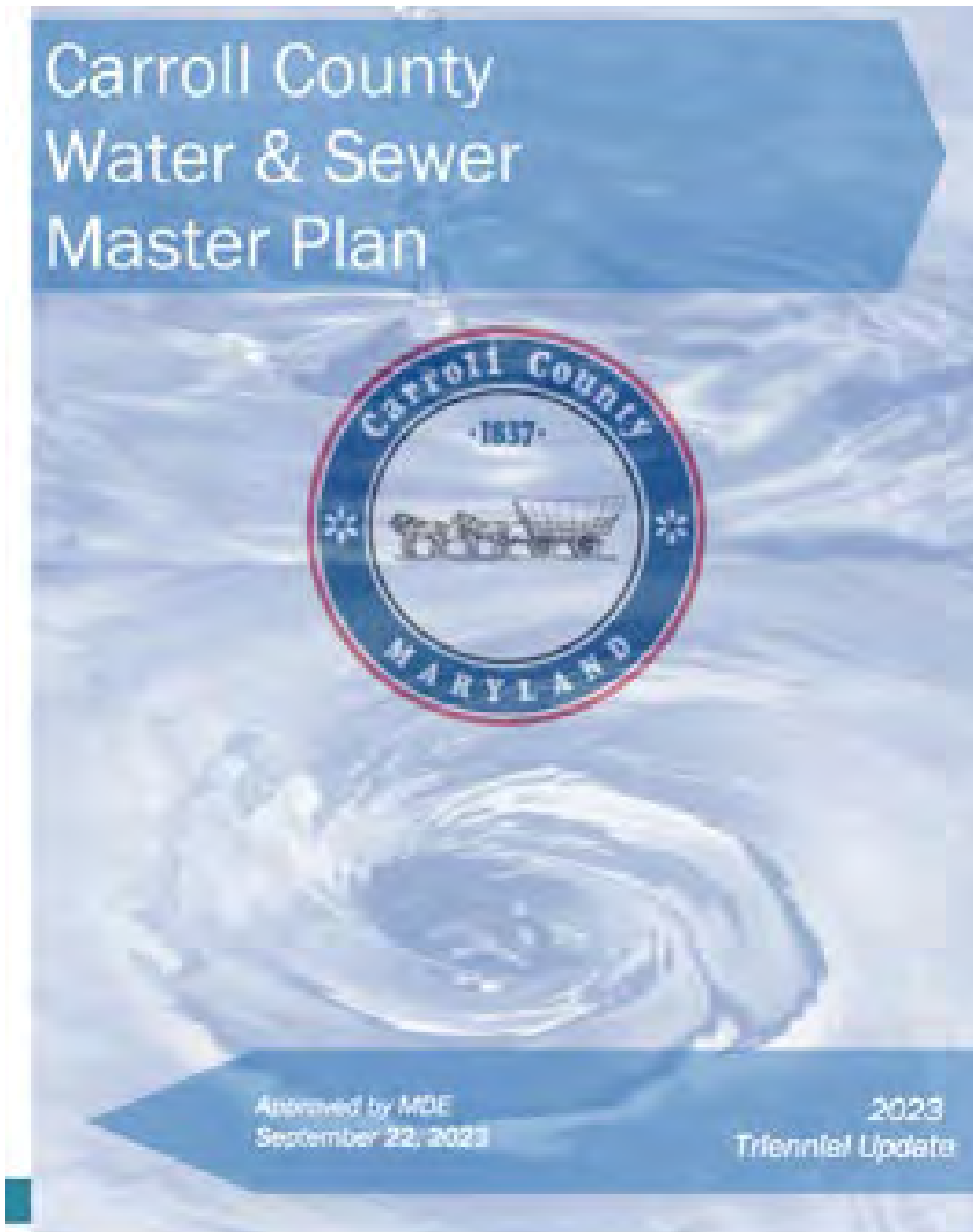


2025 Spring Amendment
2023 Carroll County Water & Sewer Master Plan



Contents:

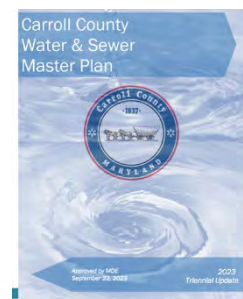
1. Union Bridge Water and Sewer Amendment Staff Report and Text Edits
2. New Windsor Water and Sewer Amendment Staff Report and Text Edits
3. Hampstead Water and Sewer Amendment Staff Report
4. Taneytown Sewer Amendment Staff Report

2023 Water and Sewer Master Plan – Spring 2025 Amendment Staff Report

To: Union Bridge Planning and Zoning Comm.
From: Andrew R. Gray, AICP, Planner
Meeting Date: April 17, 2025
System Change: Union Bridge Water and Sewer Amendment No. 1
Requestor: Town of Union Bridge
GPD Transferred: See descriptions below
Current Service Area: See descriptions below
Proposed Service Area: See descriptions below
Request Summary: To change the Water and Sewer Maps to coincide with the new Town Plan update.
Requested Action: **Approve**



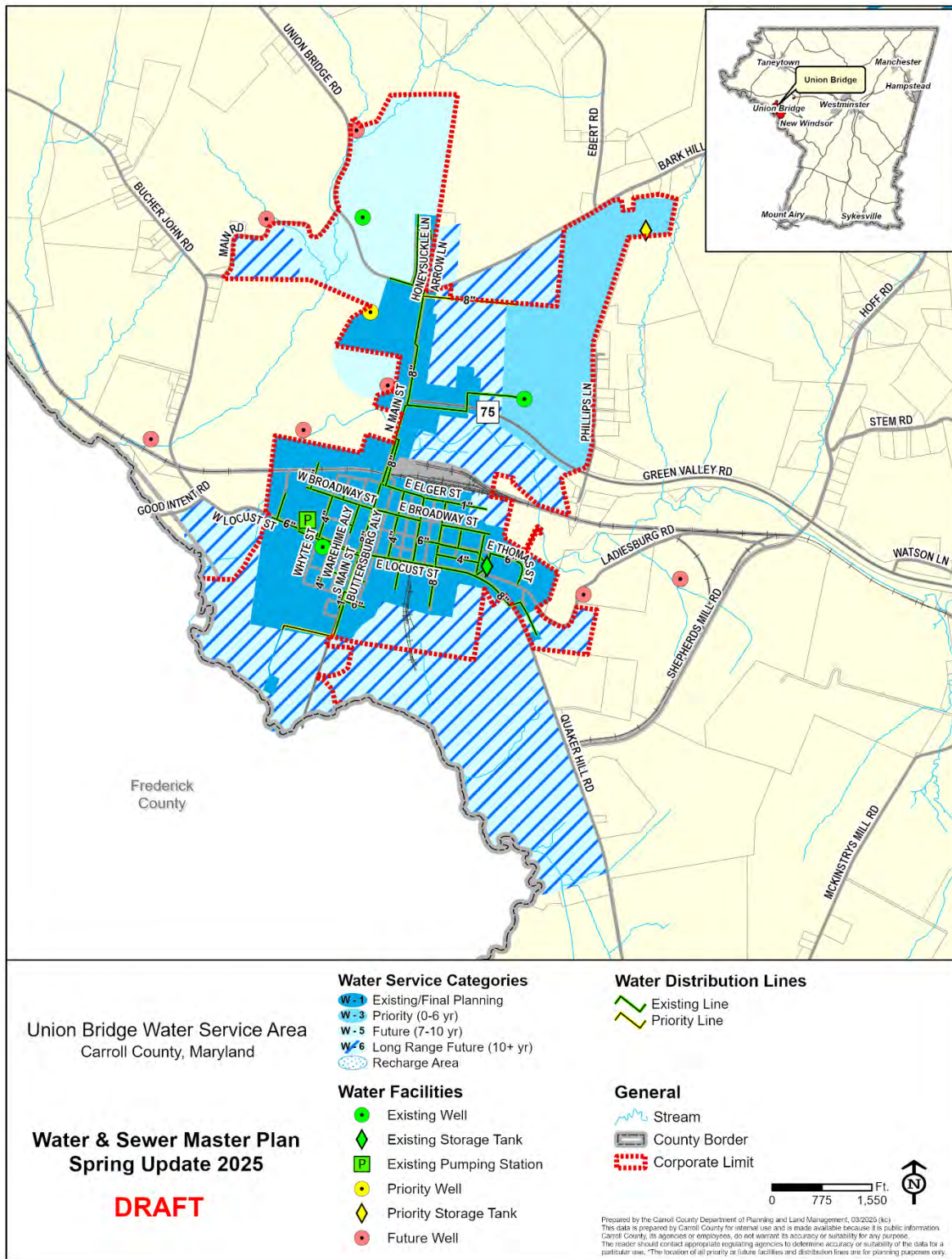
**Bureau of
Comprehensive Planning**



Summary

On July 29, 2024, the Carroll County Bureau of Comprehensive Planning received a request from the Town of Union Bridge (Town) to amend the Water and Sewer Maps to correspond with the updated revision of the *2024 Town Plan Review* of the *2008 Union Bridge & Environs Community Comprehensive Plan* (Town Plan). After review, it was decided to wait until the Town Plan was approved by the Town Mayor and Council so the Water and Sewer Master Plan Amendments would be consistent with the updated Town Plan, as approved in 2025. Town and County Staff have been working diligently to bring the attached revised calculations and map for final review.

Maps



Comprehensive and Master Plan Goals

The Town Plan mentions “*The Town of Union Bridge Vision and Goals are, as set forth in the 2008 Plan, as amended, and remain the same*”. Staff identified applicable goals that support providing properties with public water and sewer in the Town Plan, as follows:

Chapter 8: Community Facilities, Goal 1

To monitor and address as appropriate the capacity of community facilities before they reach crisis levels.

Chapter 8: Community Facilities, Goal 3

To ensure availability of all needed community facilities within or close to the community.

Chapter 10: Economic Development & Activity, Goal 1

To fund the necessary infrastructure expansion to attract and support the commercial and industrial development needed and desired within the community and to increase the tax base.

The **2014 Carroll County Master Plan, as amended in 2019**, identifies applicable goals that are related to providing properties with public water and sewer as follows:

Chapter 3: Vision Statement & Goals

Promote communication and coordination between and among the County, the municipalities, and state and regional jurisdictions on projects and issues of mutual concern. Encourage the involvement of the community in developing, amending, and implementing the Master Plan.

Chapter 3: Vision Statement & Goals

Protect and enhance the water quality of Carroll County’s rivers, streams, reservoirs, and aquifers; comply with applicable state and federal requirements related to water quality and quantity; and maintain and protect adequate water supplies to serve current and planned development.

Analyzing Changes to Projected Water and Sewer Supply

Union Bridge Water Service Area Map (Map 19):

Union Bridge Sewer Service Area Map (Map 28):

Many changes were made to the Union Bridge Water and Sewer Service Area maps resulting in a recalculation of the entire water and sewer service area. Water calculations were based off current flows of 90,304 GPD (Residential) and 75,696 GPD (Other) for a total of 166,000 GPD. Sewer calculations were based off current flows of 98,192 GPD (Residential) and 82,308 GPD (Other) for a total of 180,500 GPD. For the Priority and Future Water and Sewer Service Areas, the Buildable Land Inventory (BLI) was obtained for the service areas and used for calculations as follows:

Water - BLI				
Service Area	Category	GPD	Units/Acres	Total
Residential				
Existing	Residential	250	136	34,000.00
Priority	Residential	250	183	45,750.00
Future	Residential	250	0	0
Non-Residential				
Existing	Commercial	700	0.6	420.00
Existing	Industrial	800	7.2	5,760.00
Priority	Commercial	700	0	0
Priority	Industrial	800	0	0
Future	Commercial	700	0	0
Future	Industrial	800	0	0

Sewer - BLI				
Service Area	Category	GPD	Units/Acres	Total
Residential				
Existing	Residential	250	155	38,750.00
Priority	Residential	250	190	47,500.00
Future	Residential	250	309	77,250.00
Non-Residential				
Existing	Commercial	700	0.6	420.00
Existing	Industrial	800	6.4	5,120.00
Priority	Commercial	700	0	0
Priority	Industrial	800	0	0
Future	Commercial	700	0	0
Future	Industrial	800	0	0

Factoring in current demand with the BLI Numbers will change Table 15 and Table 32 as follows:

	Table 15					
	Projected Water Supply Demands and Planned Capacity*					
	Present Year					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Triennial	936	52	0.049	0.041	0.090	0.208
Amendment 1	1,025	88	0.090	0.076	0.166	0.208

	Table 15					
	Projected Water Supply Demands and Planned Capacity*					
	Priority Planning (0-6 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Triennial	1,767	74	0.131	0.048	0.179	0.250
Amendment 1	1,551	110	0.170	0.082	0.252	0.208

	Table 15					
	Projected Water Supply Demands and Planned Capacity*					
	Future Capacity (7-10 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Triennial	1,767	74	0.131	0.048	0.179	0.250
Amendment 1	2,310	74	0.170	0.082	0.252	0.208

Please note, after review of information in the Triennial Report, the Planned Capacity numbers were double counted and thus the numbers are 208,000 GPD for Existing, Priority, and Future.

