

HOUSING & COMMUNITY DESIGN

Housing and community design are foundational to the quality of life in any community. Where and how people live shapes their access to opportunity, their daily experiences, and their long-term stability. As populations change and housing markets evolve, communities must respond with intentional planning to ensure that everyone, regardless of age, income, or household type, can find a safe, appropriate, and affordable place to live. Housing policy is not only about numbers and density; it is about meeting diverse human needs in ways that support dignity, inclusion, and opportunity.

In addition to the availability of housing, the physical form and design of neighborhoods play a critical role in shaping a community's identity, resilience, and livability. Good design connects people to one another, reinforces the unique character of place, and fosters healthier, more walkable, and more sustainable patterns of development. Especially in a city like Taneytown, where growth must be balanced with limited infrastructure and a strong sense of heritage, planning for both housing and design is essential to ensuring that future development reflects local values while meeting emerging needs.



GOAL #1

Provide diverse housing options to meet the needs of all income levels and age groups.

Taneytown's population includes a range of households, from young families to older adults, each with unique housing needs. Offering a variety of housing types helps ensure that all residents can find suitable, affordable options within the community.

GOAL #2

Encourage high-quality residential design that aligns with Taneytown's character.

Maintaining Taneytown's architectural identity and walkable neighborhoods is essential to preserving its small-town charm. Thoughtful residential design that incorporates traditional styles, appropriate scale, and cohesive streetscapes will support both aesthetic appeal and long-term community pride.

GOAL #3

Address affordable housing needs while maintaining neighborhood stability.

Expanding access to affordable housing should be balanced with strategies that preserve neighborhood quality, foster mixed-income communities, and prevent displacement. By integrating affordability into existing and new developments, Taneytown can promote inclusive growth without undermining local character or cohesion.

HOUSING & COMMUNITY DESIGN PLAN

EVOLVING HOUSING TRENDS IN TANEYTOWN

Taneytown's housing landscape has evolved significantly over the past two decades, marked by steady residential growth and a predominance of single-family development. Between 2000 and 2020, the number of housing units in the City increased by 43%, reflecting both the expansion of its suburban residential zones and a market preference for owner-occupied homes. While these trends reflect Taneytown's traditional development pattern, they also reveal a narrowing of housing options for renters, first-time buyers, and residents with lower or moderate incomes.

HOUSING DIVERSITY & AFFORDABILITY PRESSURES

The City has seen some diversification in housing types, including an increase in 3-4 unit dwellings and larger apartment buildings. However, these forms still make up a small share of the overall housing stock. At the same time, housing costs have risen sharply. The median home value more than doubled between 2000 and 2020, and the supply of homes under \$150,000 dropped dramatically. Rental housing experienced a similar trend, with units under \$500 nearly vanishing and those above \$1,000 growing to represent nearly one in five rentals. While household incomes have increased, these gains have not been evenly distributed, and a growing number of residents may be priced out of housing that meets their needs.

AGING HOUSING STOCK

The City's housing supply also reflects a mix of older and newer stock. More than one-third of Taneytown's homes were built before 1980, including a sizable share constructed prior to 1940. These homes contribute to the City's historic character but may require reinvestment to remain functional, efficient, and accessible.

BALANCING DESIGN QUALITY WITH HOUSING CHOICE

As Taneytown looks to the future, the challenge lies in balancing the desire for high-quality, character-aligned development with the need to offer a broader range of housing options. The Community Village Overlay Zone offers a flexible tool to achieve this balance by encouraging mixed

housing types, walkable layouts, and preservation of natural features. Infill development and neighborhood revitalization can also play a key role in expanding housing supply while reinforcing the City's compact, small-town form. Continued attention to design standards (particularly those that ensure compatibility with Taneytown's architectural traditions) can help new projects enhance the visual coherence and identity of existing neighborhoods.

ADDRESSING AFFORDABILITY & SUPPORTING INCLUSION

Addressing housing affordability remains a critical concern. Rising home values and rents, combined with a shrinking inventory of lower-cost housing, risk excluding younger residents, retirees, and lower-income households. While Carroll County administers several programs to support residents in need, these efforts must be complemented by local strategies that expand access to affordable and workforce housing. Preserving existing affordable units, supporting reinvestment in aging housing, and encouraging a mix of rental and ownership opportunities are all important to maintaining an inclusive, resilient community.

