Carroll County Water & Sewer Master Plan

Spring 2025 Supplement

Approved by MDE
September 22, 2023

2023 Triennial Update

RESOLUTION NO. 250-2025

(2025 Spring Amendment Cycle to the 2023 Carroll County Water and Sewer Master Plan)

WHEREAS, the County Commissioners of Carroll County are required by Title 9, Subtitle 5 of the Environment Article of the Annotated Code of Maryland to periodically review and revise the Carroll County Water and Sewer Master Plan; and

WHEREAS, staff from various agencies including the County, municipalities, and State coordinated to develop the proposed amendments to the Carroll County Water and Sewer Master Plan; and

WHEREAS, on April 17, 2025, the Town of Union Bridge Planning and Zoning Commission certified the proposed amendments, as they pertain to Union Bridge, are consistent with the *2024 Town Plan Review of the 2008 Union Bridge & Environs Community Comprehensive Plan;* and

WHEREAS, on April 23, 2025, the Town of Hampstead Planning and Zoning Commission certified the proposed amendments, as they pertain to Hampstead, are consistent with the *2010 Hampstead Community Comprehensive Plan, amended in 2023;* and

WHEREAS, on April 28, 2025, the Town of New Windsor Planning and Zoning Commission certified the proposed amendments, as they pertain to New Windsor, are consistent with the *2007 (Amended 2010) New Windsor Community Comprehensive Plan;* and

WHEREAS, on April 28, 2025, the City of Taneytown Planning and Zoning Commission certified the proposed amendments, as they pertain to Taneytown, are consistent with the *2010 Taneytown Community Comprehensive Plan;* and

WHEREAS, on June 17, 2025, the Carroll County Planning and Zoning Commission certified the proposed amendments as consistent with the *2014 County Master Plan, Amended 2019*; and

WHEREAS, the County Commissioners of Carroll County conducted a duly advertised Public Hearing regarding the 2025 Spring Amendment Cycle on July 31, 2025.

NOW THEREFORE, BE IT RESOLVED that the County Commissioners of Carroll County adopt the following 2025 Spring Amendment to the 2023 Carroll County Water and Sewer Master Plan, this 21st day of August 2025, as follows:

Spring 2025 Water Amendment:

Town of Union Bridge:

- Many changes were made to the Union Bridge Water Service Area maps resulting in a recalculation of the entire water 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. For the Priority and Future Water Service Areas, the Buildable Land Inventory (BLI) was obtained for the service areas and used for calculations. The resulting recalculations of Table 15 are shown below:

	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

- Text edits as contained in the staff report were made.

Town of Hampstead:

1. Move Property with Parcel Account ID. 0708-062269 from *No Planned Service* 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*" (5 GPD).
2. Move Property with Parcel Account ID. 0708-033609 and 0708-064024 from *No Planned Service* 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 Parcel Account ID. 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).

Town of New Windsor:

- 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 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. For the Priority and Future Water Service Areas, the BLI was obtained and used for calculations. The resulting recalculations of Table 15 are shown below:

	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	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*					
	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	1,703	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*					
	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	1,703	55	0.094	0.075	0.169	0.626
Amendment 1	1,888	51	0.096	0.076	0.172	0.480

- Text edits as contained in the staff report were made.

Spring 2025 Sewer Amendment

Town of Union Bridge:

- Many changes were made to the Union Bridge Sewer Service Area maps resulting in a recalculation of the entire sewer service area. 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 Sewer Service Areas, the Buildable Land Inventory (BLI) was obtained for the service areas and used for calculations. The resulting recalculations of Table 32 are shown below:

	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

Town of Hampstead:

- Move Property with Parcel Account ID. 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.
- Move Property with Parcel Account ID. 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.

Town of New Windsor:

- 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 sewer service area. 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 Sewer Service Areas, the BLI was obtained and used for calculations. The resulting recalculations of Table 32 are shown below:

	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

- Text edits as contained in the staff report were made.

City of Taneytown:

- Move one single-family dwelling unit on property with Parcel Account ID. 0701-000136, from Long Range Sewer Service (S-6) to Priority Sewer Service (S-3) and add 250 GPD of *Residential Demand* to Priority, in Table 32.
- This amendment will also correct a calculation error for total demand, in Table 32, for Priority and Future Planning, from 0.989 to 0.986.

	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)			
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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

BE IT FURTHER RESOLVED that this Resolution shall become effective if/when the 2025 Spring Amendments are Approved by the Maryland Department of the Environment in accordance with the Annotated Code of Maryland, Environment Article, Section 9-507.