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Present Year					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Triennial	936	47	0.044	0.090	0.134	0.200
Amendment 1	1,023	96	0.098	0.082	0.181	0.200

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Priority Planning (0-6 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Triennial	1,792	71	0.128	0.097	0.225	0.246
Amendment 1	1,589	116	0.184	0.088	0.272	0.246

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Future Planning (7-10 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Triennial	2,767	81	0.224	0.097	0.321	0.315
Amendment 1	2,566	102	0.262	0.088	0.350	0.315

Definitions

Definitions for service area categories can be found on pages 23 and 24 of the 2023 Water and Sewer Master Plan.

Agency Comments

The Bureau of Comprehensive Planning had sent out the staff report and information to the review agencies on the listed dates below, for their preliminary review:

Department of Natural Resources (DNR) – April 17, 2025
Carroll County Health Department (CCHD) – April 17, 2025
Maryland Department of the Environment (MDE) – April 17, 2025
Maryland Department of Planning (MDP) – April 17, 2025
Carroll County Bureau of Utilities (Utilities) – April 17, 2025

Staff Recommendation

County Planning Staff recommends the Town of Union Bridge Planning and Zoning Commission certify the request to amend Map 19 (Union Bridge Water Service Area) and Map 28 (Union Bridge Sewer Service Area) as described above, is consistent with the *2024 Town Plan Review* of the *2008 Union Bridge & Environs Community Comprehensive Plan*.

Attachments:

1. Water and Sewer Text Edits

Union Bridge Water Service Area

Current Conditions

The Town of Union Bridge owns and operates the community water supply system, which serves approximately 977 people residing within the Town's corporate limits. The existing and planned service area is situated in the west-central portion of the County and encompasses approximately 1,352 acres. See Map 19: Union Bridge WSA. Permitted average daily use is 0.208 MGD. Average daily use from 2018 – 2020 was 0.0897 MGD.

The Town is supplied by two wells used for drinking water. The Town's primary well (Well #1), located on West Locust Street, drilled in 1913 and purchased from the Union Bridge Water Company in 1963, is estimated to have a safe yield of 0.576 MGD. A second well (Well #2), which became operational in 2003, is located near Whyte Street on property owned by the Union Bridge Fire Company. The Town has secured an easement from the fire company for the well and a buffer area surrounding the wellhead. This well has an estimated safe yield of 0.101 MGD.

A third well (Phillips Property – Well #3) was drilled north of MD 75 on property annexed by the Town in 1992. This property is proposed for residential and commercial development. Well #3 is housed in a wellhouse and is equipped with filtration and nitrate removal technologies. It has an estimated yield of 144,000 gpd. The well is connected by an 8-inch water main extension into the Town's system. This well is currently not in service.

The water supply system uses one glass-lined steel tank for storage. This elevated tank has storage capacity of 0.3 million gallon and reserves a two- to three-day supply for residents in the event of a well failure. This elevated tank was constructed in 2003 and replaced a 0.29-million-gallon ground level tank. The elevated tank significantly improves water pressure for residential use and fire protection. See Table 13A for Union Bridge WSA appropriations; Table 13B for Union Bridge WSA average daily use; and Table 13C for Union Bridge storage tank.

The County does not support the large Long Range service area, as the Town has unserved areas within the current corporate limits.

Map 19

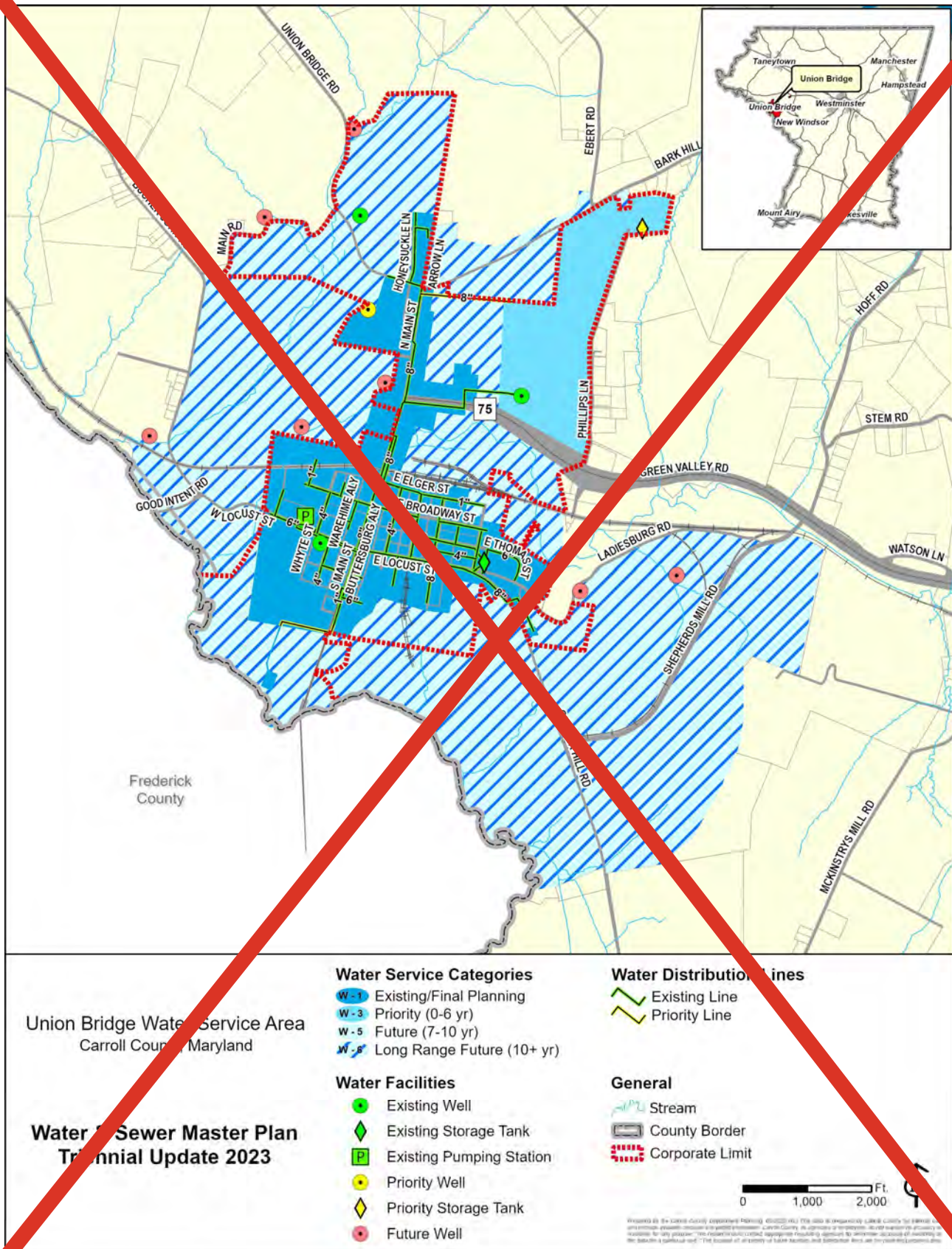


Table 13A: Union Bridge WSA Appropriations

6-Digit Watershed	Water Source	Permit Number	Permitted Daily Average Use (gpd)	Average Day Demand Month of Maximum Use (gpd)
Middle Potomac	Locust St. and Whyte St. Wells (Wells #1 and #2)	CL1979G048 (08)	166,000	200,000
Middle Potomac	Phillips Well (Well #3) (not in use)	CL1979G148 (05)	42,300	82,000
<i>Total</i>			208,300	282,000

Table 13B: Union Bridge WSA Average Daily Use

Water Source	Max. Safe Yield (mgd)	Avg. Daily Use (mgd)	Max. Peak Flow (mgd)
Well (Locust Street) #1	0.576	0.133	unknown
Well (Whyte Street) #2	0.101	0.033	unknown
Well (Phillips Lane) #3	0.144	Pending	unknown
<i>Total</i>	<i>0.821</i>	<i>0.166</i>	<i>unknown</i>

Table 13C: Union Bridge WSA Storage Tank

Water Source	Storage Capacity (mg)
Elevated Storage Tank	0.300

Allocation Procedure

A lack of new subdivision activity in Union Bridge has resulted in a first come, first served allocation procedure for Town water services, subject to specific provisions in annexation agreements. Any new development activity that necessitates an expansion of the existing water system will be required to provide the additional water at the sole financial responsibility of the developer; no burden for the expansion will be borne by the existing residents of Union Bridge. No reservations or set aside policies are provided for business or industrial users. However, the Town reserves the right to adopt a policy to reserve a portion of its water and sewerage capacity for commercial and industrial uses. A water benefit assessment fee is charged for all new residential and commercial users.

Needs Analysis

To plan for and secure needed public drinking water to meet the demand generated by the approved Union Bridge Community Comprehensive Plan, the Town may consider working with the County to secure water recharge credits on properties covered by land preservation easements. MDE would need to approve deed restriction language to achieve the goal of allocability transference.

Once the Jackson Ridge (Phillips property) subdivision begins construction, the Phillips Well (Well #3) will need to be brought online to serve the development.

The West Locust Street Well #1 (the Town's primary well) is under the influence of surface water and needs to be rehabilitated. However, work on this well cannot proceed until additional wells are

in service that could provide the necessary capacity while the Town's primary well is down. See Table 13D for Union Bridge WSA water problem areas.

Table 13D: Union Bridge WSA Water Problem Areas

Location	Population	Nature of Problem	Status
Locust Street Well (Well#1)	1,049	influence of surface water	cannot proceed until add'l wells are online

Planned Projects and Recommendations

See Table 13E for Union Bridge priority projects.

Table 13E: Union Bridge WSA Priority Projects

Project Name	Planning Category	Description	Location	Added Capacity
Phillips Well (Well #3)	Priority (W-3) 5 years	Developer driven project to bring the well on line	Phillips Lane	.042 mgd*
Bowman Well	Future (W-5)	Developer driven project to bring the well on line		.187 mgd**

* Capacity adding project is driven by the demand generated from the Jackson Ridge Development

* *Bowman Well Estimated yield based on 2004 Advanced Land and Water, Inc. Report. The Bowman well appears to have a sustainable yield in excess of 130 gpm, but is subject to MDE water allocation procedures, which could result in a final appropriation permit for a lesser amount.

Long-Term Recommendations (10+ years)

- Investigate the potential to withdraw water from the existing Lehigh pond to treat and use as potable water.
- Drill and develop additional groundwater wells (based on the average MDE appropriation of existing Union Bridge wells) to meet projected additional demand within the service area.
- Build 300,000 gallon water storage tank on the Northeast quadrant of the Phillips property.
- Re-line and rehabilitate Well #1 to address surface water influence.
- County recommends reduction of Long-Range service Area.
- Obtain more property for recharge to address additional demand.
- Work with MDE to revise Own/Control Policy to recognize larger part of sustainable yield of the wells.