PLANNING FOR SUSTAINABLE GROWTH

Thoughtful community design will be essential as Taneytown continues to grow within a constrained geographic footprint. Much of the surrounding land is permanently preserved through agricultural easements, and utility limitations impose further restrictions on expansion. Within this context, future residential development must prioritize efficient land use, walkability, and integration with existing infrastructure. As the City adapts to changing demographics and market conditions, its commitment to cohesive, inclusive, and well-designed neighborhoods will define its long-term livability and success.

IMPLEMENTATION STEPS

Goal #1: Provide diverse housing options to meet the needs of all income levels and age groups.

- Explore the possibility of amending the zoning ordinance to allow duplexes, townhomes, accessory dwelling units (ADUs), and small multi-family buildings in appropriate residential districts to expand choices for renters, seniors, and first-time homebuyers.
- Promote the Village Overlay Zone as a tool for new developments to incorporate varied housing types, integrated open space, and walkable design features.
- Conduct a housing site inventory to locate underutilized or vacant parcels within the City that are suitable for housing diversity without expanding the City's footprint.
- Collaborate with regional affordable housing providers or land trusts to develop housing projects that serve low- to moderate-income households, seniors, and people with disabilities.

Goal #2: Encourage high-quality residential design that aligns with Taneytown's character.

- For larger or high-visibility residential projects, establish a design review procedure to ensure alignment with the City's character and surrounding context.
- Encourage development that includes connected street grids, front porches, narrow setbacks, and a human-scale streetscape to maintain the walkable, small-town feel.
- Expand outreach and technical support to owners of older homes, particularly those built before 1940, to facilitate sensitive upgrades and reinvestment.
- Adopt standards that guide infill development to reflect the scale, rhythm, and visual character of surrounding homes.

Goal #3: Address affordable housing needs while maintaining neighborhood stability.

- Offer streamlined permitting, reduced fees, or increased densities for projects that include income-restricted housing units.
- Ensure Taneytown residents have access to County-administered resources like housing vouchers, eviction prevention assistance, and rapid rehousing support.
- Regularly track housing costs, vacancy rates, and demographic shifts to identify emerging needs and inform proactive policy responses.
- Consider allowing ADUs by right in residential zones, subject to design and occupancy standards, to increase affordability without altering neighborhood character.
- Use public forums, surveys, and neighborhood outreach to build support for housing solutions that maintain community cohesion and respect local values.

WATER RESOURCES ELEMENT

Section 3.05 (a)(vi) of Article 66B of the Annotated Code of Maryland mandates that all Maryland counties and municipalities that exercise planning and zoning authority prepare and adopt a Water Resources Element (WRE) to their comprehensive plans. The element identifies the following:

- Drinking water supplies
- Water resources which are needed for existing and future growth
- Receiving waters for stormwater and treated wastewater
- Land areas for stormwater management systems and wastewater treatment
- Pollutant reductions for existing and future growth

In 2010, Carroll County adopted a joint WRE in collaboration with all eight of its municipalities, including Taneytown. The entire plan can be found at the Carroll County website. Key components of the plan are listed in this section.

The purpose of the WRE is to ensure that future county and municipal comprehensive plans reflect the opportunities and limitations presented by local and regional water resources. WREs are intended to improve local jurisdictions' contribution to the protection of state land and water resources; to the protection of public health, safety and welfare; and to meet local and state smart growth policies.

A Models and Guidelines document was prepared by the Maryland Departments of Planning (MDP) and Environment (MDE). Its purpose was to help local governments prepare the WRE in a manner that not only met the requirements of the law but strengthened their planning efforts by ensuring that water resources are adequate to support smart growth while meeting local economic, environmental, and land use goals. The common goals for Maryland's water resources are reflected in the Chesapeake Bay Tributary Strategies, federal and state regulatory programs, and smart growth policies.

CURRENT CONDITIONS

WATER SUPPLY

Taneytown's public water system draws from an unconfined, fractured rock aquifer. An aquifer is an underground pocket of water which is trapped between layers of rock. A confined aquifer is trapped between layers of impermeable material so that it is under pressure. An unconfined aquifer, like the one that supplies Taneytown's water, does not have the same impermeable layer above it. These aquifers are closer to the surface and therefore they are more susceptible to seasonal fluctuations in recharge due to drought or periods of high precipitation. A fractured rock aquifer means the water is stored in the cracks and fractures of the bedrock. This geology results in variable yields from well to well and requires careful siting, testing, and ongoing monitoring to ensure reliable water supply. Although these aquifers can deliver high-quality groundwater, their vulnerability to contamination and seasonal variability requires active management and protection.