ADOPTED this 21st day of August 2025.

THE COUNTY COMMISSIONERS
OF CARROLL COUNTY, MARYLAND,
a body corporate and politic of the
State of Maryland

ATTEST:

County Clerk

(SEAL)
Kenneth Kiler, President

(SEAL)
Joseph Vigliotti, Vice-President

(SEAL)
Tom Gordon, III, Commissioner

(SEAL)
Michael Guerin, Commissioner

Approved for legal sufficiency:

Timothy C. Burke, County Attorney

2023 Carroll County Water and Sewer Master Plan
Spring 2025 Amendment Cycle

June 17, 2025

In accordance with §1-303 and 1-304 of the Land Use Article and §9-505 of the Environment Article, the Planning & Zoning Commission finds the spring 2025 amendments to the 2023 Water & Sewer Master Plan consistent with the 2014 Carroll County Master Plan (as amended in 2019), based on the following:

1. Chapter 2 of the Carroll County Master Plan (Interjurisdictional Coordination, Planning Process and Community Involvement) has a goal to "promote communication and coordination between and among the County, the municipalities, and state and regional jurisdictions on projects and issues of mutual concern." Water and sewer planning is an issue of mutual concern for multiple jurisdictions because it is instrumental in achieving the timing, patterns, and intensities of growth envisioned in local and regional plans. Coordination between the municipalities, County, and State on these amendments has achieved this goal.
2. Chapter 5 of the Carroll County Master Plan (Water Resources) has a goal to "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." Water and sewer planning ensures that development is appropriately located and timed to respond to existing and future water supply and water quality protections. These amendments reflect careful study of the need for water and sewer service that will serve planned development and the ability to meet these demands in a way that protects the county's water resources.
3. Chapter 6 of the Carroll County Master Plan (Public Facilities & Services) notes that the Water & Sewer Master Plan enables the County and its municipalities to plan for and fund improvements to public water and sewer systems in a way that is consistent with and implements local plans. The Planning & Zoning Commissions for each of the affected municipalities have certified that the amendments are consistent with their

comprehensive plans. Because the County Master Plan recognizes that the municipal plans and County Master Plan are "vitally linked together to help implement the overall vision for each plan," (p. 137), actions such as these amendments that implement and are consistent with local plans also implement and are consistent with the County Master Plan.

4. Chapter 16 of the Carroll County Master Plan (Land Use & Growth Management) contains goals to "facilitate a development pattern that is consistent with the fabric of our communities" and to "pursue policies that facilitate development in appropriate areas." It also contains a recommendation to "work with the municipalities to incorporate ways to achieve the County's goal to pursue policies that facilitate development in appropriate areas." Planning for public water and sewer service in accordance with local plans facilitates development in appropriate areas. These amendments will support the pattern of development envisioned in local plans and the County Master Plan, namely to direct growth to the designated growth areas where public water and sewer service is available or planned.

Therefore, the Planning & Zoning Commission recommends the Board of County Commissioners adopt and submit to Maryland Department of the Environment the spring 2025 amendments to the 2023 Water & Sewer Master Plan as presented on June 17, 2025 by staff and summarized on the attached pages.

Janice R. Kirkner, Chair
Carroll County Planning and Zoning Commission

Daphne Daly, AICP, Secretary
Carroll County Planning and Zoning Commission

c. Andrew Gray, AICP, Comprehensive Planner

Spring 2025 Water Amendment:

Town of Union Bridge:

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since water usage will be "*very minimal for periodic wash down of equipment and mixing of water treatment chemicals*".

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Amendment 1	1,883	41	0.077	0.073	0.150	0.165

- Text edits as contained in the staff report were made.

City of Taneytown:

- Move 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 add 250 GPD of *Residential Demand* to Priority, in Table 32.

- This amendment will also correct a calculation error for total demand, in Table 32, for Priority and Future Planning, from 0.989 to 0.986.

	Table 32 Projected Sewerage Demands and Planned Capacity* **Priority Planning** **(0-6 Years)**					
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			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)**					
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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

2023 CARROLL COUNTY WATER AND SEWER MASTER PLAN

2025 SPRING AMENDMENT

April 17, 2025

The Union Bridge Planning and Zoning Commission hereby certifies the 2025 Spring Amendment to the 2023 Carroll County Water and Sewer Master Plan, as it pertains to the Town of Union Bridge, is consistent with the 2024 Town Plan Review of the 2008 Union Bridge & Environs Community Comprehensive Plan (Town Plan), as presented in the attached staff report.