Union Bridge Sewer Service Area

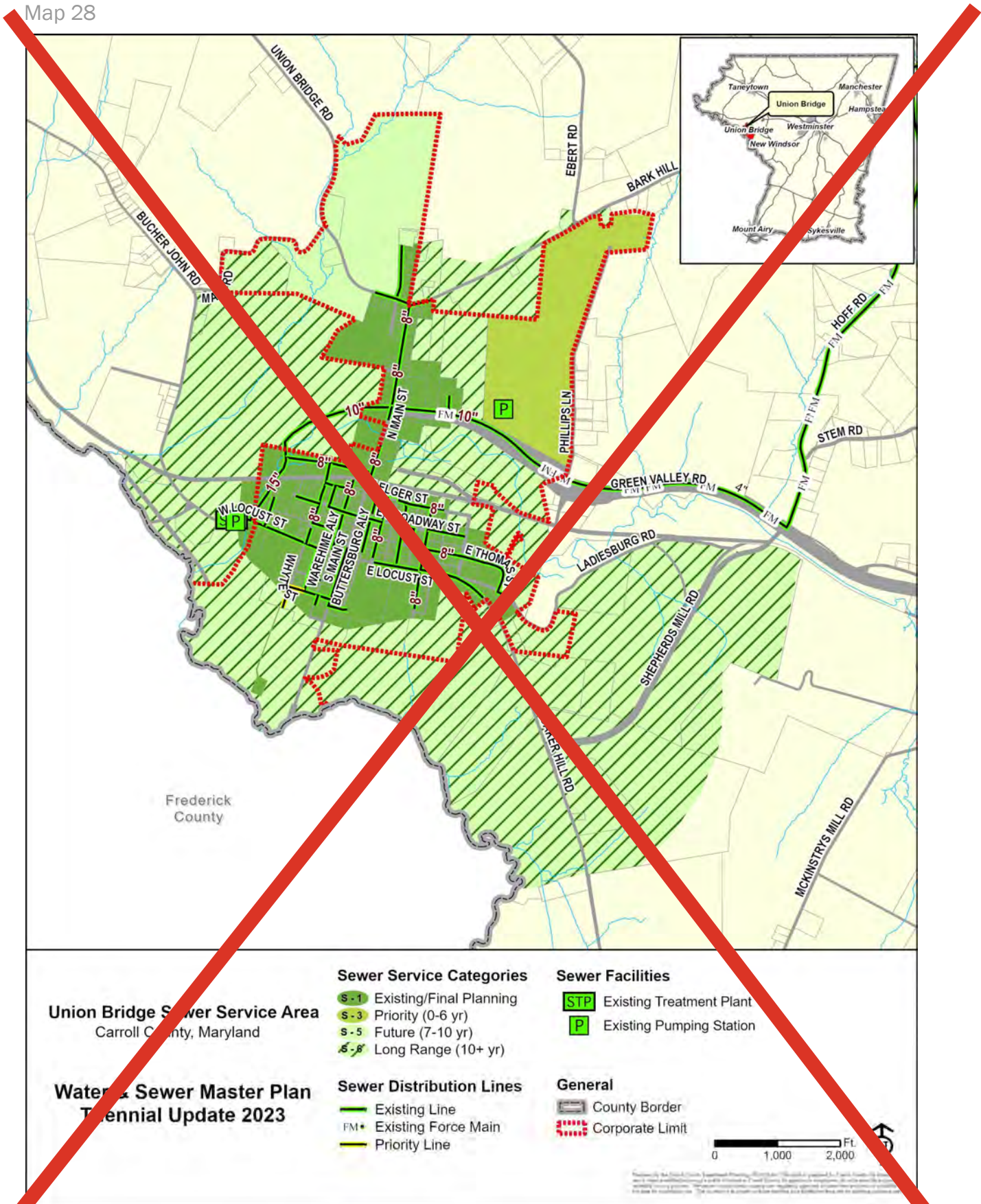
Current Conditions

The Town of Union Bridge owns and operates the community sewer system. The service area is in western Carroll County and covers approximately 1,406 acres and serves 410 EDUs. See Map 29: Union Bridge SSA. The Union Bridge WWTP discharges into Little Pipe Creek, which is in the Double Pipe Creek watershed. The Union Bridge sewer system consists of a collection system, one pumping station, and a WWTP. The WWTP has a design capacity of 0.200 MGD, with a three-year average flow from 2018-2020 of approximately 0.1805 MGD, including I&I. Individual service is not metered. Much of the system is gravity fed to a wet well from which all sewage is pumped into the plant.

The Town has a policy of only serving properties within its corporate limits, except for Francis Scott Key High School, which is served with public sewer from the town to address on-site waste disposal problems.

The County does not support the large Long Range service area, as the Town has unserved areas within the current corporate limits.

Map 28



Inventory of Existing Wastewater Treatment Plants, Interceptors, Sewage Pumping Stations, and Force Mains

See Tables 24A-24C for Union Bridge SSA infrastructure.

Table 24A: Union Bridge SSA Treatment Plant

Service Area and/or WWTP Name	WWTP Treatment Type	Points of Discharge	WWTP Design Capacity (MGD)	Average Flows (MGD)	Method of Sludge Disposal
Union Bridge	Activated sludge	Little Pipe Creek	0.200	0.166	Transported to other WWTP
Discharge Permit Number: OODPO774 NPDES Number: MD0022454					

Table 24B: Union Bridge SSA Pumping Stations

Pumping Station	Coordinate Location*	# of Pumps	Capacity of Each Pump (MGD)	Normal Pumping Capacity (MGD)	Average Day Pumping (MGD)
WWTP (Locust Street)	N 1260314.15 E 692726.85	2	0.375 (total)	0.140	0.140
Francis Scott Key High School	N1274660.91 E701504.92	2	0.025	n/a	n/a
Total		4	0.400	0.140	0.140

*Coordinate locations are Maryland State Plane 1983 Datum.

Table 24C: Union Bridge SSA Force Mains

Force Main	Maximum Day Pumpage (MGD)	Diameter (inches)	Design Flow (MGD)
Locust Street	0.325	8	0.200
(FSK force main)	n/a	3 & 4	0.025
Total	0.325		0.225

*Provided Design Average Daily Flow for Design Flow.

Sludge Management

The Town's sludge is disposed of by transporting it to the County-owned sludge facility at the Westminster Wastewater Treatment Plant. The Town transports 640.2 tons of wet sludge and 15.36 tons of dry sludge. See Table 24D for Union Bridge SSA sludge management.

Table 24D: Union Bridge SSA Sludge Management

Quantity (tons/yr)	Quality	Method of Disposal/Use	Permit #	Future Disposal Method	Problems
640.2 wet 15.36 dry	3% solids removed from digesters, no metal excess	Transported to another WWTP	2012-STR-3055	-	None

Allocation Procedure

The allocation policy for available sewer capacity in Union Bridge is first come, first served allocation procedure for Town water services, subject to specific provisions in annexation agreements. Costs for expansion of sewer capacity due to new development are the responsibility of the developer. The Town also charges a sewer benefit-assessment fee for every new unit.

The Town of Union Bridge will only allocate capacity to within 0.020 mgd of the design and permitted capacity, which is 0.200 mgd. The purpose for this policy is to avoid planning to the limits of the wastewater treatment plant's capacity. If system use reaches within 0.020 mgd of the plant's capacity, developers will be responsible for providing and/or paying for the needed system improvements. No reservations or set-aside policies for businesses or residential developers are currently provided. However, such a policy may be considered by the Town.

Needs Analysis

Current estimates, based on MDE formulas used in the WRE for estimating I&I, suggest that 26 percent of flows in Union Bridge may be attributable to this problem. Projects aimed at reducing I&I could recapture this capacity. Union Bridge is aware that work to recapture I&I throughout its system is needed. In January 2017, the Town filed an application with MDE for a project that would locate and repair most of the I&I problems within town.

A preliminary expansion study was completed in February 2005. The study recommends that a new WWTP be constructed at a different location to locate the plant out of the floodplain. The next phase of this project will be final design of a new treatment plant with a design capacity of 0.800 mgd. This phase of the project currently is not funded.

In addition, the Town may conduct a flow monitoring program to determine peak hourly flows and the amount of inflow to the sewer main along Little Pipe Creek. The Town is also reviewing the feasibility of and need to replace and enlarge this sewer main to serve new development. The cost of these improvements will be borne primarily by developers. See Table 24E for Union Bridge sewage problem areas.

Table 24E: Union Bridge SSA Sewage Problem Areas

Area Name	Location	Population (Where Applicable)	Nature Of Problem	Status
Town of Union Bridge	Throughout the system	1,042	I&I	Currently being studied

Planned Projects and Recommendations

See Table 24F for Union Bridge SSA priority projects

Table 24F: Union Bridge SSA Priority Projects

Project Name	Planning Category	Description	Location	Capacity Added
Infiltration/Inflow Reduction	Priority (S-3) Immediate	Begin an expanded program of infiltration/inflow reduction program	Throughout the system	TBD
WWTP Expansion 1	Priority (S-3) 5 Years	Developer driven expansion of the WWTP	Current WWTP	.046 MGD*
WWTP Expansion 2	Future (S-5) 10 Years	Developer driven expansion of the WWTP	Current WWTP	.069 MGD*
*WWTP Expansion 1 is driven by the demand generated from the Jackson Ridge Development				
*WWTP Expansion 2 is driven by the demand generated from the Villages of Union Bridge				

Long-Term Recommendations (10+ years)

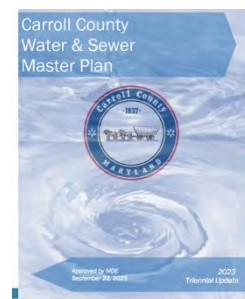
- Conduct a video survey of sewer lines to detect areas of infiltration/inflow or other problems.
- In the event the current WWTP cannot be expanded, acquire land for and construct new 0.8 mgd WWTP.
- Improvements to meet Enhanced Nutrient Removal goal at the existing WWTP.
- Replace existing 10" sewer with a new 15-inch sanitary interceptor sewer from the WWTP to Manhole No. 6
- Construct 8" collector sewer lines North of MD 75 on the Phillips property.
- Explore options for using spray irrigation to create capacity at the WWTP if it is expanded.
- Investigate the potential to use WWTP treated effluent for Lehigh cooling operations.
- Projects may be contingent on Public Works Agreements and private sector development activity.
- County recommends reducing the Long-Range service Area.

2023 Water and Sewer Master Plan – Spring 2025 Amendment Staff Report

To: New Windsor Planning and Zoning Comm.
From: Andrew R. Gray, AICP, Planner
Meeting Date: April 28, 2025
System Change: New Windsor Water and Sewer Amendment No. 1
Requestor: Town of New Windsor
GPD Transferred: See descriptions below
Current Service Area: NA
Proposed Service Area: NA
Request Summary: Revise Water and Sewer multipliers and calculations to coincide with updated BLI numbers for the Town Wastewater Treatment Plant ENR Upgrade and make needed text revisions.
Requested Action: **Approve**



**Bureau of
Comprehensive Planning**



Summary

On January 30, 2025, the Carroll County Bureau of Comprehensive Planning received a request from the Town of New Windsor (Town) to amend the Water and Sewer calculations to determine updated and more accurate future water and sewer demand numbers for the ENR upgrade to the Town Wastewater Treatment Plant. During review, Town and County Staff identified needed text changes that are identified.

Maps

No map changes have been requested by the Town.

Comprehensive and Master Plan Goals

The **2007 New Windsor Community Comprehensive Plan**, identifies applicable goals that support providing properties with public water and sewer as follows:

Chapter 5: Land Use and Growth Management, Goal 1

Manage the rate of growth so that it keeps pace with the provision of public facilities and services;

Chapter 8: Community Facilities, Goal 1

Ensure that all public facilities and services can properly accommodate new development in addition to serving the current population.

Chapter 9: Natural and Agricultural Resources, Goal 1

Preserve and make wise use of environmental resources;

The **2014 Carroll County Master Plan, as amended in 2019**, identifies applicable goals that are related to providing properties with public water and sewer as follows:

Chapter 3: Vision Statement & Goals

Promote communication and coordination between and among the County, the municipalities, and state and regional jurisdictions on projects and issues of mutual concern. Encourage the involvement of the community in developing, amending, and implementing the Master Plan.

Chapter 3: Vision Statement & Goals

Protect and enhance the water quality of Carroll County's rivers, streams, reservoirs, and aquifers; comply with applicable state and federal requirements related to water quality and quantity; and maintain and protect adequate water supplies to serve current and planned development.

Analyzing Changes to Projected Water and Sewer Supply

Changes were made by the Town to the Town's Buildable Land Inventory (BLI) and GPD calculation multiplier resulting in a recalculation of the entire water and sewer service area. Water calculations were based off current flows of 81,336.98 GPD (Residential) and 14,806.02 GPD (Other) for a total of 96,143 GPD. Sewer calculations were based off current flows of 62,604 GPD (Residential) and 11,396 GPD (Other) for a total of 74,000 GPD. For the Priority and Future Water and Sewer Service Areas, the BLI was obtained and used for calculations as follows:

Water - BLI				
Service Area	Category	GPD	Units/Acres	Total
Residential				
Existing	Residential	250	48	12,000
Priority	Residential	250	6	1,500
Future	Residential	250	0	0
Existing-Outside	Residential	250	1	250
Priority-Outside	Residential	250	3	750
Future-Outside	Residential	250	0	0
Non-Residential				
Existing	Commercial	700	16.1	11,270
Existing	Industrial	800	32.4	25,920
Priority	Commercial	700	5.2	3,640
Priority	Industrial	800	0	0
Future	Commercial	700	0	0
Future	Industrial	800	25.4	20,320

Sewer - BLI				
Service Area	Category	GPD	Units/Acres	Total
Residential				
Existing	Residential	250	27	6,750
Priority	Residential	250	27	6,750
Future	Residential	250	0	0
Existing–Outside	Residential	250	1	250
Priority–Outside	Residential	250	3	750
Future–Outside	Residential	250	0	0
Non-Residential				
Existing	Commercial	700	16.1	11,270
Existing	Industrial	800	2.3	1,840
Priority	Commercial	700	5.2	3,640
Priority	Industrial	800	0	0
Future	Commercial	700	0	0
Future	Industrial	800	55.5	44,400

Factoring in current demand with the BLI Numbers will change Table 15 and Table 32 as follows:

	Table 15					
	Projected Water Supply Demands and Planned Capacity*					
	<u>Present Year</u>					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Triennial	1,441	53	0.077	0.014	0.091	0.196
Amendment 1	1,748	47	0.081	0.015	0.096	0.196

	Table 15					
	Projected Water Supply Demands and Planned Capacity*					
	<u>Priority Planning</u> (0-6 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Triennial	1,703	55	0.094	0.055	0.149	0.376
Amendment 1	1,885	51	0.096	0.056	0.151	0.275

	Table 15					
	Projected Water Supply Demands and Planned Capacity*					
	<u>Future Capacity</u> (7-10 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Triennial	1,703	55	0.094	0.075	0.169	0.626
Amendment 1	1,888	51	0.096	0.076	0.172	0.480

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Present Year					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Triennial	1,441	46	0.067	0.012	0.079	0.115
Amendment 1	1,719	36	0.063	0.011	0.074	0.115

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Priority Planning (0-6 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Triennial	1,701	49	0.084	0.029	0.113	0.115
Amendment 1	1,881	41	0.077	0.028	0.105	0.125

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Future Planning (7-10 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Triennial	1,701	49	0.084	0.073	0.157	0.250
Amendment 1	1,883	41	0.077	0.073	0.150	0.165

Definitions

Definitions for service area categories can be found on pages 23 and 24 of the 2023 Water and Sewer Master Plan.