The City of Taneytown owns and operates the water supply system and generally limits service to the area located within the City's corporate boundary. The overall water service area covers approximately 3,134 acres within and bordering the municipality. Taneytown's water supply system includes eight municipal wells, supported by two elevated water storage tanks. A ninth well, Well 10, is not currently in service. Of the eight wells, six are located within the Piney Creek watershed, while the remaining two are situated in the Big Pipe Creek watershed, both of which are part of the broader Monocacy River basin. These sources are managed to maintain adequate daily supply and reserve capacity for fire protection and peak usage periods.

Throughout the system, chlorination by chlorine gas, the only treatment used, occurs at each pump house with the exception of Wells 9 & 12. Well 9 is treated by granular activated carbon for volatile organic compounds. Water from Well 12 is treated at the Well 11 pump house. After chlorination, water is distributed through the water system and into the City's two aboveground storage tanks. The combined usable storage of these tanks is 610,000 gallons, which provides a 1.5 days' supply

of water based on actual consumption. In addition to maintaining constant pressure throughout the system, the storage tanks also provide water supply for firefighting.

Ongoing coordination with Carroll County ensures that source protection and system capacity planning align with projected demand and watershed protection efforts. The County's delineations of certain areas as Aquifer

Protection Areas and Wellhead Protection Areas serves as an added layer of safeguard against contamination and development pressures near municipal well sites. Aquifer Protection Areas are zones that surround designated growth areas and serve to safeguard groundwater resources that could supply public water systems in the future. These areas are prioritized for long-term water supply planning and are intended to protect both water quality and recharge potential from incompatible land uses or contamination risks. The Aquifer Protection Area encompasses all of Taneytown and can be seen on the Water Resource Management Area Guidance Map in the Carroll County Water & Sewer Master Plan (2023 Triennial Update). Wellhead Protection Areas are zones around existing public supply wells or springs that contribute directly to their recharge. These areas are delineated based on hydrogeologic modeling and field data, and they are subject to special regulations to minimize risks of groundwater contamination near active drinking water sources. The Wellhead Protection Area coverage in Taneytown can be found on the Environmental Resources Map on page 113 of this comprehensive plan.

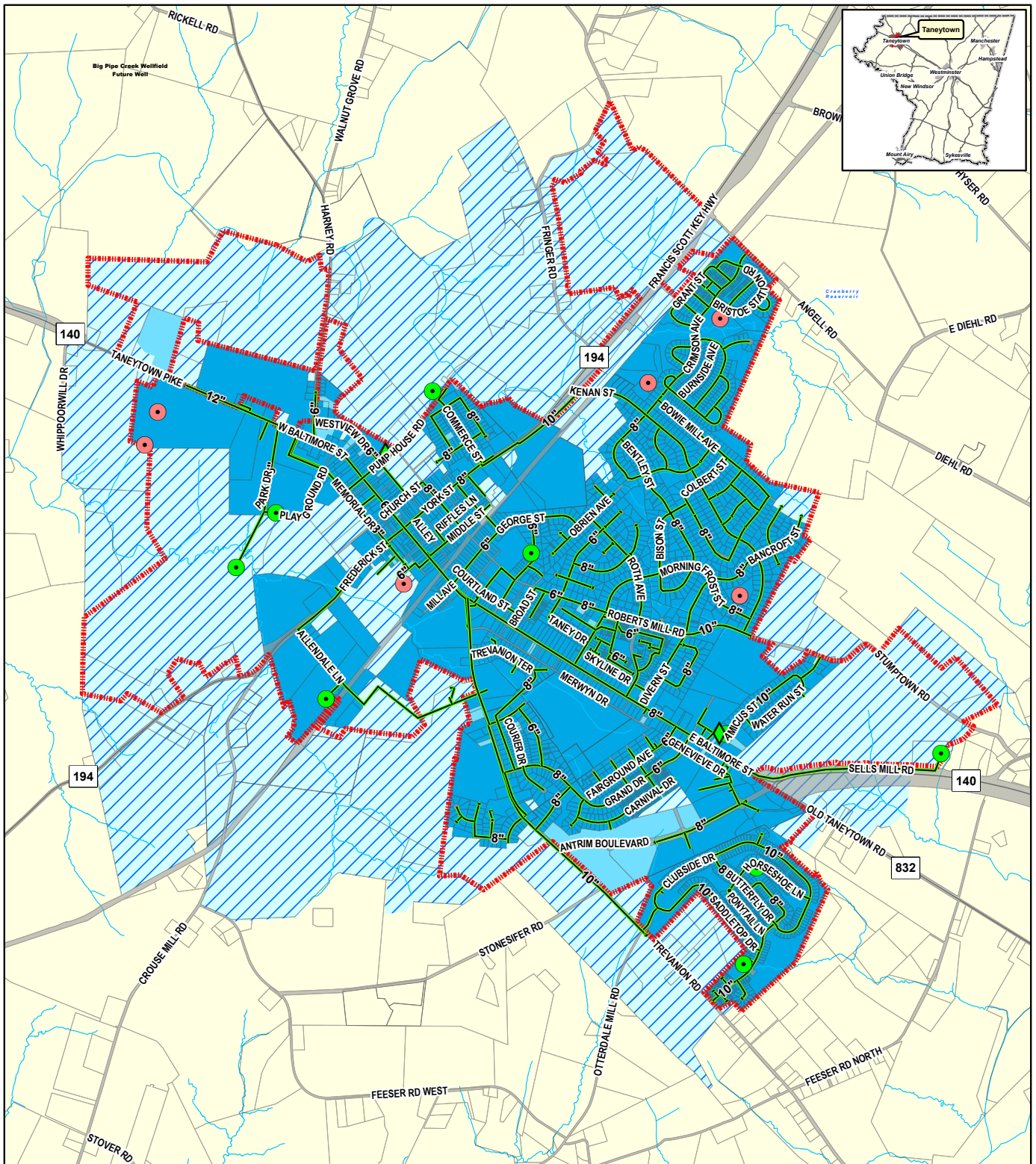
In addition to its groundwater sources, Taneytown has considered long-term options to diversify its water supply through the development of a surface water system. One such concept, still under consideration by the County, involves a surface water intake on Big Pipe Creek. This option includes a proposed intake with a safe yield of 0.4 million gallons per day (mgd), coupled with a 2.0 mgd intake capacity and a 125 mgd storage impoundment. While this project is not currently underway, it remains a potential strategy to enhance system resiliency and meet future water demands through regional or multi-municipal collaboration.

