

Planning Commission Report to the Board of County Commissioners

Fall 2009 Amendment Carroll County Master Plan for Water and Sewerage

**Re: Robert Allen Property
- Sewer -**

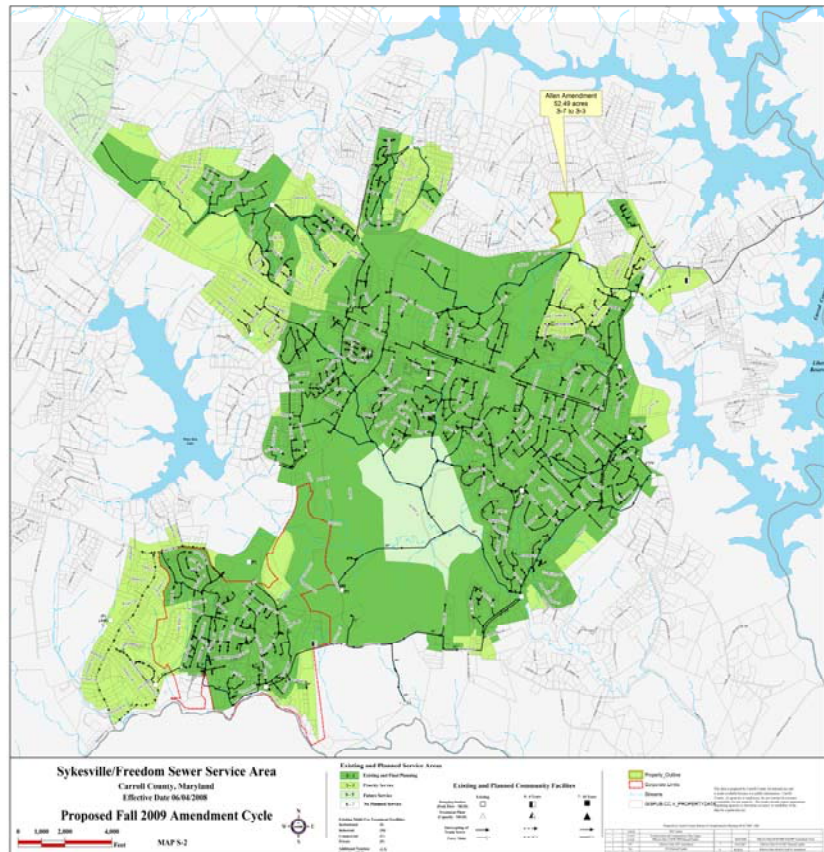
This request would amend the September 2007 *Carroll County Master Plan for Water and Sewerage* and any subsequent amendments prior to this request. The request detailed below pertains to changes to the Freedom sewer service area and associated maps and tables.

Request

1. Add the 52.49 acre parcel to the Priority Planning (S-3) category on the Freedom Area Sewer Service Area. It is currently in the No Planned Service Area (S-7).
2. Revise Table 6 in the plan document text to reflect revised population and demand figures for the Priority and Future Sewer Service Areas as a result of these changes.

Location

- The parcel of land is located in the 5th election district at the intersection of Bennett Road and Oklahoma Road. It currently can be accessed off of Bandy Avenue in Morgan Estates or Mycroft Street in Sherlock Holmes Estates. It is located in the Freedom Community Planning Area.



Background Information

The Allen property currently is zoned R-40,000 and is used for agricultural purposes. It is occupied by a house as well. The 52.49 acre property is surrounded by R-40,000 zoning to the north and west and R-20,000 and Conservation zoning to the south and east. For the most part, the immediate surrounding area is developed as residential subdivisions, though some larger parcels in the vicinity remain undeveloped. Most notably, the Morgan Estates and Sherlock Holmes subdivisions adjoin the property to the north and west. A planned major street is delineated in the *2001 Freedom Community Comprehensive Plan* that would connect Bandy Avenue and Mycroft Street through the subject property.

