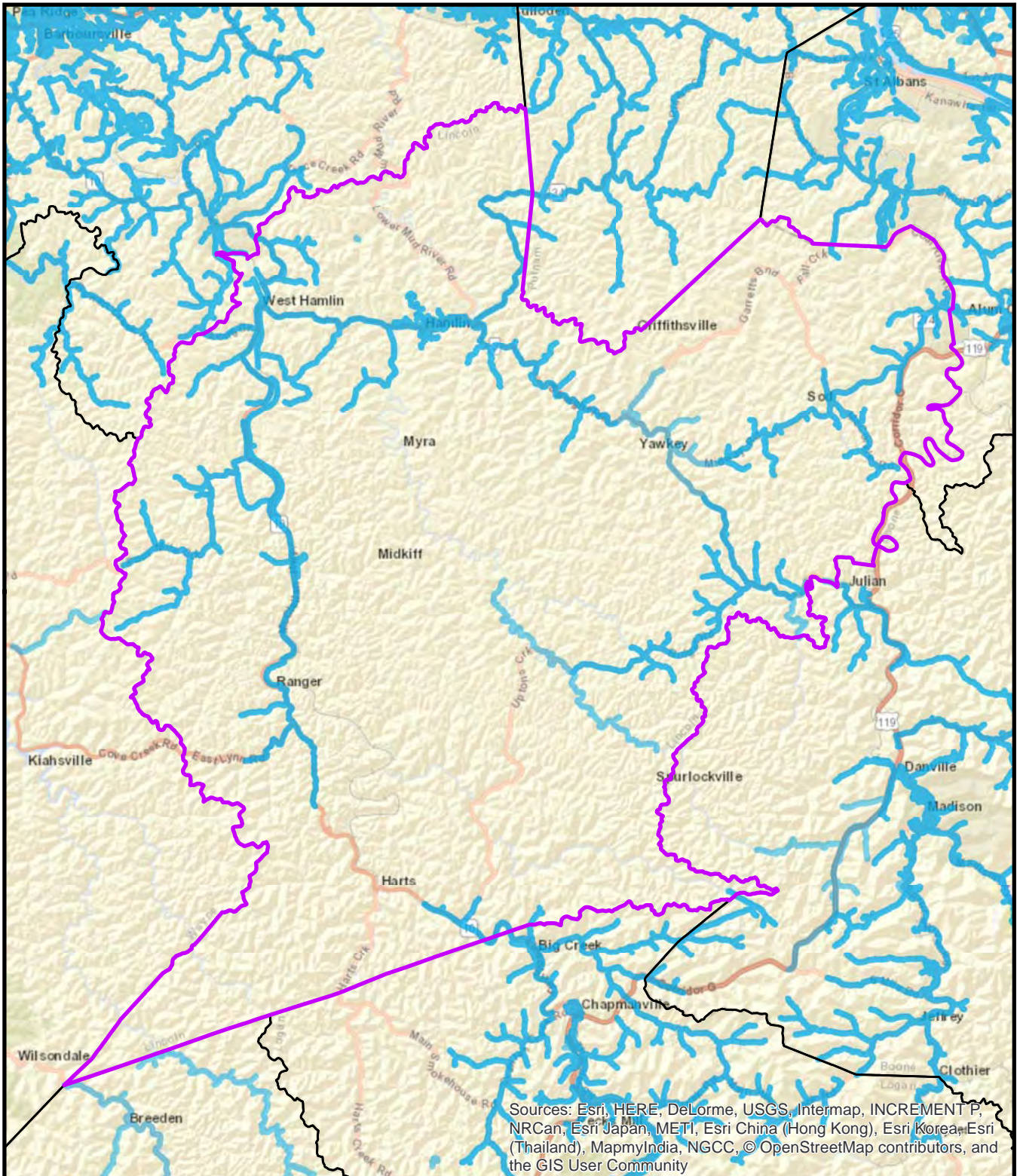
Distribution of Service to Structures



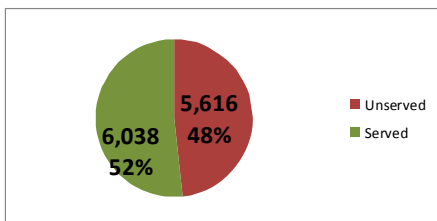
0 1.75 3.5 7 Miles

Served Area

Sewer Service Area Lincoln County



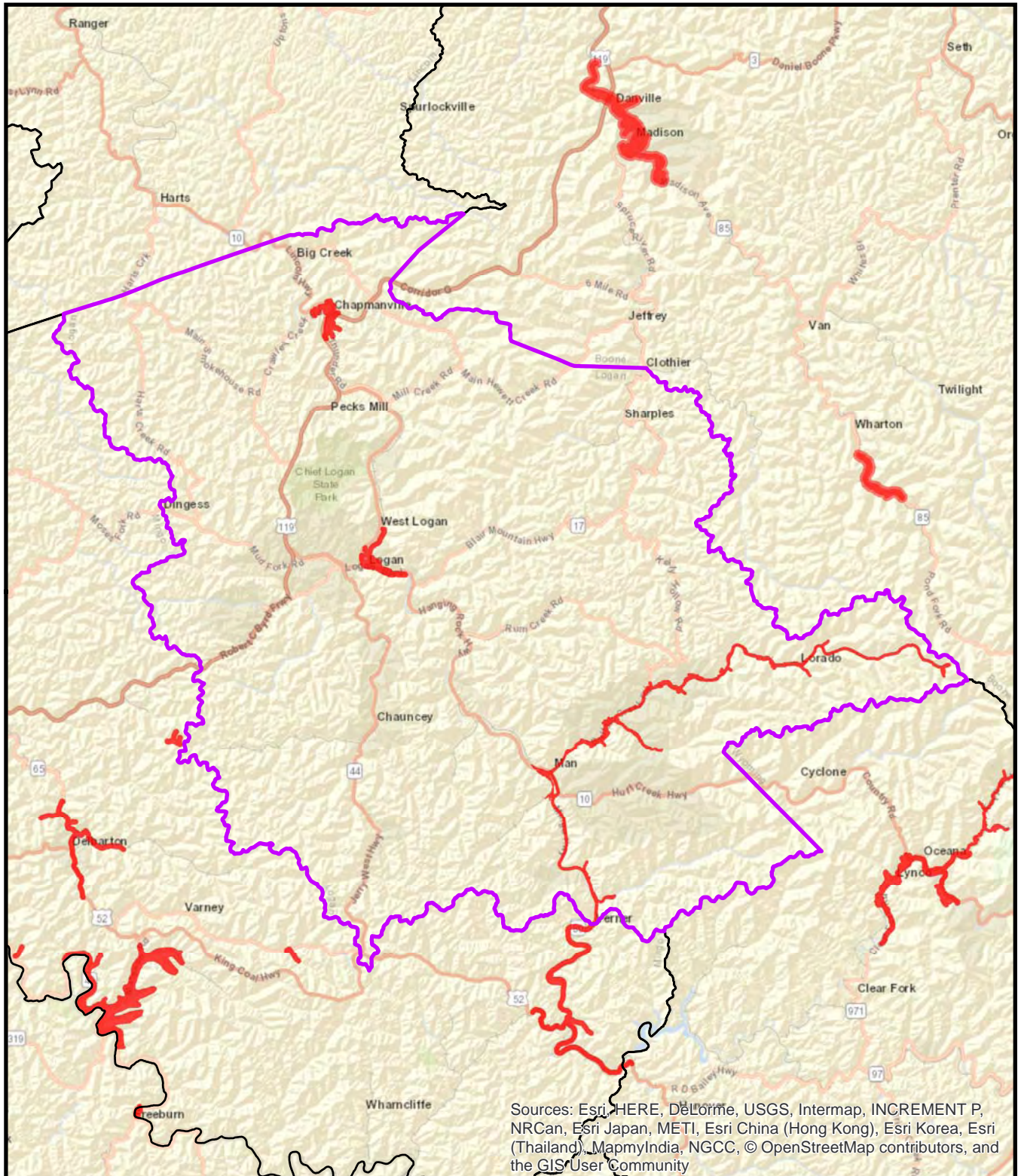
Distribution of Service to Structures



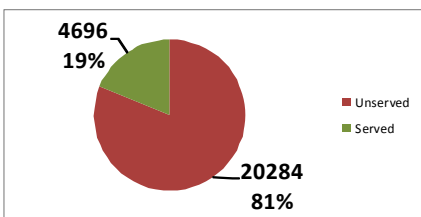
0 1.75 3.5 7 Miles

 Served Area

Water Service Area Lincoln County



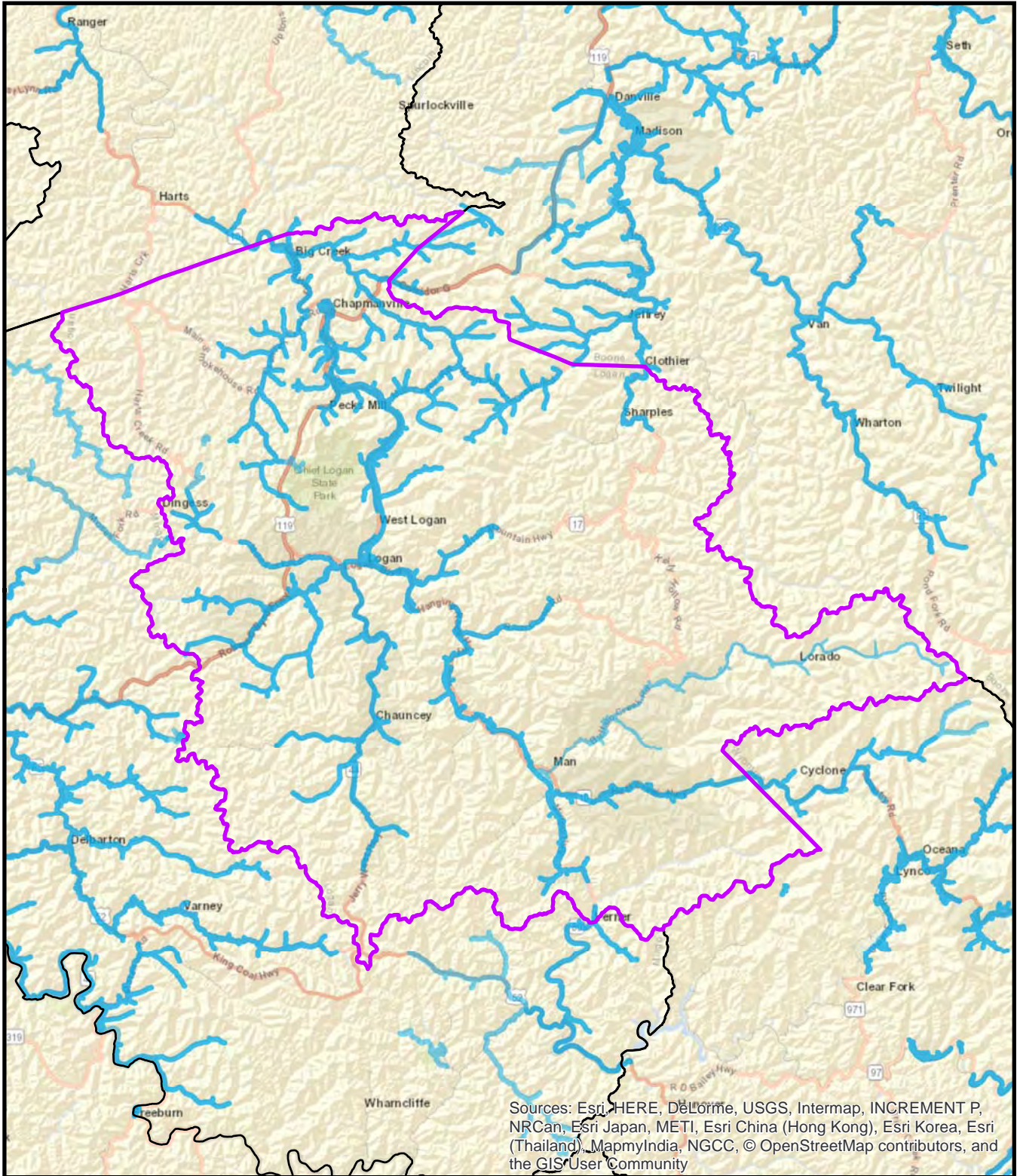
Distribution of Service to Structures



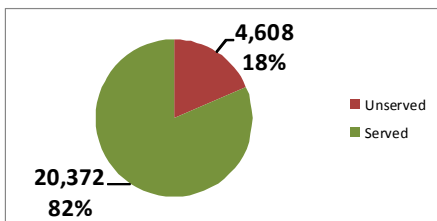
0 2 4 8 Miles

Served Area

Sewer Service Area Logan County



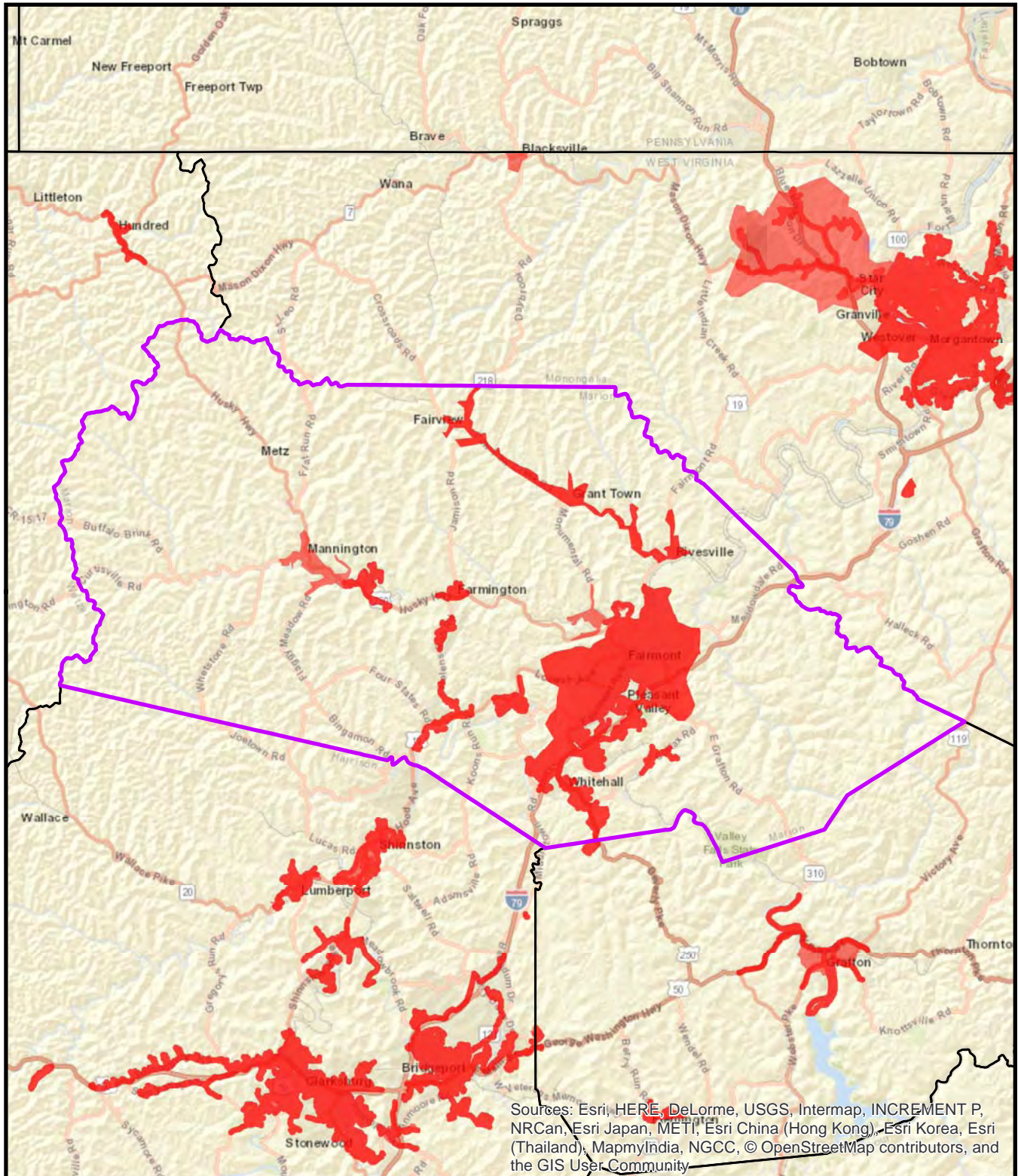
Distribution of Service to Structures



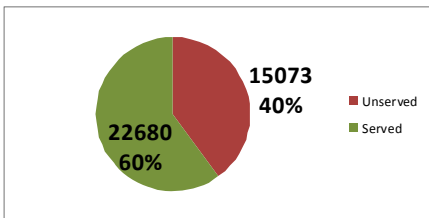
0 2 4 8 Miles

 Served Area

Water Service Area Logan County



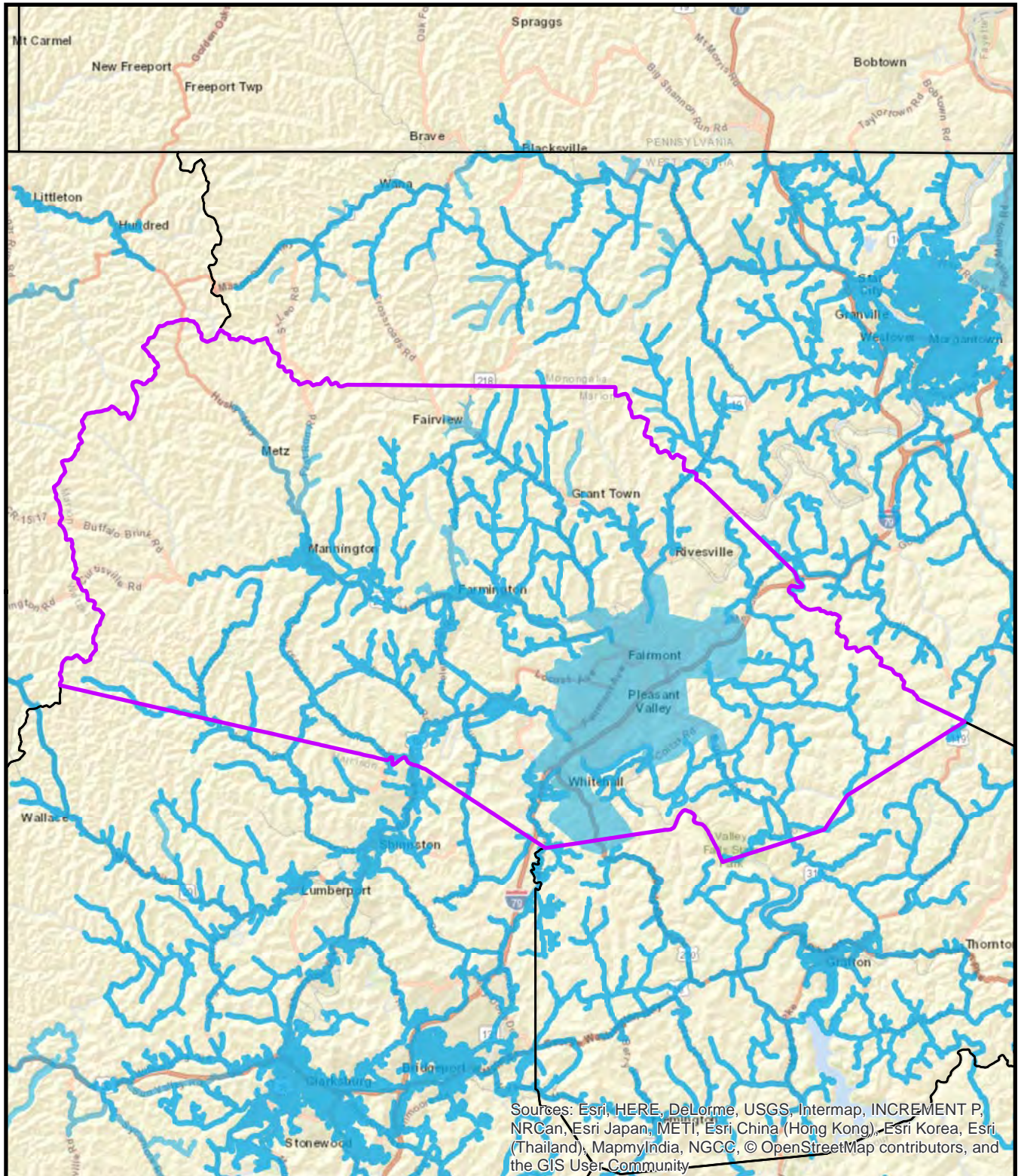
Distribution of Service to Structures



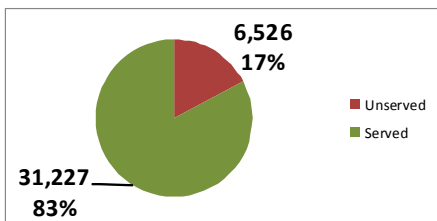
0 2 4 8 Miles

Served Area

Sewer Service Area Marion County



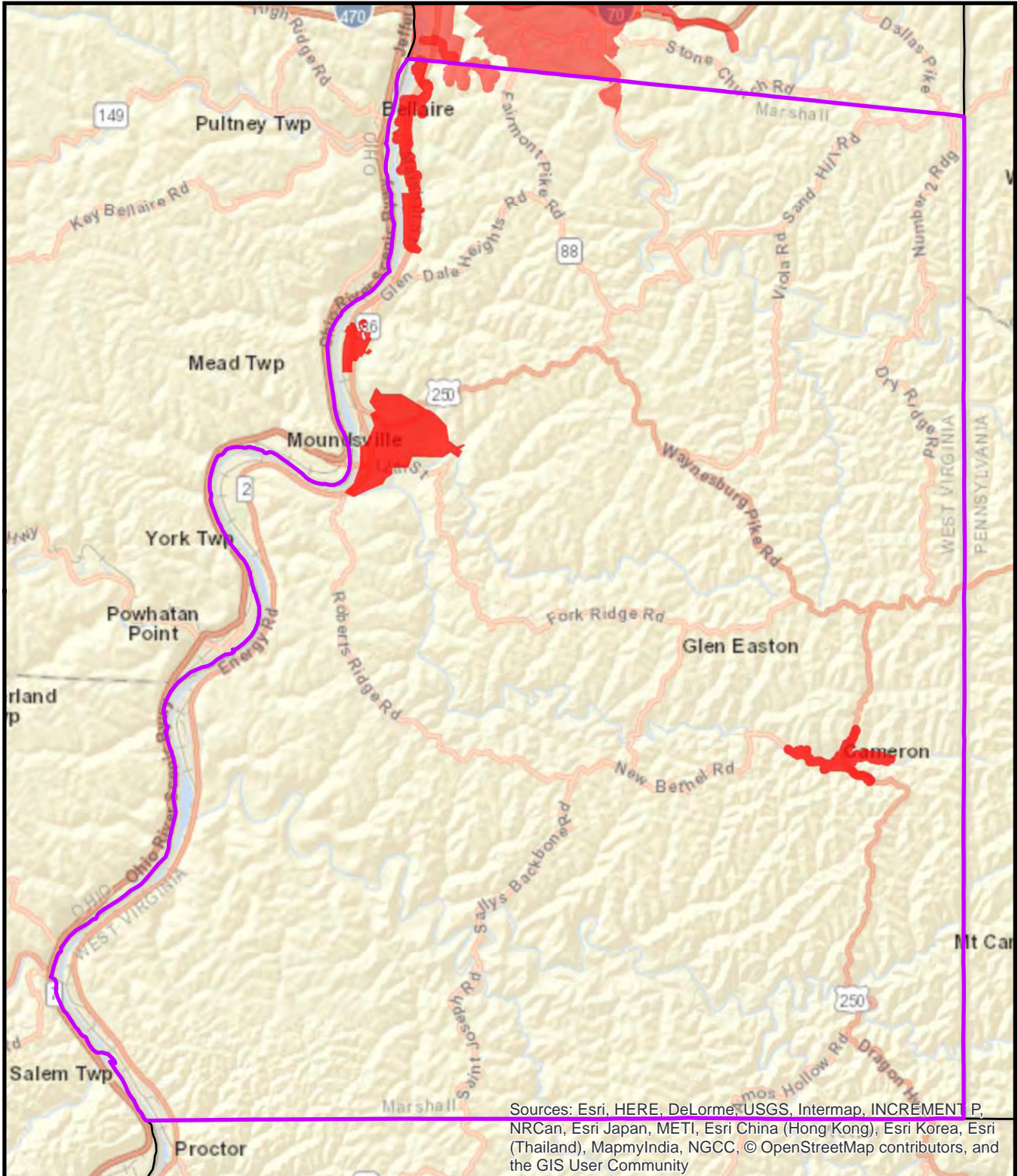
Distribution of Service to Structures



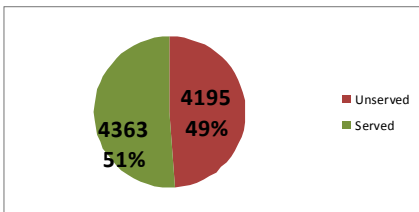
0 2 4 8 Miles

 Served Area

Water Service Area Marion County



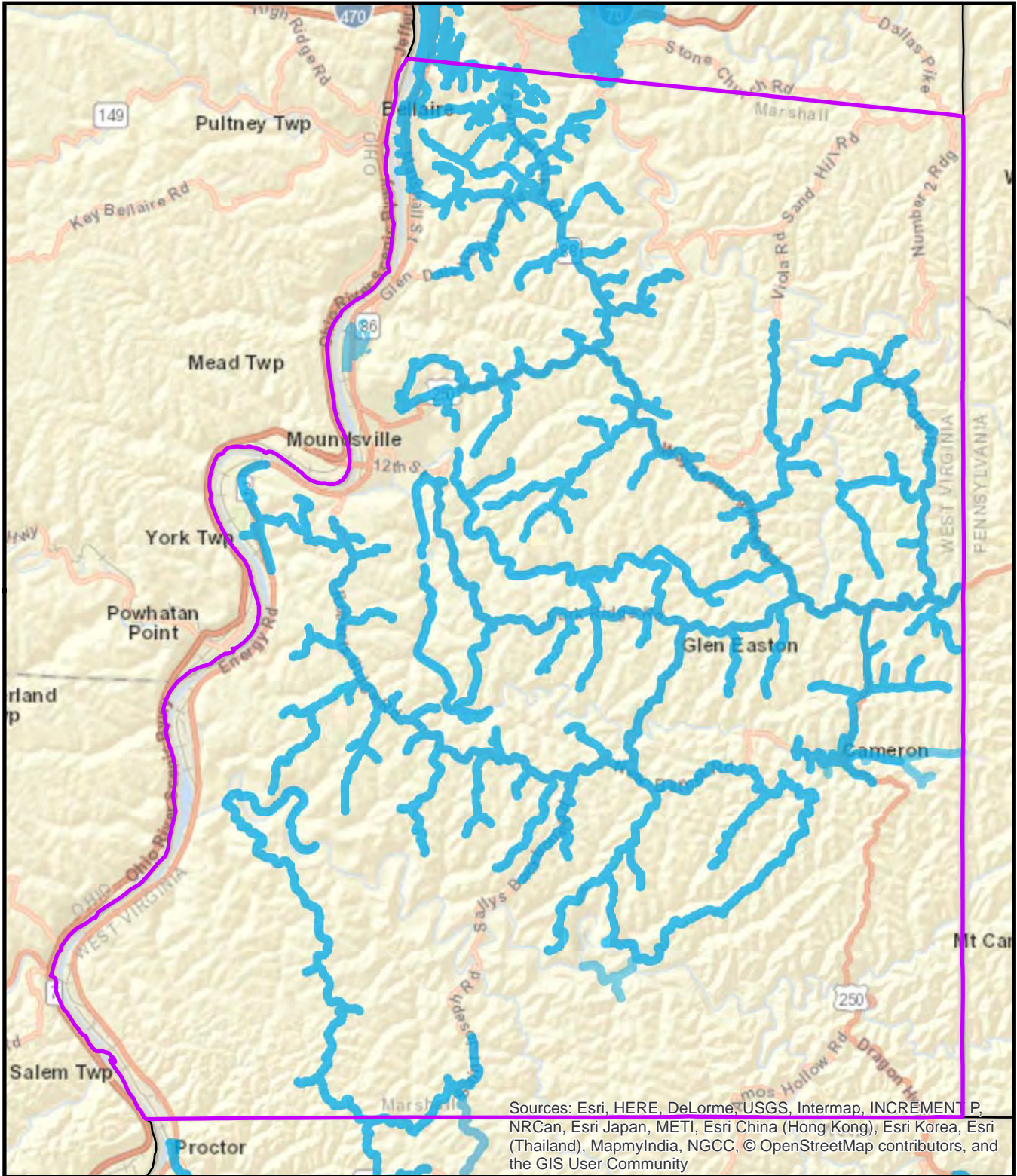
Distribution of Service to Structures



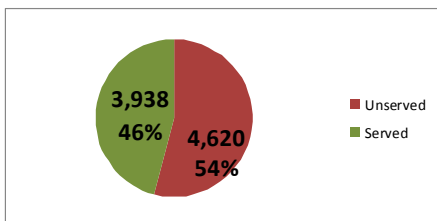
0 1.25 2.5 5 Miles

Served Area

Sewer Service Area Marshall County



Distribution of Service to Structures

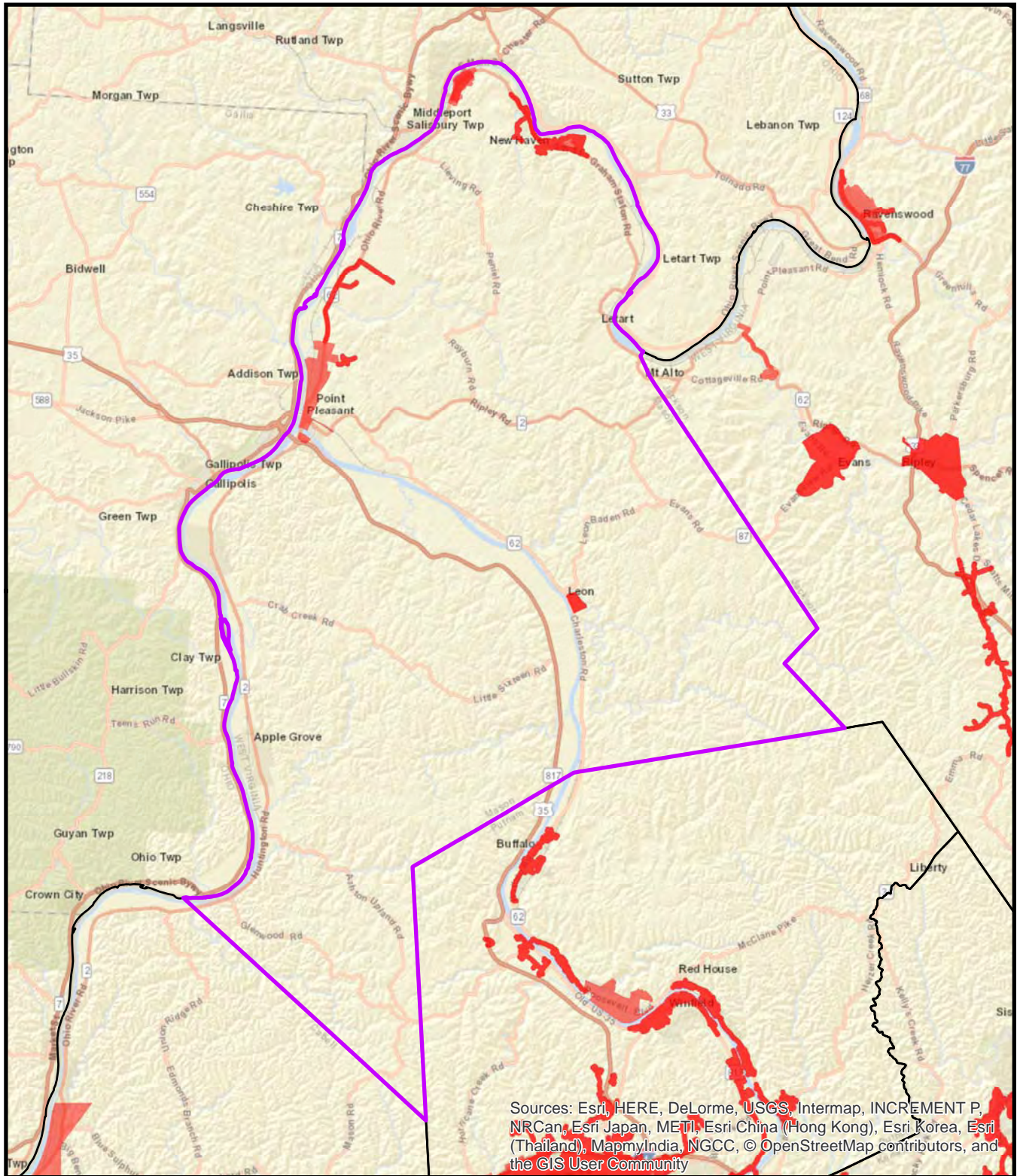


0 1.25 2.5 5 Miles

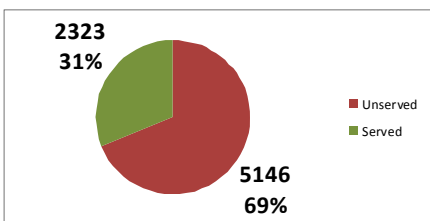
 Served Area

Water Service Area Marshall County





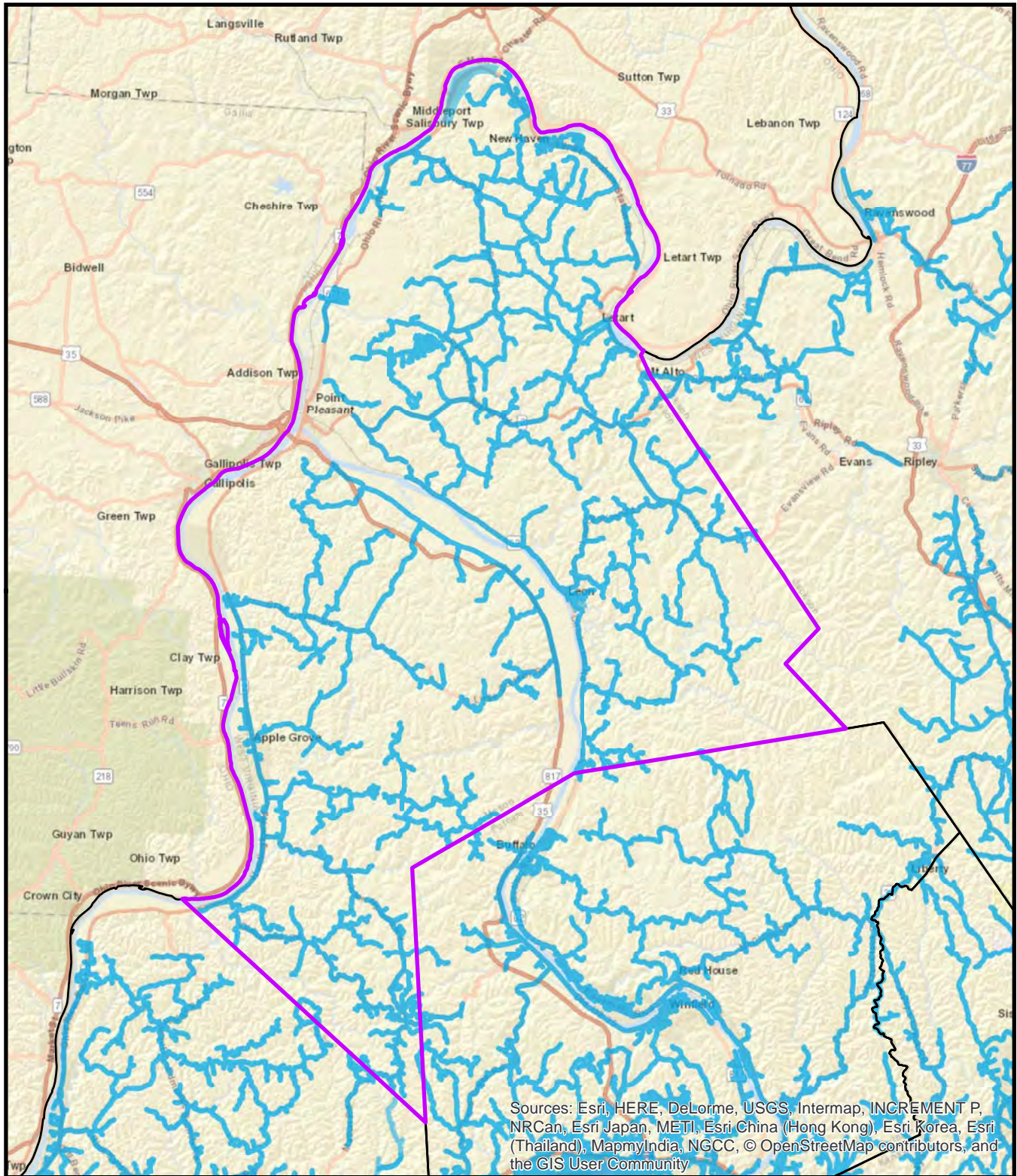
Distribution of Service to Structures



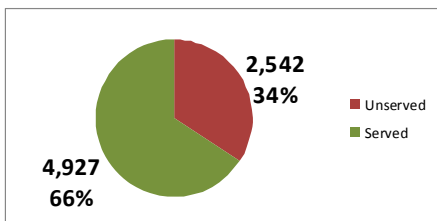