Water Supply Demand

Water supply demand projections for Taneytown are derived from the 2023 Carroll County Water and Sewer Master Plan, which outlines current and future needs based on projected population growth and land use changes. In 2023, the water supply system served 3,338 accounts. Approximately 77% of total consumption is estimated to be residential. Total water production (as metered at the City's production wells) in 2023 was recorded to be an average of approximately 450,000 gallons per day (gpd). The City's permitted daily average use was 552,100 gpd.

TABLE WRE-1: TANEYTOWN WATER SYSTEM (2023)		
WATER SOURCE	PERMIT NUMBER	PERMITTED DAILY AVERAGE USE (GPD)*
Wells 8 & 9	CL1978G079 (10)	190,000
Well 10**	CL2010G002 (01)	77,600
Wells 11 & 12	CL1978G279 (02)	118,000
Well 14	CL1978G179 (05)	90,000
Wells 15 & 16	CL2004G018 (03)	135,000
Well 17***	CL2007G003 (02)	19,100
TOTAL		552,100
Source: Carroll County Water & Sewer Master Plan 2020		
*GPD stands for "gallons per day".		
**Well 10 is currently not in service. Its permitted daily average use was not calculated as a part of the total for all wells.		
***The existing permitted capacity of Well 17 is 19,100 gpd, however the reliable yield of the Well is approximately 270,000 gpd and a permitted daily average use of up to 204,500 gpd is estimated. The City is evaluating acquisition of recharge acreage which will be linked to well permit increases.		

TABLE WRE-2: TANEYTOWN WATER STORAGE		
STORAGE TANK	STORAGE CAPACITY (GALLONS)	USABLE STORAGE
Pump House Rd. Standpipe	750,000	460,000
E. Baltimore St. Water Tower	150,000	150,000
TOTAL	900,000	610,000
Source: Carroll County Water & Sewer Master Plan 2020		



Taneytown Water Service Area Carroll County, Maryland

Water & Sewer Master Plan Triennial Update 2023

Water Service Areas

- W-1 Existing/Final Planning
- W-2 Priority (0-6 yr)
- W-3 Long Range Future (10+ yr)

Water Distribution Lines

- Existing Line

Water Facilities

- Existing Well
- Existing Storage Tank
- Future Well

General

- Stream
- Corporate Limit
- County Border



Prepared by the Carroll County Department Planning, 05/2023 (kc) 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 regulating 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.