For the most part, the entire eastern half of the property is wooded. This area contains isolated areas of steep slopes and several stream branches. These streams join a larger stream located in the Conservation zoned land just south of the property. The subject property lies within the watershed of Liberty Reservoir, and is situated less than one mile from the reservoir pool area.

The subject property is located in the Priority Water Service category. The surrounding subdivision homes are in the Existing/Final Planning Water Service category and currently are served by public water. The subject property and the surrounding subdivision homes are all in the No Planned Sewer Service category and are served by private septic systems.

Based on the zoning of this property, the Buildable Land Inventory estimates that there are 49 potential buildable lots. However, development potential is significantly constrained due to a variety of environmental features on site that limit areas suitable for septic systems. In April 2009, several preliminary tests were performed and observed by the Carroll County Health Department. The results of the preliminary tests indicated that conditions on site may require that a variety of septic disposal options be explored. This would likely affect the ultimate lot yield that could be realized.

To calculate estimated sewer demand for the property, the applicant used a multiplier (provided by the County as part of the Water and Sewer Amendment Application) of .7 lots per acre in the R-40,000 zoning district. According to this multiplier, there are 36 potential lots that could be built on this site. Based on that number, the total sewer demand for the property would be 9,000 gpd. Based on the 49 potential lots estimated by the Buildable Land Inventory, the total sewer demand for this property would be 12,250 gpd.

Based on the preliminary tests, the property would most likely need to be served by public sewer in order to be developed at a density that approaches what would be expected in the R-40,000 zoning district.

The existing sewer main is located in the vicinity of Bennett Road, directly to the south of the property. According to the applicant, Morgan Estates and Sherlock Holmes Estates subdivisions have experienced failing septic systems.

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The requested amendment would add the subject property to the Priority Sewer Service Area on the Freedom Sewer Service Area map. Table 6 of the 2007 *Master Plan for Water and Sewerage* also would be modified to reflect the population and demand adjustments for the Priority and Future service projections. The map and table can be found at the end of this report.

Agency Comments

The Carroll County Health Department submitted the following comments:

“In the background information included with the amendment packet for the Robert Allen project, it is stated that only one out of 28 percolation tests performed on this property could be considered as passing. The statement is misleading in that the reason for excavating this one “passing” test and the other 27 tests on April 29 and May 1, 2009, was only to determine water table levels during the time of year when water tables could be expected to be at their highest. The data acquired from this exercise would be used to set restrictions for testing outside of wet weather conditions.

While our office does not object to the proposed amendment and agrees that there is value in protecting environmentally sensitive areas by clustering development on smaller lots served by public sewerage systems, we thought it appropriate to make the above points of clarification. Our office can only comment on the suitability of soils for the installation of septic systems, and presently there is insufficient data to conclude how many lots this property might accommodate or in what configuration.”

The Carroll County Department of Public Works did not have any comments.

Baltimore Reservoir Watershed Management Program (Reservoir Technical Group - RTG) submitted the following comments (excerpted):

“The proposed action by the County (i.e., changing the sewer service category of the subject property in the *Master Plan* and subsequently providing access to public sewers), strictly speaking, does not contradict any of the “commitments” in the *2005 Action Strategy for the Reservoir Watersheds* that pertain to current land-use designations and possible changes to those designations. (See *Action Strategy* item 3.6.4: “Baltimore and Carroll Counties will protect the reservoir watersheds by limiting insofar as possible additional urban development zoning within the reservoir watersheds.”)

The property already is zoned R-40,000 (allows one-acre residential lots), which is an “urban” land use under the terms of the *2005 Action Strategy*. Therefore, developing the tract with one-acre lots for up to 49 houses -- or alternatively, clustering 49 units on a portion of the property (with enhanced stormwater controls) and leaving the balance of the property in permanent community open space -- strictly speaking, is not in violation of this particular *Action Strategy* commitment. A change in zoning is not required.