Chair of the Union Bridge Planning and Zoning Commission

1034 S. Carroll Street
Hampstead, MD 21074
410-239-7408 Tel
410-239-6143 Fax
Hampstead@carr.org
www.hampsteadmd.gov

2023 CARROLL COUNTY WATER AND SEWER MASTER PLAN

2025 SPRING AMENDMENT

April 23, 2025

The Hampstead Planning and Zoning Commission hereby certifies the 2025 Spring Amendment to the 2023 Carroll County Water and Sewer Master Plan, as it pertains to the Town of Hampstead, is consistent with the 2010 Hampstead Community Comprehensive Plan, amended in 2023, as presented in the attached staff report.

Chair of the Hampstead Planning and Zoning Commission

NEAL C. ROOP
MAYOR
E-mail:
NRoop@newwindsormd.org

Phone: 410-635-6575
Fax: 410-635-2995
E-mail:
Info@NewWindsorMD.org

TOWN OF NEW WINDSOR
209 High Street - P. O. Box 609
New Windsor, Maryland 21776

April 28, 2025

Javier Toro, Planner
Carroll County Government
Department of Planning & Land Management
225 N. Center Street
Westminster, MD 21157

Dear Javier:

After review and comments from the Town of New Windsor Staff, the Town of New Windsor Planning and Zoning Commission voted (6-0) to certify the 2025 Spring Amendment to the 2023 Carroll County Water and Sewer Master Plan, as it pertains to the Town of New Windsor, is consistent with the 2007 (amended 2010) New Windsor Community Comprehensive Plan, as presented in the attached staff report.

Mark J. Schultz, Chairman
New Windsor Planning and Zoning Commission

MAYOR AND CITY COUNCIL

2023 CARROLL COUNTY WATER AND SEWER MASTER PLAN

2025 SPRING AMENDMENT

April 28, 2025

The Taneytown Planning and Zoning Commission hereby certifies the 2025 Spring Amendment to the 2023 Carroll County Water and Sewer Master Plan, as it pertains to the City of Taneytown, is consistent with the 2010 Taneytown Community Comprehensive Plan, as presented in the attached staff report.

James A Wieprecht April 28, 2025

Chair of the Taneytown Planning and Zoning Commission

17 E. BALTIMORE STREET • TANEYTOWN, MARYLAND 21787
(410) 751-1100 • Fax (410) 751-1608
website: www.taneytown.org

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*).