Agency Comments

The Bureau of Comprehensive Planning had sent out the staff report and information to the review agencies on the listed dates below, for their preliminary review:

Department of Natural Resources (DNR) – April 17, 2025

Carroll County Health Department (CCHD) – April 17, 2025

Maryland Department of the Environment (MDE) – April 17, 2025

Maryland Department of Planning (MDP) – April 17, 2025

Carroll County Bureau of Utilities (Utilities) – April 17, 2025

Staff Recommendation

County Planning Staff recommends the Town of New Windsor Planning and Zoning Commission certify the request to amend Table 15 (Water) and Table 32 (Sewer) as described above, and the text revisions as shown in the attached Master Plan excerpt is consistent with the *2007 New Windsor Community Comprehensive Plan*.

Attachments:

1. Water and Sewer Text Edits

New Windsor Water Service Area

Current Conditions

The community water supply system in New Windsor is owned by the Town and is operated by the Maryland Environmental Service (MES). The system serves 828 existing connected EDUs within the corporate limits of the municipality. The existing and planned service area is in the west-central portion of the County and encompasses approximately 848 acres. See Map 16: New Windsor WSA. Permitted average daily use is 196,000 gpd and average daily demand of maximum use 184,000 gpd.

The New Windsor Municipal Water System is supplied by a network of connected springs and wells. Dennings well, Main Spring; Hillside Wells; and Dickerson Run. Water travels from Dennings Well through a 1 mile, 4 inch-diameter gravity waterline to Main Spring; from Main Spring through a 3-mile, 8 inch-diameter waterline to a 150,000 gallon Chlorine Contact Tank, to a booster station before entering the town distribution system. The two Hillside wells located at the south side of Hillside Drive pump water directly into the Town's water distribution system. Roops Meadow Spring and Dennings Spring, additional longstanding water sources for the system, are currently not utilized due to MDE's findings that the springs are under the influence of surface water. Treatment plants would be required if they were to resume as water sources. The Town has an agreement with Lehigh Cement Company to use water pumped from the Lehigh New Windsor Quarry as a future water source.

The water from the Main Spring at Bowersox and the Dennings Well flows by gravity through a pipeline to a 150,000-gallon chlorine contact tank for treatment. From there the water flows through a booster pump station and pumped into the distribution system and ultimately into two water storage tanks located on Rowe Rd.

The Hillside wells are also pumped into the distribution system. Tank storage consists of a 250,000-gallon finished water standpipe and a 375,000-gallon elevated pedestal water storage tank located next to the first tank. Both water tanks are located on Rowe Rd.

Even though Roops Meadow Spring is currently not in use, a contingency plan remains in effect with the Lehigh Heidelberg Cement Group providing water in the event that quarry operations were to adversely affect Roops Meadow Spring. The Town is presently permitted for an average daily total demand of 196,000 gpd from the system's multiple sources. Actual average daily use is 96,143 gpd. See Table 10A for New Windsor WSA appropriations; see Table 10B New Windsor average daily use; and see Table 10C for New Windsor WSA Storage Tanks.

Table 10A: New Windsor WSA Appropriations

6-Digit Watershed	Water Source	Permit Number	Permitted Daily Average Use (gpd)	Average Day Demand Month of Maximum Use (gpd)
Middle Potomac	Dennings Well/Main Spring Roops Meadow Spring	CL1978G022 (06)	143,000	202,000
Middle Potomac	Hillside Wells (No. 1 & 2)	CL1992G049 (03)	53,000	80,000
Total			196,000	282,000

Table 10B: New Windsor WSA Average Daily Use

Water Source	Max. Safe Yield (MGD)	Avg. Daily Use (MGD)	Max. Peak Flow (MGD)
Well/Spring Network (Dennings Well, Main Spring, Roops Meadow Spring)	0.170	0.061	0.148
Hillside Wells (Nos. 1 & 2)	0.068	0.046	0.036
Total	0.238	0.107	0.184

Table 10C: New Windsor WSA Storage Tank

Storage Tank	Storage Capacity (mg)
Chlorine Contact Tank	0.15
Standpipe	0.250
Standpipe	0.375
Total	0.775

Allocation Procedure

New Windsor follows a “first come, first served” policy for the allocation of available water service. Subdivision or development activity is a developer or new-user expense. Currently there are no “set-aside” policies for business or industrial users. “Adequacy” of all public facilities, including the water supply system is a requirement of the Planning Commission and is a prerequisite to executing public works agreements or making new connections for water service to new customers (*New Windsor Code §175-17*).

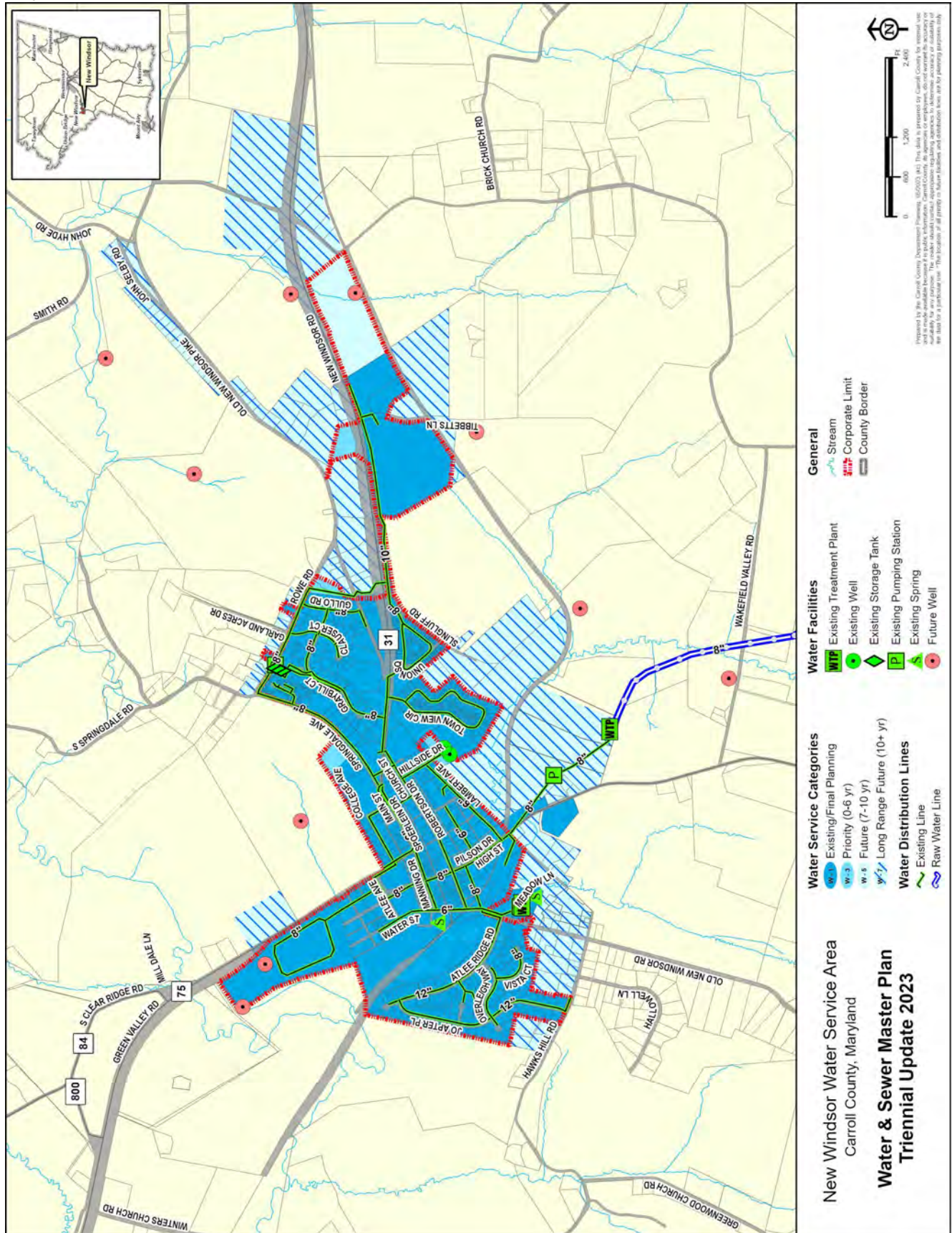
Needs Analysis

As mentioned above, Roops Meadow Spring is under the influence of surface water, requiring the Town to abandon its use until this influence is addressed by providing a treatment plant. In addition, the threat of potential water source depletion from Lehigh New Windsor Quarry is a possibility. See Table 10D for New Windsor WSA water problem areas.

Table 10D: New Windsor WSA Water Problem Areas

Location	Population	Nature of Problem	Status
Roops Meadow Spring	n/a	Surface water influence	Currently offline
Roops Meadow Spring	n/a	Potential impact from Lehigh New Windsor Quarry	Lehigh contingency plan in effect

Map 16



Planned Projects and Recommendations

See Table 10E for New Windsor WSA priority projects.

Table 10E: New Windsor WSA Priority Projects

Project Name	Planning Category	Description	Location	Added Capacity
Main Spring Farm Well (MSF-5)	Priority (W-3) 5 years	Well MSF-5; connect to system	Main Spring Farm	.10 MGD
Water Infrastructure	Priority (W-3) 5 years	Water System Upgrade, SCADA, valves, stations	Distribution System	0 MGD
Water Audit	Priority (W-3) 5 years	Account for water loss	Completed yearly	0 MGD
Main St. & High St. Project	Existing (W-1) Immediate	Water main replacement to improve distribution (starts 2023)	Main/High Streets	0 MGD
Roops Meadow Spring	Priority (W-3) 5 years	Develop plan for treatment to use as temporary water source in emergency	Meadow Lane	Would require 24 hr. treatment plant
Hillside Well (078-079)	Priority (W-3) Immediate	Maximize operability	Hillside Drive	.034 MGD
Additional Water Sources	Priority (W-3) Immediate	Explore, identify, acquire, develop	Atlee Ridge Well	.045 MGD

Long-Term Recommendations (10+ years)

- Develop an agreement with Heidelberg Materials to use water pumped from the Lehigh New Windsor Quarry as a potential future water source per existing agreement.
- Preliminary Engineering Report for replacing the approximately 120-year-old main line from Main Spring to Main St. MD-31. This line is approximately 15,000 linear feet through mostly private property. This project should be an alternative to the Additional Water Sources project mentioned above in the event additional water sources cannot be acquired.
- Groundwater Wells: Drill and develop groundwater wells (based on the average MDE appropriated of existing New Windsor wells) for redundant water supply as a future Town use.
- Maintain long-term options for non-groundwater water supply, including Heidelberg Materials New Windsor Quarry, regional connections to Union Bridge water supply, and regional connection to Westminster Water Supply.
- Add redundant storage capacity at Chlorination tank.
- Update Chlorination booster station.
- ~~• Install generators at Hillside and Main Spring.~~
- Snader Property well and other additional sources 205,000 GPD

Projected Water Supply Demands and Projected Capacity

The following table summarizes projected water demand over the next ten years. It incorporates planned capacity improvements that respond to the demand projections.

Table 15²

Projected Water Supply Demands and Planned Capacity

Service Area	Existing Year						Priority Planning (0-6 Year)						Future Planning (7-10 Year)					
	Res. Pop. Ser.	G P C D	Capacity Million Gal. Daily (MGD)				Res. Pop. Ser.	G P C D	Capacity Million Gal. Daily (MGD)				Res. Pop. Ser.	G P C D	Capacity Million Gal. Daily (MGD)			
			Res. Dem.	Oth. Dem.	Tot. Dem.	Ex. Cap.			Res. Dem.	Oth. Dem.	Tot. Dem.	Pl. Cap.			Res. Dem.	Oth. Dem.	Tot. Dem.	Pl. Cap.
Freedom/Sykesville	22,893	84	1.938	0.102	2.04	4.427	7,120	86	2.47	0.541	3.031	4.427	31,199	86	2.55	0.541	3.091	7.0
Hampstead ^{3 12}	5,991	44	0.266	0.071	0.337	0.630	7,337	52	0.386	0.302	0.688	0.709	7,682	54	0.417	0.323	0.740	0.884
Manchester	5,408	42	0.225	0.077	0.302	0.581	6,776	51	0.347	0.053	0.400	0.386	6,784	51	0.348	0.053	0.401	0.606
Mount Airy ⁴	9,691	65	0.225	0.177	0.402	0.927	9,888	65	0.646	0.303	0.949	1.079	10,728	65	0.646	0.304	0.950	1.079
New Windsor ⁵	1,441	35	0.077	0.014	0.091	0.196	1,703	55	0.094	0.055	0.149	0.376	1,703	55	0.094	0.075	0.169	0.626
Taneytown ^{6 7}	7,234	48	0.347	0.103	0.450	0.552	7,833	51	0.400	0.205	0.605	0.601	7,833	51	0.400	0.205	0.605	0.601
Union Bridge	936	52	0.049	0.041	0.090	0.208	1,767	74	0.131	0.048	0.179	0.250	1,767	74	0.131	0.048	0.179	0.250
Westminster ^{8 9 10 11}	29,308	91	2.66	0.396	3.056	4.231	32,795	92	3.013	0.758	3.771	5.231	33,022	92	3.036	0.811	3.847	5.231

² See Appendix 3 Method for Projecting Water Supply and Sewer Demands.