Nevertheless, members of the RTG feel that the proposed “infill” of suburban residential land uses on the Allen property can be potentially harmful to Liberty Reservoir (less than one mile away), even if it is done by means of public water and sewer. This is primarily because of the potential for adverse nonpoint source (runoff) effects after development (in the absence of reliable mitigation measures) and also because of the possible removal of some of the existing wooded areas during development.

Therefore, the members of the RTG recommend that environmentally sensitive portions of the tract should not be built upon, but instead be placed in permanent public (or “community”) open space; that woodlands, streams and steep slopes must be permanently protected when planning the development; and that all reasonable measures must be taken to provide permanent, reliable on-site stormwater management.

Although the Freedom WWTP does not discharge within a reservoir watershed, and thus is not within the purview of the RTG, we note that the Staff Analysis on p.3 of the Amendment states that the wastewater plant already is “overcommitted” when all properties located within its current, priority and future service areas in the Carroll County water and sewerage *Master Plan* are allowed for. To these future (already planned) sewage flows to the wastewater plant, the 9,000 – 12,250 gpd that would come from the developed Allen property would be added, making the future situation at the Freedom WWTP marginally worse. This issue needs to be addressed in the County’s forthcoming Water Resources Element of its Comprehensive Plan.”

Analysis

The property is zoned R-40,000 and lies within the Freedom Community Planning Area, one of the county’s designated growth areas. It is surrounded by residential subdivisions of roughly ½-acre to 1-acre lots.

The *Carroll County Master Plan for Water and Sewerage* states that the “County is in support of extending community sewer service to areas designated low density residential and zoned Residential “R-40,000” which are planned for cluster development. Extension of the sewer service will include the small cluster lots only and will exclude the open space portion of the development. Providing community sewer service in this manner will promote environmental protection of the Liberty Reservoir with increased open space areas while maintaining high levels of efficiency and cost-effectiveness to the public sewerage system.”

It is likely that without public sewer service the property would not be able to develop at densities consistent with the R-40,000 zoning and the development pattern established on surrounding properties. The resulting development pattern would be inconsistent with the vision expressed in the comprehensive plan for the area, and would be inconsistent with the goal of directing growth to the county’s designated growth areas.

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Allowing the property to be developed as a cluster subdivision on public water and sewer would help to achieve the vision of the comprehensive plan and would be consistent with the goals of the Master Plan for Water & Sewerage. It also would allow for the creation of dedicated open space that could effectively protect environmental resources on site. Furthermore, it is possible that public sewer service will need to be made available at some point in the future if septic systems in the area fail.

The Freedom wastewater treatment plant has a permitted capacity of 3.500 mgd. The demand for sewer to serve existing served areas, infill development potential, and all properties in the Priority and Future service categories is estimated to be 3.731 mgd. This results in a shortfall of .231 mgd capacity, to which the estimated .009-.012 mgd demand from the subject property would need to be added. The County's Water Resources Element will be evaluating general adjustments that may need to be made to the comprehensive plan and service areas to balance demand with capacity.

Carroll County Planning Commission Certification

At its October 20, 2009 meeting, the Carroll County Planning & Zoning Commission approved the amendment and certified it as consistent with the Freedom Community Comprehensive Plan. However, the Planning Commission recommendation to the Board of County Commissioners is based on the condition that the property owner agrees to use clustering while developing the property.