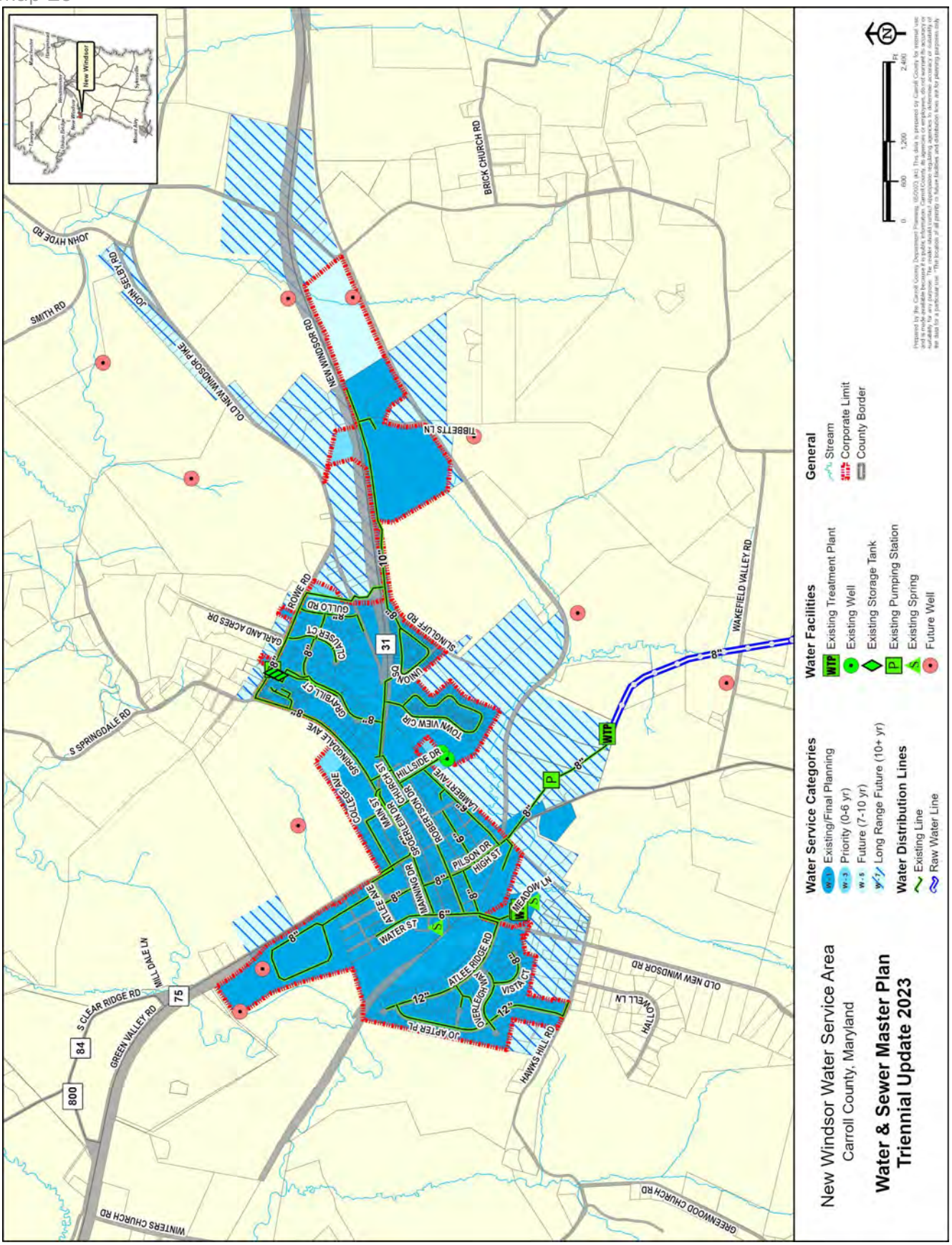
Needs Analysis

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


New Windsor Water Service Area
Carroll County, Maryland
Water & Sewer Master Plan
Triennial Update 2023
Water Service Categories
W-1 Existing/Final Planning
W-2 Priority (0-6 yr)
W-3 Future (7-10 yr)
W-4 Long Range Future (10+ yr)
Water Distribution Lines
Existing Line
Raw Water Line
Water Facilities
WTP Existing Treatment Plant
Existing Well
Existing Storage Tank
P Existing Pumping Station
Existing Spring
Future Well
General
Stream
Corporate Limit
County Border
BRICK CHURCH RD
NEW WINDSOR RD
JOHN HYDE RD
JOHN SELBY RD
SMITH RD
OLD NEW WINDSOR PIKE
TIBBETTS LN
ROWE RD
GULLO RD
CLAUSER CT
GARLAND ACRES DR
GRAYBILL CT
SLINGLUFF RD
UNION OS
TOWN VIEW CIR
HILLSIDE DR
LAMBERT AVE
ROBERTSON DR
CHURCH ST
MAIN ST
SPRINGDALE AVE
COLLEGE AVE
S SPRINGDALE RD
PILSON DR
HIGH ST
MEADOW LN
WATER ST
HAWMING DR
ATLEE AVE
ATLEE RIDGE RD
RALEIGH CT
VISTA CT
JO APTER PL
OLD NEW WINDSOR RD
OWELL LN
HALL
HAWKS HILL RD
WAKEFIELD VALLEY RD
MILL DALE LN
S CLEAR RIDGE RD
GREEN VALLEY RD
WINTERS CHURCH RD
GREENWOOD CHURCH RD
31
75
84
800
WTP
P
10"
12"
8"
6"

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
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.
- Snader Property well and other additional sources 205,000 GPD