³ Florida Rock Property has a total allocation of 82,816 gpd. On the Water Map for Hampstead this property shows as Priority. The allocation is split 63,816 gpd in the Priority Water Service Area and 19,200 gpd in the Future Service Area.

⁴ Mount Airy's Total Demand includes 119,640 gpd to account for drought conditions (which is 12% of total demand). The Priority calculations were provided by the Town of Mount Airy.

⁵ New Windsor's Priority and Future calculations are based on 165 gal per unit for residential demand.

⁶ Mount Airy, Taneytown and Union Bridge do not have any properties in the Future Planning Category.

⁷ The Priority Calculations are based on the development projects in the approval process and were provided to the County by the City.

⁸ Westminster's Priority and Future residential calculations are based on 235 gal per unit and 55 gallons/1,000 s.f. other demand.

⁹ Westminster does not have any residential properties in the Future Planning Category.

¹⁰ LEF Stone Chapel LLC property has a total demand of 33,420 gpd. The water map for Westminster has the Industrial zoned portion in Existing/Final Planning. The demand is split 10,500 gpd in Existing, 13,752 gpd in Priority and 9,168 gpd in Future.

¹¹ Westminster Water Reuse Facility Priority (0-6 Yrs), 1.00 MGD.

¹² Priority water demand is based on a 1,000 gpd average of sewer use, should a change of use occur which requires a greater demand, re-evaluation of the Towns capacity is needed to ensure the Town is able to supply this increased demand.

New Windsor Sewer Service Area

Current Conditions

The Town of New Windsor owns the community sewer system, which is operated by the Maryland Environmental Services (MES). Located in the west-central portion of the County, the New Windsor SSA covers approximately 945 acres and serves **811** actual connected EDUs. See Map 25: New Windsor SSA. Generally, the Town limits service to the area located within the Town's corporate boundary. New Windsor WWTP design capacity is 0.115 MGD. Average flows are **0.074** MGD.

The New Windsor wastewater system consists of collection lines, four public and one private pumping stations, and a wastewater treatment facility. The design capacity of the wastewater treatment facility is 0.115 MGD.

The WWTP facility is located at the north end of Water Street. The treated effluent is discharged to Dickenson Run. Upgraded laboratory facilities provide more effective monitoring of the treatment process, including a computerized effluent flow meter. Influent is metered, and sewer rates are based on metered water use.

The Town constructed a 0.115 MGD treatment plant to replace the lagoon system. The plant is a Continuous Sequencing Batch Reactor Process (CSBR) system. The lagoons have been phased out and decommissioned. The Town has dredged and regraded the lagoons and has filled in the lagoons for future ballfields/recreational areas.

The Town will investigate sludge dewatering at the WWTP as part of the Preliminary Engineering Report and possible ENR Upgrade.

Inventory of Existing Wastewater Treatment Plants, Interceptors, Sewage Pumping Stations, and Force Mains

See Tables 21A-21D for New Windsor SSA infrastructure.

Table 21A: New Windsor SSA Treatment Plant

Service Area and/or WWTP Name	WWTP Treatment Type	Points of Discharge	WWTP Design Capacity (MGD)	Flows Average/Peak	Method of Sludge Disposal
New Windsor	CSBR*	Dickenson Run	0.115	0.074	-
Total			0.115	0.074	

Discharge Permit Number: 05DP0640 NPDES Number: MD0022586

~~* plant is replacing lagoon system; lagoons to be phased out~~

Map 25

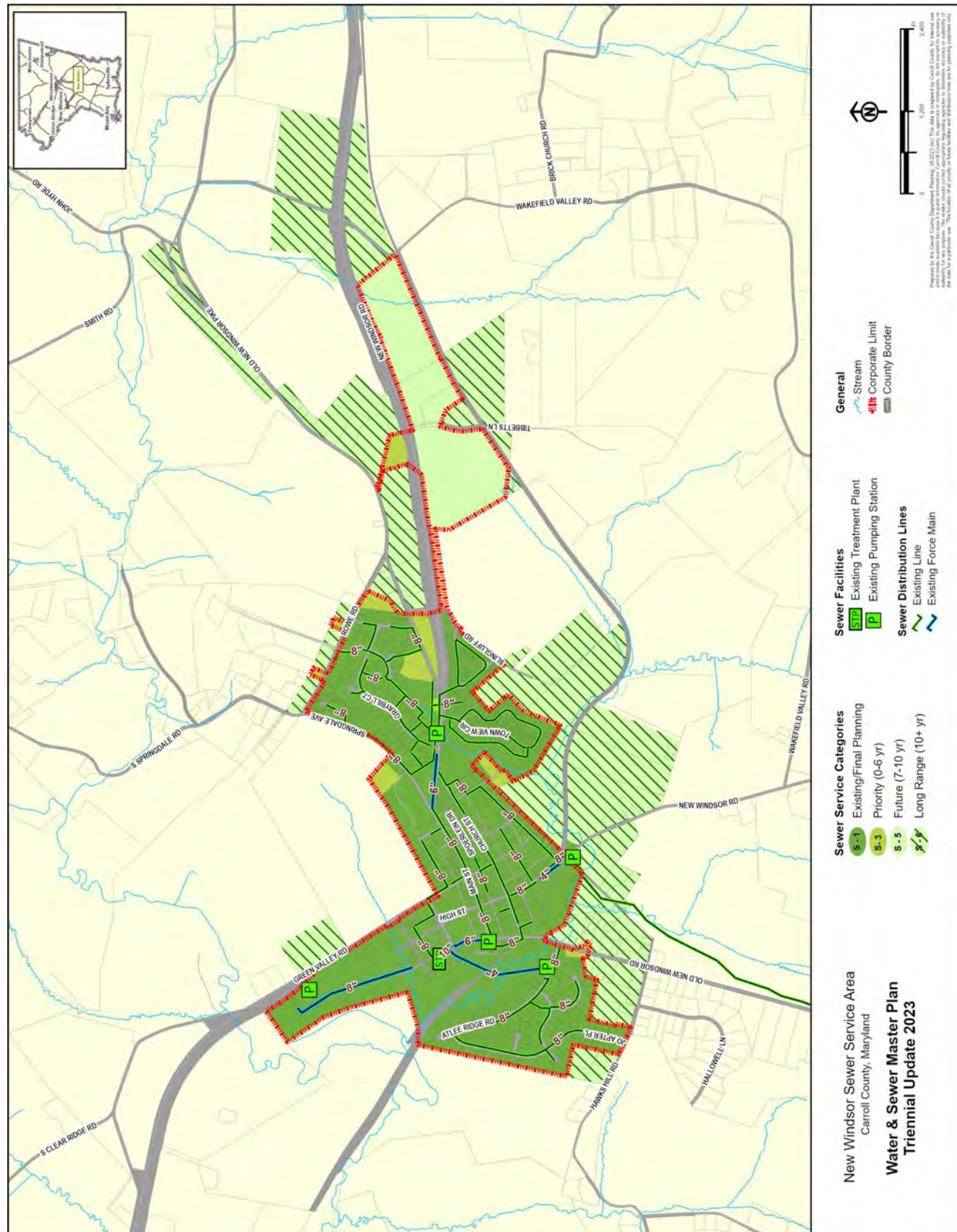


Table 21B: New Windsor SSA Pumping Stations

Pumping Station	Coordinate Location*	# Of Pumps	Capacity of Each Pump (MGD)	Normal Pumping Capacity (MGD)	Average Day Pumping (MGD)
Coe Drive	N 1282398.94 E 682149.41	2	0.086	-	Converts to 59.7 GPM
Main Street	N 1281218.44 E 683323.49	2	0.230	-	Converts to 159.7 GPM
Blue Ridge	N 1284087.93 E 684060.74	2	0.456	-	Converts to 316.7 GPM
CC Board of Comm. Springdale Prep. School	N 1280371.56 E 686114.35	2	0.036	-	-
Atlee Ridge	N 1280737.26 E 682521.52	2	0.344	-	Converts to 238.9 GPM
Total		10	1.152		

*Coordinate locations are Maryland State Plane 1983 Datum.

Table 21C: New Windsor SSA Force Mains

Force Main	Maximum Day Pumpage MGD (date)	Diameter (inches)	Design Flow (MGD)
Coe Drive	-	4	-
Main Street	-	6	-
Atlee Ridge	-	4	-
Blue Ridge	-	6	-
CC Board of Commissioners - Springdale Prep School	-	2	-

*Provided Design Average Daily Flow for Design Flow.

Sludge Management

The Town currently hauls liquid sludge to the Westminster Septage Facility. The Town will investigate sludge dewatering at the WWTP as part of the Preliminary Engineering Report (PER) and possible ENR Upgrade. Future sludge disposal will be dependent on sludge dewatering method recommended by PER and incorporated in future possible ENR Upgrade. See Table 21D for New Windsor SSA sludge management.

Table 21D: New Windsor SSA Sludge Management

Quantity	Quality	Method of Disposal/Use	Permit #s	Future Disposal Method	Problems
629,140 gal/year liquid sludge	-	Hauled to Westminster Septage Facility	-	To be investigated as part of PER and determined in future possible ENR Upgrade and determined at later date.	-

Allocation Procedure

The Town of New Windsor usually provides sewer capacity on a “first come, first served” basis. Available capacity has been allocated to provide for the current development. Any expansion of the Town’s sewer facilities necessitated by development will be paid for by the developer.

Needs Analysis

The Town of New Windsor upgraded their Wastewater Treatment Plant to a Continuous Sequencing Batch Reactor Process (CSBR) system that was constructed in 2011. The existing WWTP provides BNR treatment and is under evaluation in the PER for upgrade to ENR treatment standards.

Planned Projects and Recommendations

See Table 21E for New Windsor SSA priority projects.

Table 21E: New Windsor SSA Priority Projects

Project Name	Planning Category	Description	Location	Capacity Added
Wastewater Treatment Plant Upgrades	Future (S-3) 7-10 years	Improvements to meet Enhanced Nutrient Removal goal	Existing WWTP	0 MGD
Wastewater Treatment Plant Expansion	Priority (S-3) 0-6 years	Expand WWTP to reach planned capacity of .125 MGD	Existing WWTP	.010 MGD
Sewer Lining	Priority (S-3) 0-6 years	Lining the sewer pipes	Lambert/Hillside/Maple & Church	0 MGD
Blue Ridge Pump Station	Existing (S-1)	Upgrade 30-year old pump station	Existing PS	0 MGD
Atlee Ridge Pump Station Upgrade	Priority (S-3) Immediate		Existing PS	0 MGD

Long-Term Recommendations (10+ years)

- Conduct a I&I study to determine current level of inflows from I&I to potentially regain some capacity; make system improvements to reduce I&I.
- Investigate reuse of Town’s treated effluent through spray irrigation at ballfields, for firefighting, industrial operations, or other appropriate uses.
- Wastewater Treatment Plant Expansion 40,000 GPD

Projected Sewer Supply Demands and Projected Capacity

The following table summarizes projected sewer demand over the next ten years. It incorporates planned capacity improvements that respond to the demand projections.

Table 32³

Projected Sewerage Demands and Planned Capacity*

Service Area	Present Year						Priority Planning (0-6 Year)						Future Planning (7-10 Year)					
	Res. Pop. Ser. ¹	G P C D	Capacity Million Gal. Daily (MGD)				Res. Pop. Ser.	G P C D	Capacity Million Gal. Daily (MGD)				Res. Pop. Ser.	G P C D	Capacity Million Gal. Daily (MGD)			
			Res. Dem.	Oth. Dem.	Tot. Dem.	Cap.			Res. Dem.	Oth. Dem.	Tot. Dem.	Pl. Cap.			Res. Dem.	Oth. Dem.	Tot. Dem.	Pl. Cap.
Freedom/Sykesville ⁴	25,964	85	2.209	.116	2.325	3.500	2,209	86	2.325	0.488	2.929	3.500	29,177	87	2.740	.548	3.204	3.500
Hampstead	6,094	67	0.410	0.067	0.477	0.900	7,721	77	0.555	0.314	0.869	0.900	8,083	80	0.587	0.361	0.948	0.900
Manchester	4,046	58	0.237	0.032	0.269	0.500	4,304	79	0.343	0.053	0.396	0.500	4,548	80	0.349	0.053	0.402	0.500
Mount Airy ⁵	9,654	59	0.571	0.161	0.732	1.200	9,851	60	0.589	0.287	.876	1.200	9,851	60	0.589	0.288	.877	1.200
New Windsor ^{6,7}	1,701	46	0.067	0.012	0.079	0.115	1,701	49	0.084	0.029	0.113	0.115	1,701	49	0.084	0.073	0.157	0.250
Taneytown ^{8,9}	7,234	88	0.640	0.191	0.831	1.100	8,801	81	0.714	0.272	0.989	1.100	8,801	81	0.714	0.272	0.989	1.100
Union Bridge ¹⁰	936	47	0.044	0.090	0.134	0.200	1,792	71	0.128	0.097	0.225	0.246	2,767	81	0.224	0.097	0.321	0.315
Westminster ¹¹	28,839	144	4.156	0.676	4.832	5.000	33,073	138	4.584	1.08	5.614	6.5	33,474	138	4.624	1.118	5.742	6.5

³ See Appendix 3 Method for Projecting Water Supply and Sewer Demands. Note: Table 32 corresponds with MDE's required Table 32 and is therefore out of sequence with preceding and succeeding table numbers.