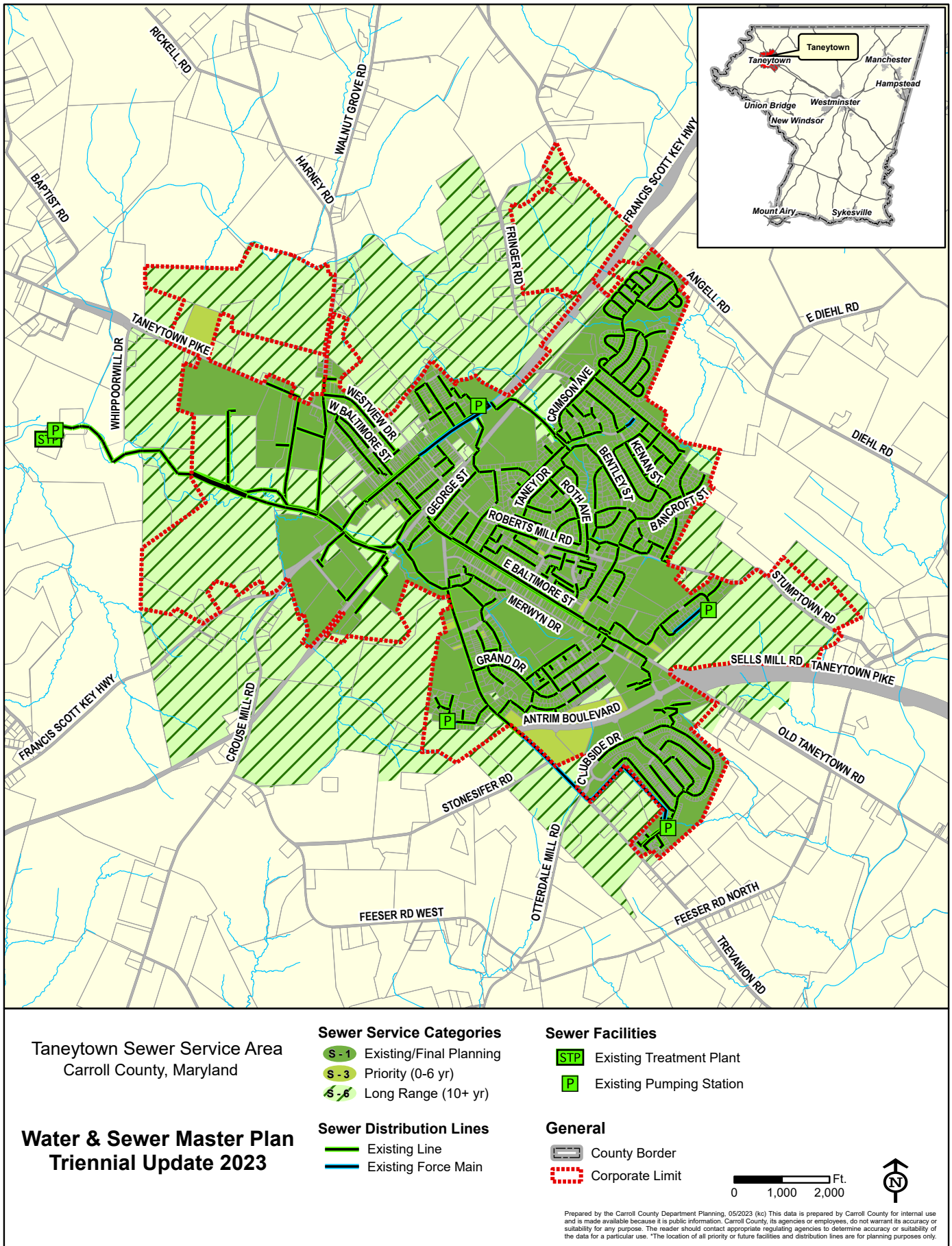


TABLE WRE-3: FUTURE WATER SUPPLY DEMAND

CURRENT DEMAND*	CURRENT PERMITTED	SHORT TERM DEMAND (0-6 YR)	LONG TERM DEMAND (2040)
450,000	552,100	634,750	898,045

Source: Carroll County Water & Sewer Master Plan

**This number is an average of daily use in gpd (gallons per day) for a period between 2020-2022.*

Two residential developments currently in the planning stages are expected to add 331 new dwelling units. Using the County's standard projection factor of 250 gpd per unit, this equates to an additional 82,750 gpd of short-term residential demand. Looking further ahead, residential demand is projected to increase by 114,500 gpd by the year 2040, based on countywide population forecasts and build-out estimates.