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

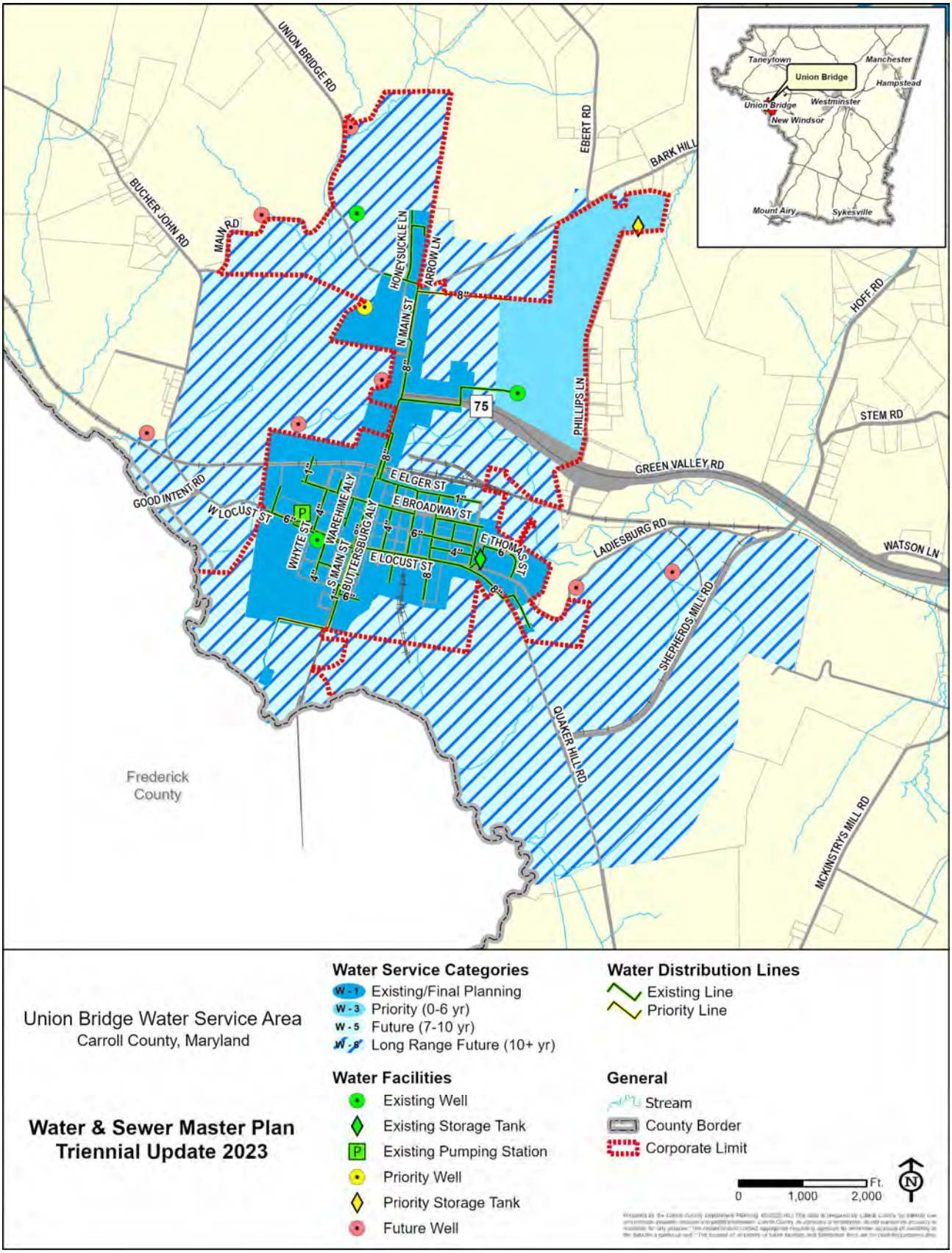

UNION BRIDGE RD
EBERT RD
BARK HILL
BUCHER JOHN RD
MAIN RD
HONEYSUCKLE LN
ARROW LN
N MAIN ST
HOFF RD
PHILLIPS LN
75
STEM RD
GREEN VALLEY RD
GOOD INTENT RD
W LOCUST ST
E ELGER ST
E BROADWAY ST
WAREHIME ALY
WHYTE ST
S MAIN ST
BUTTERSBURG ALY
E LOCUST ST
E THOMAS ST
LADIESBURG RD
WATSON LN
SHEPHERDS MILL RD
QUAKER HILL RD
MCKINSTRYS MILL RD
Frederick County
Taneytown
Manchester
Union Bridge
Hampstead
Union Bridge
Westminster
New Windsor
Mount Airy
Sykesville
Union Bridge Water Service Area
Carroll County, Maryland
Water & Sewer Master Plan
Triennial Update 2023
Water Service Categories
W - 1 Existing/Final Planning
W - 3 Priority (0-6 yr)
W - 5 Future (7-10 yr)
W - 8 Long Range Future (10+ yr)
Water Facilities
Existing Well
Existing Storage Tank
Existing Pumping Station
Priority Well
Priority Storage Tank
Future Well
Water Distribution Lines
Existing Line
Priority Line
General
Stream
County Border
Corporate Limit
0
1,000
2,000
Ft.
N

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
Total			*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
Total	*0.821*	*0.166*	*unknown*

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*

* 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.