⁴ Snowden Creek Rd infill lots (2) add 500 gpd Residential Priority; Stavlas property adds 700 gpd Other Priority

⁵ The Priority calculations are based on the Mount Airy's "pipeline" allocations and were provided to the County by the Town.

⁶ New Windsor's Priority and Future calculations are based on 165 gal per unit for residential demand.

⁷ New Windsor will be eliminating this deficit by conducting an I&I project that will recapture more than 17,000 gpd.

⁸ The Priority calculations are based on the development projects in the approval process. These calculations account for I/I reductions in the York Street Pump Station. Taneytown Crossing has a total allocation of 4,500 gpd.

⁹ Mount Airy and Taneytown do not have any properties in the Future Planning Category.

¹⁰ Union Bridge will be eliminating this deficit by conducting an I&I project that will recapture more than 10,000 gpd

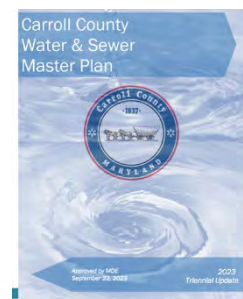
¹¹ LEF Stone Chapel LLC Property has a total demand of 33,420 gpd. The Sewer map for Westminster has the Industrial zoned portion in Existing/Future Planning. The allocation is split; 24,252 gpd in Priority and 9,168 gpd in Future.

2023 Water and Sewer Master Plan – Spring 2025 Amendment Staff Report

To: Hampstead Planning and Zoning Commission
From: Andrew R. Gray, AICP, Planner
Meeting Date: April 23, 2025
System Change: Hampstead Water Amendment No. 1
Hampstead Sewer Amendment No. 3
Requestor: Town of Hampstead
GPD Transferred: NA
Current Service Area: See descriptions below
Proposed Service Area: See descriptions below
Request Summary: To make several edits to the Water and Sewer Master Plan maps as detailed below related to the PFAS Treatment/Centralization Project.
Requested Action: **Approve**