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Table 6
Projected Sewerage Demands and Planned Capacity*

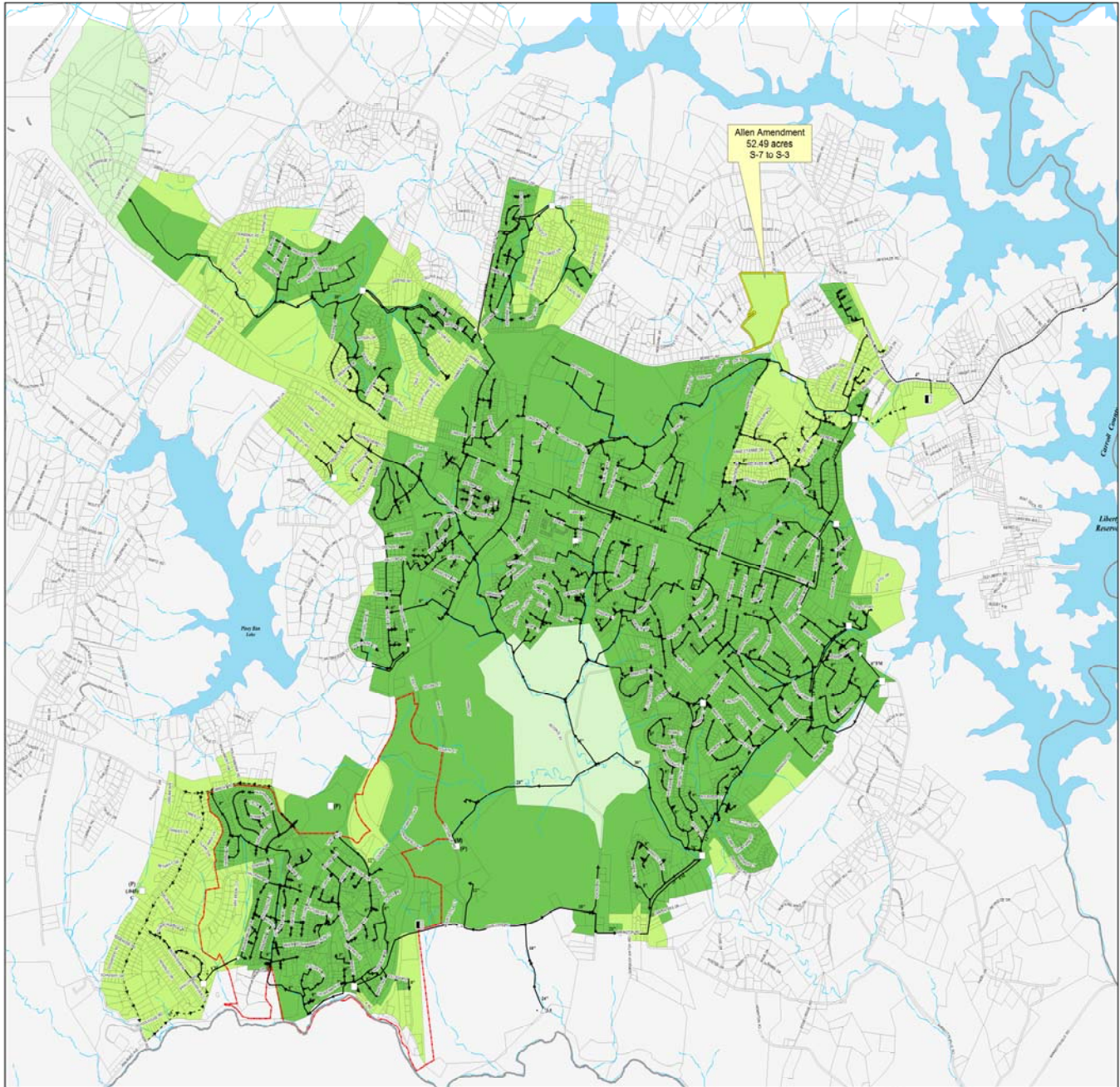
Present Year						
Service Area	Residential Population Served ¹	GPCD	Capacity in Million Gallons per Day (mgd)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Mount Airy (Map S-1)	8,631	83	0.563	0.150	0.713	1.200
Sykesville/Freedom (Map S-2)	19,051	81	1.552	0.826	2.378	3.500
Manchester (Map S-3)	3,714	59	0.219	0.019	0.238	0.500
Hampstead (Map S-4)**	5,520	86	0.474	0.178	0.652	0.900
Westminster (Map S-5)	24,560	115	2.826	1.423	4.249	5.000
Union Bridge (Map S-6)	1,049	103	0.108	0.029	0.137	0.200
New Windsor (Map S-7)	1,114	67	0.075	0.022	0.097	0.094
Taneytown (Map S-8)	6,200	106	0.660	0.165	0.825	1.100
Priority Planning (0-6 Year)						
Service Area	Residential Population Served ¹	GPCD	Capacity in Million Gallons per Day (mgd)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Mount Airy (Map S-1)	12,203	87	0.873	0.352	1.225	1.348
Sykesville/Freedom (Map S-2)	33,757	79	2.677	0.835	3.512	3.500
Manchester (Map S-3)	5,311	65	0.342	0.093	0.435	0.500
Hampstead (Map S-4)**	7,997	75	0.480	0.365	0.836	0.900
Westminster (Map S-5)	41,728	83	4.258	1.353	5.611	5.700
Union Bridge (Map S-6)	5,260	80	0.447	0.184	0.631	0.800
New Windsor (Map S-7)	1,913	80	0.139	0.047	0.186	0.190
Taneytown (Map S-8)	13,439	78	1.222	0.513	1.736	1.740
Future Planning (7-10 Year)						
Service Area	Residential Population Served ¹	GPCD	Capacity in Million Gallons per Day (mgd)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Mount Airy (Map S-1)	16,635	74	1.202	0.430	1.632	1.650
Sykesville/Freedom (Map S-2)	33,868	79	2.686	1.415	4.101	4.100
Manchester (Map S-3)	5,794	66	0.379	0.093	0.472	0.500
Hampstead (Map S-4)**	8,558	75	0.480	0.365	0.836	0.900
Westminster (Map S-5)	44,668	82	4.499	1.408	5.907	6.000
Union Bridge (Map S-6)	5,366	80	0.455	0.414	0.869	0.870
New Windsor (Map S-7)	2,818	80	0.212	0.156	0.368	0.370
Taneytown (Map S-8)	14,257	78	1.286	0.566	1.852	1.860