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 15[2]
Projected Water Supply Demands and Planned Capacity

Service Area	Present Year						Priority Planning (0-6 Year)						Future Planning (7-10 Year)					
	Res. Pop. Ser.	GPCD	Capacity Million Gal. Daily (MGD)				Res. Pop. Ser.	GPCD	Capacity Million Gal. Daily (MGD)				Res. Pop. Ser.	GPCD	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	85	1.938	0.102	2.040	4.427	29,080	86	2.487	0.541	3.028	4.427	31,159	82	2.547	0.541	3.088	7.000
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	0.031	0.256	0.581	6,790	51	0.348	0.053	0.401	0.606	6,798	51	0.349	0.053	0.402	0.606
Mount Airy[4]	9,727	65	0.633	0.177	0.812	0.927	9,924	66	0.651	0.303	0.954	1.079	9,924	66	0.651	0.304	0.955	1.079
New Windsor [5]	1,748	47	0.081	0.015	0.096	0.196	1,885	51	0.096	0.056	0.151	0.275	1,888	51	0.096	0.076	0.172	0.480
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	7,883	51	0.400	0.205	0.605	0.601
Union Bridge	1,025	88	0.090	0.076	0.166	0.208	1,551	110	0.170	0.082	0.252	0.208	2,310	74	0.170	0.082	0.252	0.208
Westminster [8] [9] [10] [11]	29,308	91	2.66	0.396	3.056	4.231	32,846	92	3.017	0.758	3.775	5.231	33,073	92	3.040	0.811	3.851	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]

[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

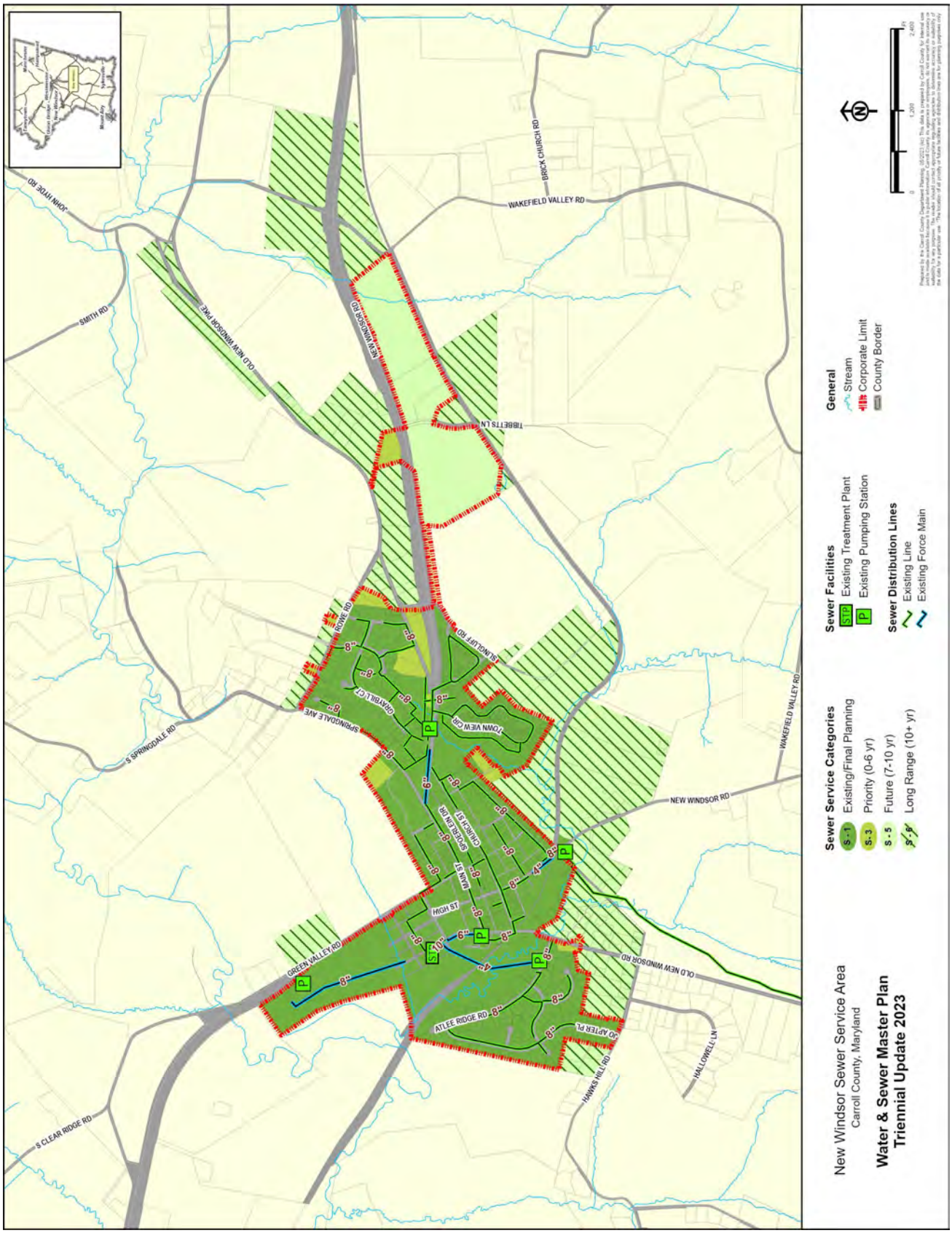
See Tables 21A-21D for New Windsor SSA infrastructure.