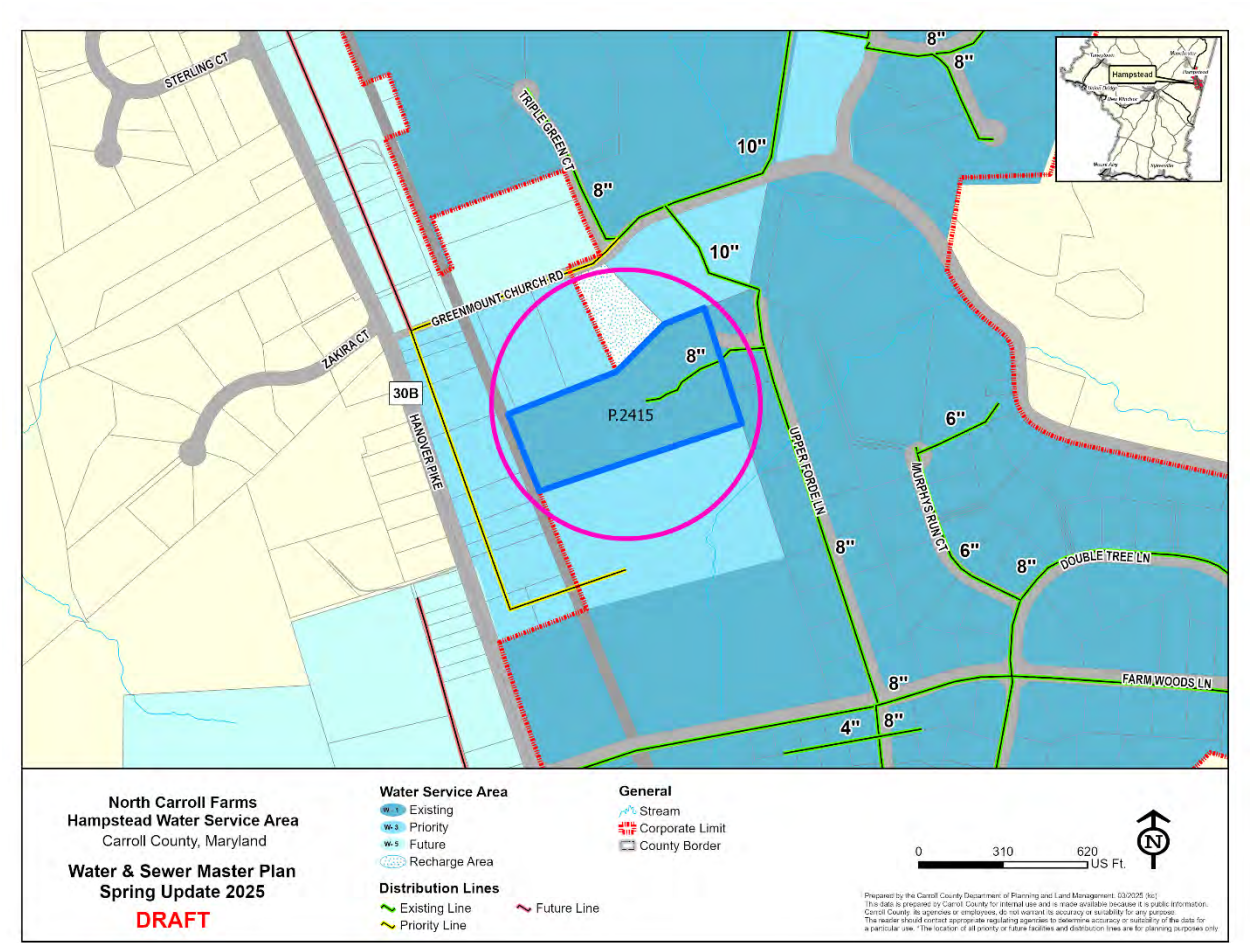
**Bureau of
Comprehensive Planning**

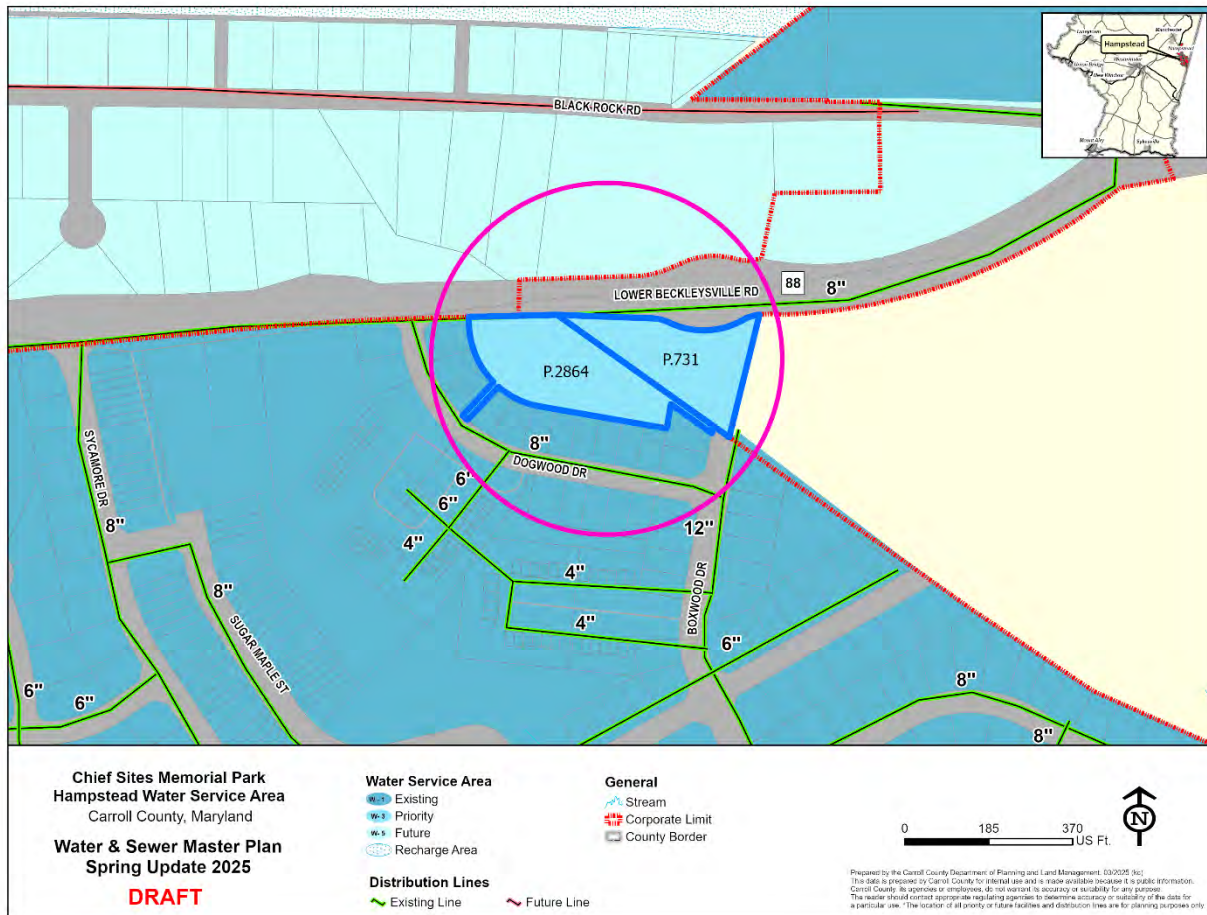


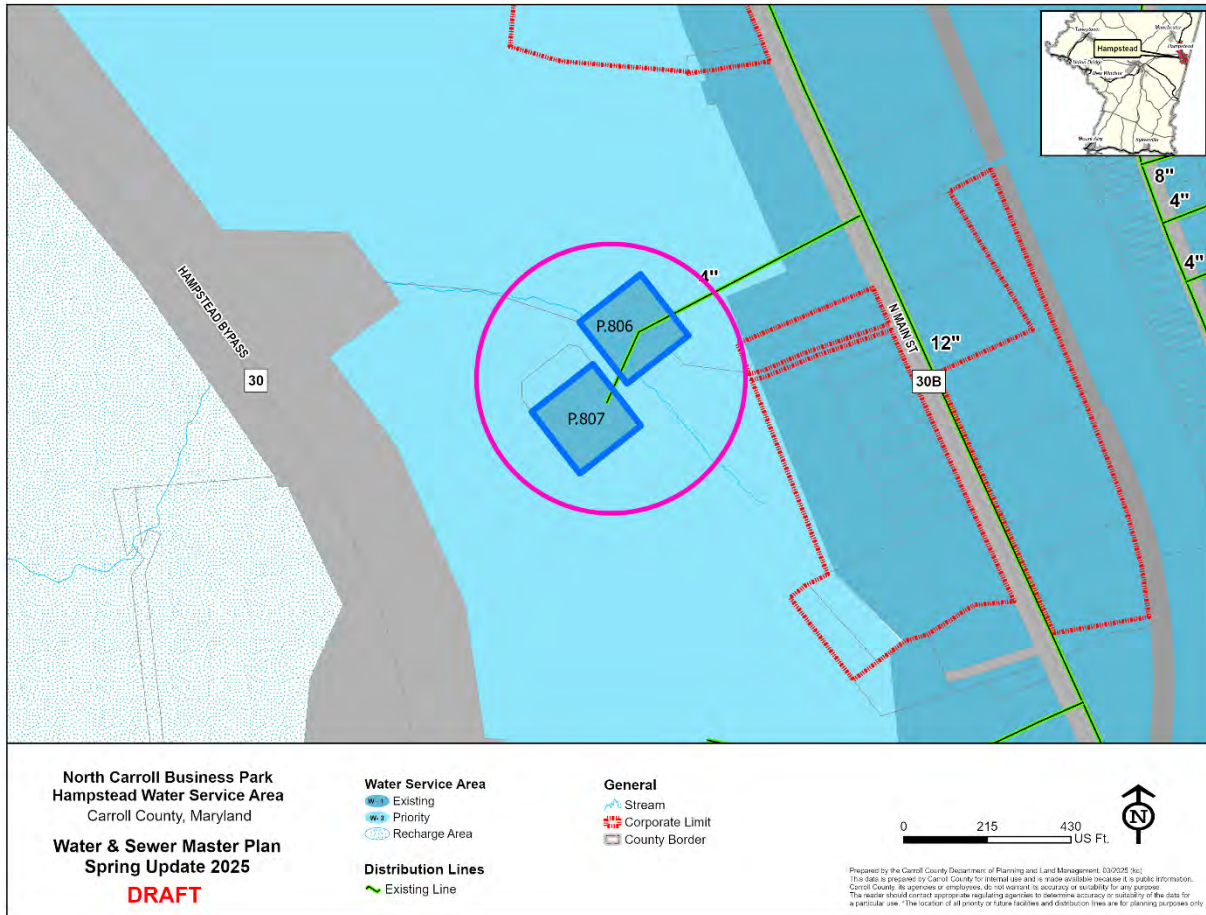
Summary

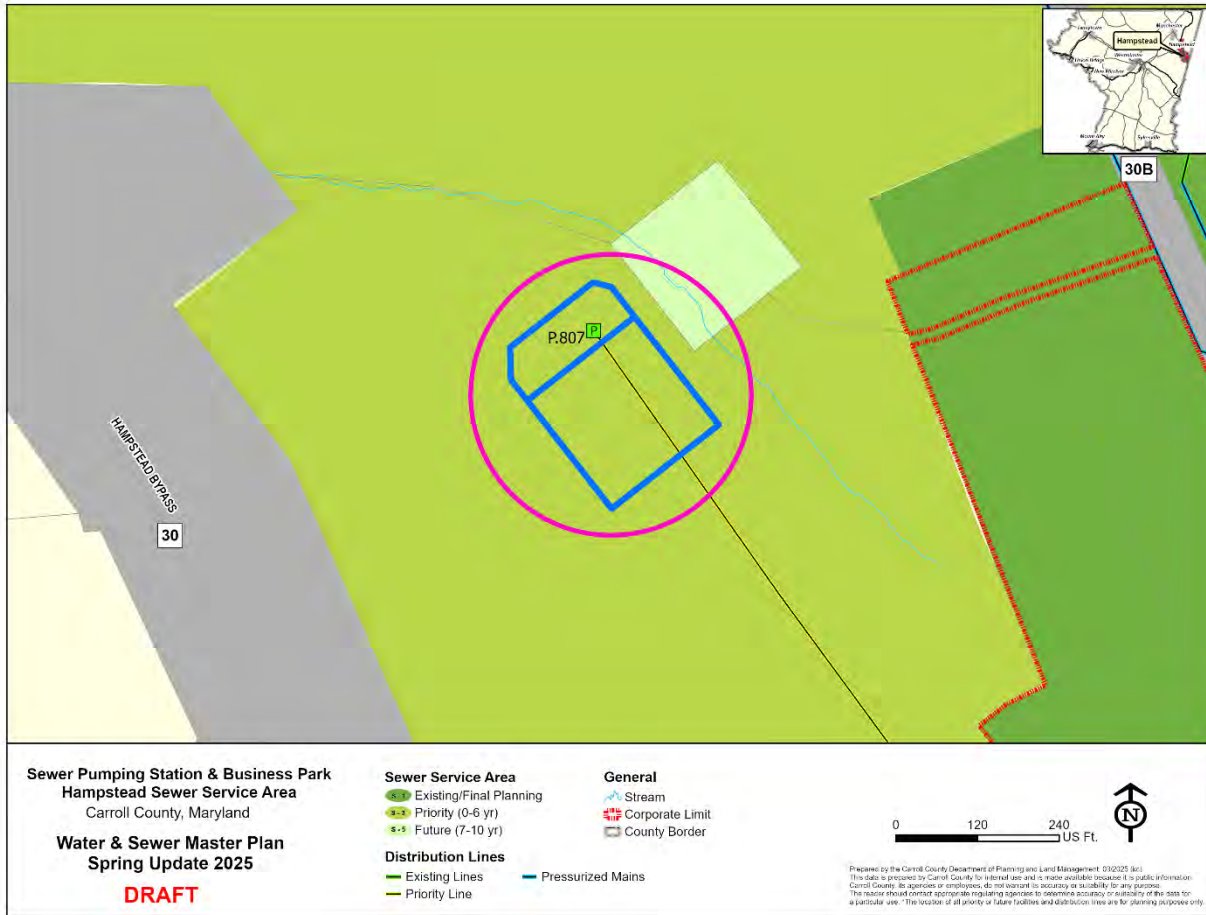
On December 5, 2024, the Carroll County Bureau of Comprehensive Planning received a request from the Town of Hampstead (Town) to amend their water and sewer service areas to clear up any potential concerns with MDE review of the Hampstead *PFAS Treatment and Centralization Project*. As part of this amendment, water demand is very minimal and thus no demand changes in Table 15 and 32 are proposed.

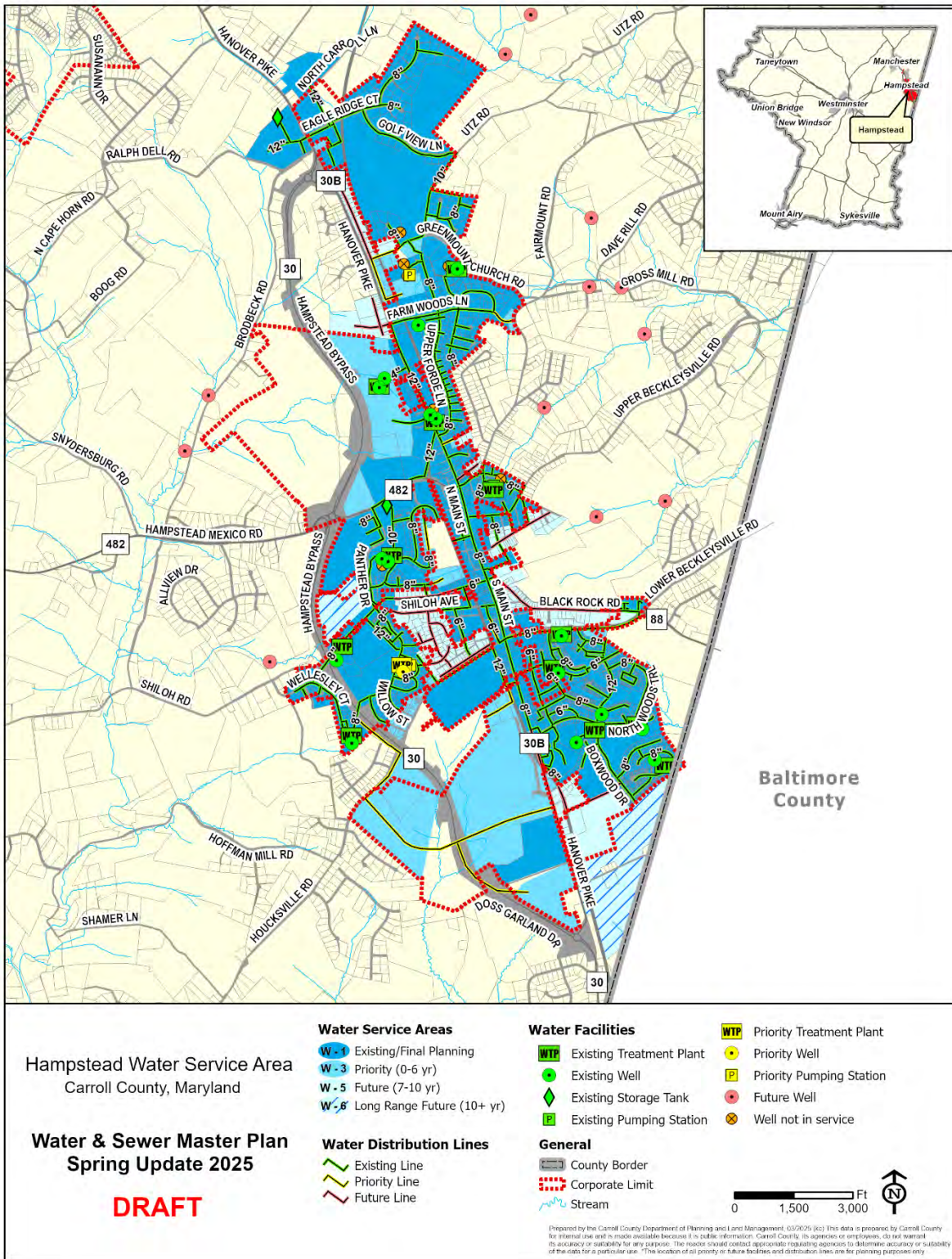
Maps

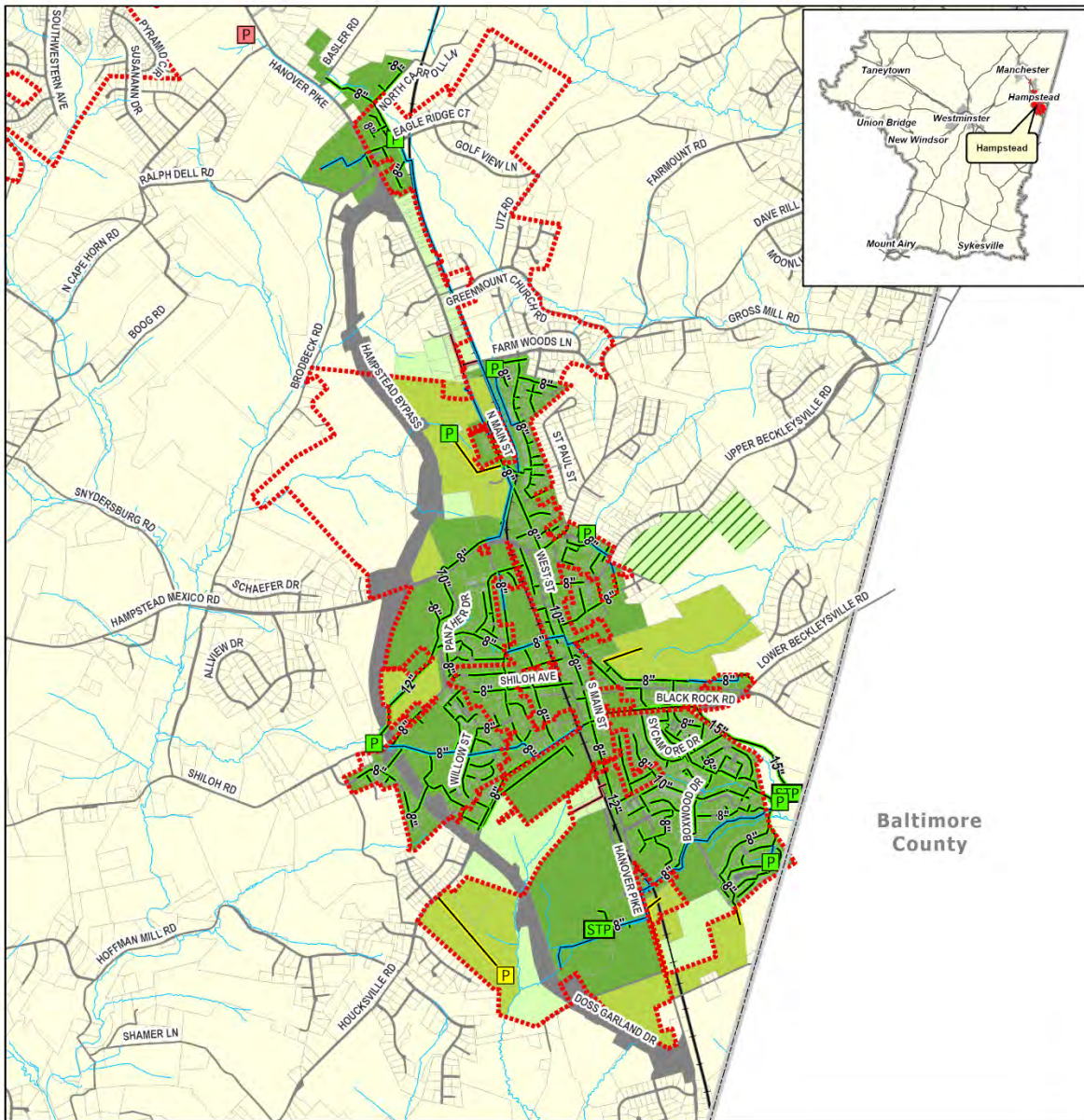












Hampstead Sewer Service Area
Carroll County, Maryland

Water & Sewer Master Plan Spring Update 2025

DRAFT

Sewer Service Area

- S-1 Existing/Final Planning
- S-3 Priority (0-6 yr)
- S-5 Future (7-10 yr)
- S-6 Long Range (10+ yr)

Sewer Distribution Lines

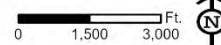
- Existing Force Main
- Existing Line
- Priority Line
- Future Line

Sewer Facilities

- STP Existing Treatment Plant
- P Existing Pumping Station
- P Priority Pumping Station
- P Future Pumping Station

General

- Stream
- County Border
- Corporate Limit



Prepared by the Carroll County Department of Planning and Land Management, 03/2025 (v2). This data is prepared by Carroll County for internal use and is made available because it is public information. Carroll County, its agencies or employees, do not warrant its accuracy or suitability for any purpose. The reader should contact appropriate regulatory agencies to determine accuracy or suitability of the data for a particular use. The location of all priority or future facilities and distribution lines are for planning purposes only.