0 2.25 4.5 9 Miles

Served Area

Sewer Service Area Mason County



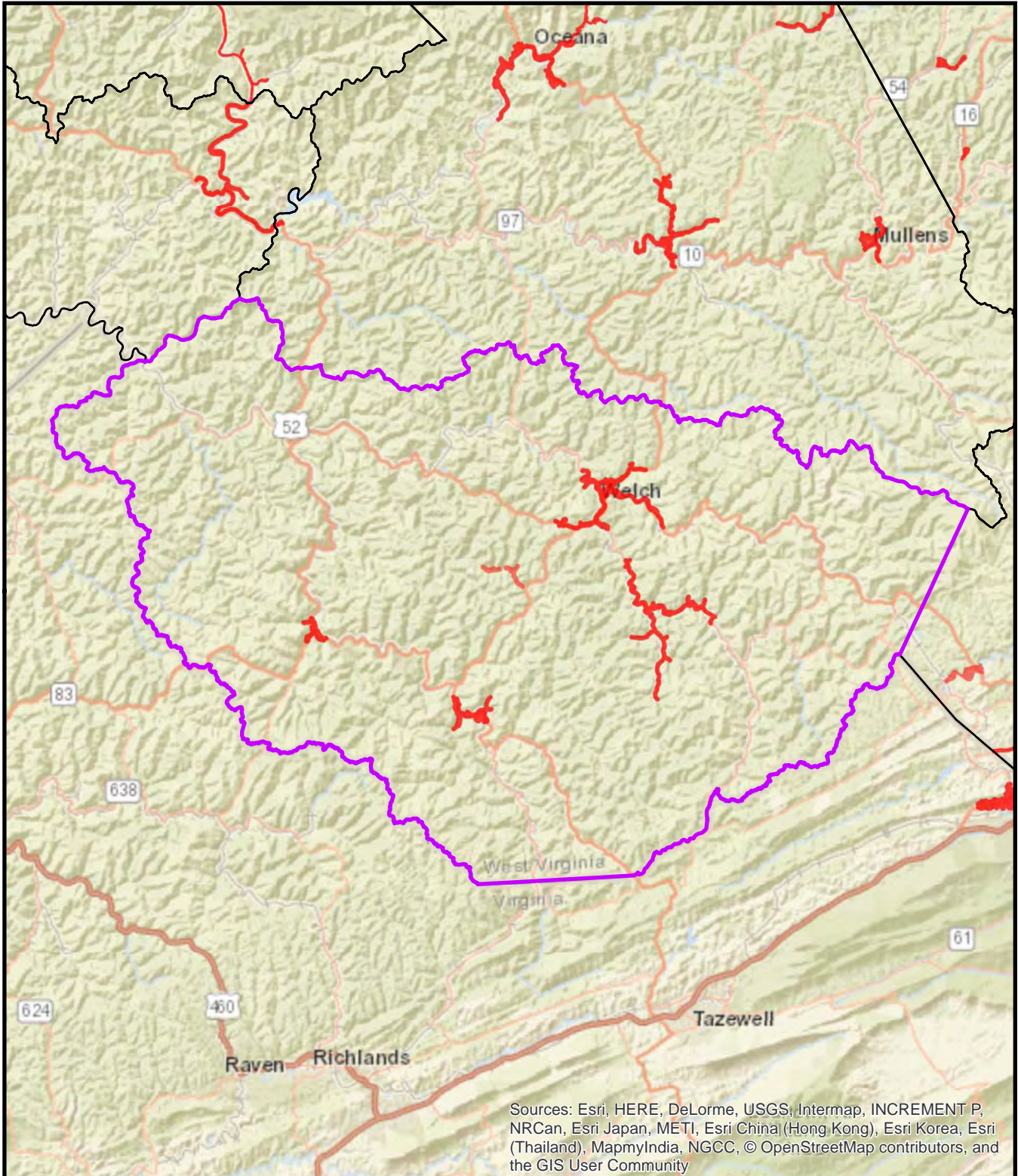
Distribution of Service to Structures



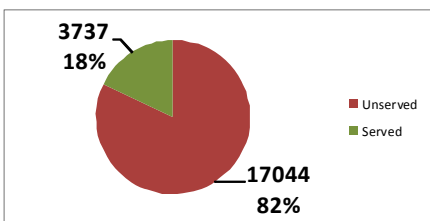
0 2.25 4.5 9 Miles

 Served Area

Water Service Area Mason County



Distribution of Service to Structures

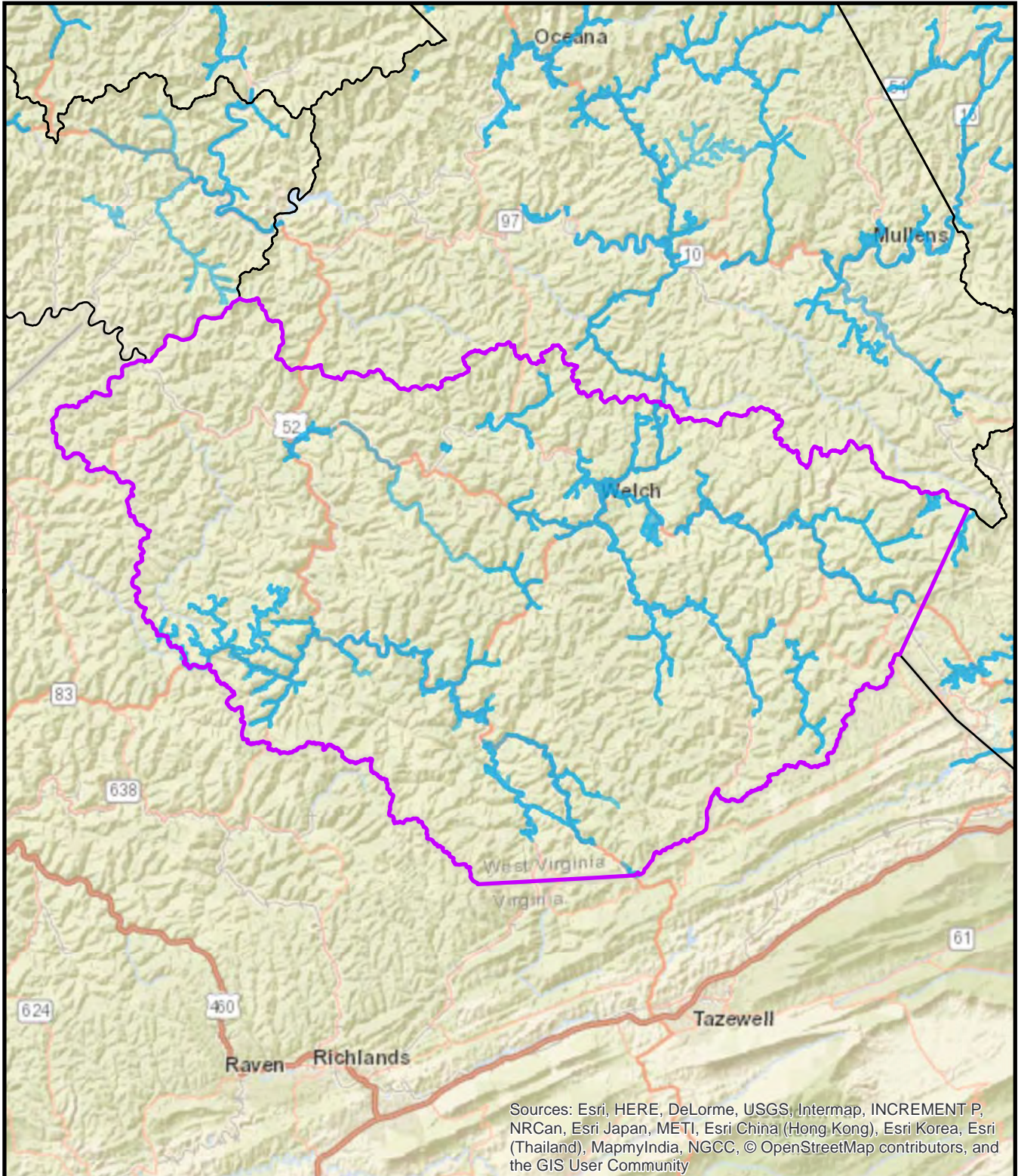


0 2.5 5 10 Miles

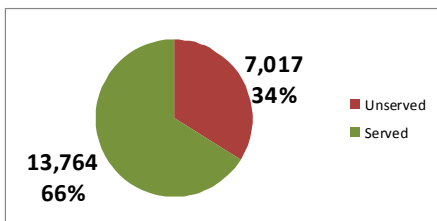
 Served Area

Sewer Service Area McDowell County





Distribution of Service to Structures

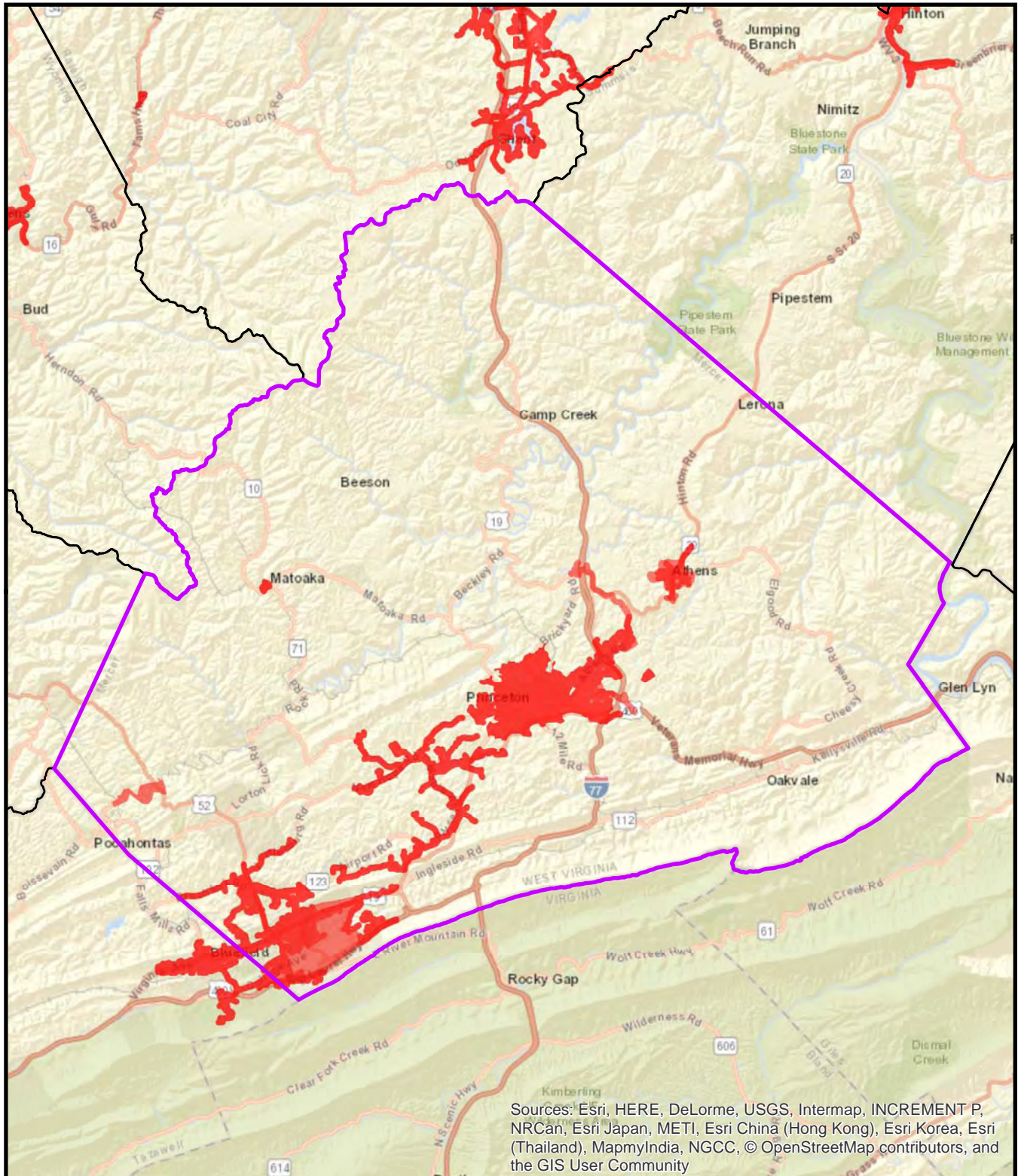


0 2.5 5 10 Miles

 Served Area

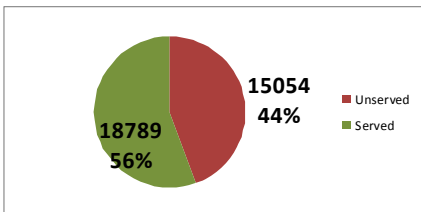
Water Service Area McDowell County





Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures

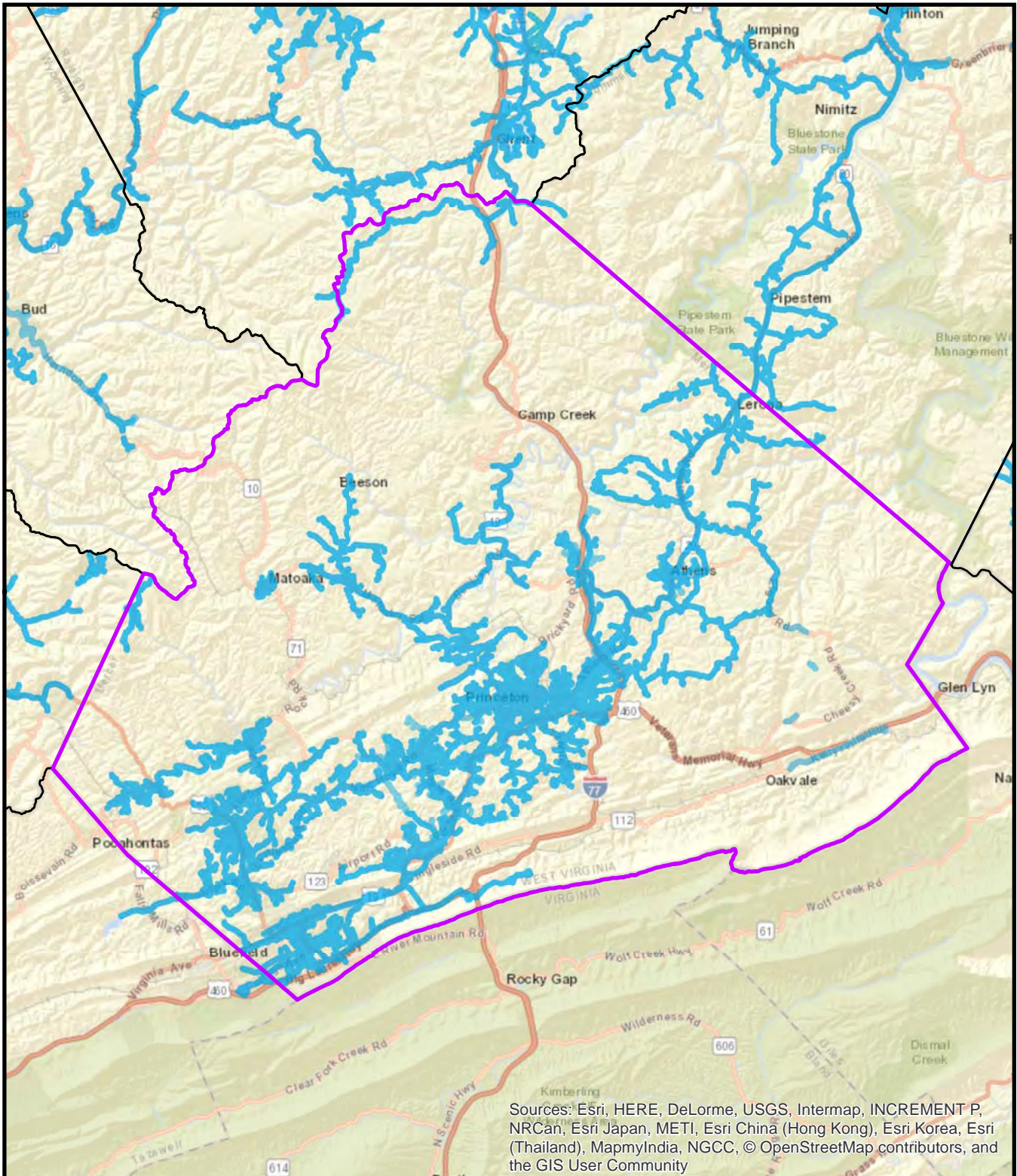


0 1.75 3.5 7 Miles

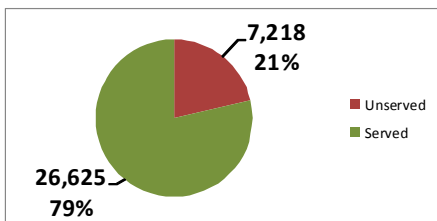
Served Area

Sewer Service Area Mercer County





Distribution of Service to Structures

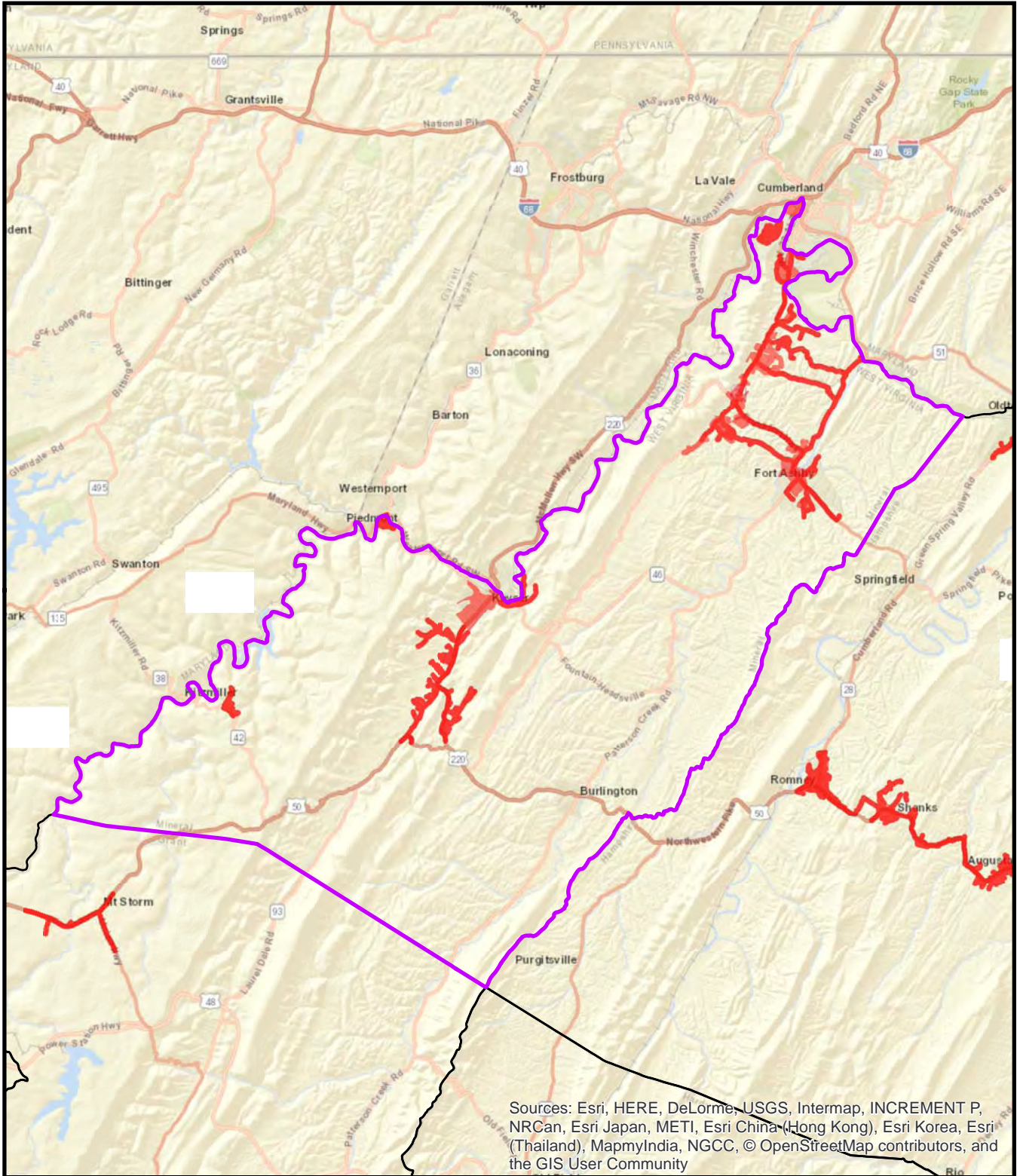


0 1.75 3.5 7 Miles

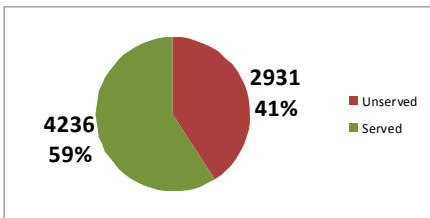
 Served Area

Water Service Area Mercer County





Distribution of Service to Structures

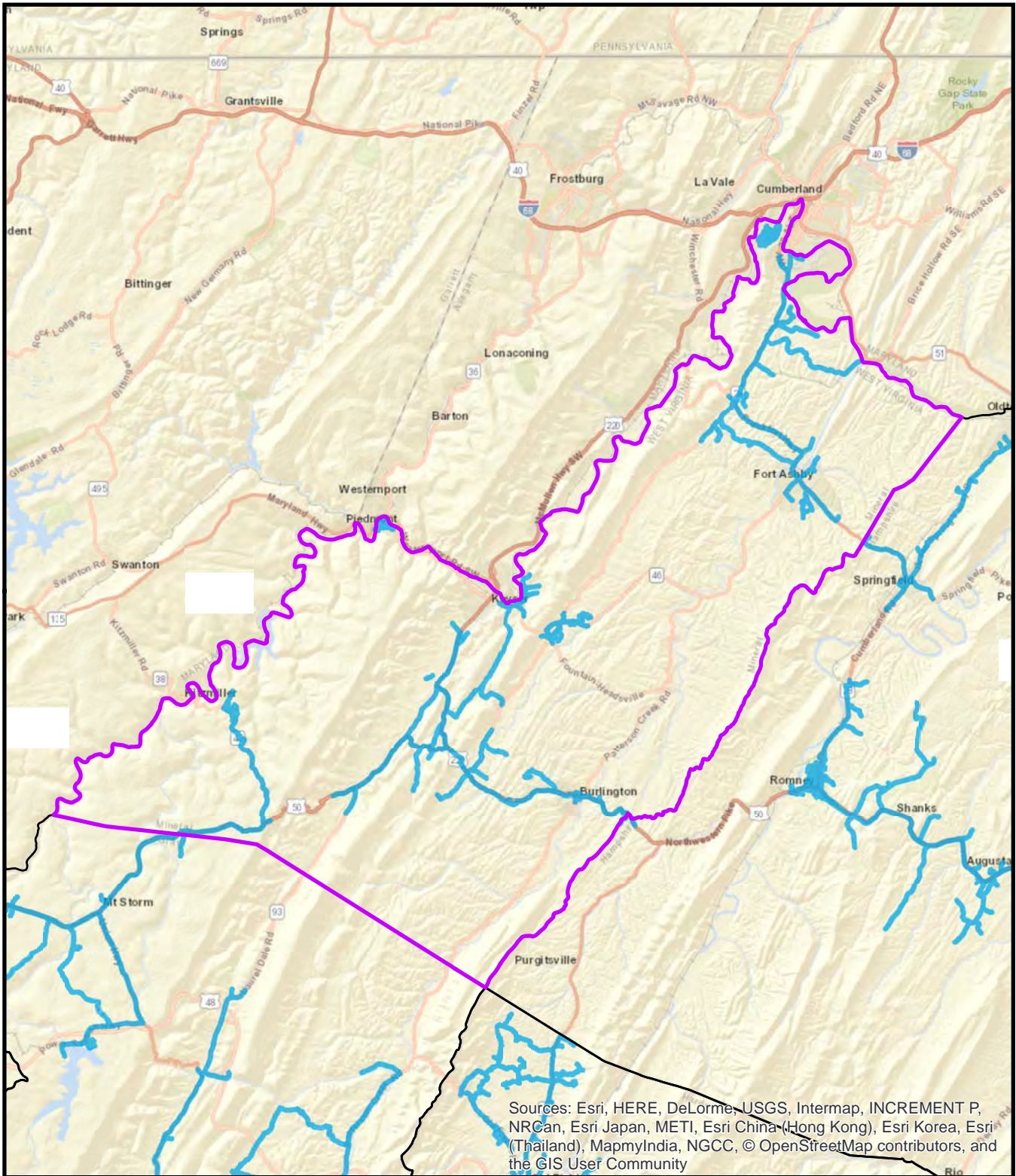


0 2.25 4.5 9 Miles

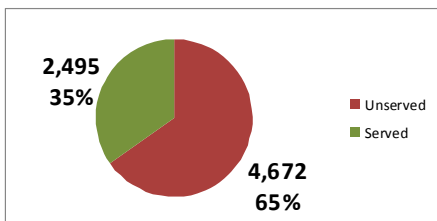
Served Area

Sewer Service Area Mineral County





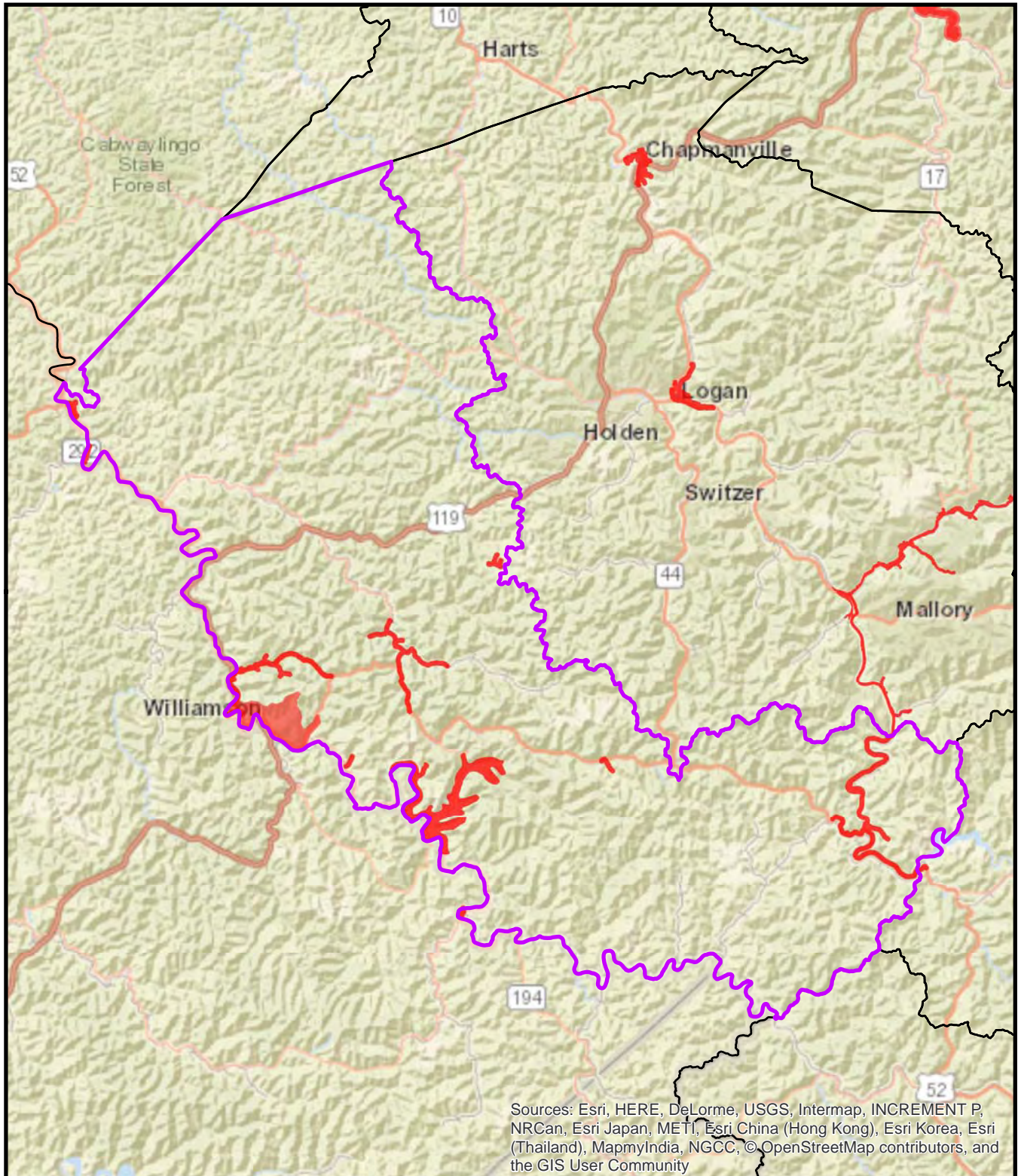
Distribution of Service to Structures



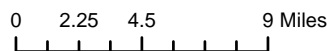
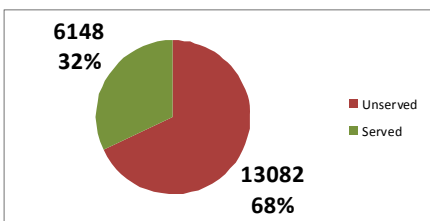
0 2.25 4.5 9 Miles

 Served Area

Water Service Area Mineral County

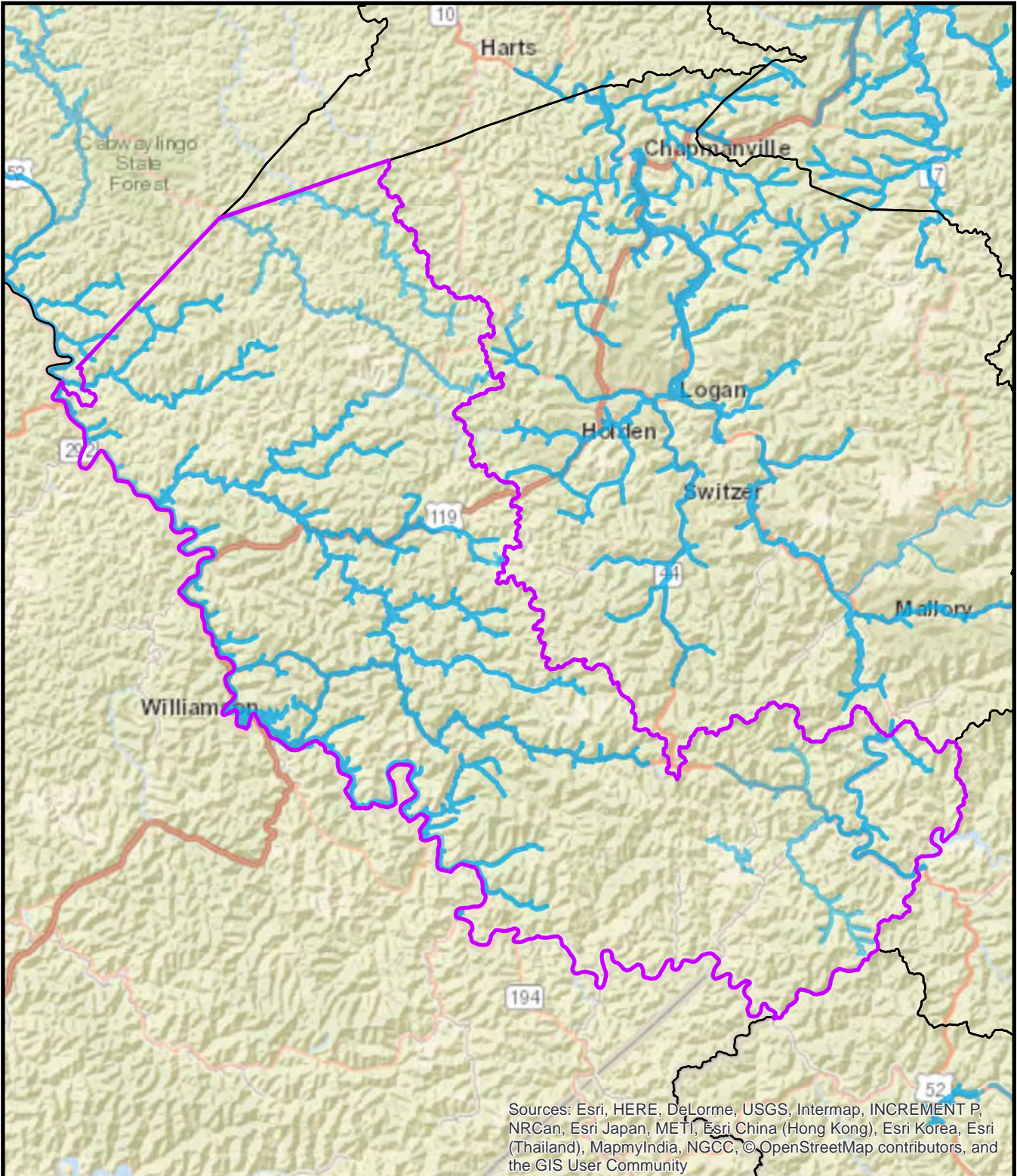


Distribution of Service to Structures

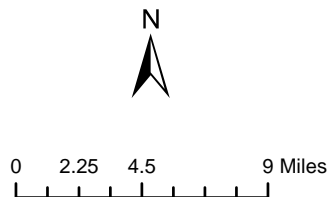
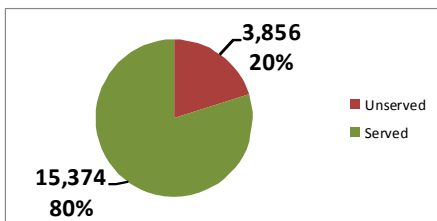