¹ Present Year Population figures include only those people living in Existing/Final Planning Area
² Priority Year Population figures assume total build out of Existing & Priority Service Areas
³ Future Year Population figures assume total build out of Existing, Priority, & Future Service Areas

GPCD – Gallons per Capita per Day

*See Appendix 3 Method for Projecting Water Supply and Sewerage Demands
**Data based on the adopted 2004 Hampstead Community Comprehensive Plan

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Sykesville/Freedom Sewer Service Area
Carroll County, Maryland
Effective Date 06/04/2008

Proposed Fall 2009 Amendment Cycle



MAP S-2



Existing and Planned Service Areas

- S-1 Existing and Final Planning
- S-2 Priority Service
- S-5 Future Service
- S-7 No Planned Service

- Existing Multi-Use Treatment Facilities
- Residential (R)
 - Industrial (I)
 - Commercial (C)
 - Private (P)
 - Municipal/Industrial Capacity (M/I)

Existing and Planned Community Facilities

- Proposed Station (P) or Flow (M/I)
- Treatment Plant (T) or Capacity (M/I)
- Existing
- Intercepting of Trunk Sewer
- Force Main
- 0 - 4 Years
- 5 - 10 Years
- 11 - 18 Years

- Property Outline
- Corporate Limits
- Streets
- GIS/SPUB CC_V_PROPERTY.DAT

This data is provided by Carroll County for internal use and is not a public utility. Carroll County is not responsible for any errors or omissions in this data. The user should verify the accuracy of the data for their specific use.

Prepared by Carroll County Bureau of Comprehensive Planning 09/12/2009 (09)

NO.	DATE	BY	DESCRIPTION
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