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


New Windsor Sewer Service Area
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Sewer Service Categories
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S-3 Priority (0-6 yr)
S-5 Future (7-10 yr)
S-6 Long Range (10+ yr)
Sewer Facilities
STP Existing Treatment Plant
P Existing Pumping Station
Sewer Distribution Lines
Existing Line
Existing Force Main
General
Stream
Corporate Limit
County Border
WAKEFIELD VALLEY RD
BRICK CHURCH RD
JOHN HYDE RD
SMITH RD
OLD NEW WINDSOR PIKE
NEW WINDSOR RD
TIBBETTS LN
S SPRINGDALE RD
SPRINGDALE AVE
GRAYBILL CT
BLANCHARD RD
TOWN VIEW CIR
CHURCH ST
SCHOOL LN
MAIN ST
HIGH ST
GREEN VALLEY RD
ATLEE RIDGE RD
OLD NEW WINDSOR RD
HALLOWELL LN
HAWKS HILL RD
S CLEAR RIDGE RD

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
Springdale Prep School (Private)	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
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

Union Bridge Sewer Service Area

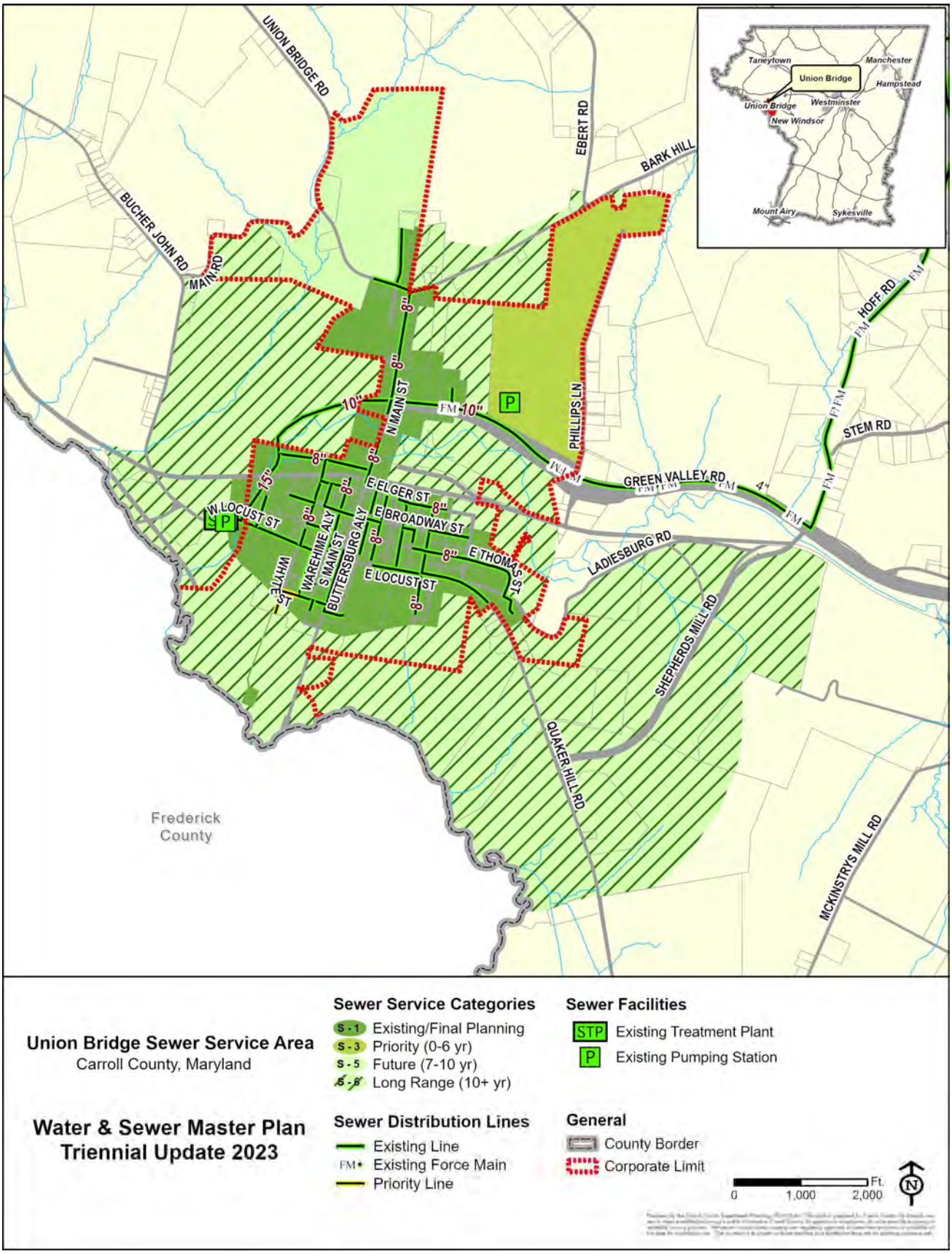
Current Conditions

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


UNION BRIDGE RD
EBERT RD
BARK HILL
BUCHER JOHN RD
MAIN RD
HOFF RD
STEM RD
PHILLIPS LN
N MAIN ST
GREEN VALLEY RD
W LOCUST ST
E ELGER ST
E BROADWAY ST
E THOMAS ST
E LOCUST ST
WAREHIME ALY
S MAIN ST
BUTTERSBURG ALY
WHYTE ST
LADIESBURG RD
SHEPHERDS MILL RD
QUAKER HILL RD
MCKINSTRYS MILL RD
Frederick County
Taneytown
Manchester
Union Bridge
Hampstead
Westminster
New Windsor
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S-5 Future (7-10 yr)
S-6 Long Range (10+ yr)
Sewer Distribution Lines
Existing Line
Existing Force Main
Priority Line
Sewer Facilities
STP Existing Treatment Plant
P Existing Pumping Station
General