 Served Area

Sewer Service Area Mingo County

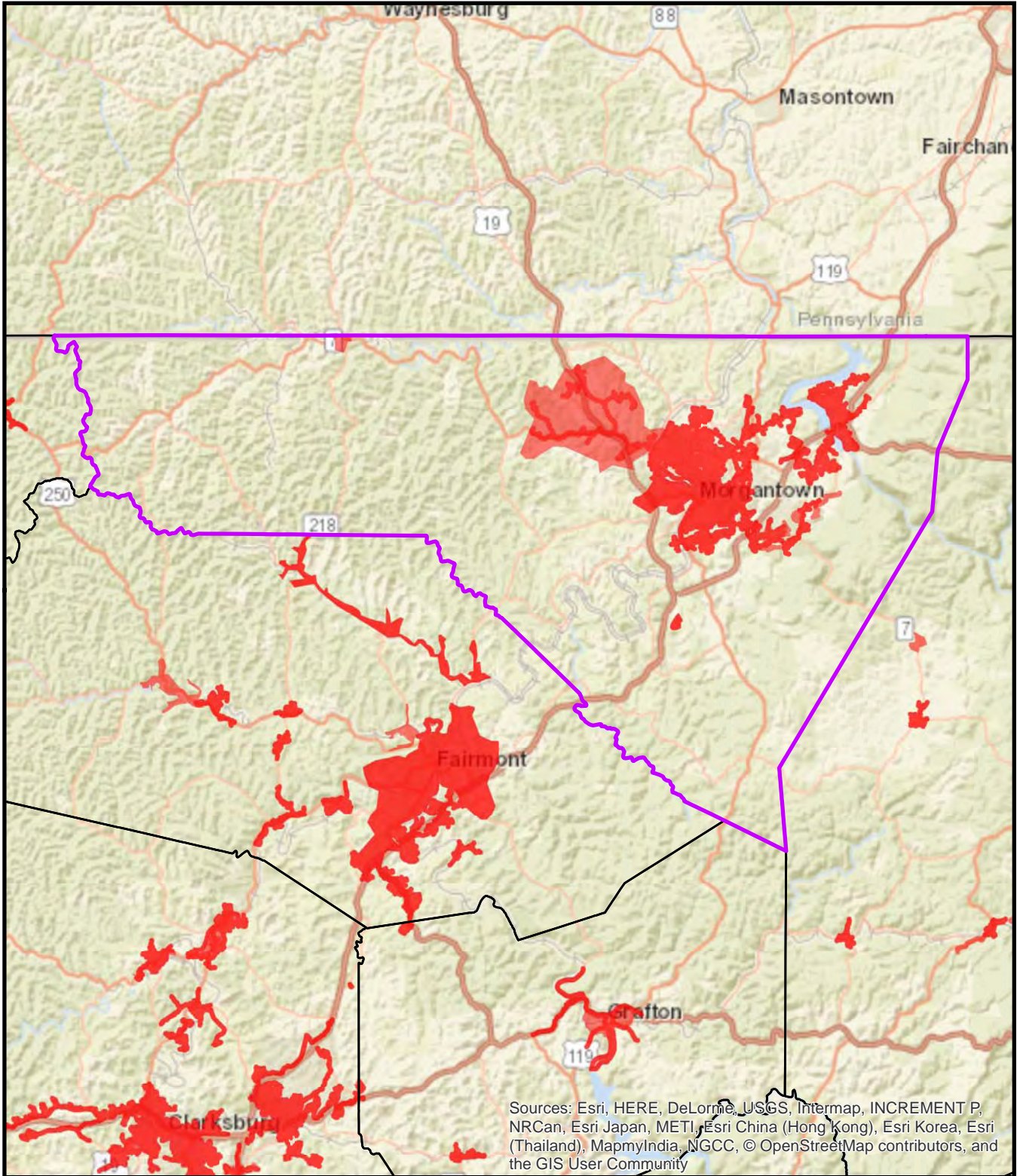


Distribution of Service to Structures

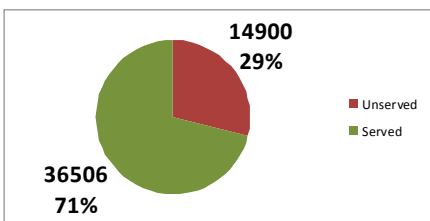


Water Service Area Mingo County

 Served Area



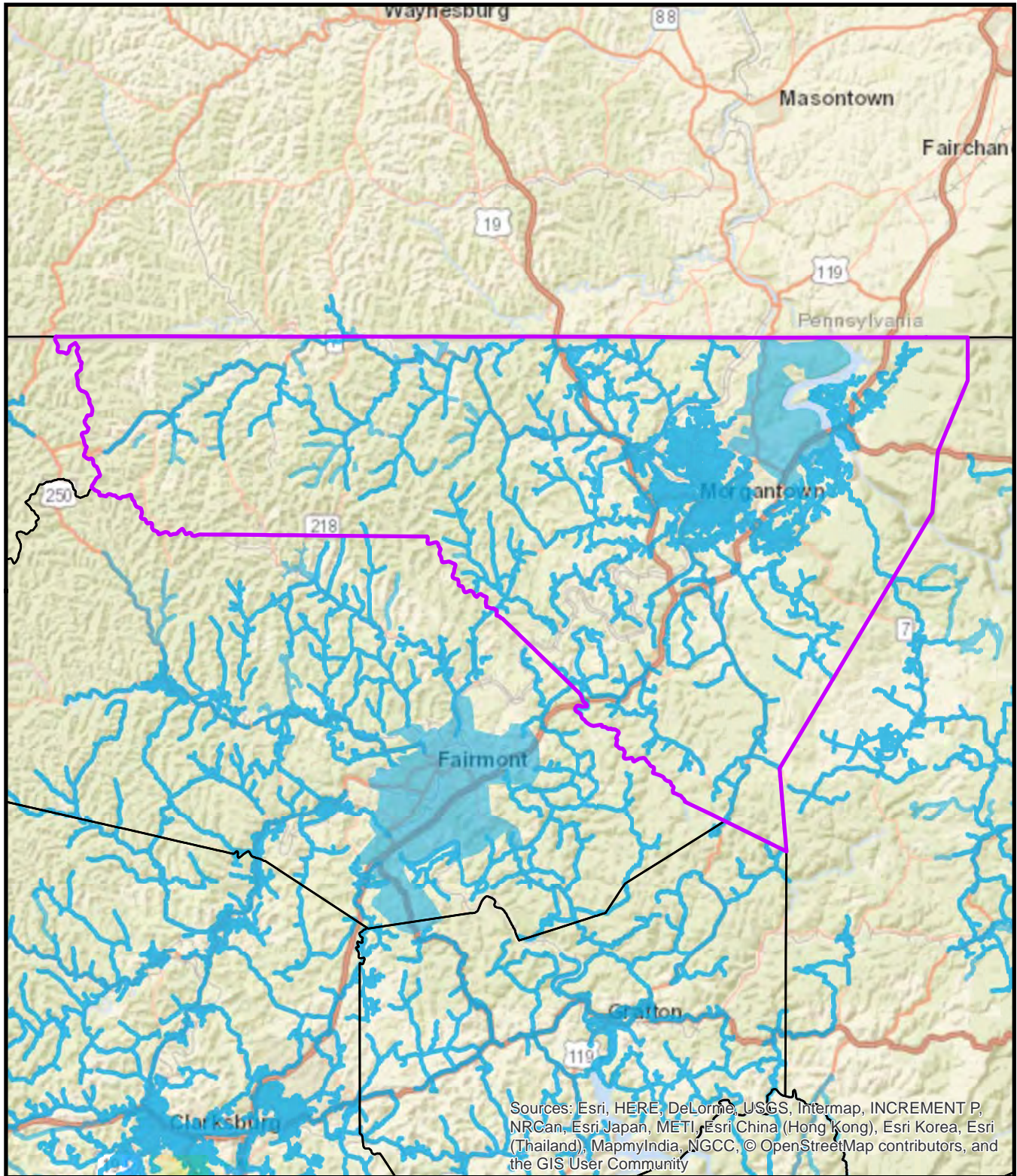
Distribution of Service to Structures



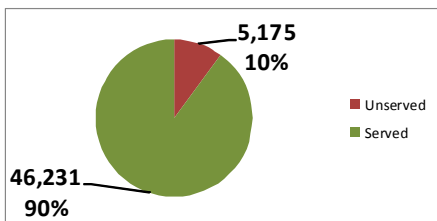
0 2.25 4.5 9 Miles

 Served Area

Sewer Service Area Monongalia County



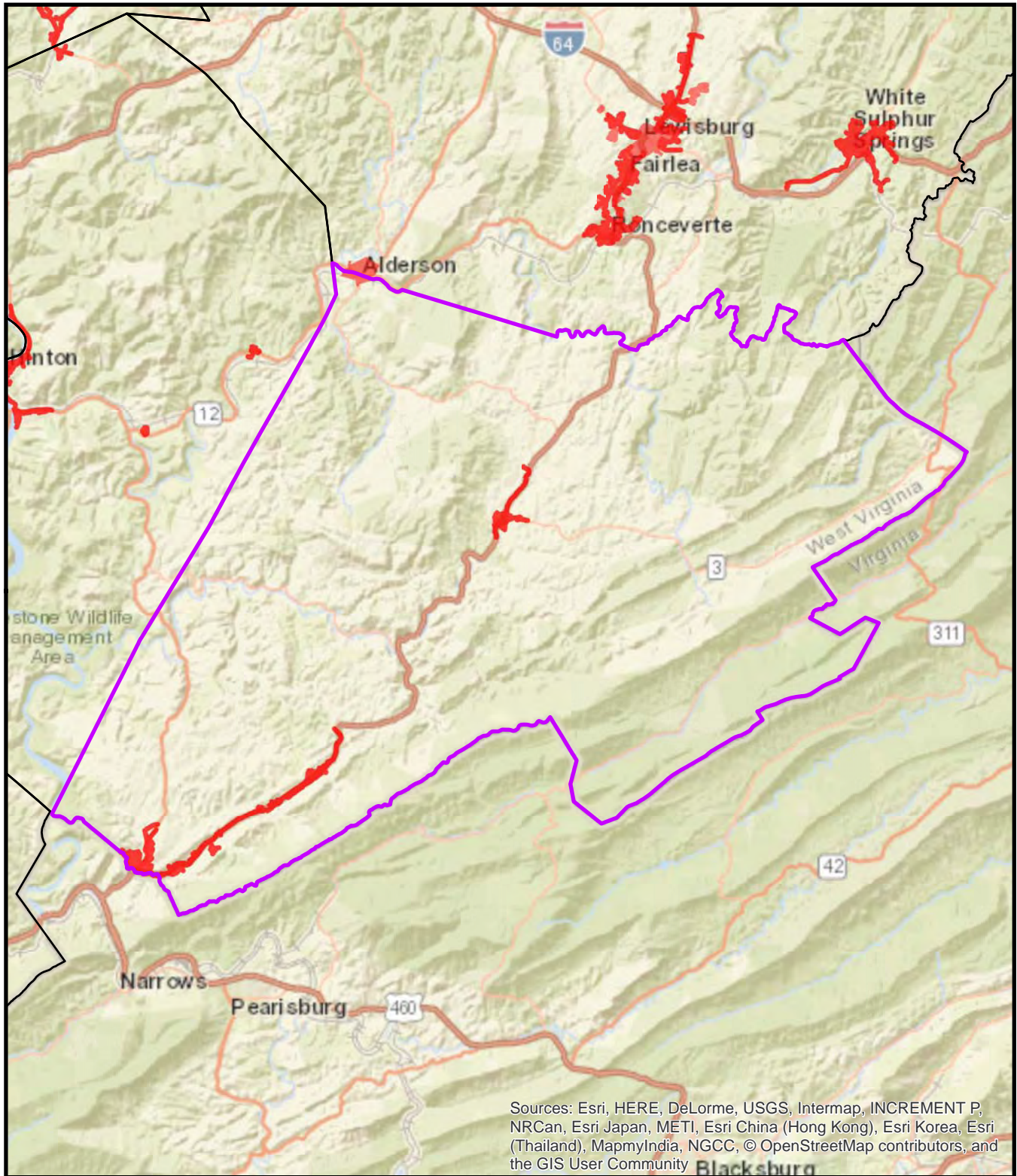
Distribution of Service to Structures



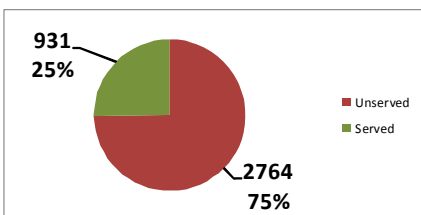
0 2.5 5 10 Miles

 Served Area

Water Service Area Monongalia County



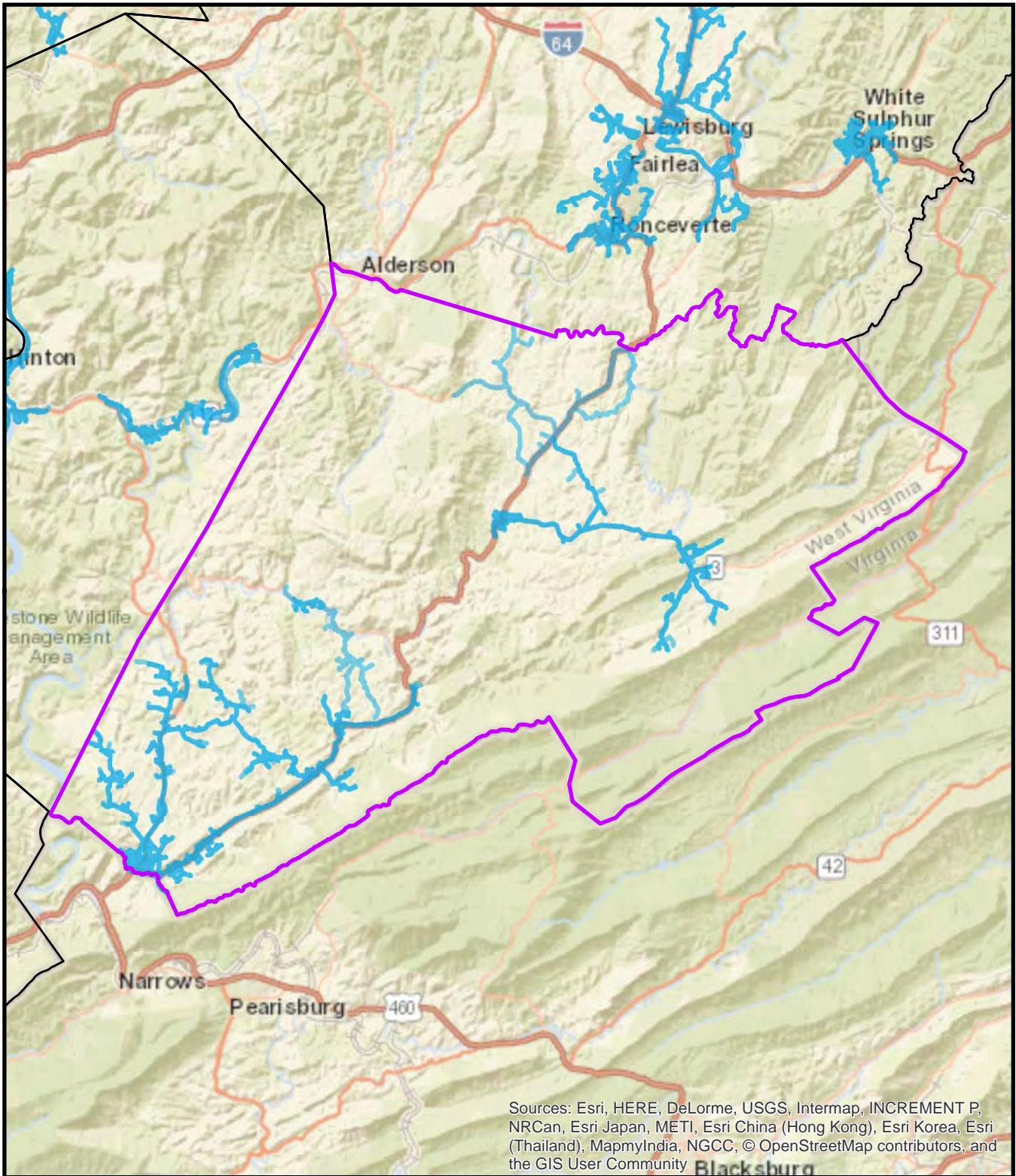
Distribution of Service to Structures



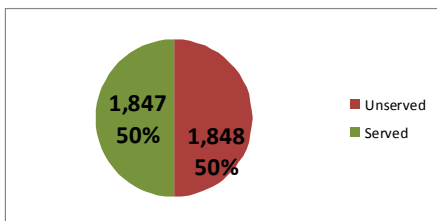
0 2.25 4.5 9 Miles

Served Area

Sewer Service Area Monroe County



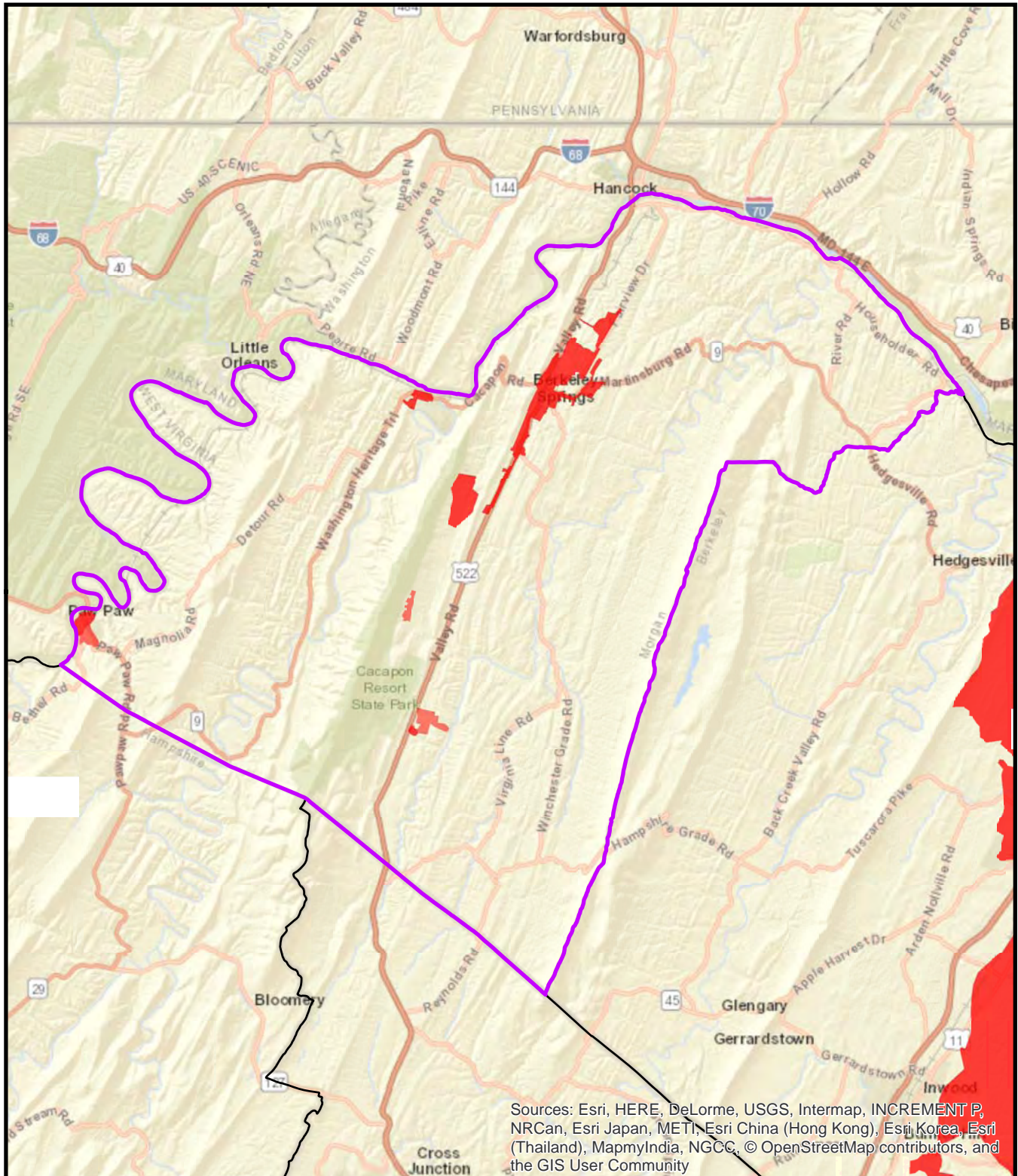
Distribution of Service to Structures



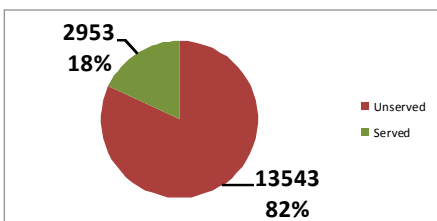
0 2.25 4.5 9 Miles

 Served Area

Water Service Area Monroe County



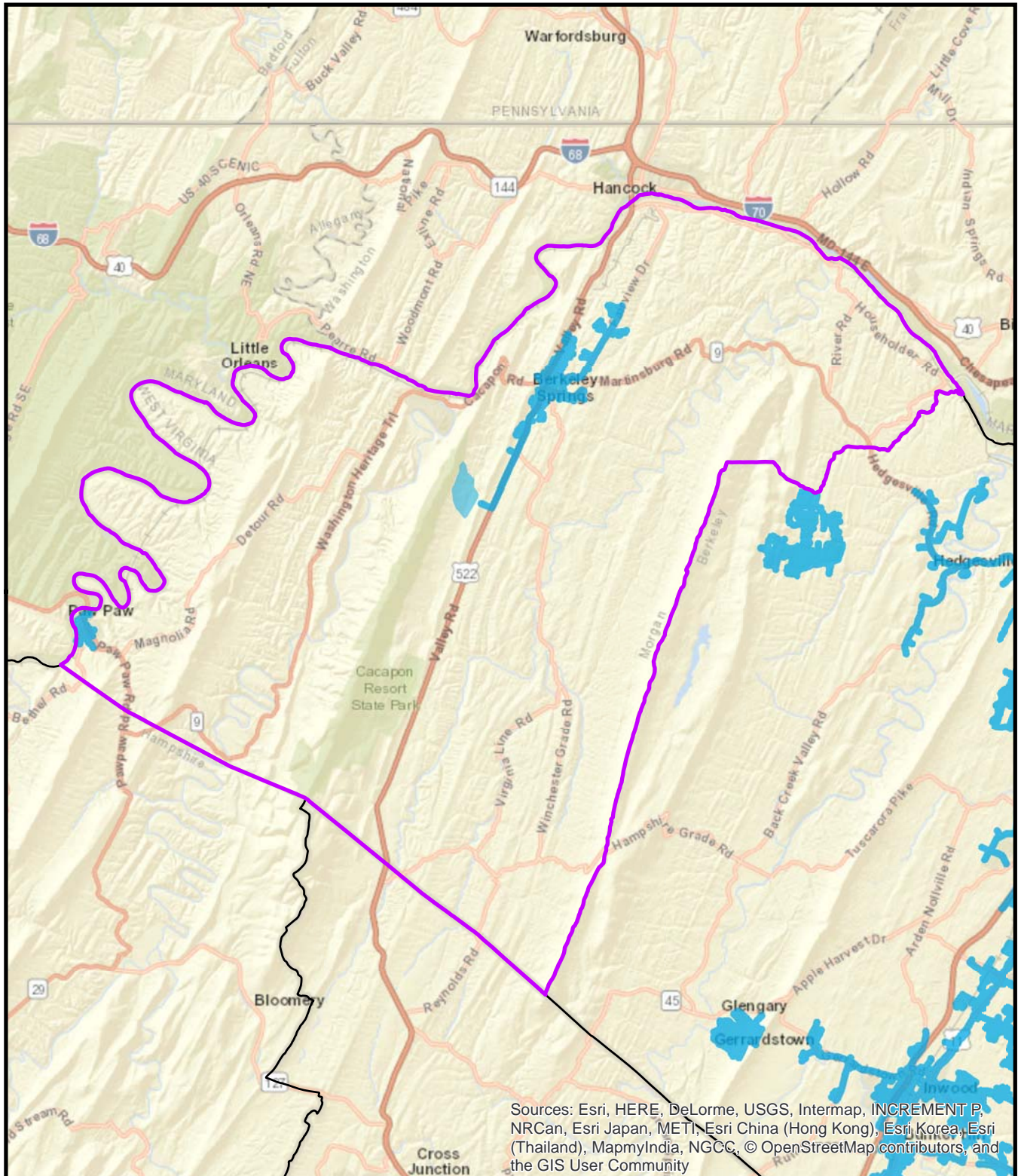
Distribution of Service to Structures



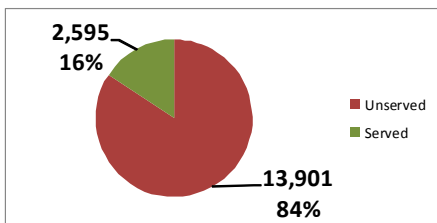
0 1.5 3 6 Miles

Served Area

Sewer Service Area Morgan County



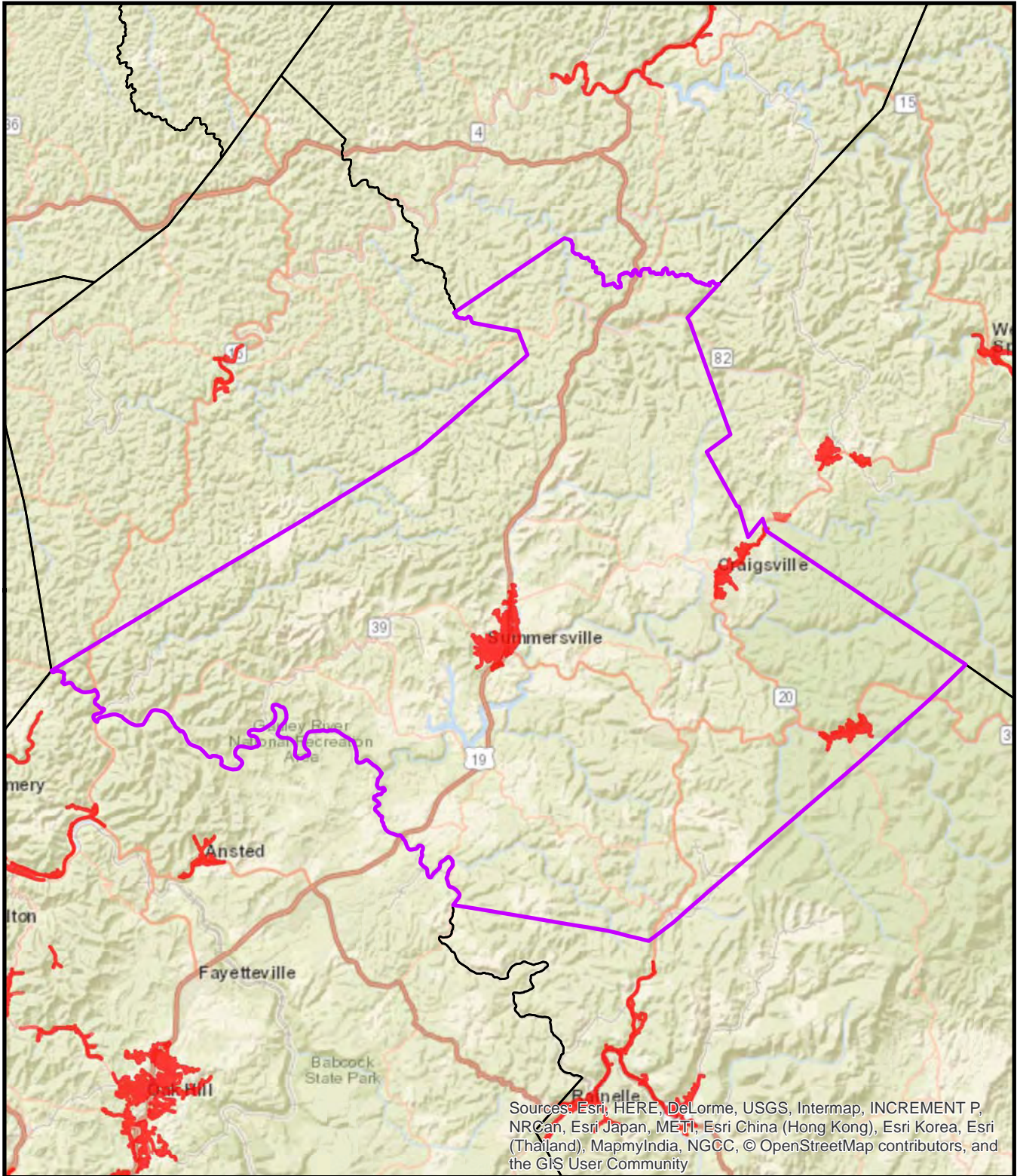
Distribution of Service to Structures



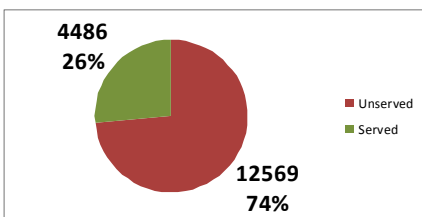
0 1.5 3 6 Miles

 Served Area

Water Service Area Morgan County



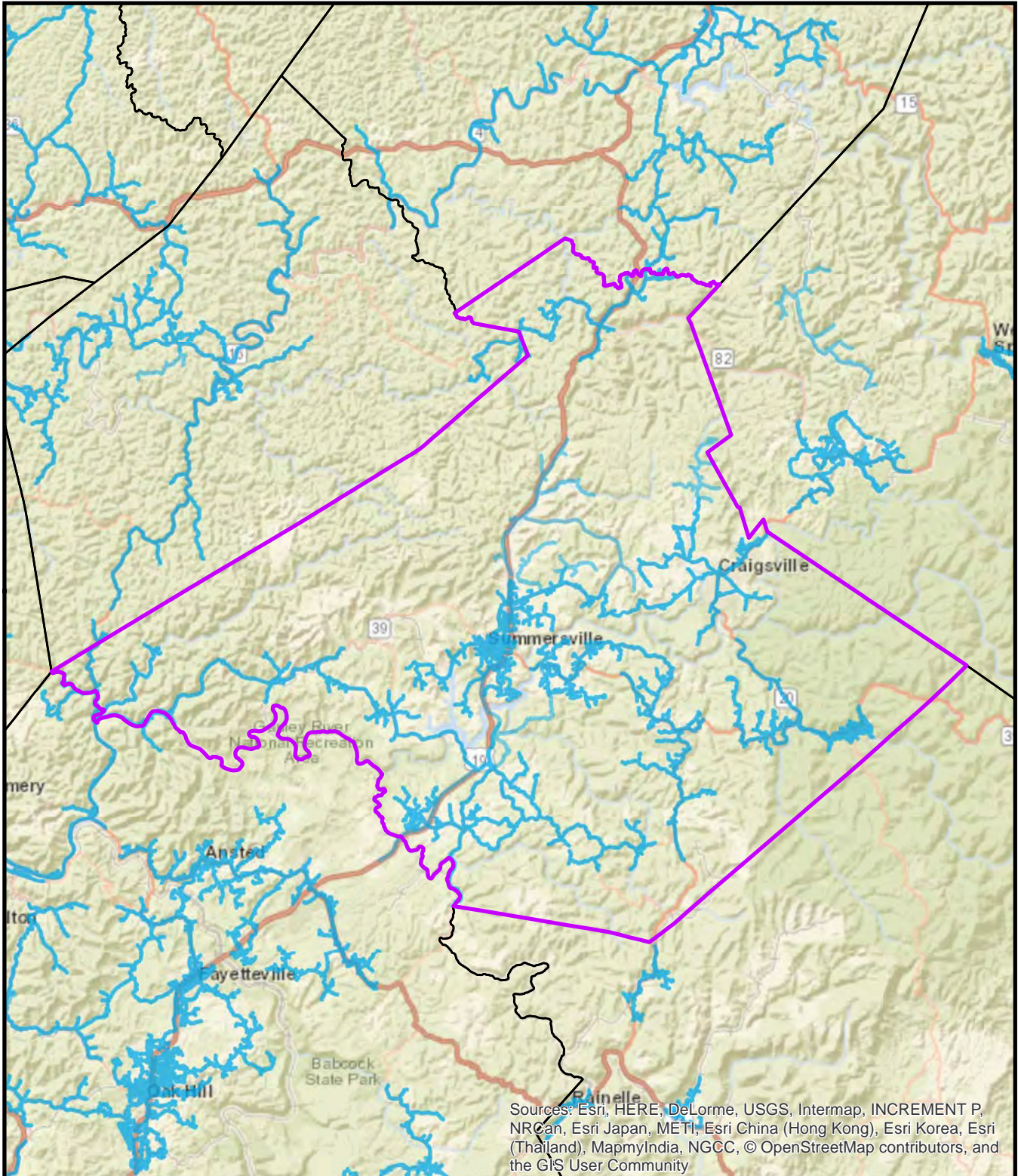
Distribution of Service to Structures



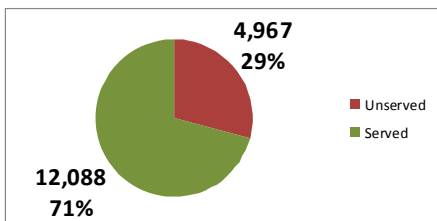
0 2.75 5.5 11 Miles

 Served Area

Sewer Service Area Nicholas County



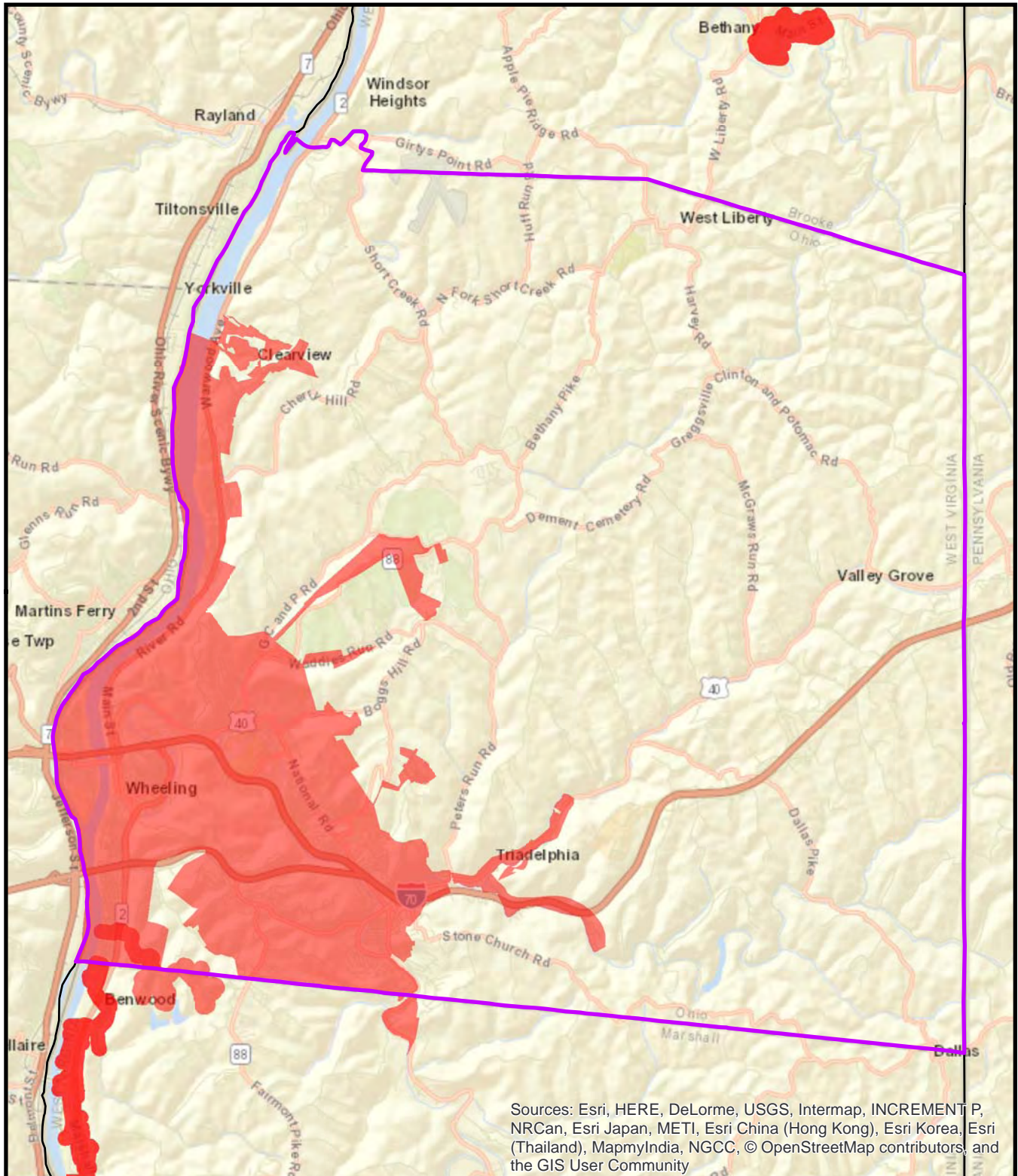
Distribution of Service to Structures



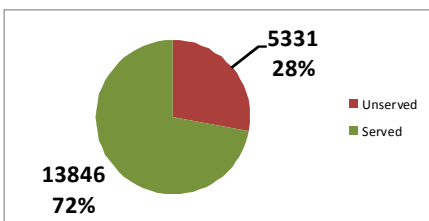