Comprehensive and Master Plan Goals

The **2010 Hampstead Community Comprehensive Plan, as amended in 2023** identifies applicable goals that support providing properties with public water and sewer as follows:

Chapter 8: Community Facilities, Goal 1

To allow new development only when all community facilities are available or can be expanded to serve that development.

Chapter 9: Natural and Agricultural Resources, Goal 4

To protect the aquifer and manage the use of groundwater.

The **2014 Carroll County Master Plan, as amended in 2019**, identifies applicable goals that are related to providing properties with public water and sewer as follows:

Chapter 3: Vision Statement & Goals

Promote communication and coordination between and among the County, the municipalities, and state and regional jurisdictions on projects and issues of mutual concern. Encourage the involvement of the community in developing, amending, and implementing the Master Plan.

Chapter 3: Vision Statement & Goals

Protect and enhance the water quality of Carroll County's rivers, streams, reservoirs, and aquifers; comply with applicable state and federal requirements related to water quality and quantity; and maintain and protect adequate water supplies to serve current and planned development.

Analyzing Changes to Projected Water and Sewer Supply

Hampstead Water Service Area Map (Map 13):

This is the first amendment to the *2023 Water & Sewer Master Plan* for the *Hampstead Water Service Area*. Amendment No. 1 consists of the following:

1. Move Property with SDAT No. 0706-062269 from *Recharge* to *Existing (W-1)*. The **North Carroll Farms Water Treatment Plant** was not indicated as needing demand table (Table 15) modifications since water usage will be *“very minimal for periodic wash down of equipment and mixing of water treatment chemicals”*.

2. Move Property with SDAT No. 0708-033609 and 0708-064024 from *Recharge* to *Priority (W-3)*. The new **Hampstead Valley Water Treatment Plant** was not indicated as needing demand table (Table 15) modifications since water usage will be very minimal (35 GPD).
3. Move Property with SDAT No. 0708-071322 and 0708-071314 from *Priority (W-3)* to *Existing W-1*. The rebuilt **Dairy Water Treatment Plant** was not indicated as needing demand table modifications since water usage will be very minimal (81 GPD).

Hampstead Sewer Service Area Map (Map 22):

This is the third amendment to the *2023 Water & Sewer Master Plan* for the *Hampstead Sewer Service Area*. Amendment No. 3 consists of the following:

1. Move Property with SDAT No. 0708-433472 from *Future (S-5)* to *Priority (S-3)*. The rebuilt Dairy Water Treatment Plant will be transferring minimal flow to the County's **N Main ST Sewer Pump Station**. Flow rates are minimal (81 GPD), and thus demand table modifications are not needed.
2. Move Property with SDAT No. 0708-071322 from *Future (S-5)* to *Priority (S-3)*. The rebuilt **Dairy Water Treatment Plant** will be transferring minimal flow to the County's N Main ST Sewer Pump Station. Flow rates are minimal (81 GPD), and thus demand table modifications are not needed.

Definitions

Definitions for service area categories can be found on pages 23 and 24 of the 2023 Water and Sewer Master Plan.

Agency Comments

The Bureau of Comprehensive Planning had sent out the staff report and information to the review agencies on the listed dates below, for their preliminary review:

Department of Natural Resources (DNR) – April 17, 2025
Carroll County Health Department (CCHD) – April 17, 2025
Maryland Department of the Environment (MDE) – April 17, 2025
Maryland Department of Planning (MDP) – April 17, 2025
Carroll County Bureau of Utilities (Utilities) – April 17, 2025

Staff Recommendation

County Planning Staff recommends the Town of Hampstead Planning and Zoning Commission certify the request to amend Map 13 (Hampstead Water Service Area) and Map 22 (Hampstead Sewer Service Area) as described above, as consistent with the *2010 Hampstead Community Comprehensive Plan, as amended in 2023*.

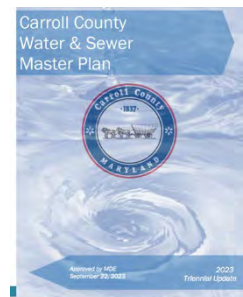
2023 Water and Sewer Master Plan – Spring 2025 Amendment Staff Report

To: Taneytown Planning and Zoning Commission
From: Andrew R. Gray, AICP, Planner
Meeting Date: April 28, 2025
System Change: Taneytown Sewer – Amendment No. 1
Requestor: City of Taneytown
GPD Transferred: 250 GPD or 0.0003 MGD
Current Service Area: Long Range (S-6)
Proposed Service Area: Priority (S-3)
Request Summary: To have property with SDAT No. 0701-000136 designated in the Priority Sewer Service Area (S-3).

Requested Action: **Approve**



Bureau of
Comprehensive Planning

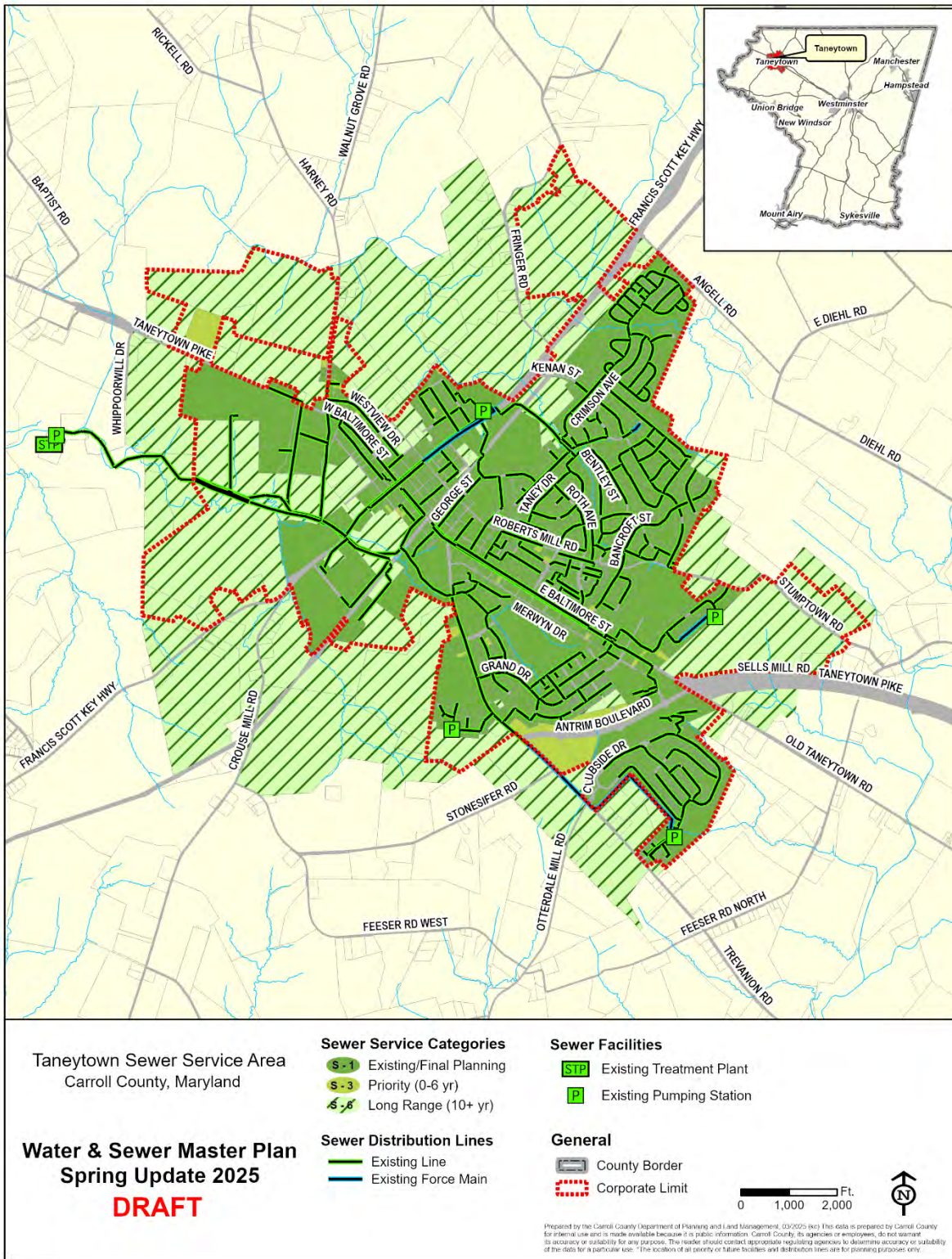


Summary

On February 3, 2025, the Carroll County Bureau of Comprehensive Planning received a request from the City of Taneytown to transfer a total 250 GPD of sewer capacity from the Taneytown Long Range Sewer Service Area (S-6) to the Priority Sewer Service Area (S-3) adding one existing residential property.

Maps





Comprehensive and Master Plan Goals

The **2010 Taneytown Community Comprehensive Plan** identifies applicable goals that are related to providing properties with public water and sewer as follows:

Chapter 5: Land Use and Growth Management, Goal 4

Ensure that development plans are sensitive to the existing physical and man-made environment by considering hydrologic and soil characteristics, topography, existing uses of the land, availability of public facilities, and accessibility.

Chapter 7: Community Facilities, Goal 3

Ensure that development plans manage growth in keeping with the community's ability and willingness to provide and maintain public services and facilities such as public water and sewer service, school facilities, police protection, fire and ambulance services, and recreational programs and facilities.

Chapter 8: Natural and Agricultural Resources, Goal 1

Identify and protect ground water resources to ensure an ample municipal water supply for current and future users.

Chapter 16: Water Resources Element, Goal 1 and Goal 2

To develop, maintain and protect adequate water supplies to serve current and planned population and development.

Restore water quality and protect from pollution and encroachment, and comply with applicable state and federal requirements related to water quality and quantity.

The **2014 Carroll County Master Plan, as amended in 2019**, identifies applicable goals that are related to providing properties with public water and sewer as follows:

Chapter 3: Vision Statement & Goals

Promote communication and coordination between and among the County, the municipalities, and state and regional jurisdictions on projects and issues of mutual concern. Encourage the involvement of the community in developing, amending, and implementing the Master Plan.

Chapter 3: Vision Statement & Goals

Protect and enhance the water quality of Carroll County's rivers, streams, reservoirs, and aquifers; comply with applicable state and federal requirements related to water quality and quantity; and maintain and protect adequate water supplies to serve current and planned development.

Analyzing Changes to Projected Sewer Supply and Capacity

According to County Policy, the County is using MDE multipliers for water and wastewater supply (unless otherwise noted) as follows:

Residential GPD	250 GPD x No. of units (Residential Buildable Land Inventory GIS Layer)
Commercial GPD	700 GPD x usable acres (Non-Residential BLI GIS Layer)
Industrial GPD	800 GPD x usable acres (Non-Residential BLI GIS Layer)

According to Table 32 in the Master Plan, sewer capacity for the Taneytown Sewer Service Area is currently 1,100,000 GPD.

Taneytown Sewer Service Area Map (Map 27) and Demand Calculations:

This amendment is the first amendment to the 2023 Water & Sewer Master Plan for the Taneytown Sewer Service Area. Amendment No. 1 will update the Taneytown Sewer Service Area Map and Text by moving one single-family dwelling unit on property with SDAT No. 0701-000136, from Long Range Sewer Service (S-6) to Priority Sewer Service (S-3) and adding 250 GPD of *Residential Demand* to Priority, in Table 32. This amendment will also correct a calculation error for total demand.

As exhibited above, the change in sewer demand will modify Table 32, as follows:

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Priority Planning					
	(0-6 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Planned Capacity
Triennial	8,801	81	0.714	0.272	0.986	1.100
Amendment 1	8,804	81	0.714	0.272	0.986	1.100

	Table 32					
	Projected Sewerage Demands and Planned Capacity*					
	Future Planning					
	(7-10 Years)					
	Residential Population Served	Gallons Per Capita Per Day	Capacity Million Gallon Daily (MGD)			
			Residential Demand	Other Demand	Total Demand	Existing Capacity
Triennial	8,801	81	0.714	0.272	0.986	1.100
Amendment 1	8,804	81	0.714	0.272	0.986	1.100

Note: Please be advised that sewer demand as shown in the charts are cumulative. For instance, sewer in Existing is also reflected in Priority and Future. Sewer in Priority is also reflected in Future. There are no Future service area designated properties in Taneytown, so Priority is the same as Future.

Definitions

Definitions for service area categories can be found on pages 23 and 24 of the 2023 Water and Sewer Master Plan:

Agency Comments

The Bureau of Comprehensive Planning had sent out the staff report and information to the review agencies on the listed dates below, for their preliminary review:

Department of Natural Resources (DNR) – April 17, 2025

Carroll County Health Department (CCHD) – April 17, 2025

Maryland Department of the Environment (MDE) – April 17, 2025

Maryland Department of Planning (MDP) – April 17, 2025

Carroll County Bureau of Utilities (Utilities) – April 17, 2025

Staff Recommendation

County Planning Staff recommends the City of Taneytown Planning and Zoning Commission certify the request to amend the Priority Sewer Service Area on Map 27 (Taneytown Sewer Service Area) as described above, adding 250 GPD to the demand calculations in Table 32 as described above is consistent with the *2010 Taneytown Community Comprehensive Plan*.