County Border
Corporate Limit
0 1,000 2,000 Ft.
N

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: 00DP0774 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.

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 32[3]
Projected Sewerage Demands and Planned Capacity*

Service Area	Present Year						Priority Planning (0-6 Year)						Future Planning (7-10 Year)					
	Res. Pop. Ser.[1]	GPCD	Capacity Million Gal. Daily (MGD) Res. Dem.	Oth. Dem.	Tot. Dem.	Ex. Cap.	Res. Pop. Ser.[2]	GPCD	Capacity Million Gal. Daily (MGD) Res. Dem.	Oth. Dem.	Tot. Dem.	Pl. Cap.	Res. Pop. Ser.[3]	GPCD	Capacity Million Gal. Daily (MGD) Res. Dem.	Oth. Dem.	Tot. Dem.	Pl. Cap.
Freedom/Sykesville[4]	25,964	85	2.209	.116	2.325	3.500	31,194	86	2.673	0.488	3.161	3.500	31,677	86	2.739	.548	3.287	3.500
Hampstead	6,094	67	0.410	0.067	0.477	0.900	7,822	72	0.565	0.320	0.885	0.900	8,083	73	0.587	0.361	0.948	0.900
Manchester	4,049	59	0.237	0.032	0.269	0.500	4,324	80	0.345	0.053	0.397	0.500	4,551	77	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	0.876	1.200	9,851	60	0.589	0.288	0.877	1.200
New Windsor[6] [7]	1,719	36	0.063	0.011	0.074	0.115	1,881	41	0.077	0.028	0.105	0.125	1,883	41	0.077	0.073	0.150	0.165
Taneytown[8] [9]	7,234	88	0.640	0.191	0.831	1.100	8,804	81	0.714	0.272	0.986	1.100	8,804	81	0.714	0.272	0.986	1.100
Union Bridge[10]	1,023	96	0.098	0.082	0.181	0.200	1,589	116	0.184	0.088	0.272	0.246	2,566	102	0.262	0.088	0.350	0.315
Westminster[11]	28,839	144	4.156	0.676	4.832	5.000	33,124	138	4.588	1.08	5.688	6.5	33,525	138	4.628	1.118	5.746	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]
[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/FinalPlanning. The allocation is split; 24,252 gpd in Priority and 9,168 gpd in Future.