0 2.75 5.5 11 Miles

 Served Area

Water Service Area Nicholas County



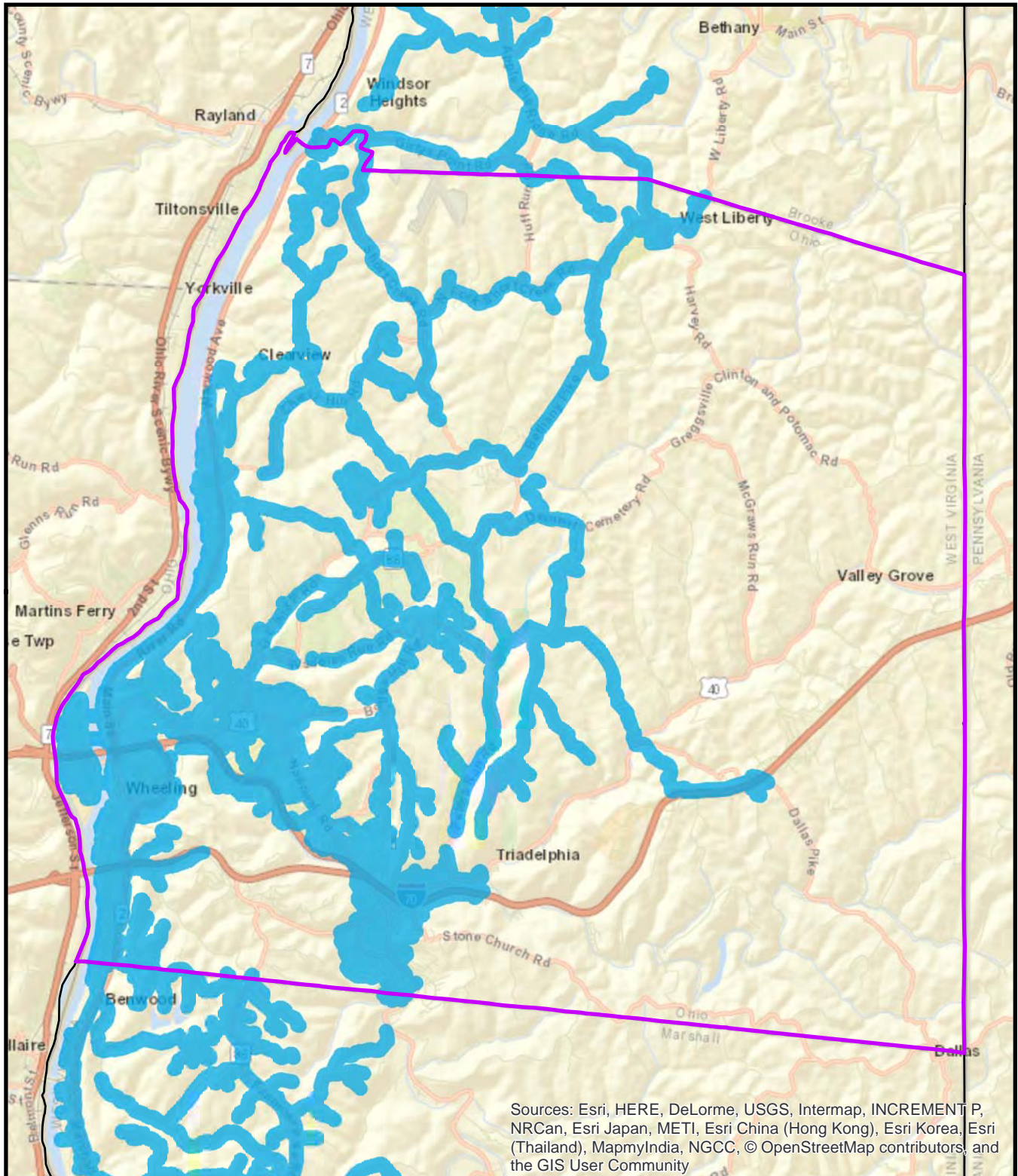
Distribution of Service to Structures



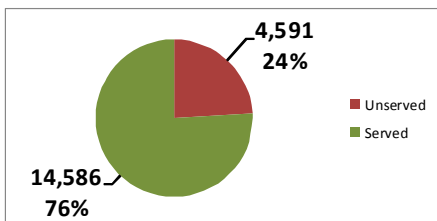
0 0.75 1.5 3 Miles

Served Area

Sewer Service Area Ohio County



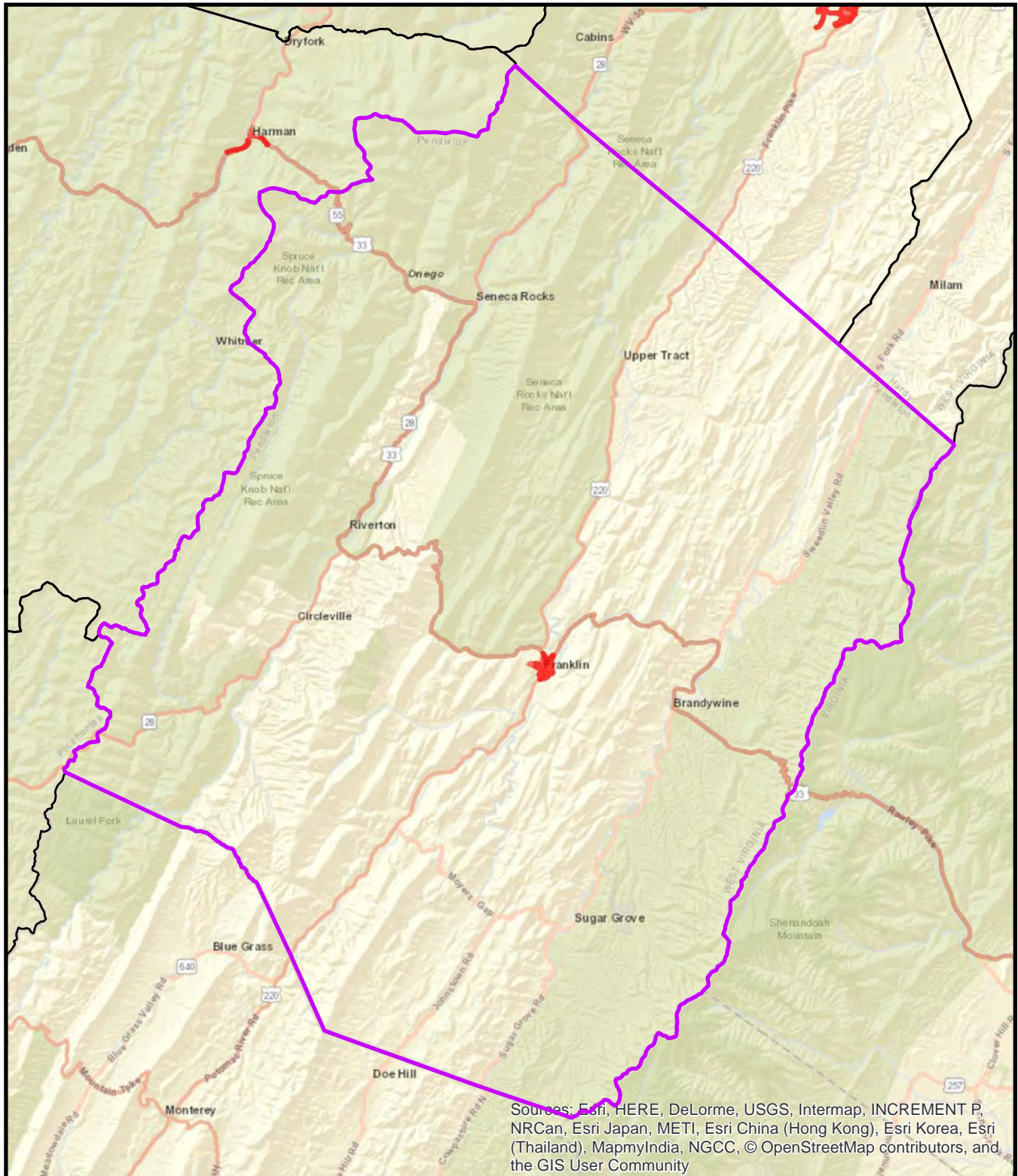
Distribution of Service to Structures



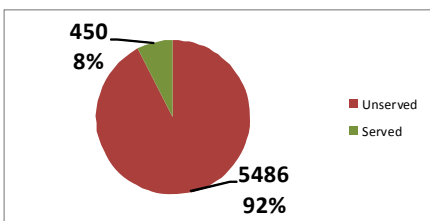
0 0.75 1.5 3 Miles

 Served Area

Water Service Area Ohio County



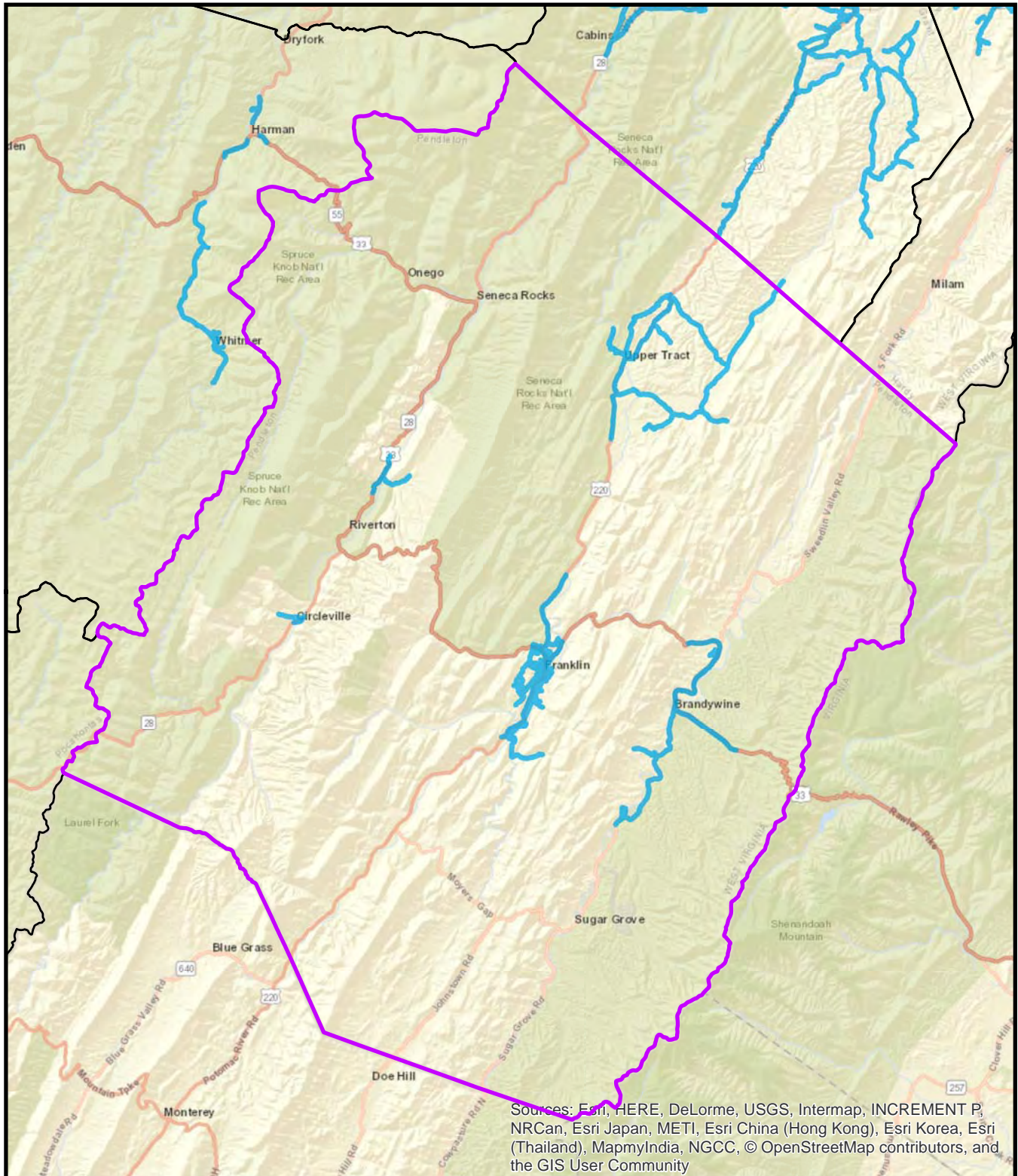
Distribution of Service to Structures



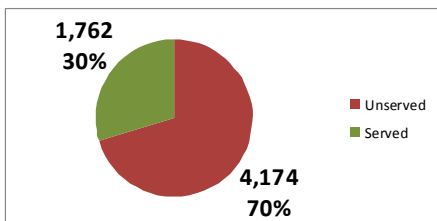
0 2.25 4.5 9 Miles

Served Area

Sewer Service Area Pendleton County



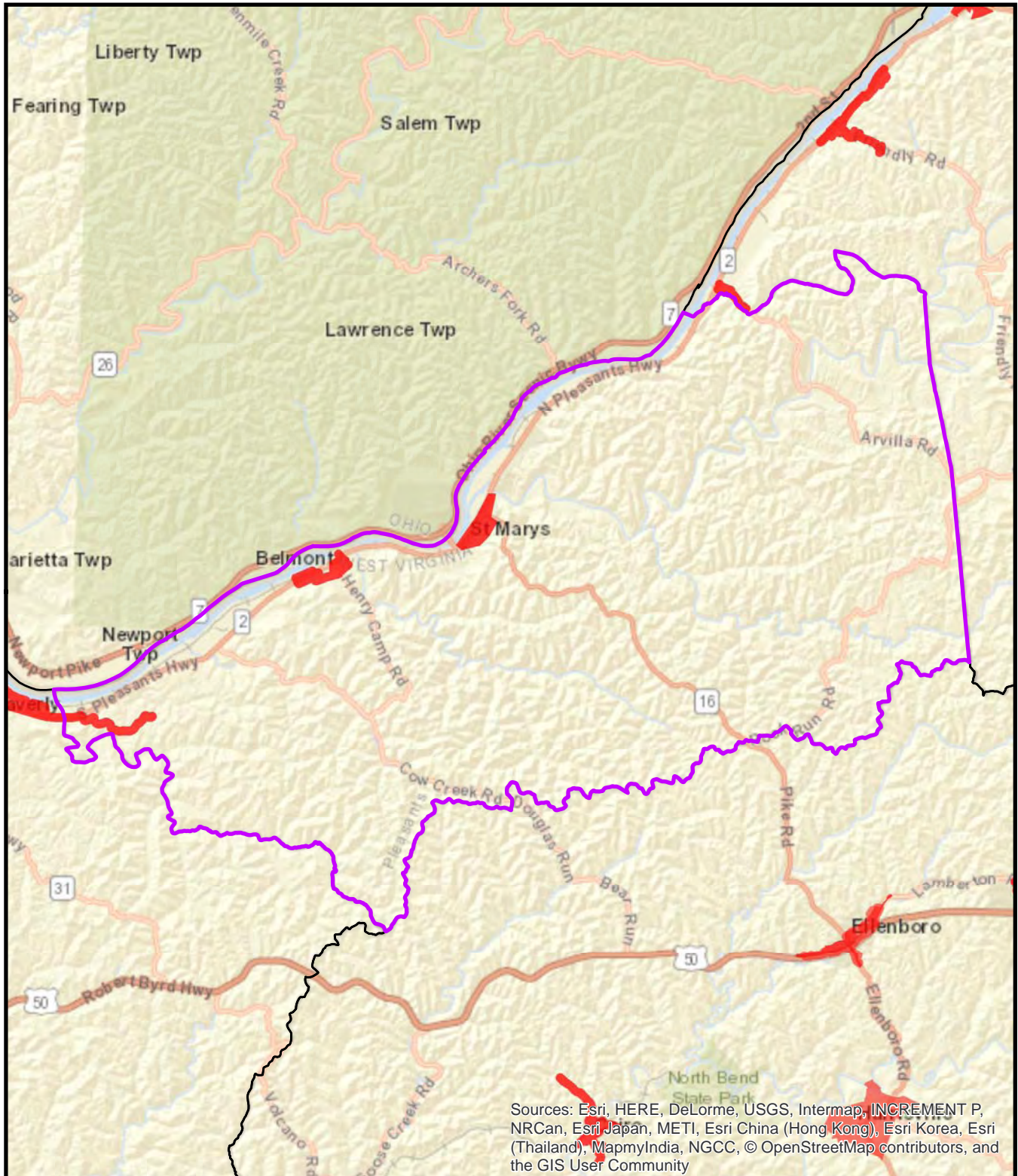
Distribution of Service to Structures



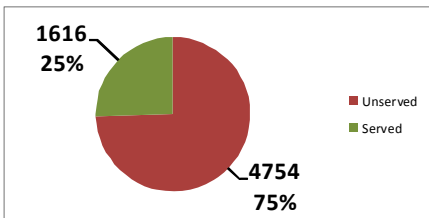
0 2.25 4.5 9 Miles

 Served Area

Water Service Area Pendleton County



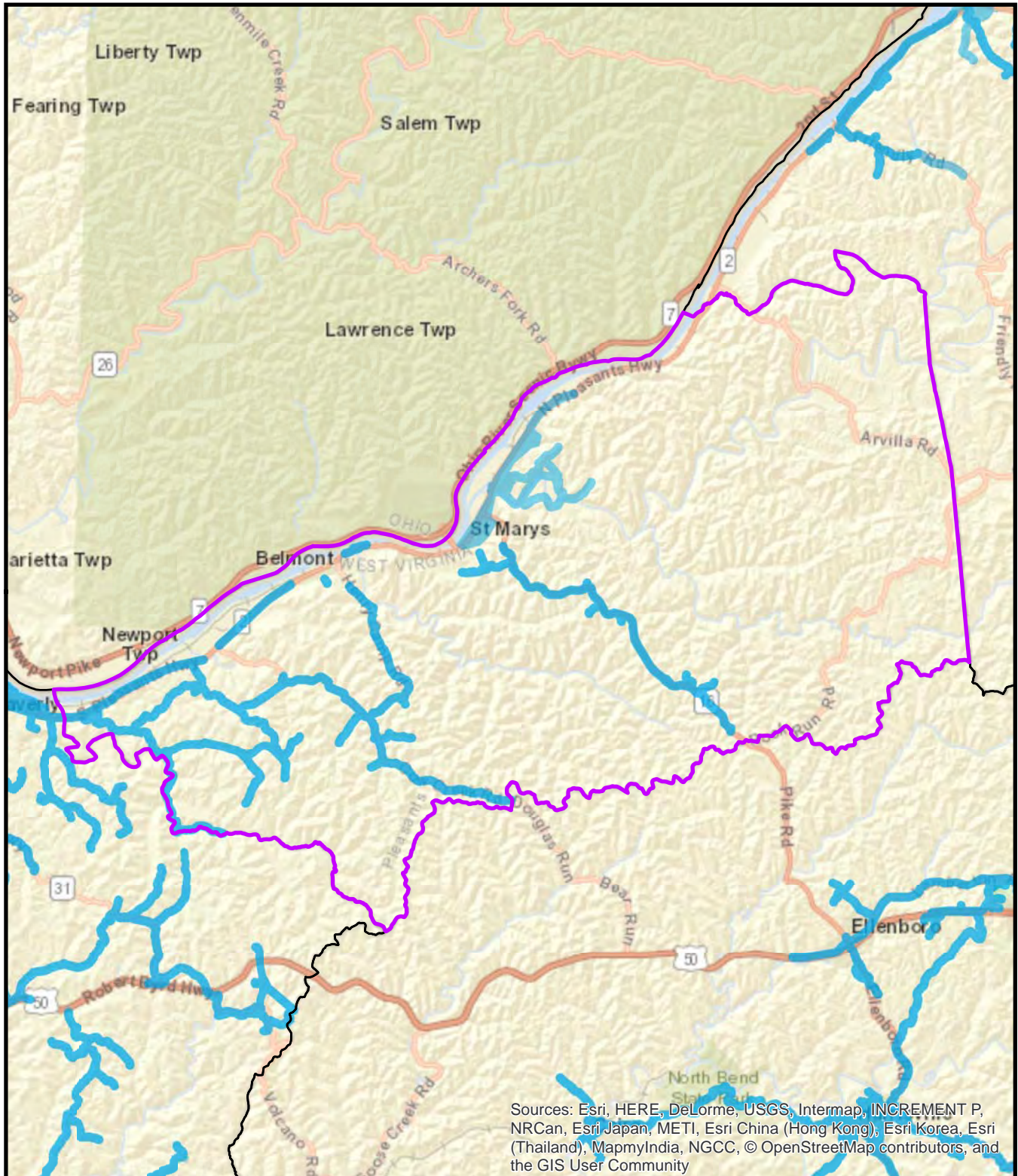
Distribution of Service to Structures



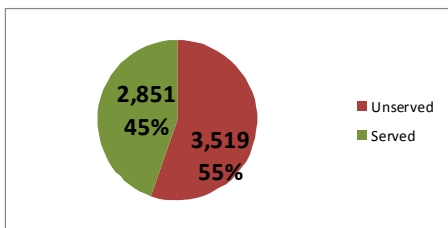
0 1.25 2.5 5 Miles

Served Area

Sewer Service Area Pleasants County



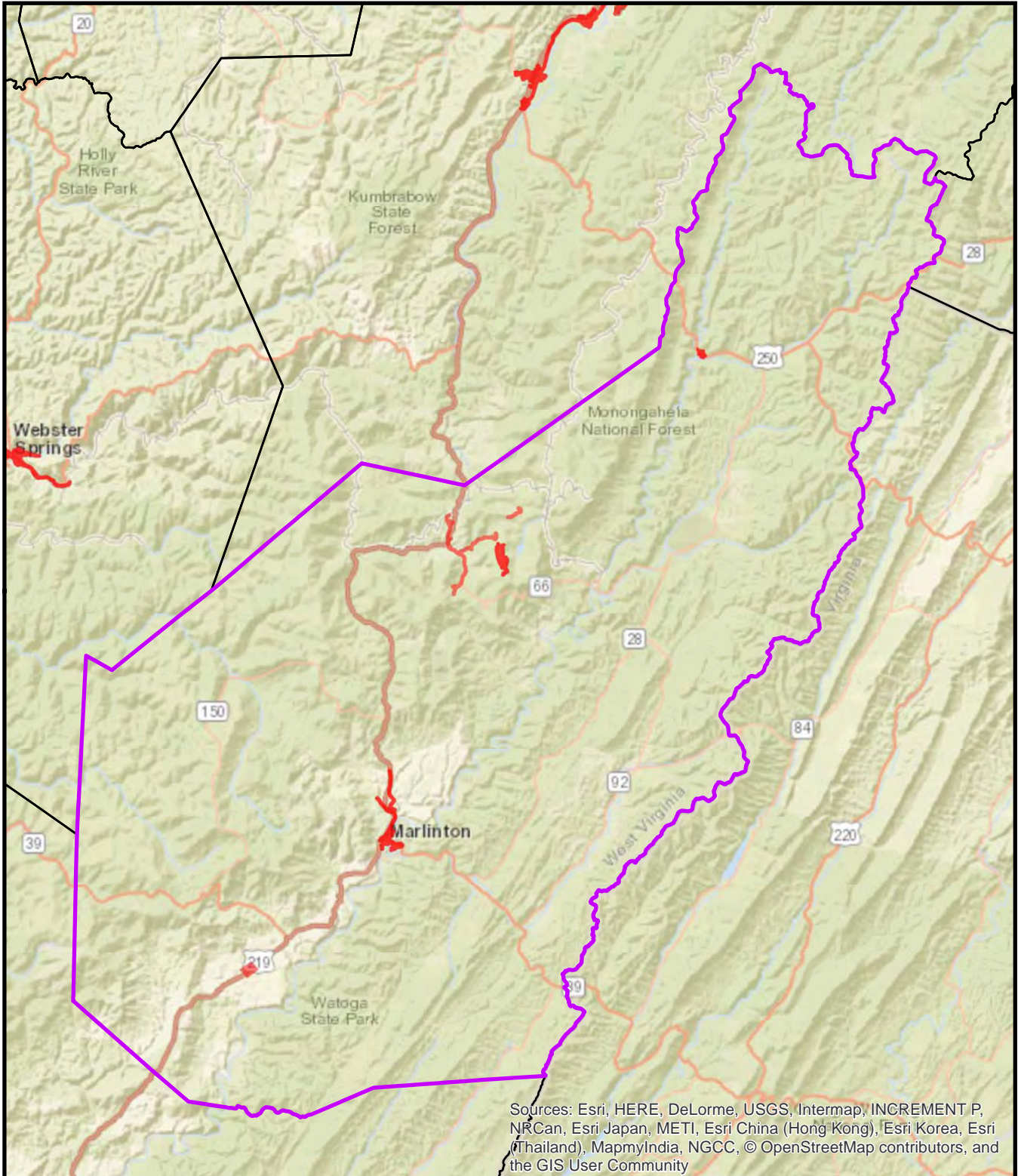
Distribution of Service to Structures



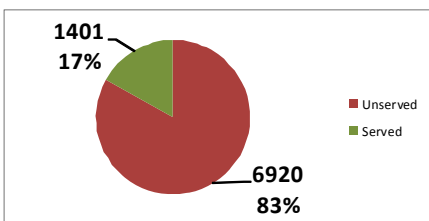
0 1.25 2.5 5 Miles

 Served Area

Water Service Area Pleasants County



Distribution of Service to Structures

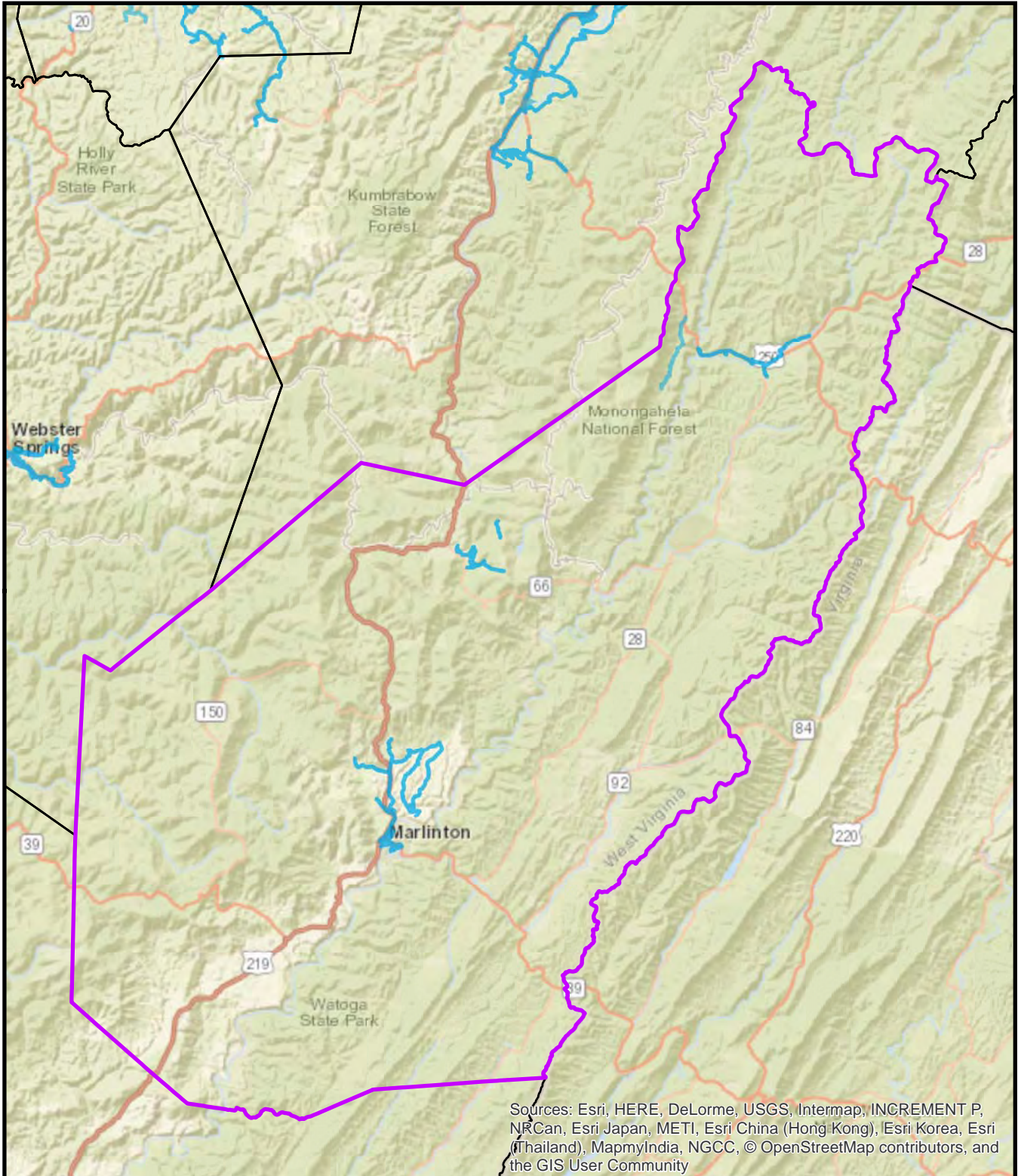


0 2.75 5.5 11 Miles

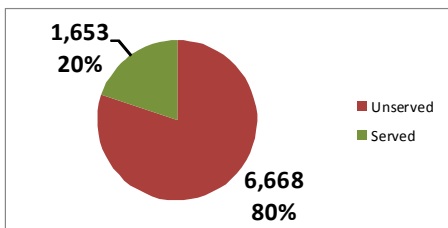
Served Area

Sewer Service Area Pocahontas County





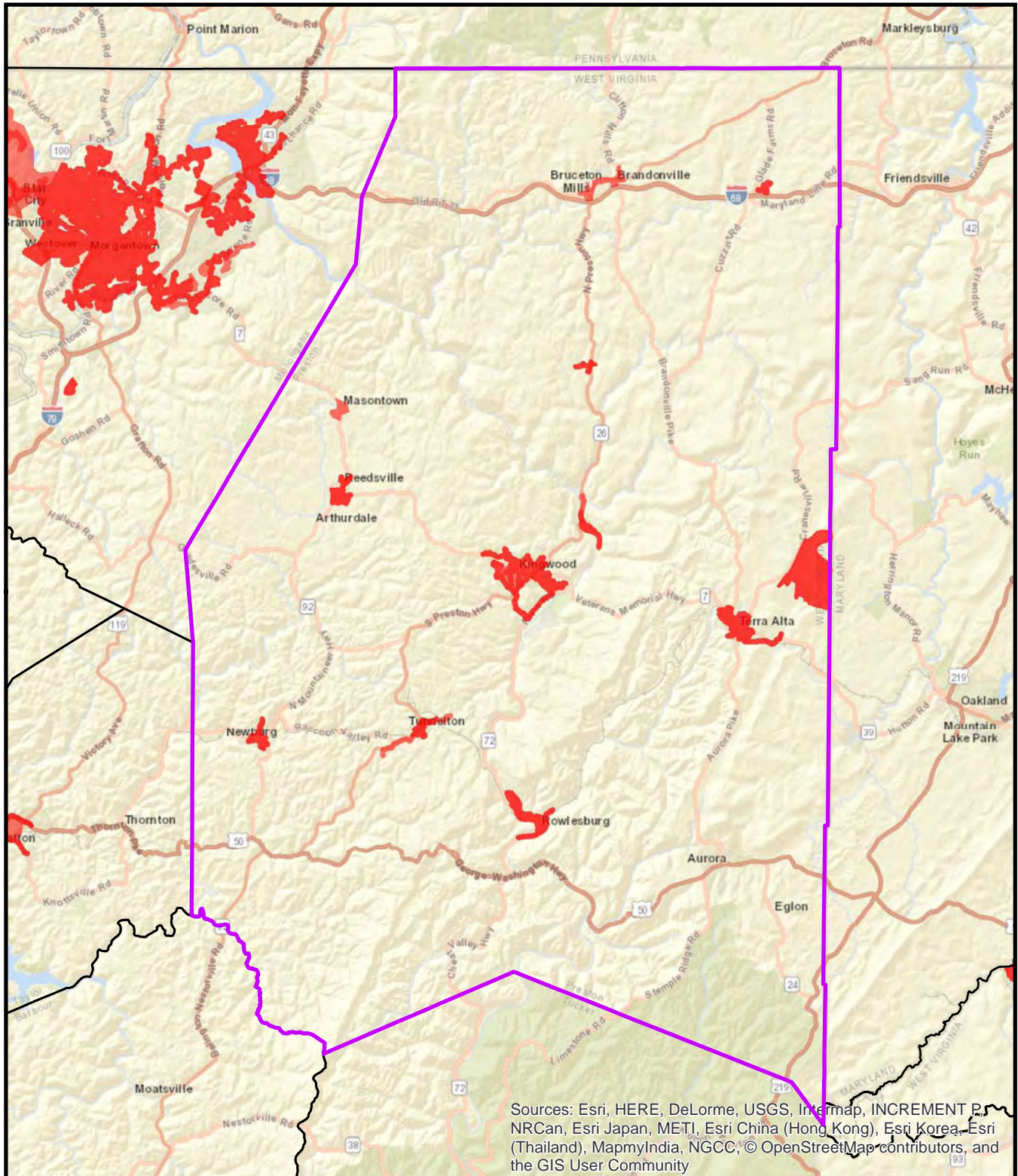
Distribution of Service to Structures



0 2.75 5.5 11 Miles

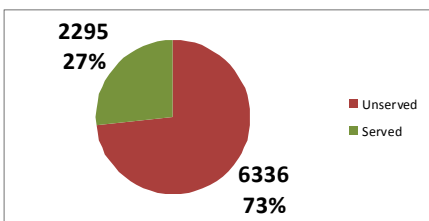
 Served Area

Water Service Area Pocahontas County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures

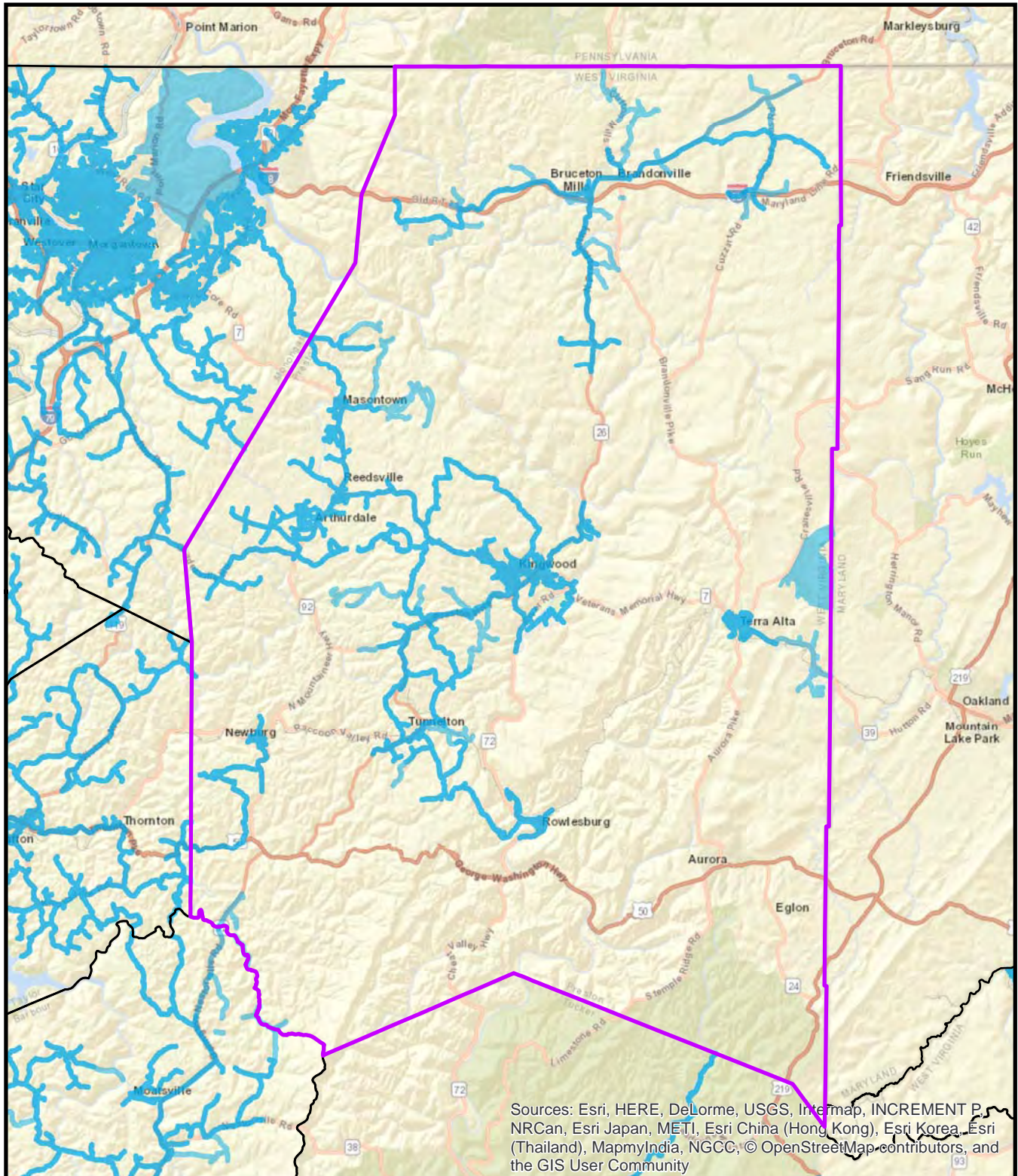


0 2 4 8 Miles

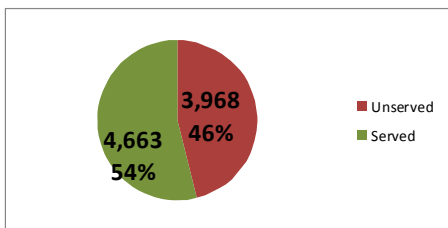
Served Area

Sewer Service Area Preston County





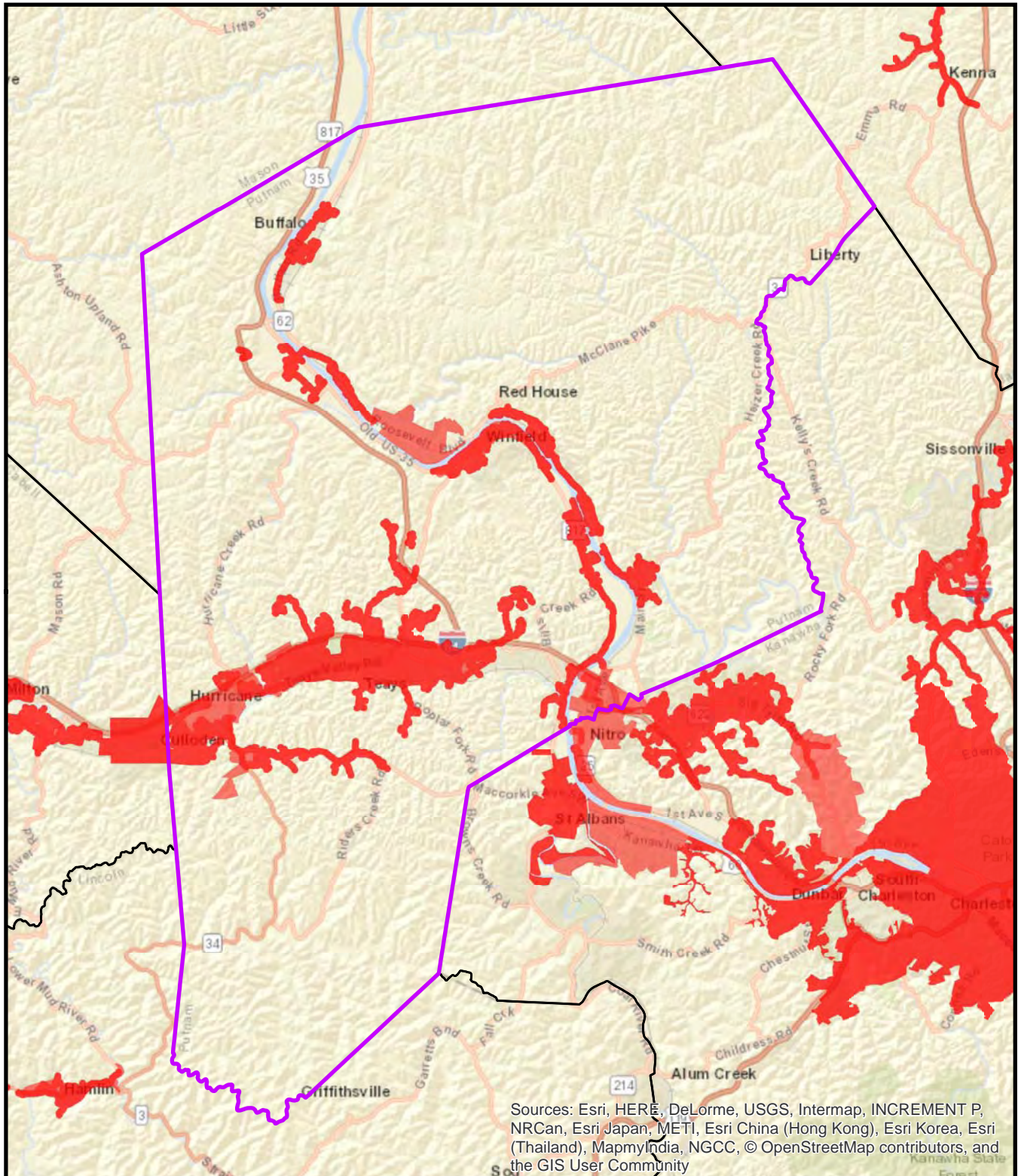
Distribution of Service to Structures



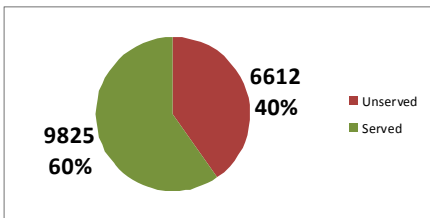
0 2 4 8 Miles

 Served Area

Water Service Area Preston County



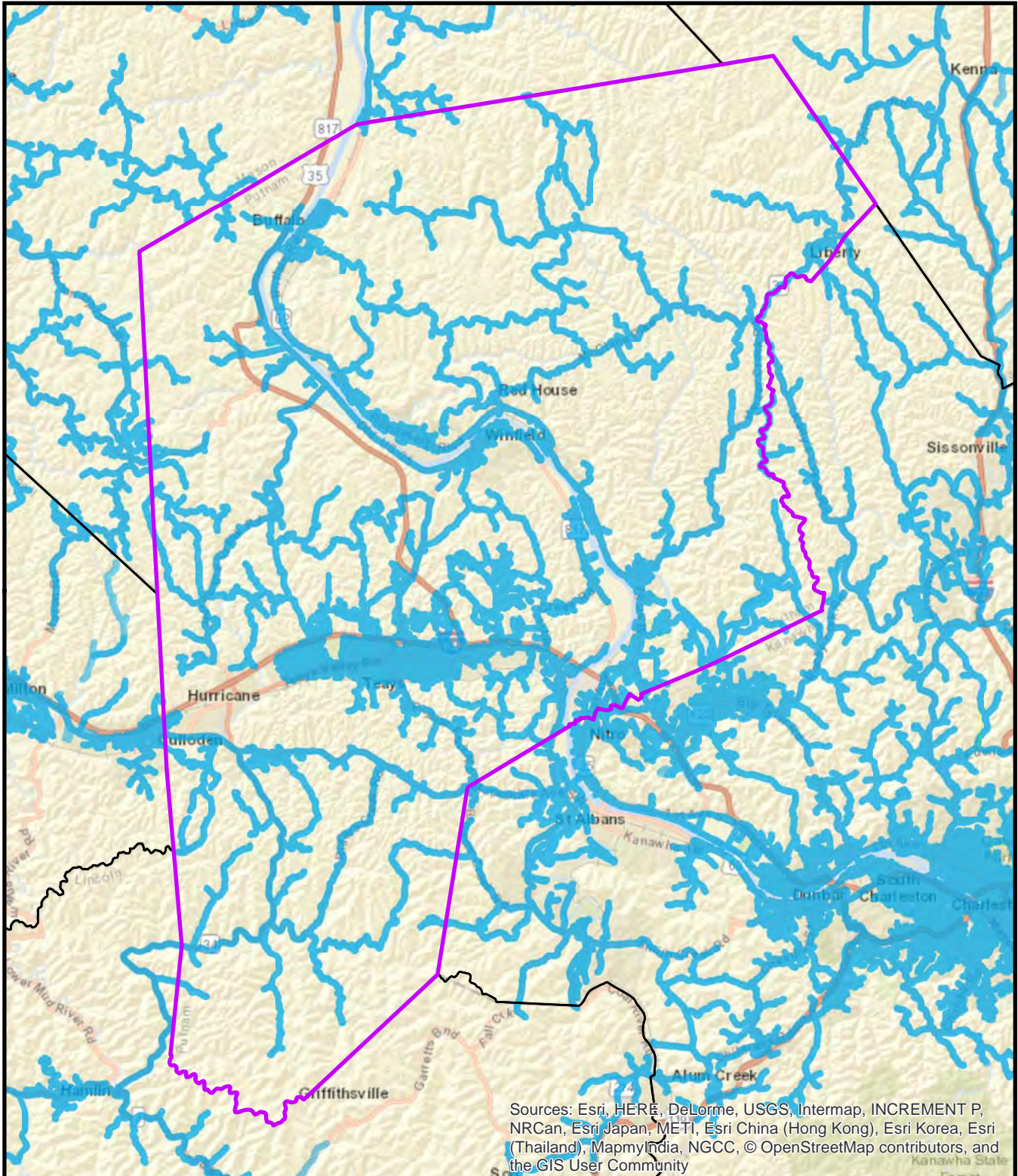
Distribution of Service to Structures



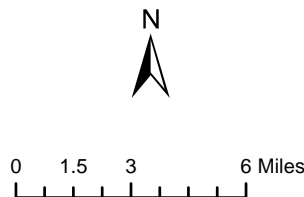
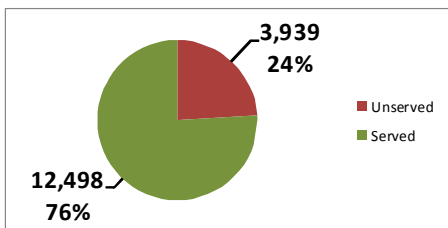
0 1.5 3 6 Miles

Served Area

Sewer Service Area Putnam County

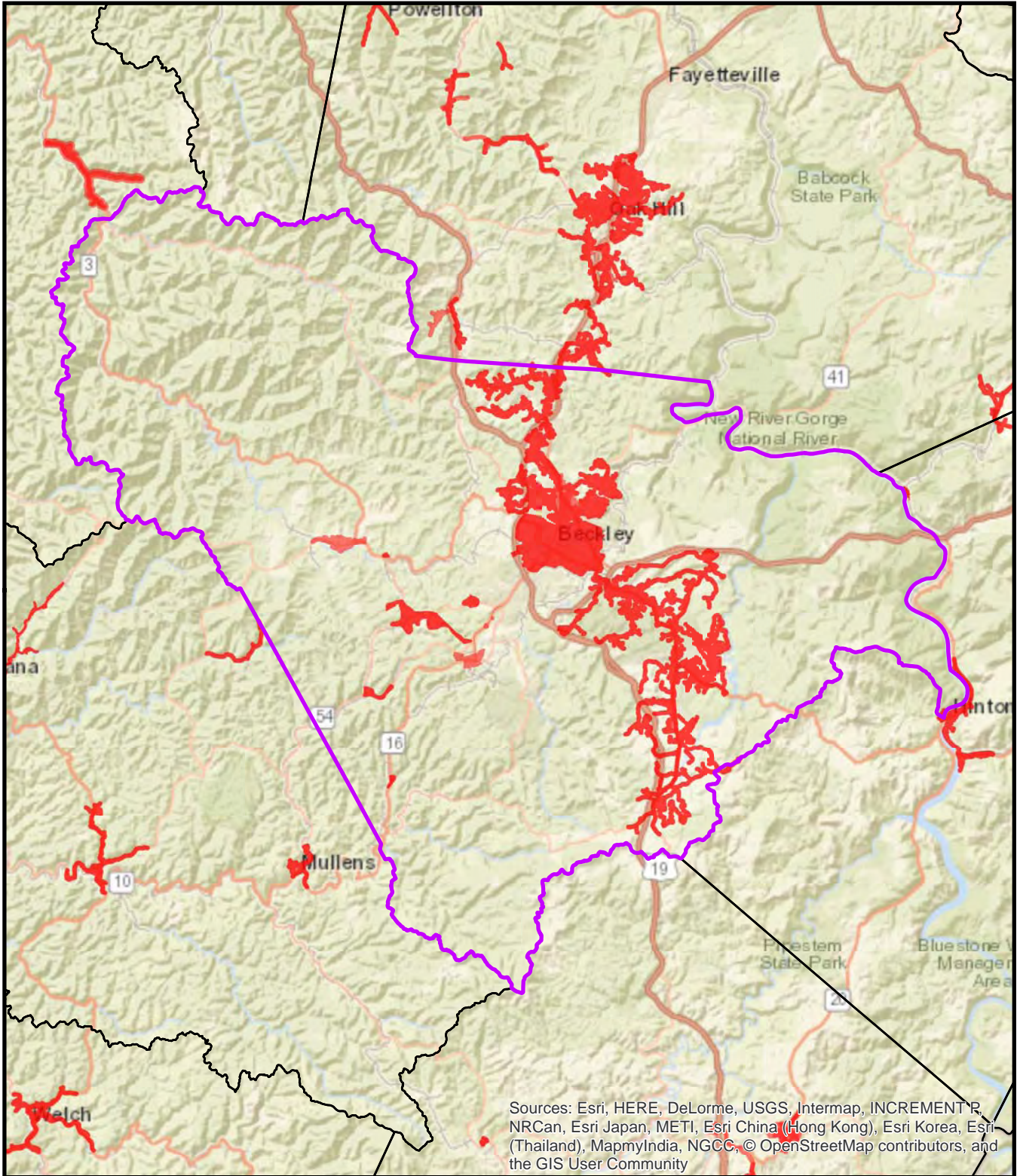


Distribution of Service to Structures

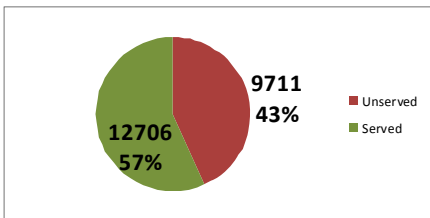


 Served Area

Water Service Area Putnam County



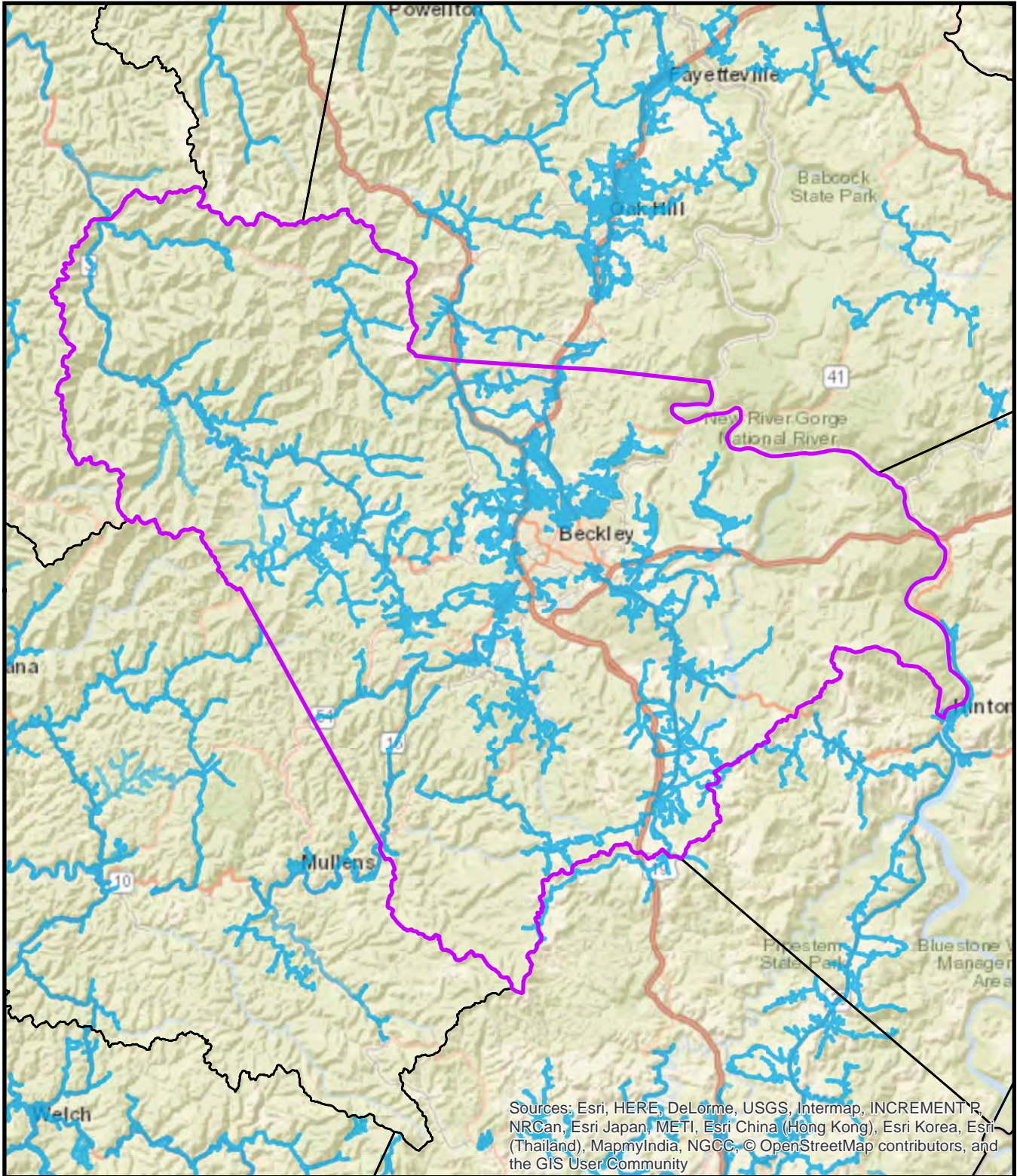
Distribution of Service to Structures



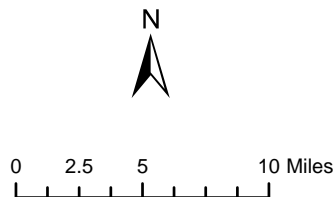
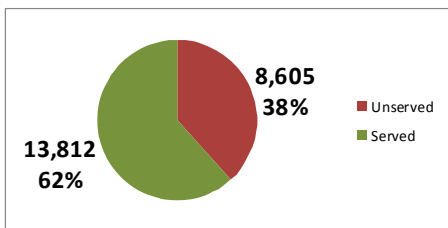
0 2.5 5 10 Miles

 Served Area

Sewer Service Area Raleigh County

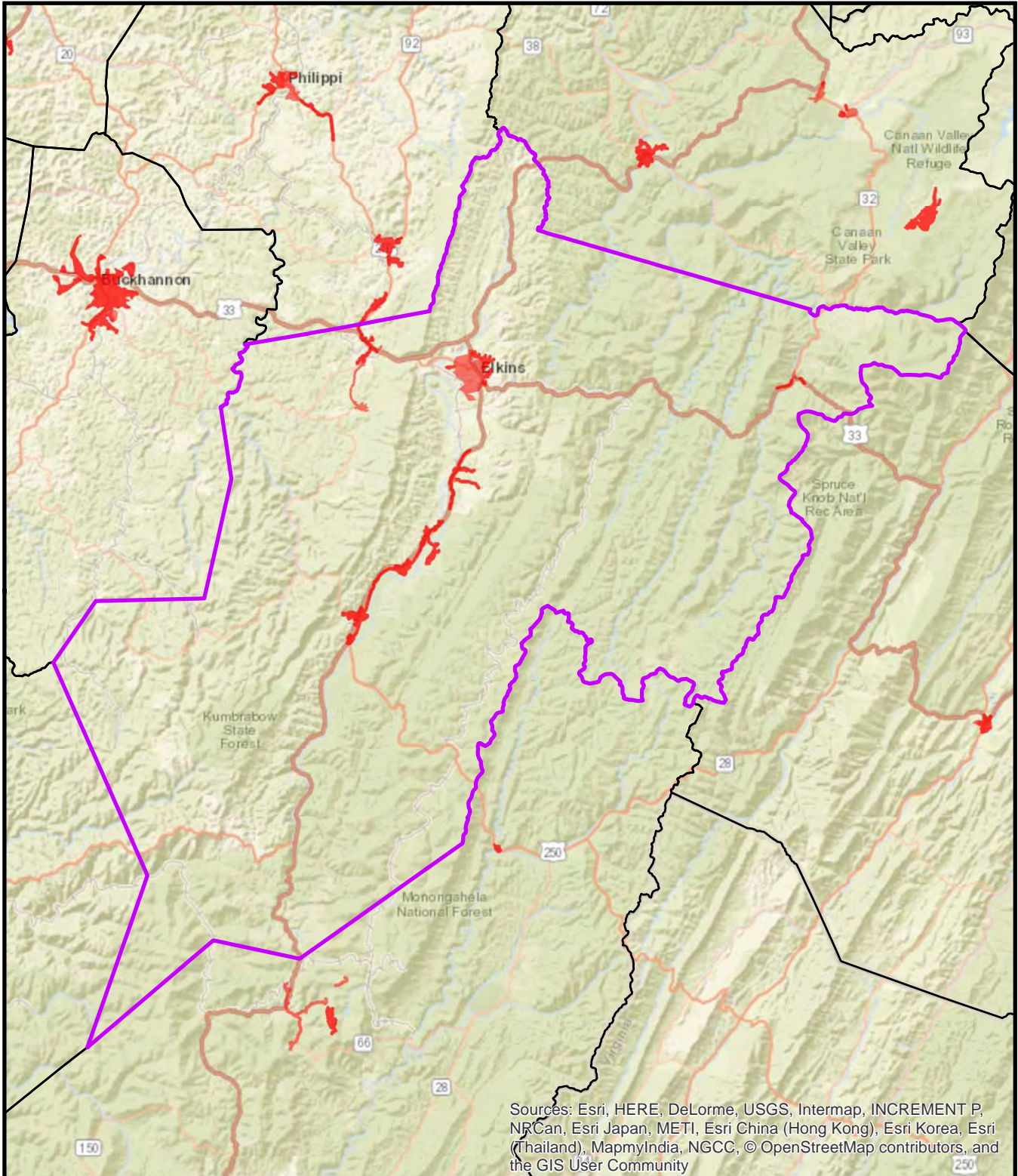


Distribution of Service to Structures



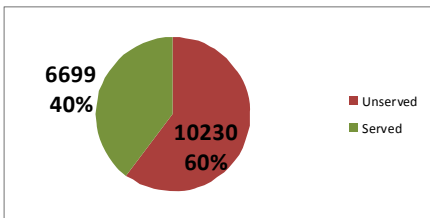
 Served Area

Water Service Area Raleigh County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures

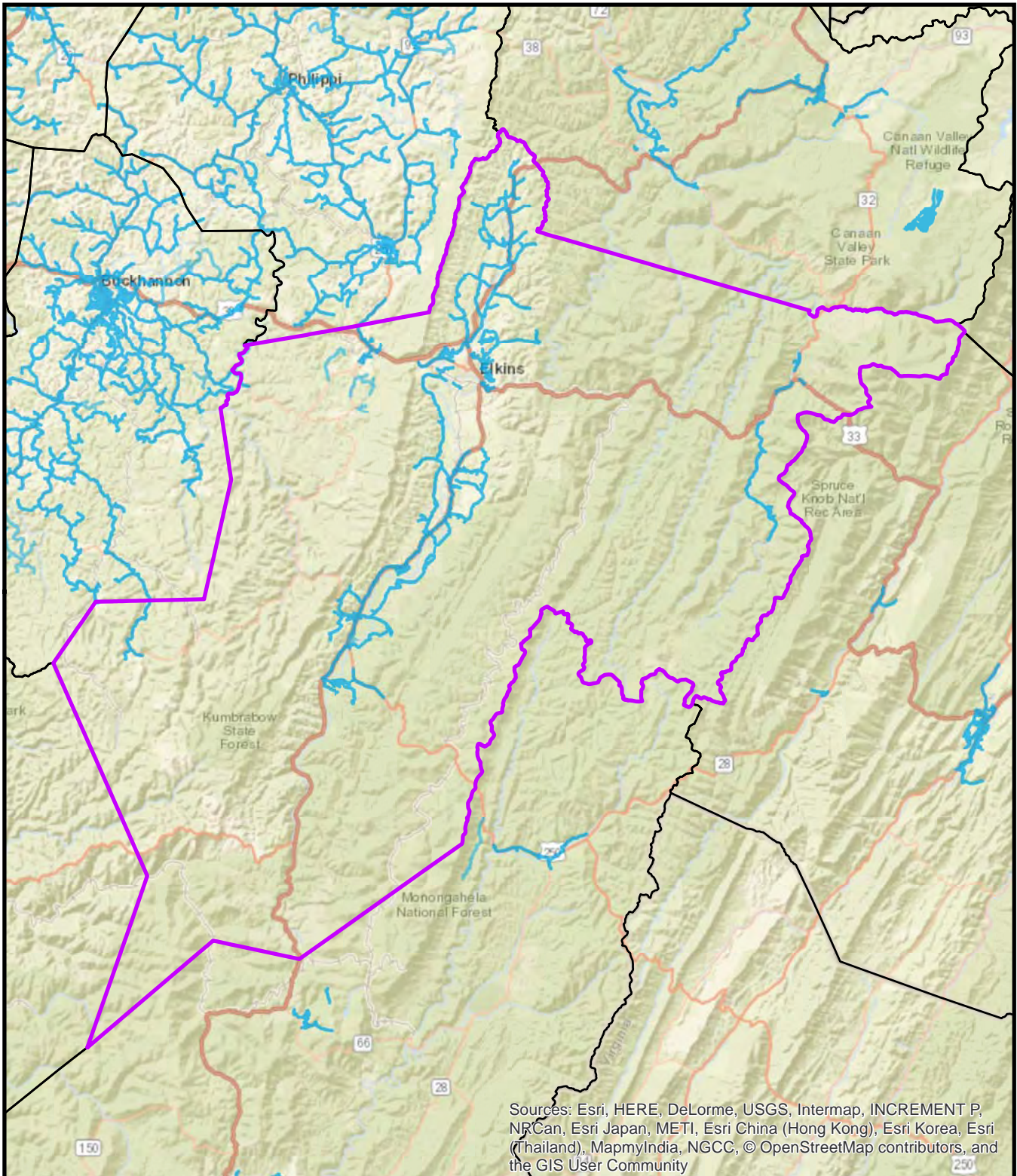


0 3.25 6.5 13 Miles

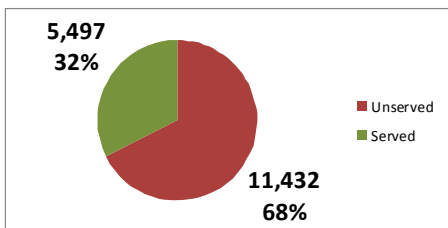
Served Area

Sewer Service Area Randolph County





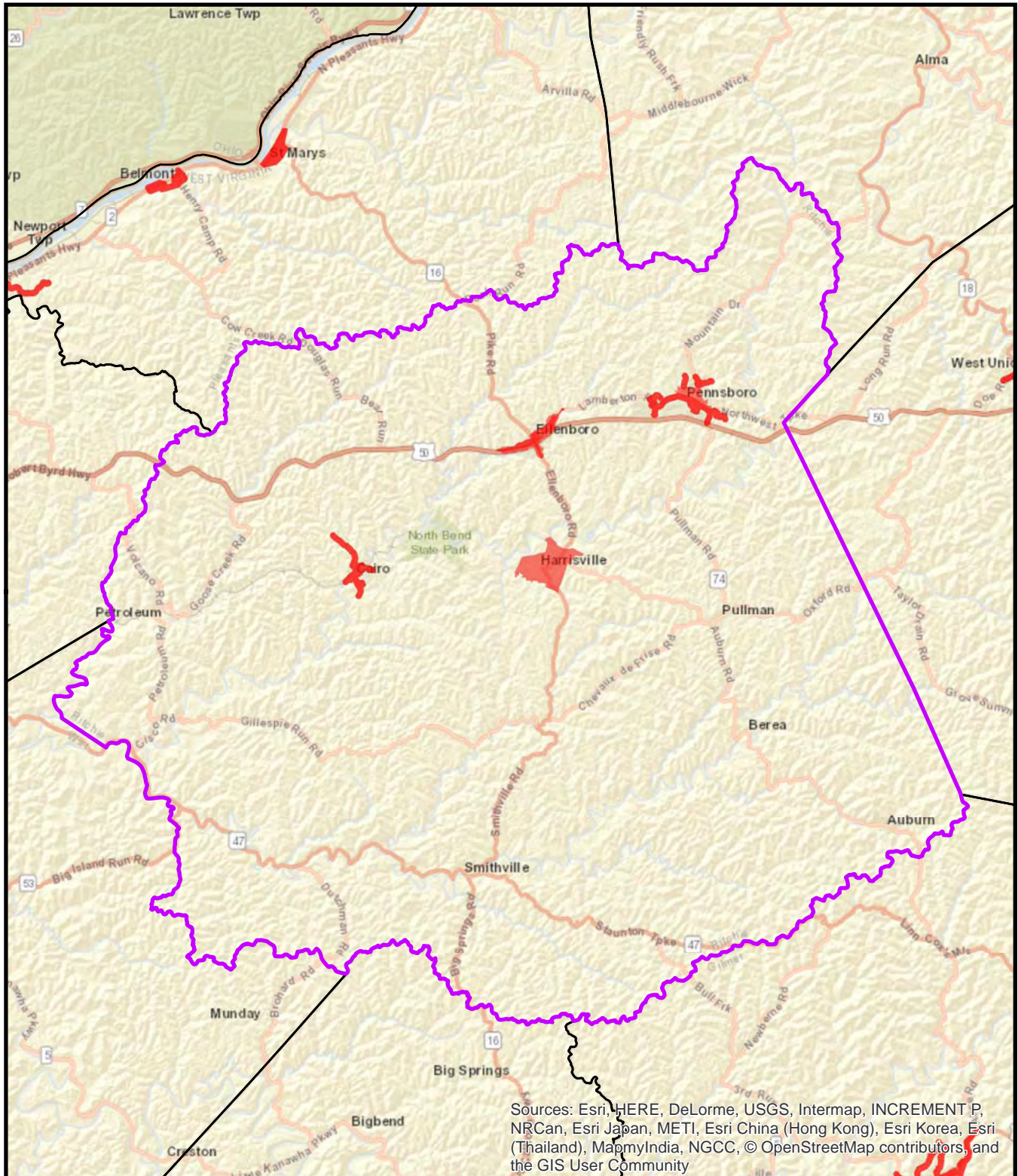
Distribution of Service to Structures



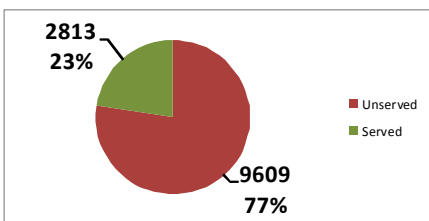
0 3.25 6.5 13 Miles

 Served Area

Water Service Area Randolph County



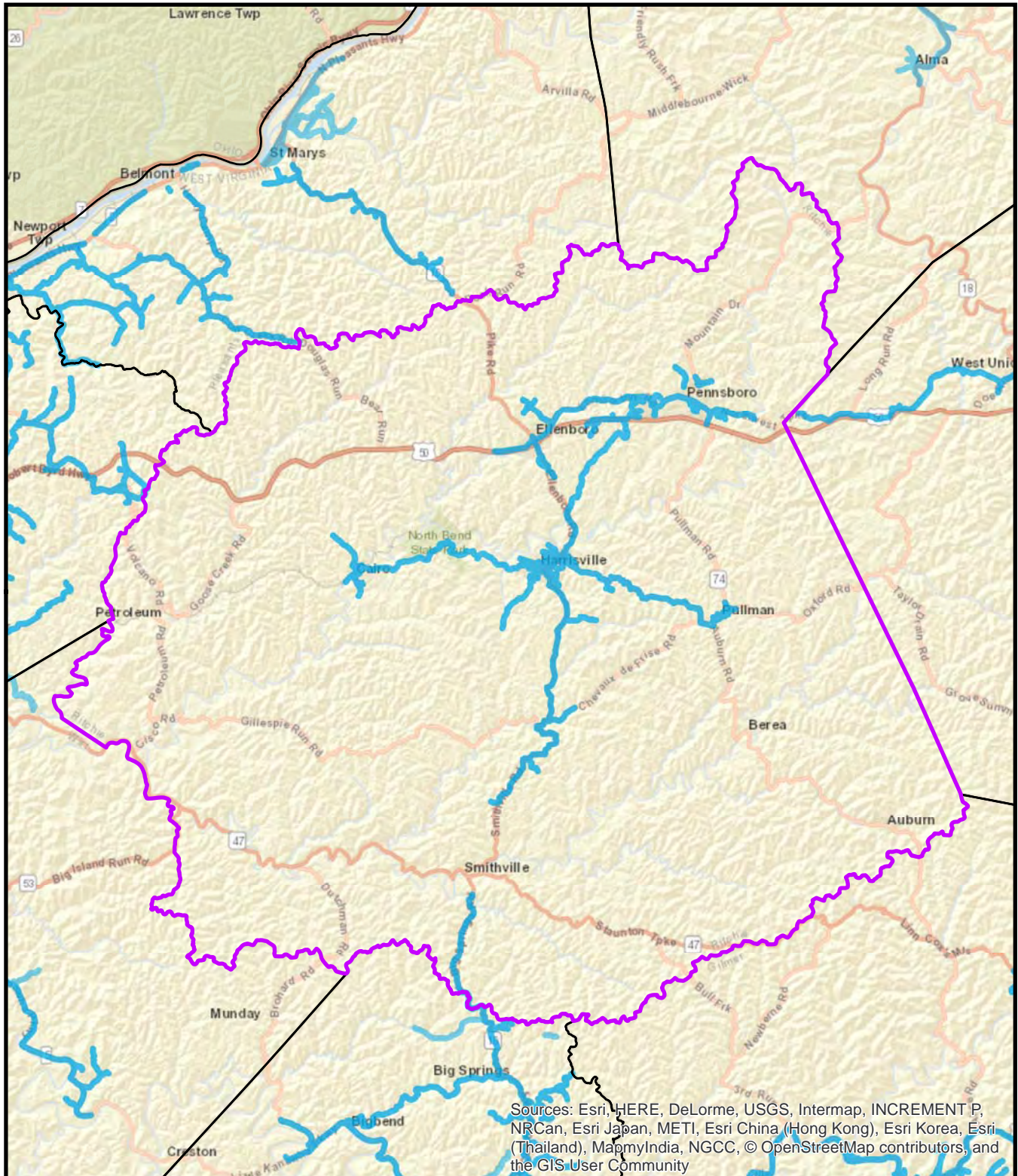
Distribution of Service to Structures



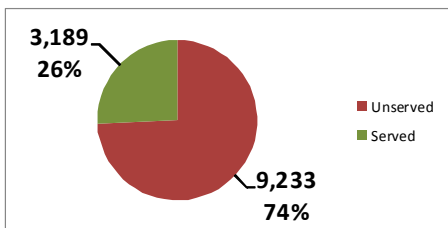
0 1.75 3.5 7 Miles

Served Area

Sewer Service Area Ritchie County



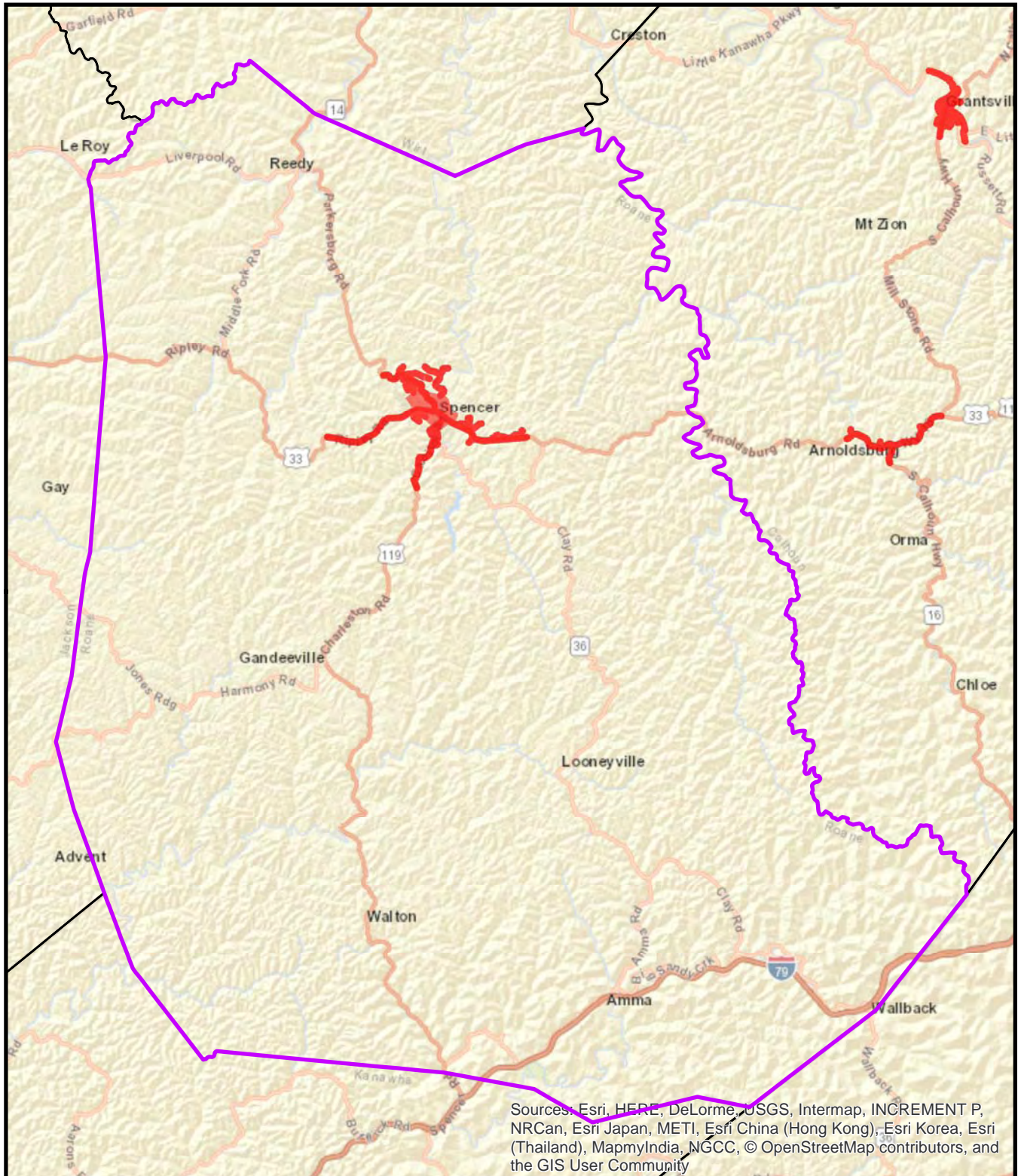
Distribution of Service to Structures



0 1.75 3.5 7 Miles

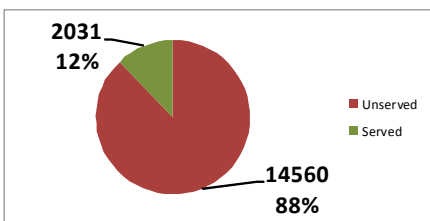
 Served Area

Water Service Area Ritchie County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures

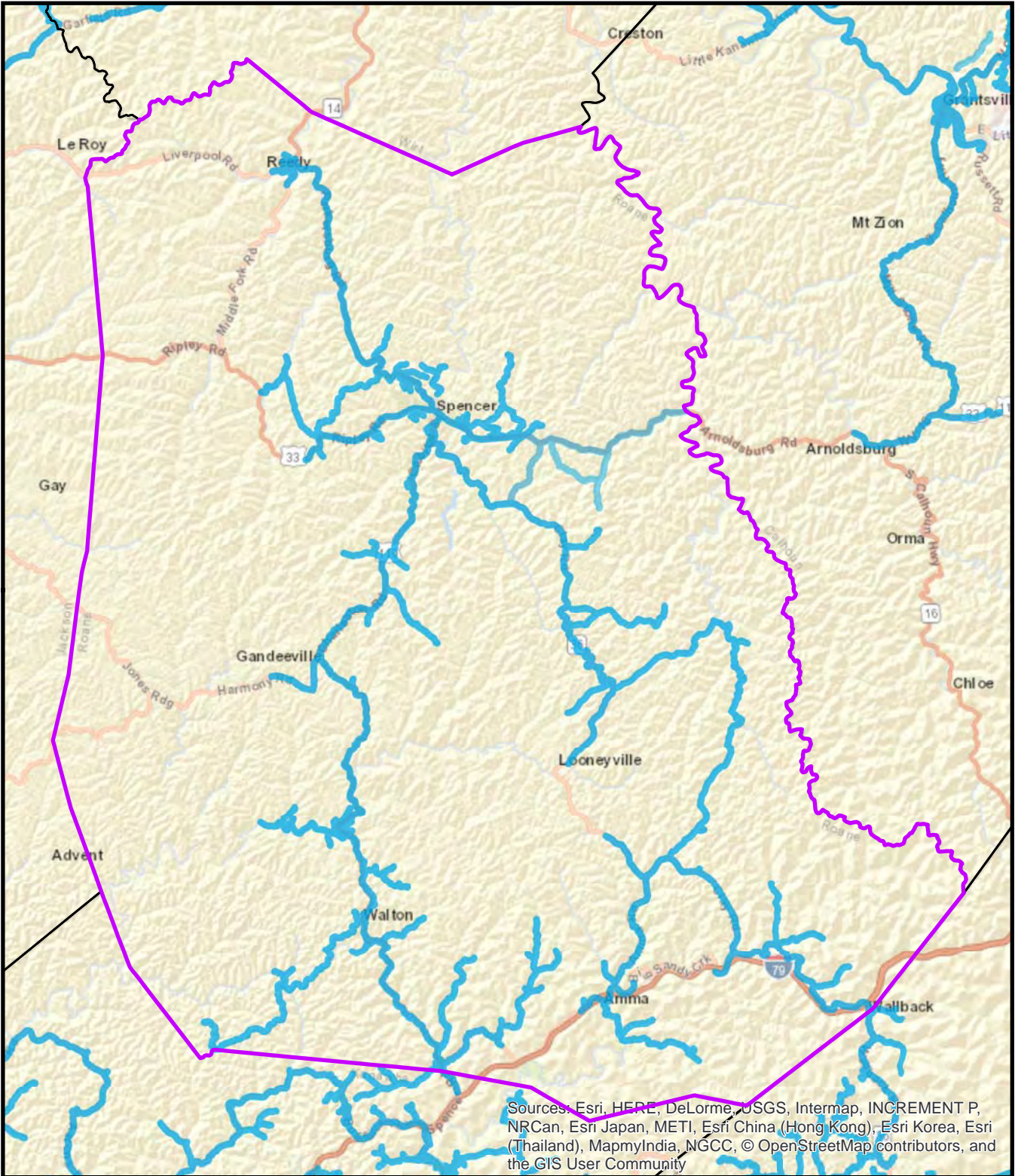


0 1.75 3.5 7 Miles

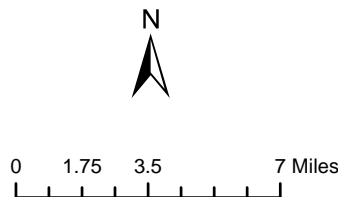
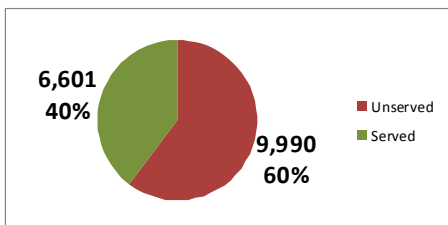
Served Area

Sewer Service Area Roane County



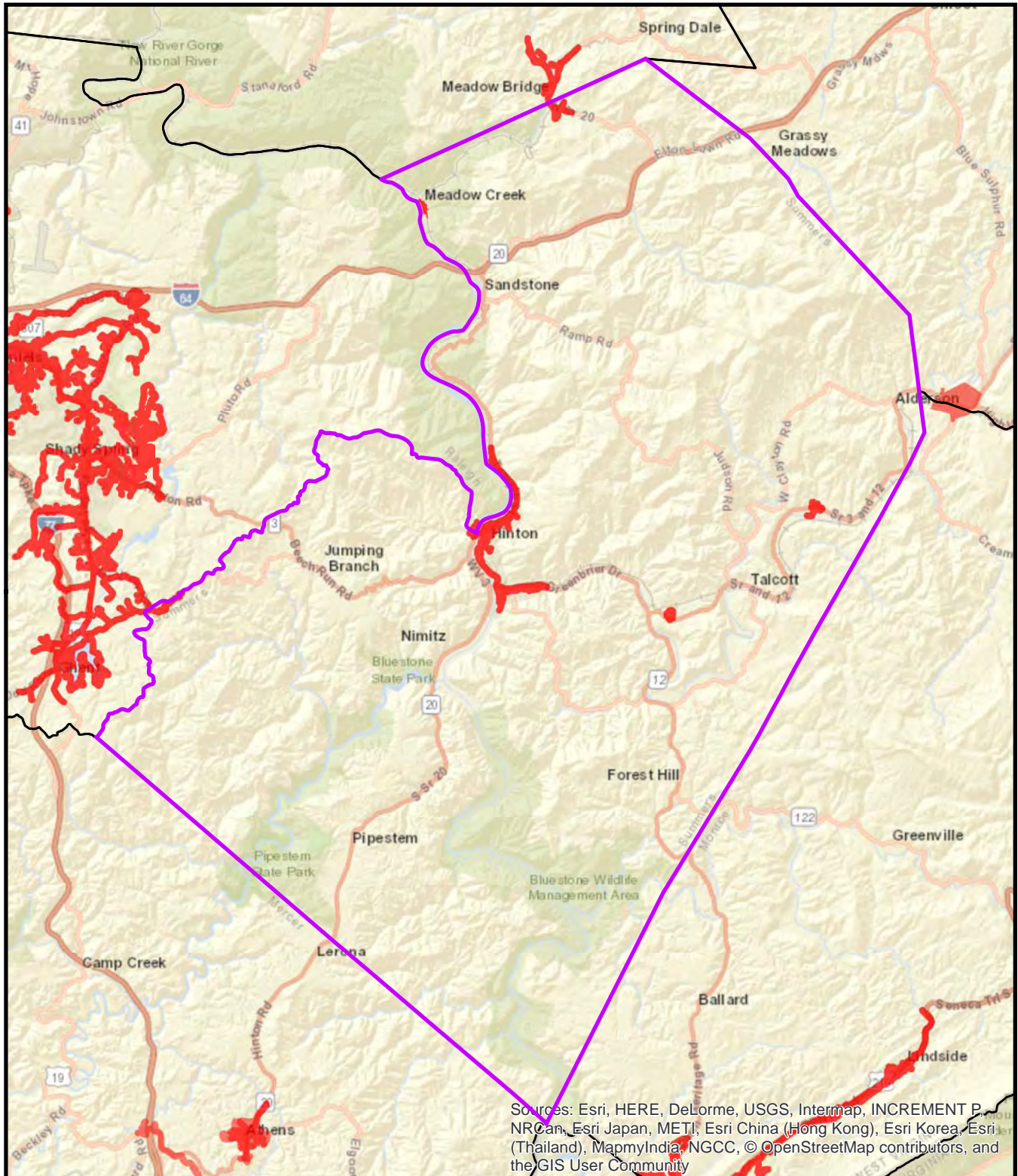


Distribution of Service to Structures

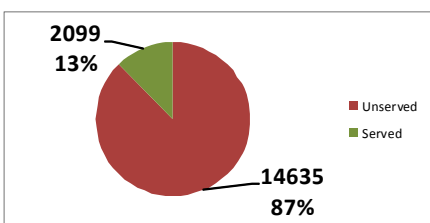


 Served Area

Water Service Area Roane County



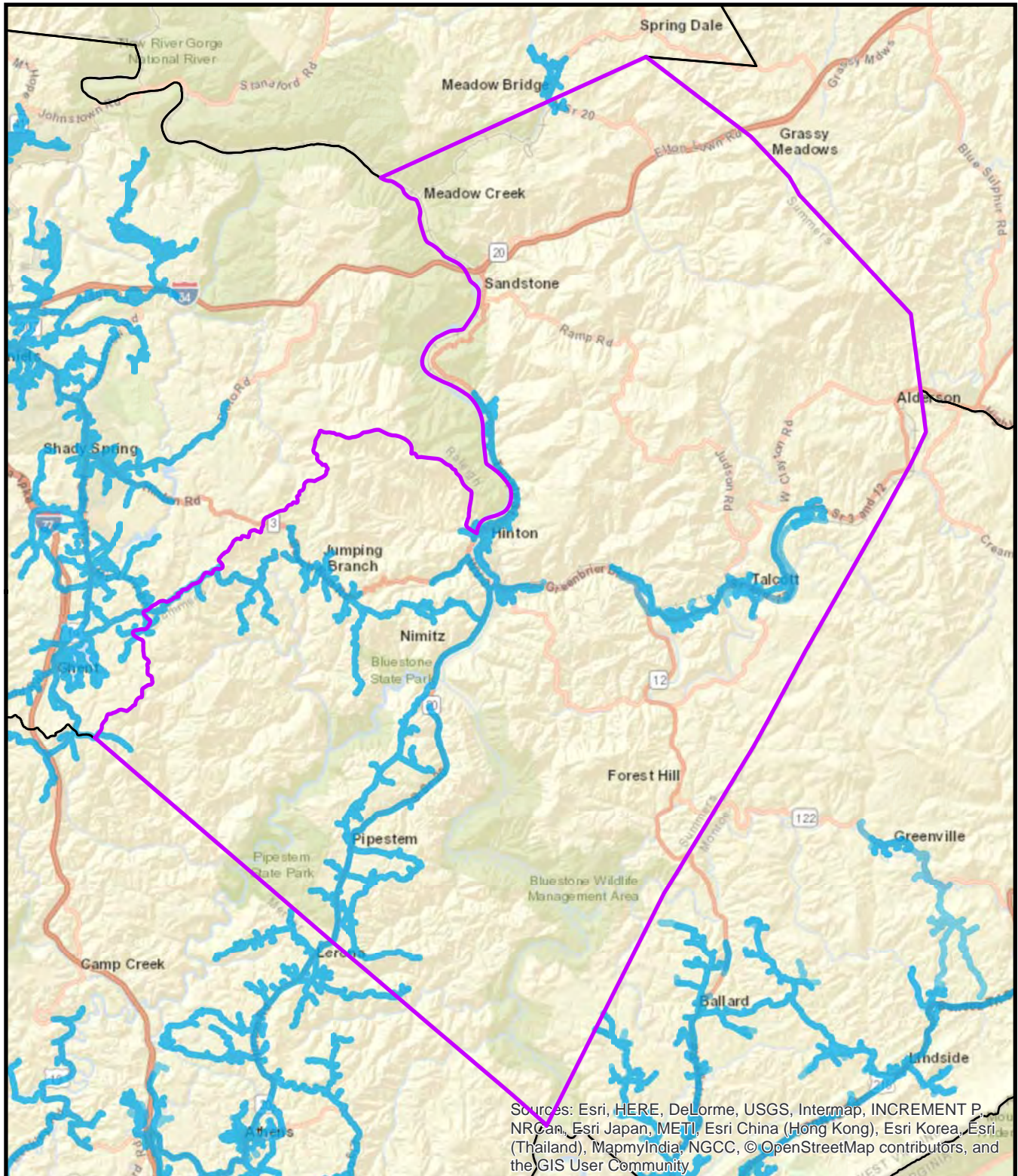
Distribution of Service to Structures



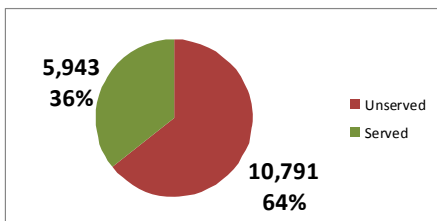
0 1.75 3.5 7 Miles

Served Area

Sewer Service Area Summers County



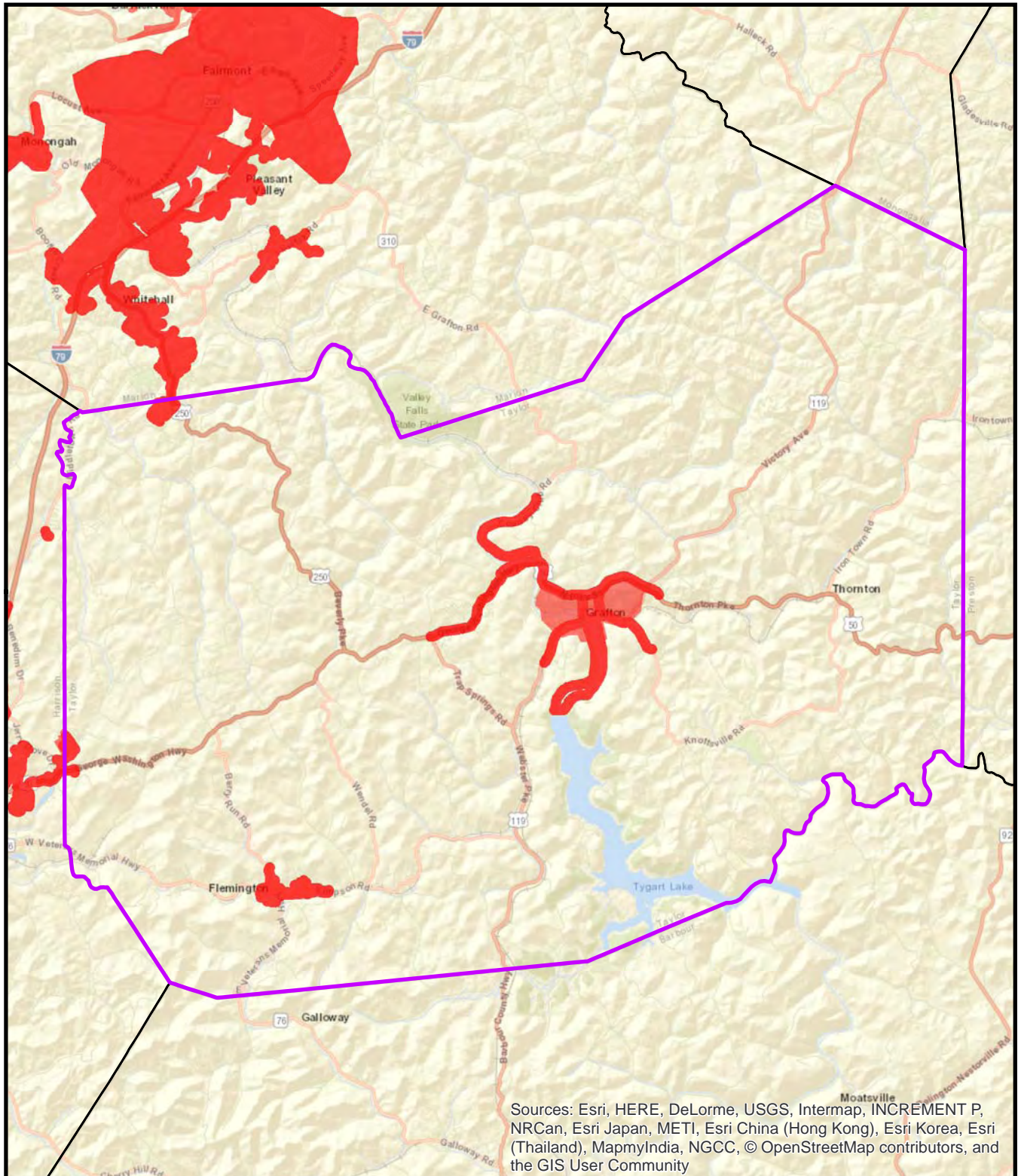
Distribution of Service to Structures



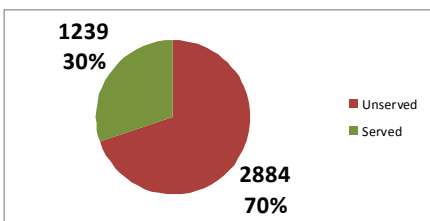
0 1.75 3.5 7 Miles

 Served Area

Water Service Area Summers County



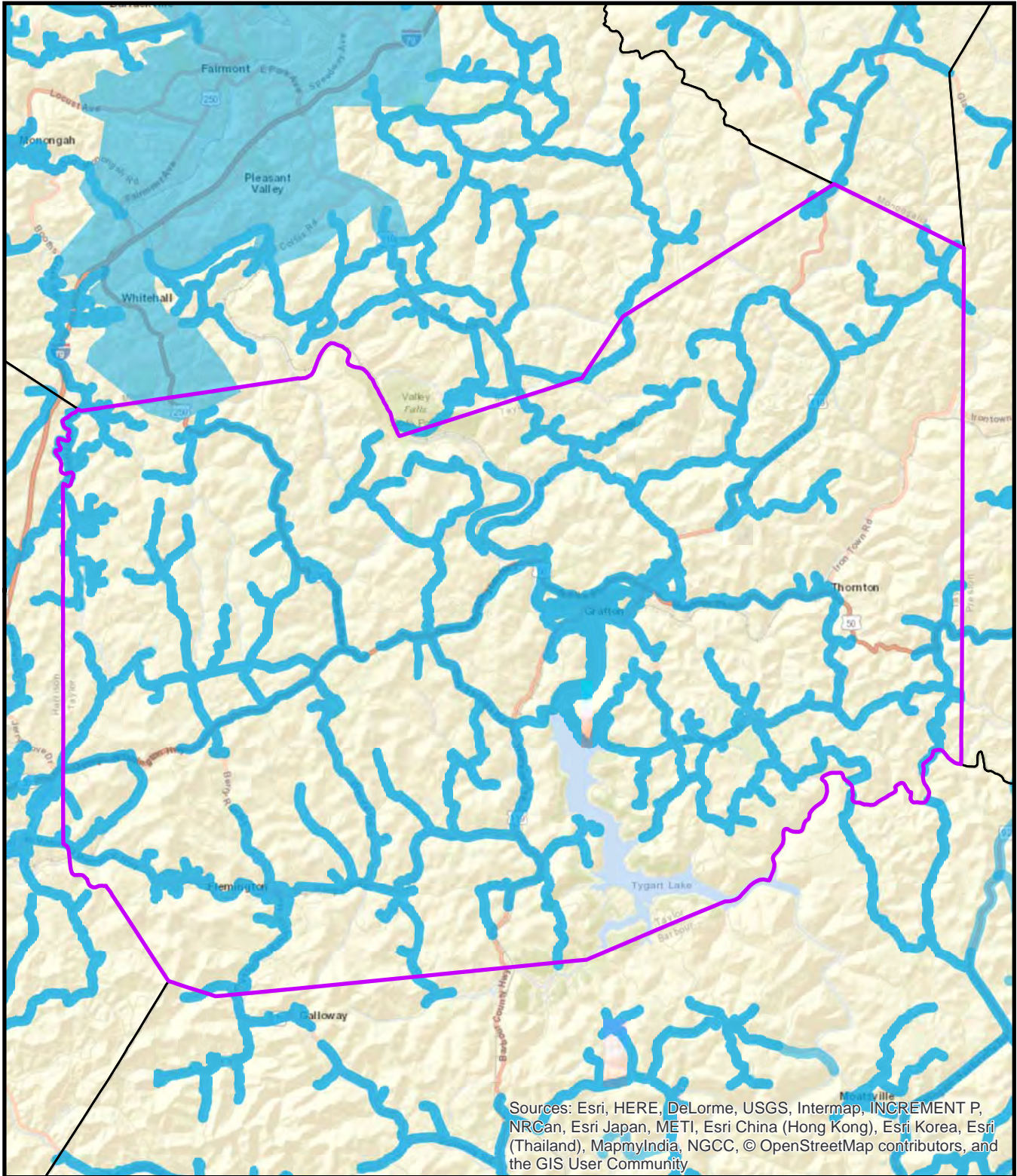
Distribution of Service to Structures



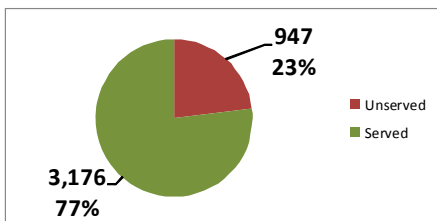
0 1 2 4 Miles

Served Area

Sewer Service Area Taylor County



Distribution of Service to Structures

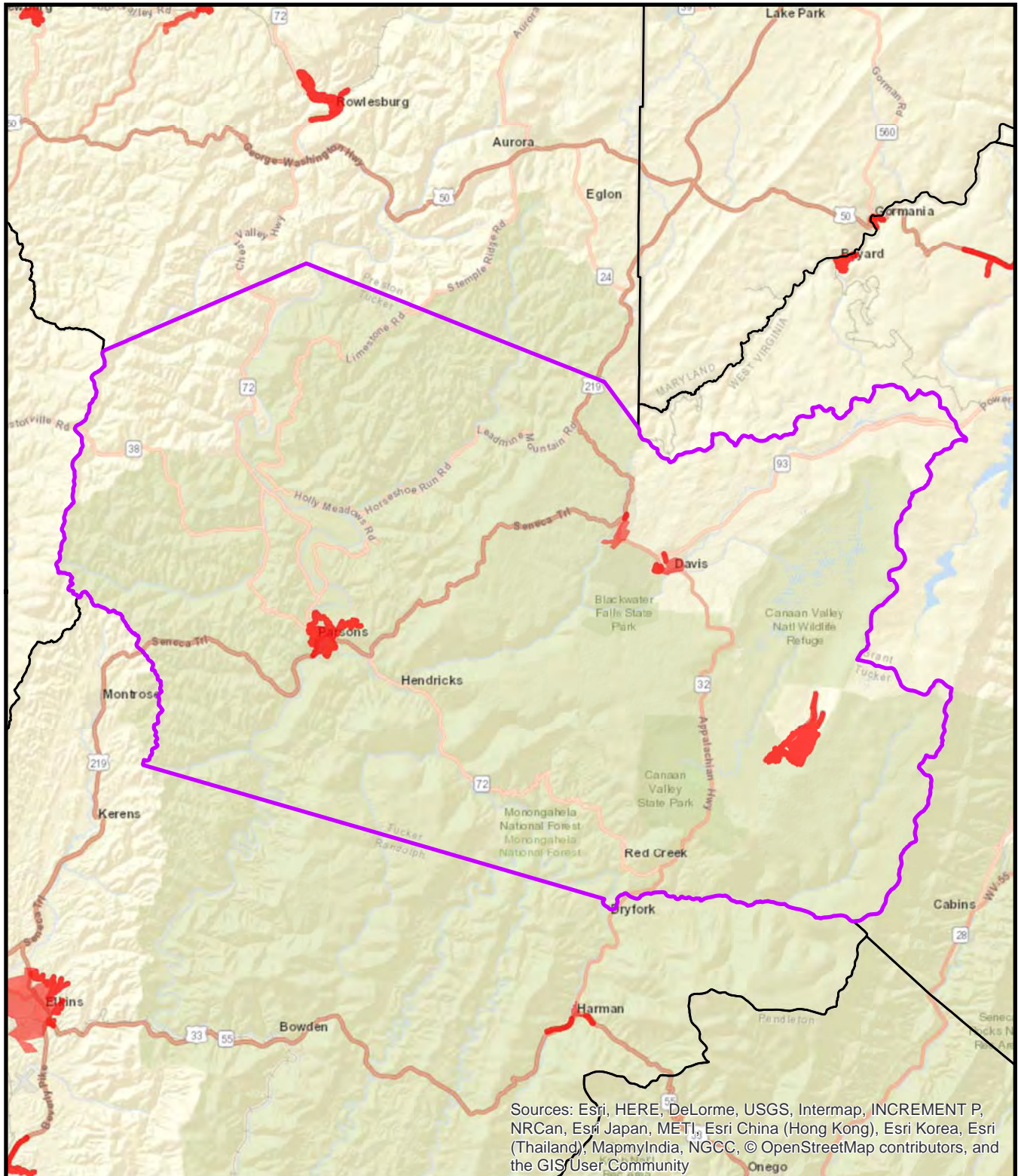


0 1 2 4 Miles

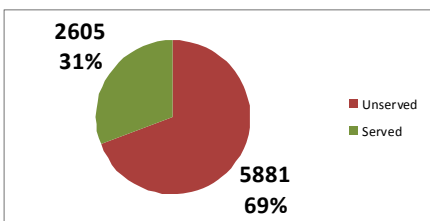
 Served Area

Water Service Area Taylor County





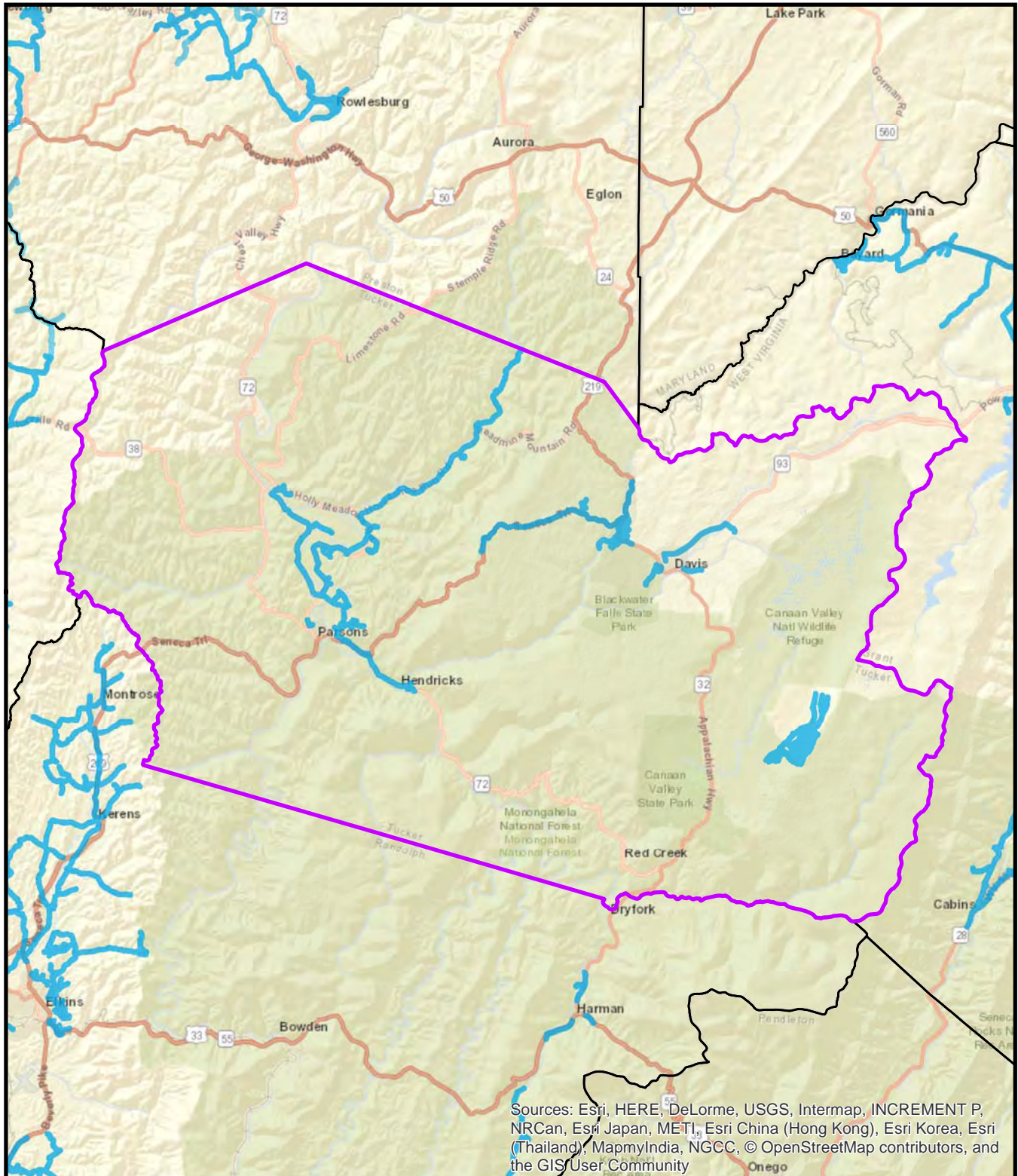
Distribution of Service to Structures



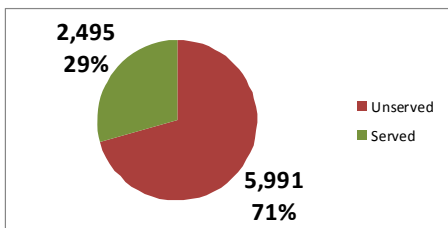
0 2 4 8 Miles

Served Area

Sewer Service Area Tucker County



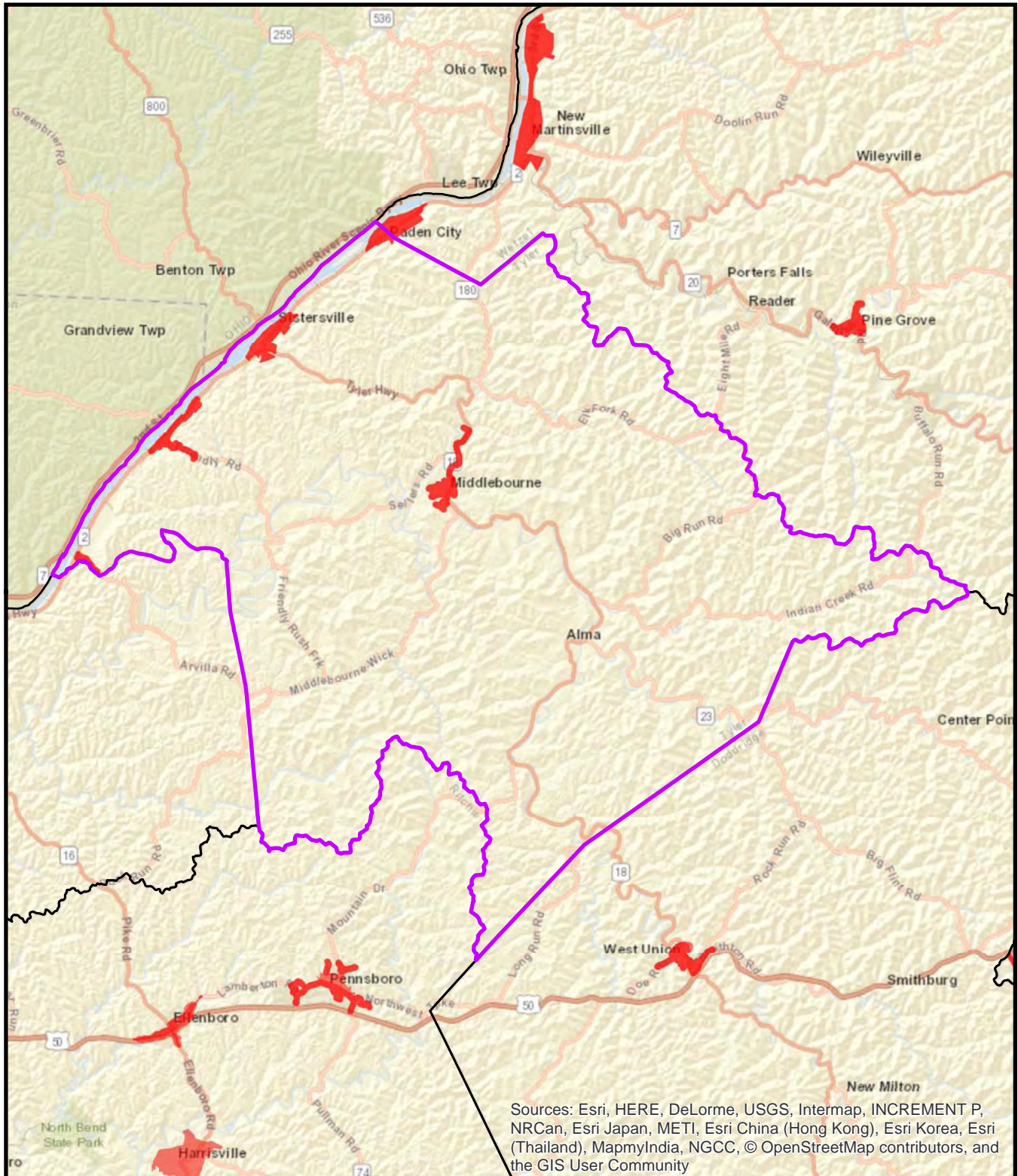
Distribution of Service to Structures



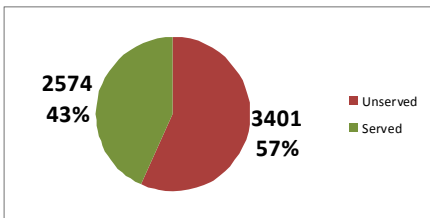
0 2 4 8 Miles

 Served Area

Water Service Area Tucker County



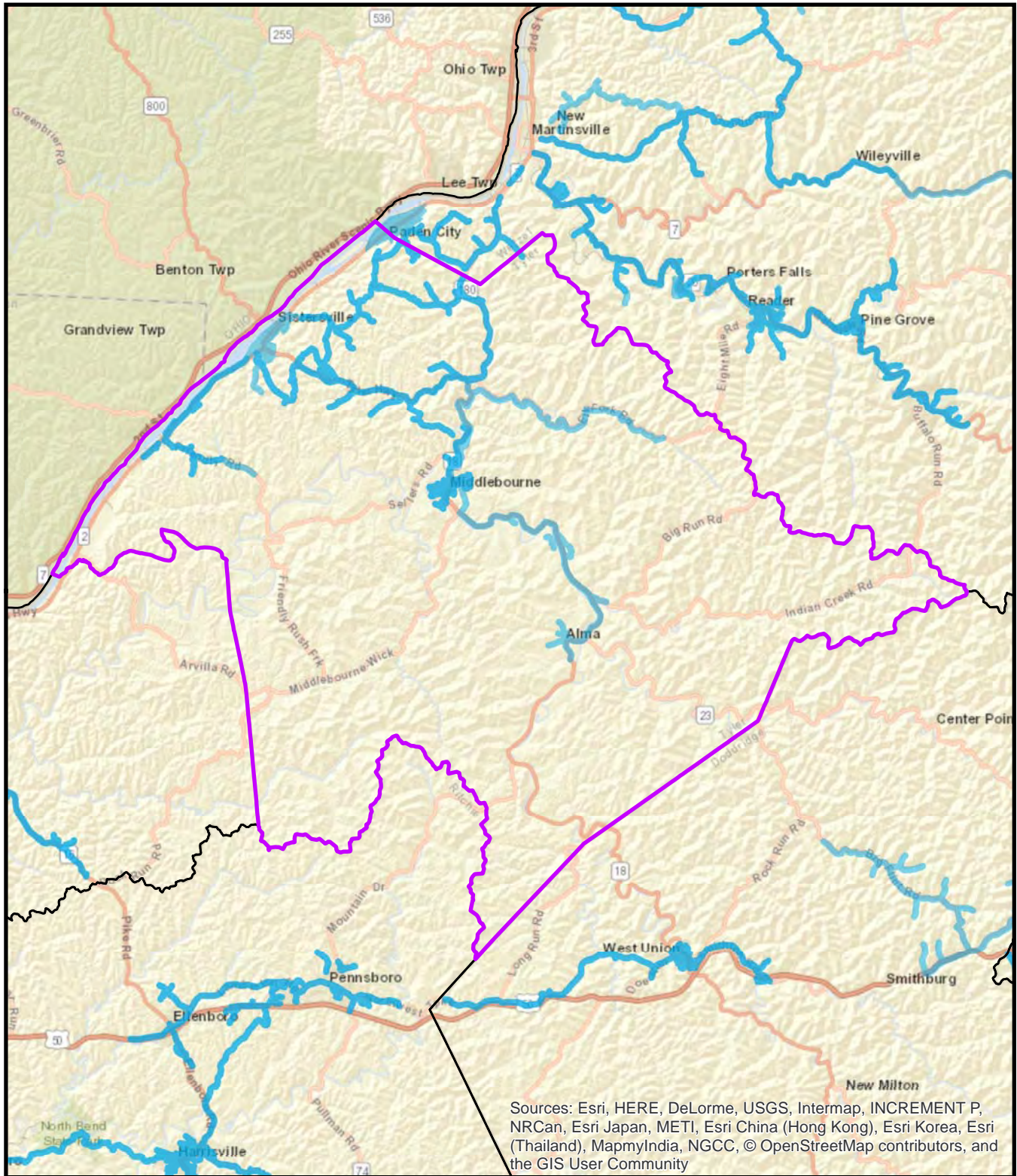
Distribution of Service to Structures



0 1.75 3.5 7 Miles

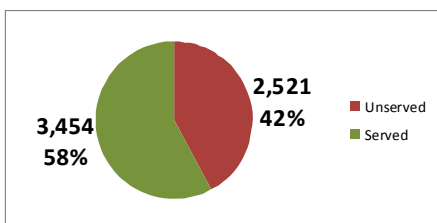
 Served Area

Sewer Service Area Tyler County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

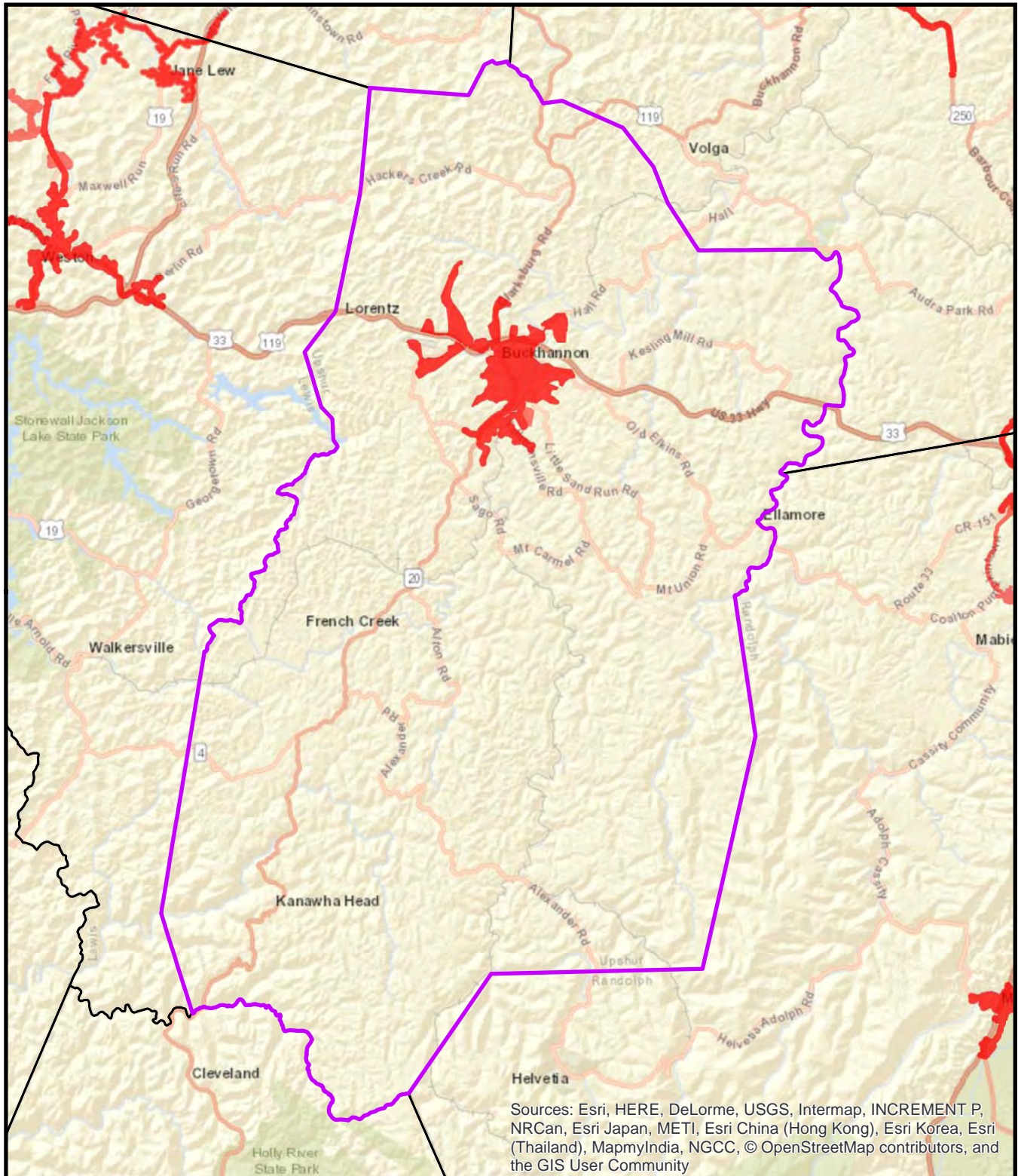
Distribution of Service to Structures



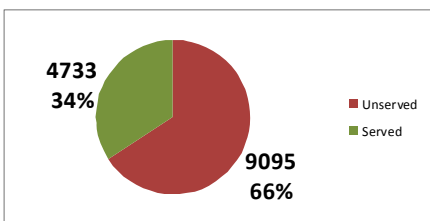
0 1.75 3.5 7 Miles

 Served Area

Water Service Area Tyler County



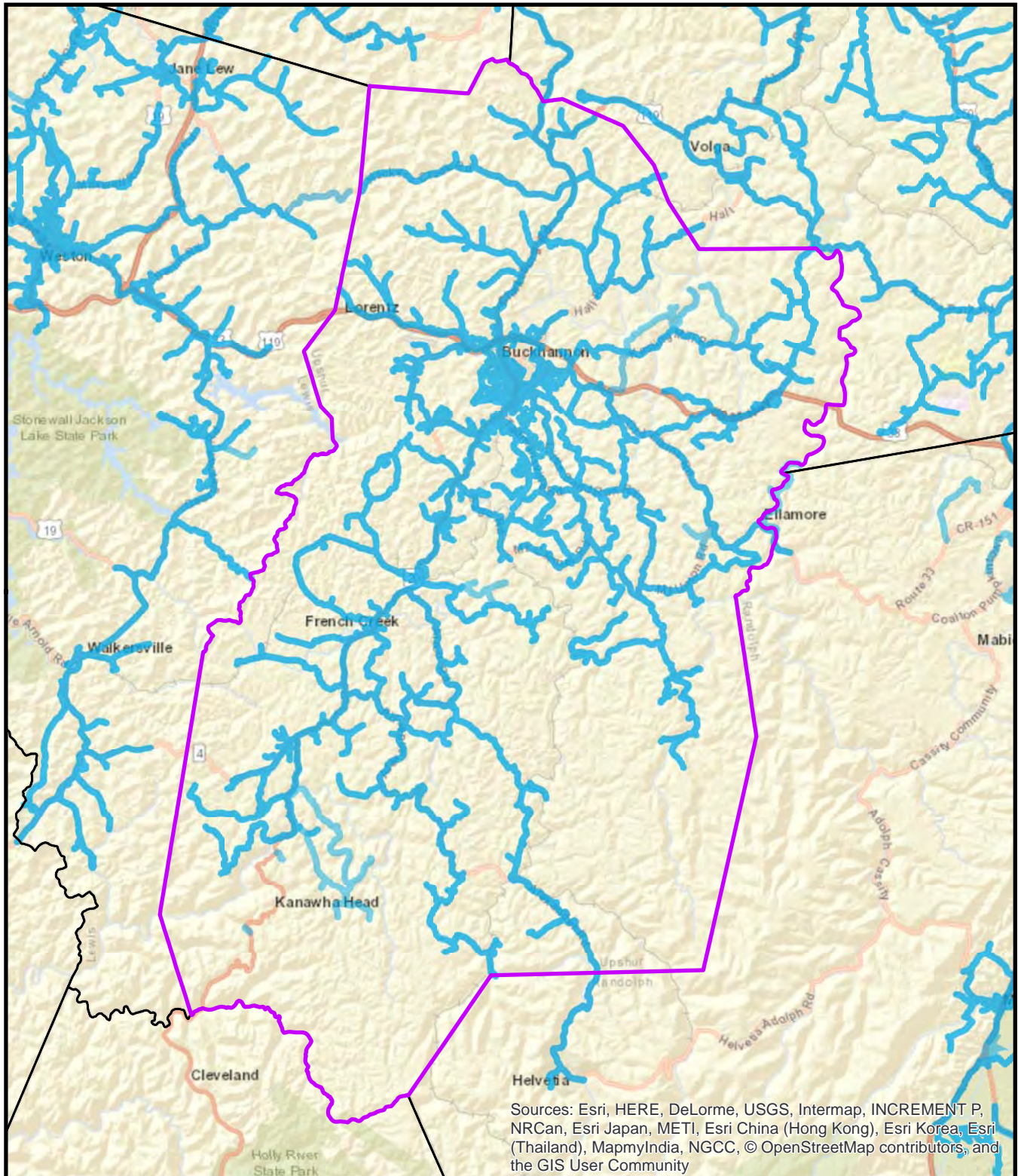
Distribution of Service to Structures



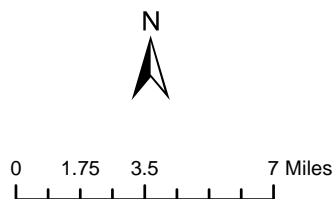
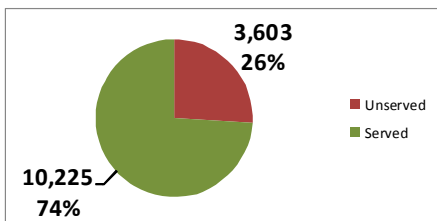
0 1.75 3.5 7 Miles

 Served Area

Sewer Service Area Upshur County

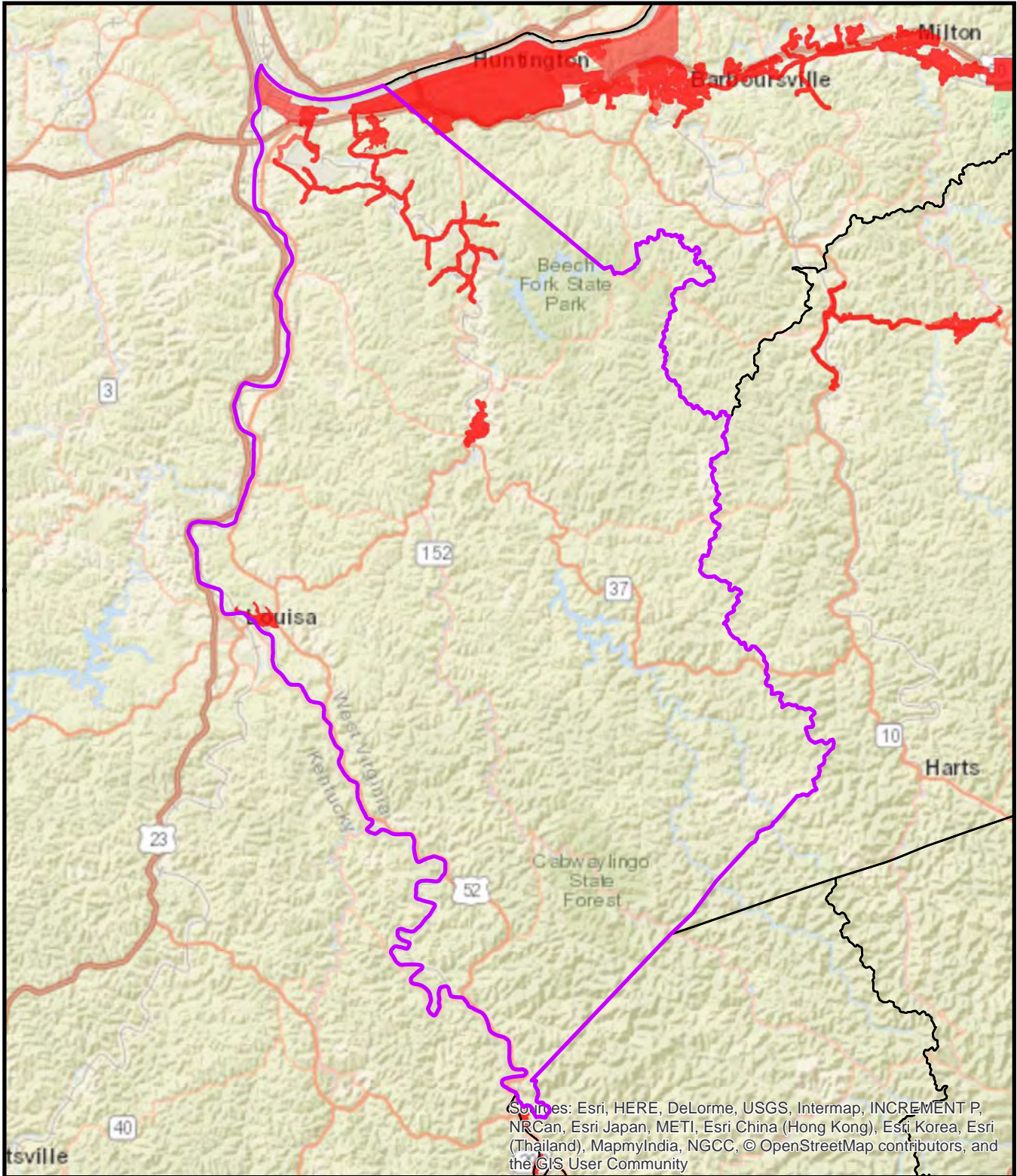


Distribution of Service to Structures



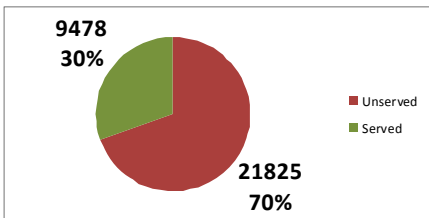
 Served Area

Water Service Area Upshur County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures

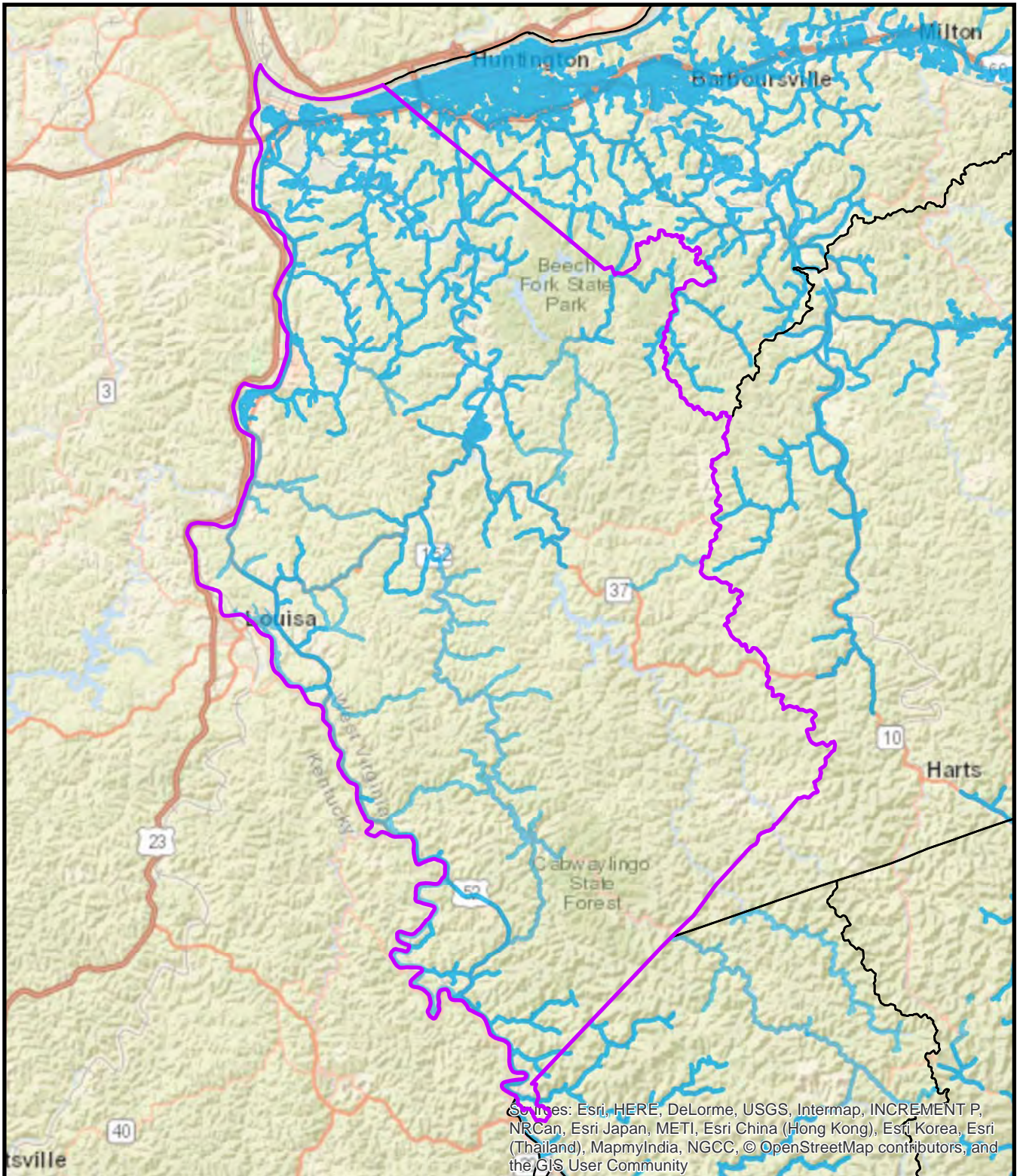


0 2.25 4.5 9 Miles

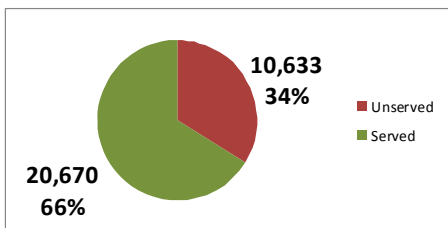
Served Area

Sewer Service Area Wayne County





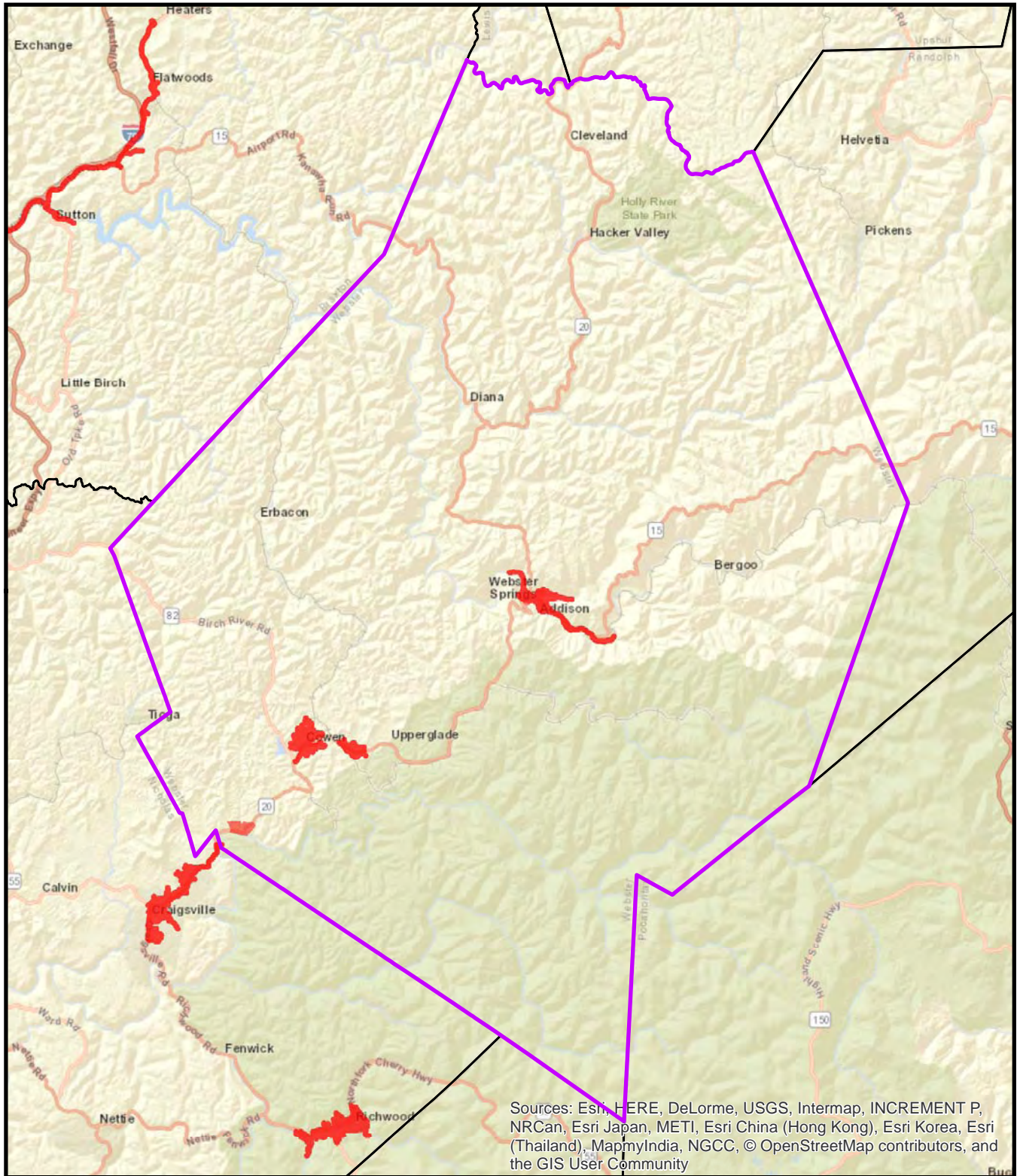
Distribution of Service to Structures



0 2.25 4.5 9 Miles

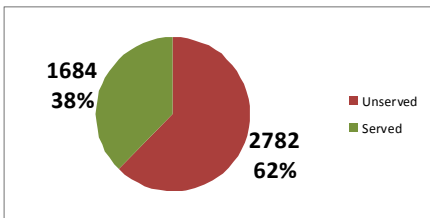
 Served Area

Water Service Area Wayne County



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures

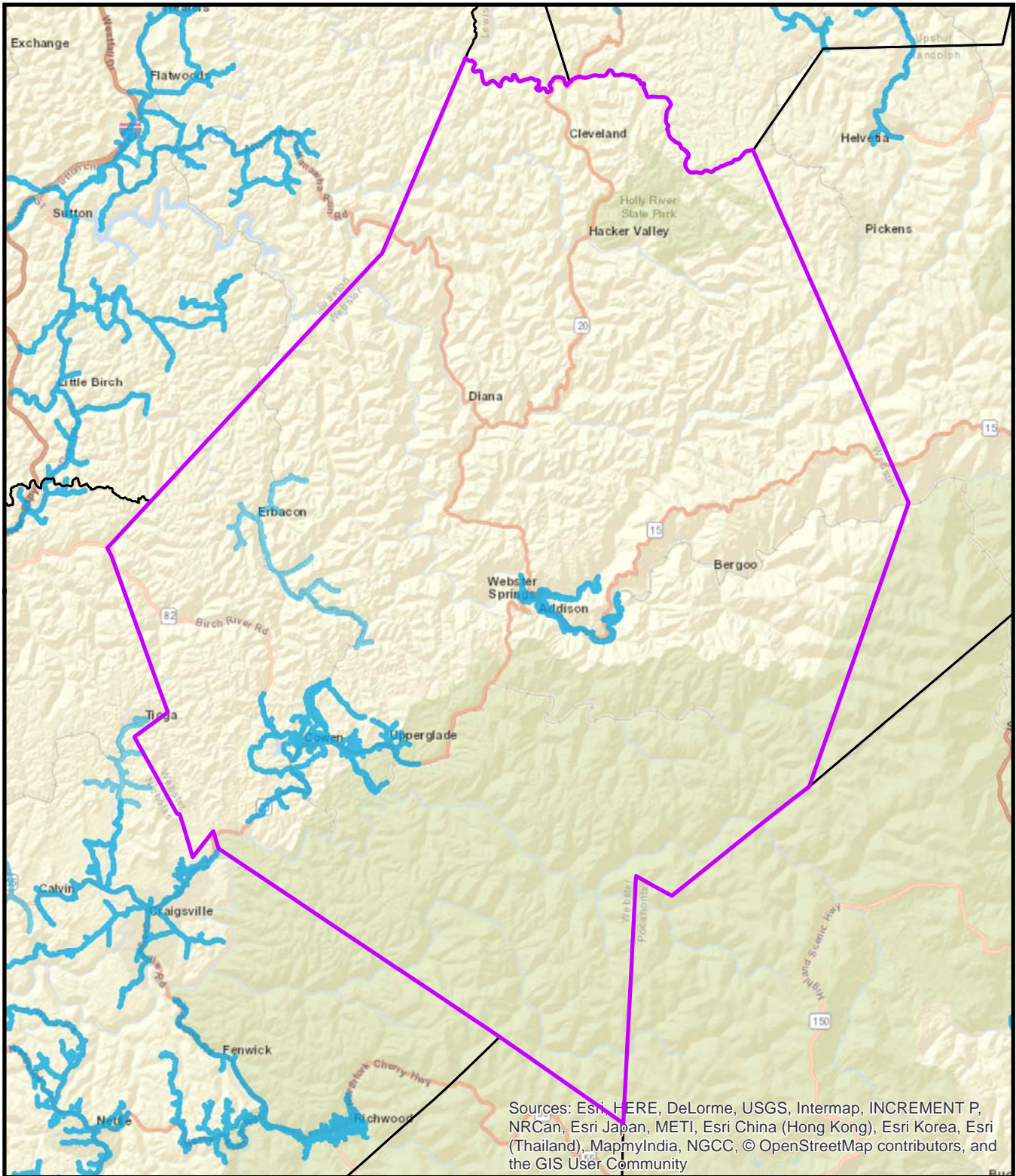


0 2 4 8 Miles

Served Area

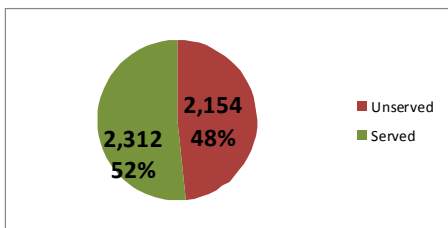
Sewer Service Area Webster County





Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

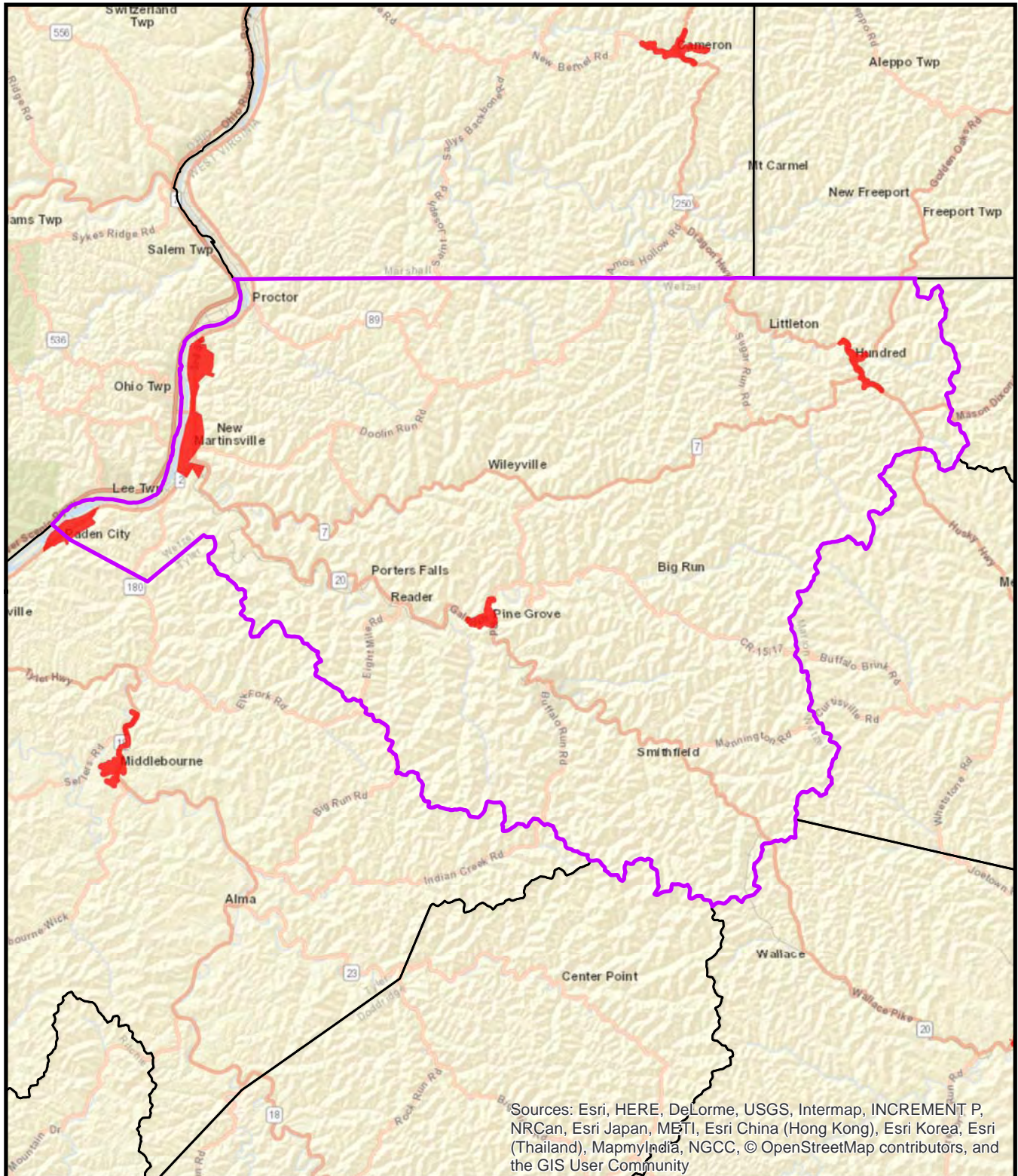
Distribution of Service to Structures



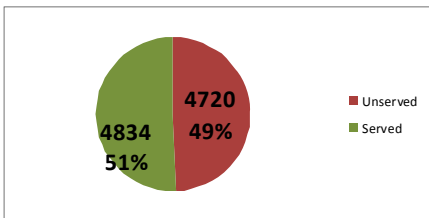
0 2 4 8 Miles

 Served Area

Water Service Area Webster County



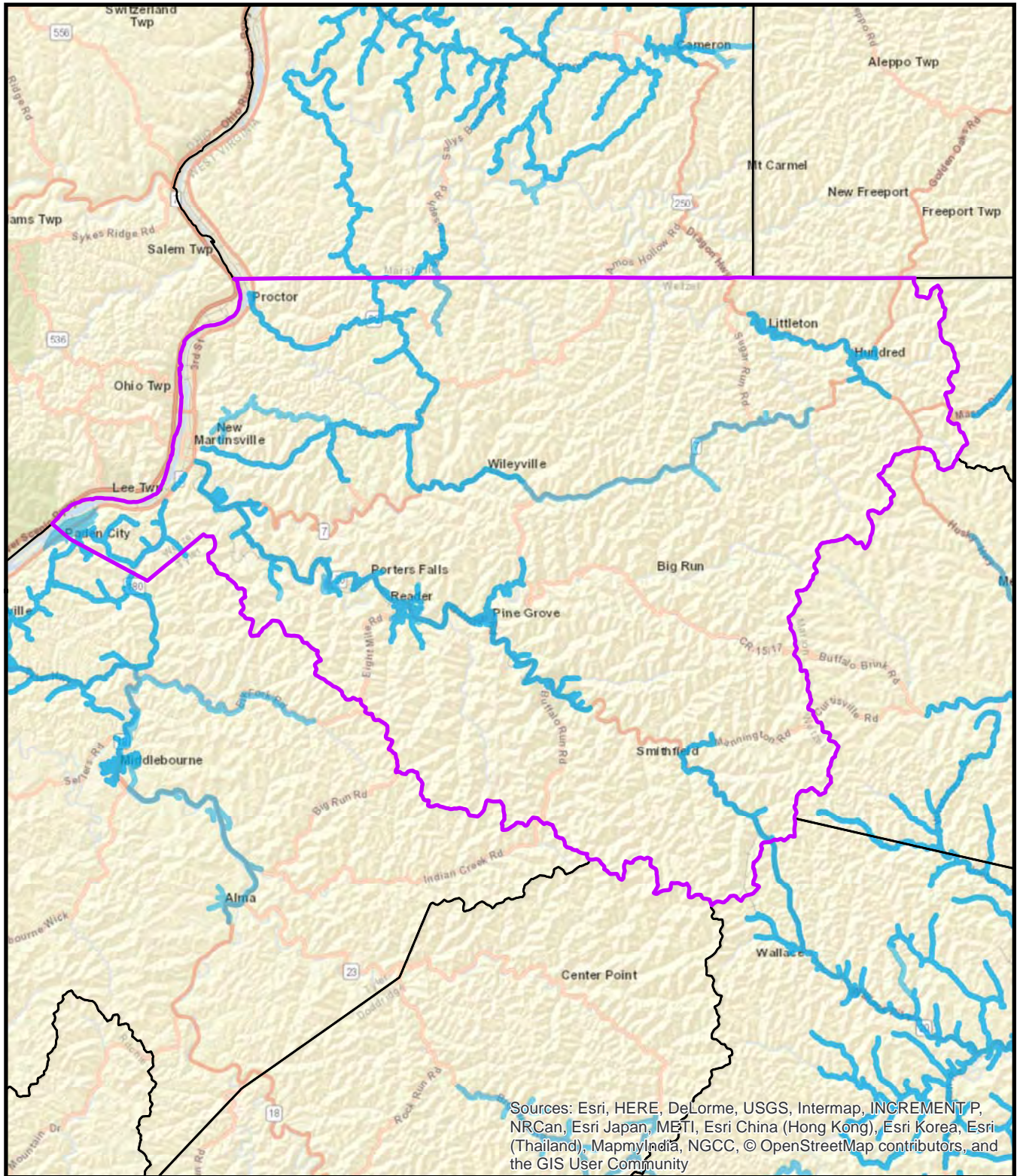
Distribution of Service to Structures



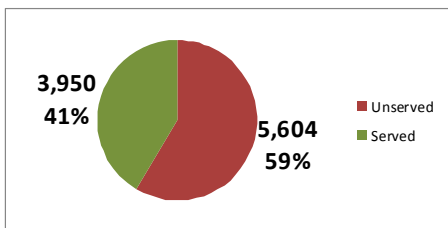
0 2 4 8 Miles

Served Area

Sewer Service Area Wetzel County



Distribution of Service to Structures

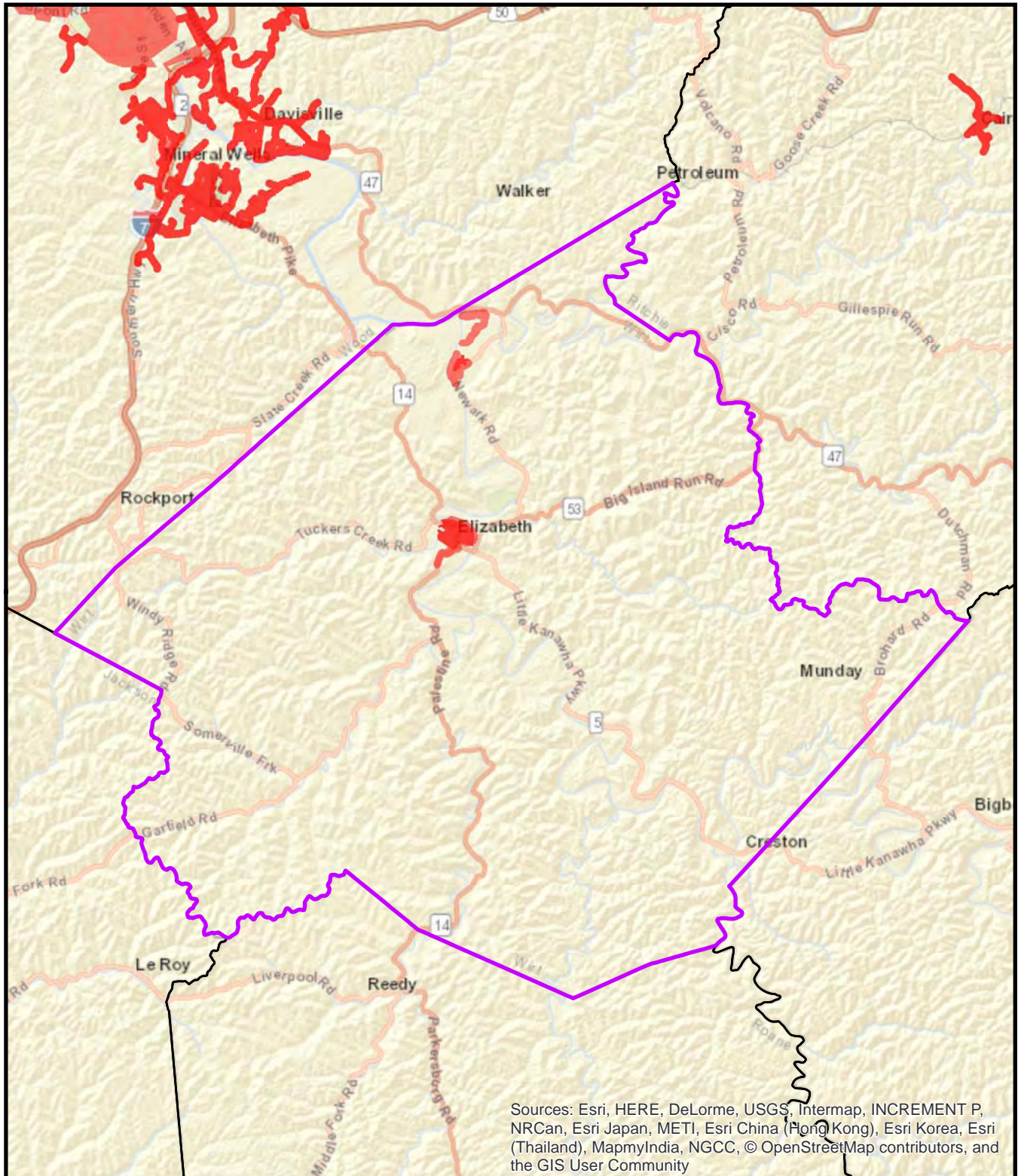


0 2 4 8 Miles

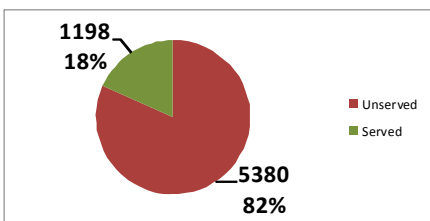
 Served Area

Water Service Area Wetzel County





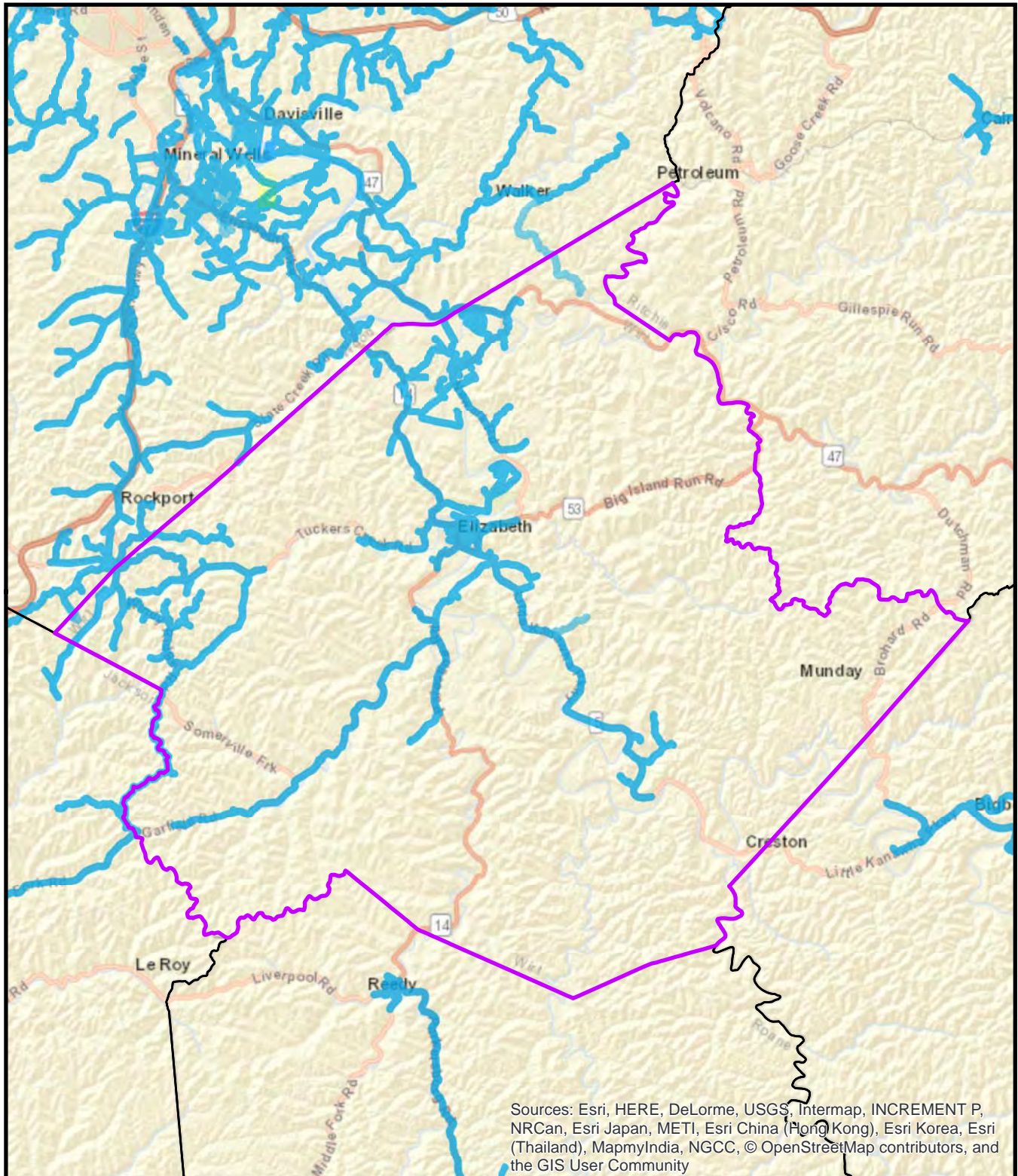
Distribution of Service to Structures



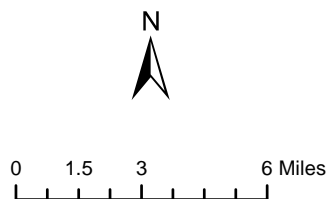
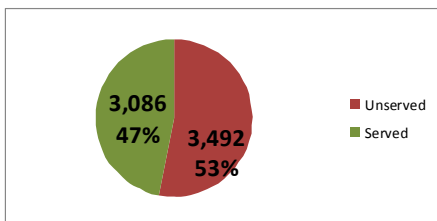
0 1.5 3 6 Miles

Served Area

Sewer Service Area Wirt County

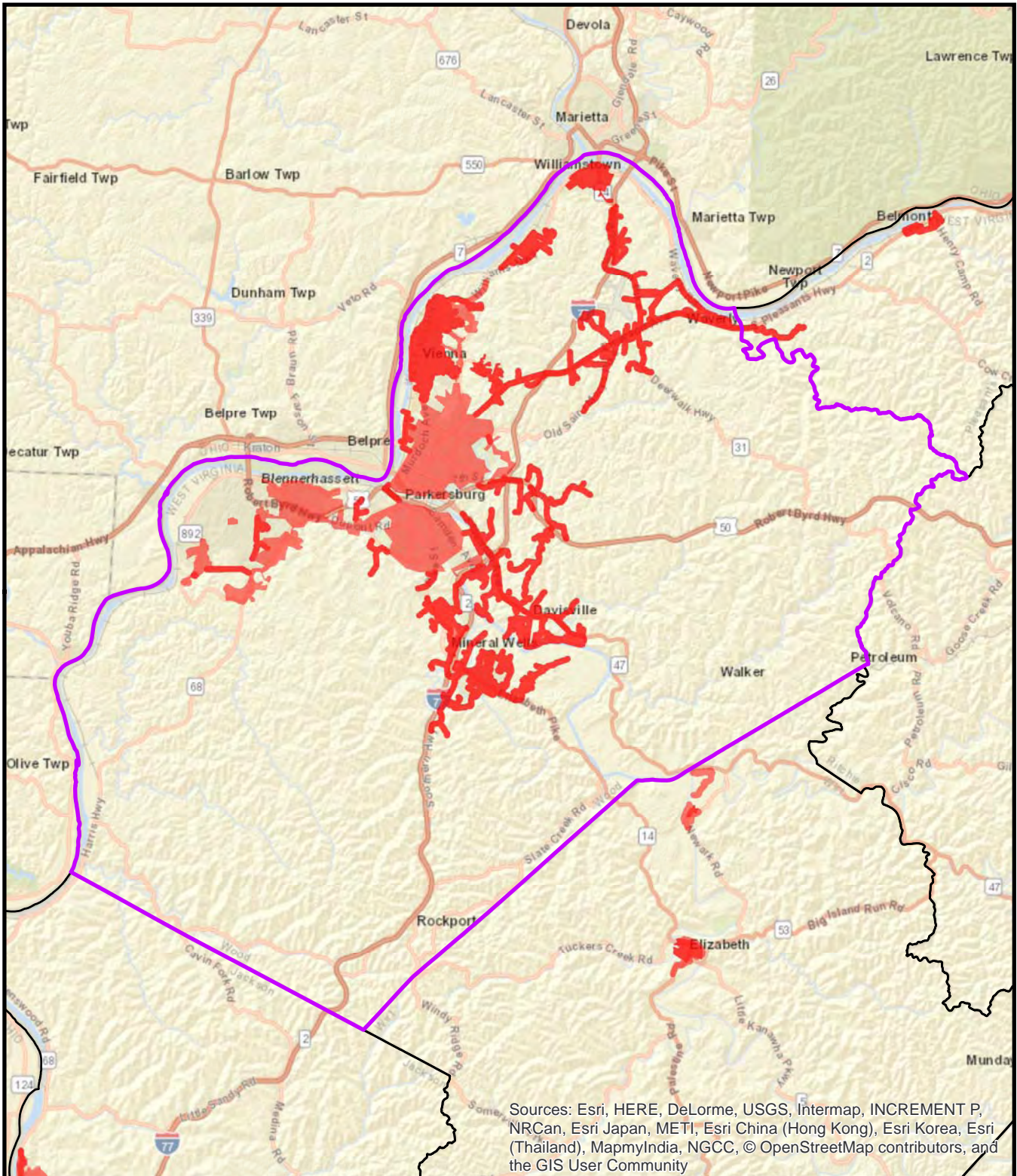


Distribution of Service to Structures

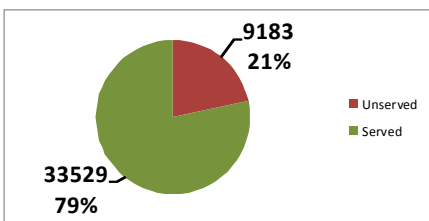


 Served Area

Water Service Area Wirt County



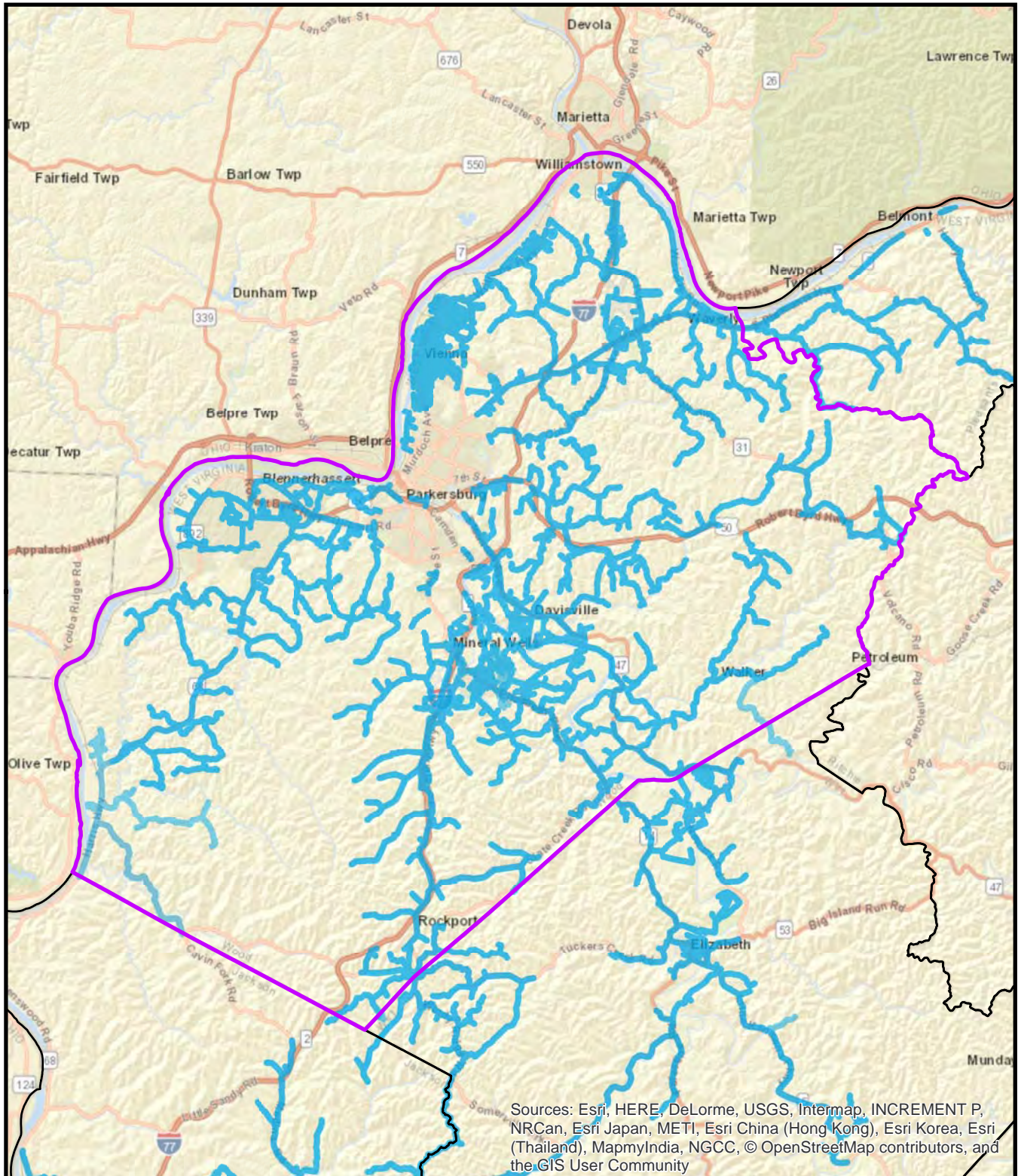
Distribution of Service to Structures



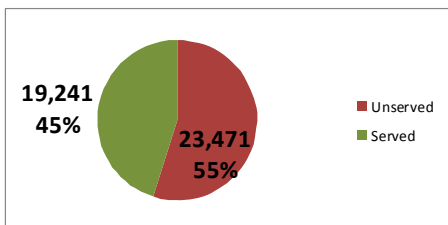
0 1.75 3.5 7 Miles

Served Area

Sewer Service Area Wood County



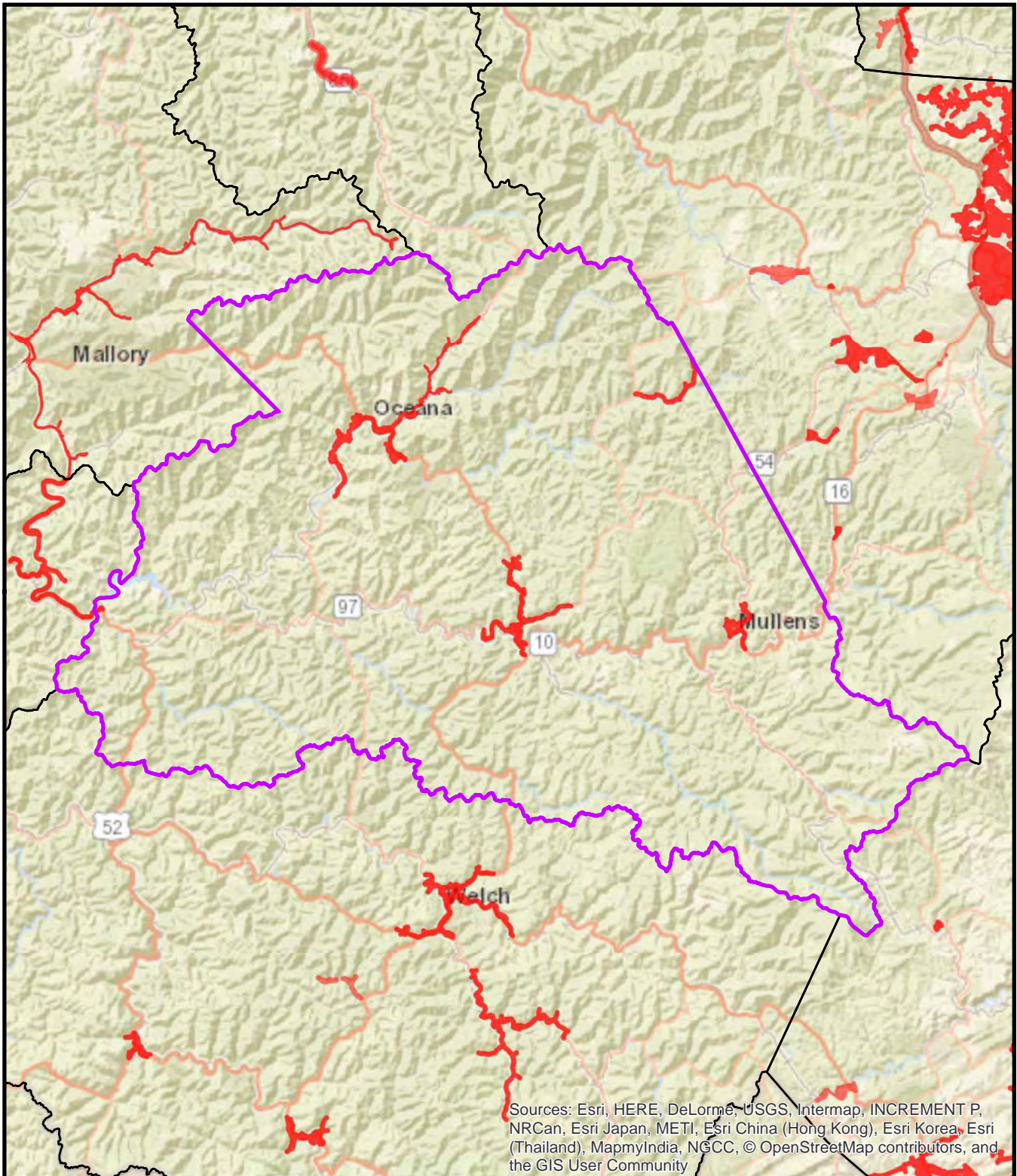
Distribution of Service to Structures



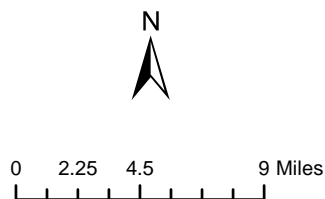
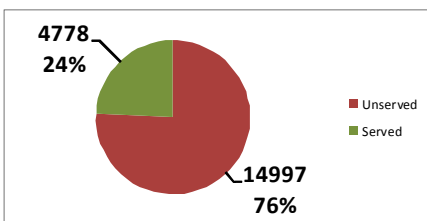
0 1.75 3.5 7 Miles

 Served Area

Water Service Area Wood County

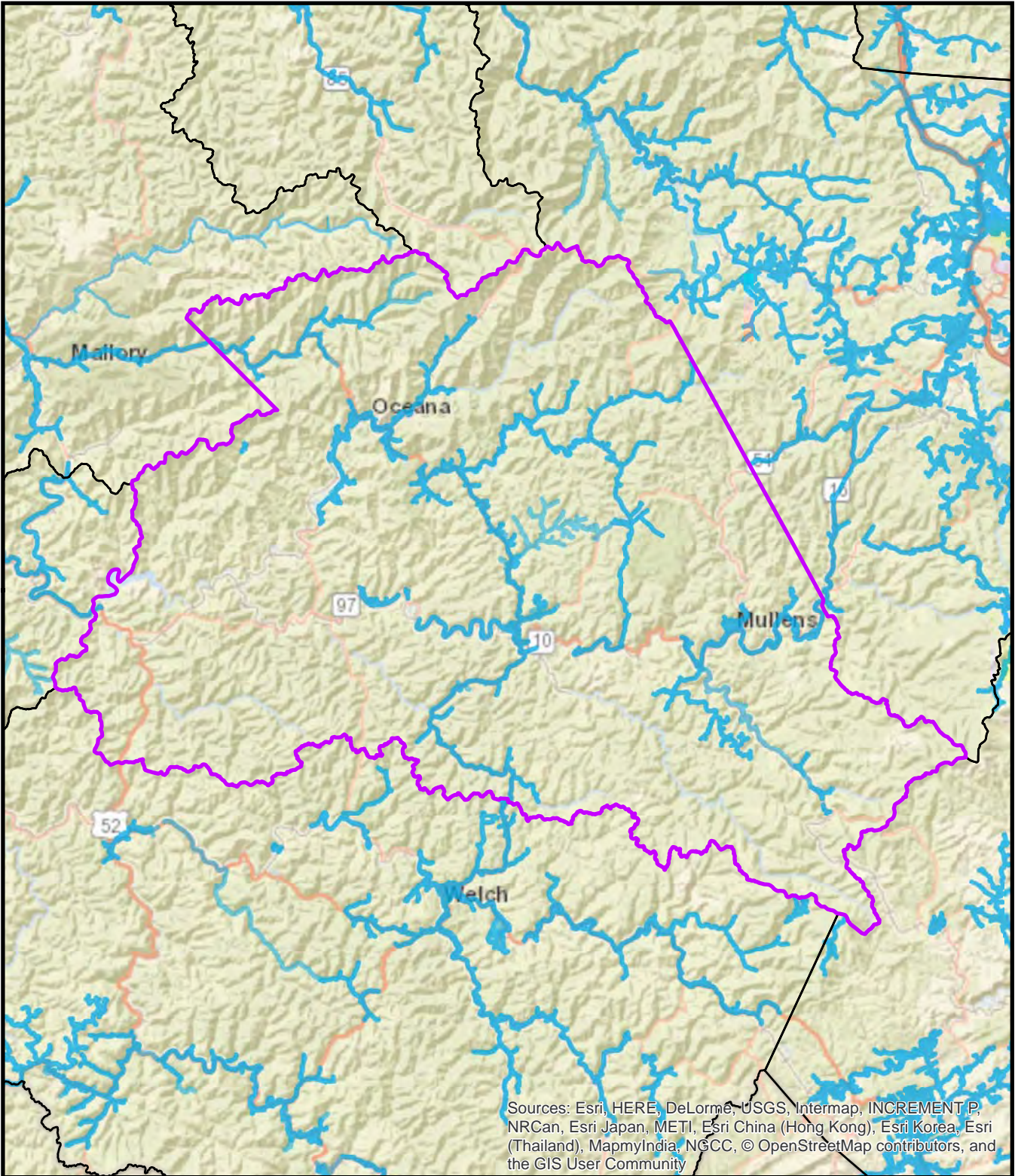


Distribution of Service to Structures

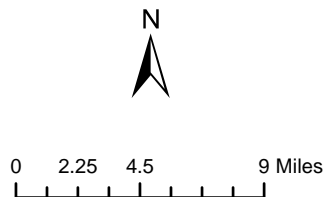
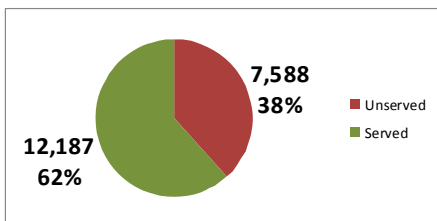


 Served Area

Sewer Service Area Wyoming County



Distribution of Service to Structures



 Served Area

Water Service Area Wyoming County