In addition to residential growth, the County has identified 250,795 gpd in potential increases from commercial and industrial uses within Taneytown's service area. Of this total, 102,000 gpd is anticipated to be needed within the next six years. These projections reflect anticipated development within the designated growth area and incorporate the County's land use designations and zoning capacity.

The County's projection methodology, detailed in Appendix 3 of the 2023 Carroll County Water and Sewer Master Plan, uses a combination of buildable land inventory, zoning allowances, and occupancy trends to estimate future demand. This approach enables municipalities like Taneytown to plan for infrastructure upgrades and source protection in coordination with county-level resource management strategies.

Water Supply Capacity

Taneytown's current permitted water supply is 552,100 gpd. Based on projected increases in residential, commercial, and industrial demand, the City would need to make available up to 898,045 gpd to fully accommodate anticipated future needs. This projected shortfall highlights the importance of expanding available capacity through both physical infrastructure and regulatory approvals.

Water withdrawals in Maryland are regulated by MDE, which issues appropriation and use permits based on available recharge and sustainable yield. To increase permitted capacity, the City

must demonstrate that sufficient groundwater recharge is available to support the additional withdrawal without depleting the aquifer or harming nearby users. As a result, the City is actively evaluating the acquisition of additional recharge acreage that can be linked to permit increases, especially in connection with high-yield wells like Well 17.

Water Supply Limitations

One of the primary limitations to expanding Taneytown's water supply is the lack of sufficient groundwater recharge acreage. While there are upland areas with potential for recharge or additional well development, acquiring the necessary land and associated water rights is costly. The City has recognized this challenge and is actively evaluating recharge acreage acquisition as a means to support future increases in permitted withdrawals from high-yield wells, particularly Well 17.

A secondary constraint involves site-specific environmental and geologic conditions, such as steep slopes, sensitive habitats, or unsuitable soils, which can limit the feasibility of developing new supply infrastructure in certain locations. Additionally, because Taneytown draws water from an unconfined fractured rock aquifer, well yields and water quality can vary significantly depending on site conditions.

The most recent MDE Source Water Assessment for Taneytown was completed in 2000. That report identified the City's water supply as being susceptible to contamination by nitrates, volatile organic compounds (VOCs), and radionuclides, while synthetic organic compounds (SOCs) were not considered a concern. Raw water samples from Well 12 were also found to be susceptible to bacterial contamination, emphasizing the need for continued source monitoring and protection. Although the assessment is dated, it remains the most current publicly available evaluation of source water vulnerability.

Another supply limitation is related to unaccounted-for water loss, which averaged 14% between 2020 and 2022. This loss is primarily attributed to leaks within the distribution system. In response, the City operates an active leak detection and monitoring program. Planned system improvements, including water main replacements, control system upgrades, and meter

replacements, are expected to reduce losses and improve system efficiency.

Additional information related to Taneytown's water supply can be found in the Taneytown Water Supply Facilities section of the 2023 Carroll County Water & Sewer Master Plan.

WASTEWATER

Taneytown's wastewater treatment plant (WWTP) is located on the west side of the City, along Piney Creek in the Upper Monocacy River watershed. The facility was originally placed into service in 2000 and is designed to treat an average daily flow of 1,100,000 gpd. The entire sewer service area comprises approximately 3,135 acres. It served 2,793 accounts in 2023. Total sewerage demand (as metered at the wastewater treatment plant) averaged from flows during 2020-2022 was recorded to be approximately an average of 829,000 gpd, including infiltration and inflow (I&I). I&I occurs when stormwater and groundwater enter the sanitary sewer system through defective pipes, joints, and manholes, contributing to flows that exceed the volume of actual wastewater generated by users. The system is hydraulically capable of treating peak flows up to five million gpd.

The City's sewage is treated via sequence batch reaction process. This is a method in which wastewater is directed to a tank where it is aerated, allowed to settle, and then treated naturally or with chemicals before it is discharged, or released. Instead of a chemical treatment, the process that Taneytown uses is a natural process called "Activated Sludge". This is a process in which microorganisms are used to break down organic matter and nutrients. The microorganisms group together into a product called "sludge", which is then separated from the treated water before being discharged into Piney Creek. Taneytown's sludge is hauled and disposed of by an outside contractor. This solid waste is utilized in agricultural settings as a

fertilizer. The City also injects liquid sludge into adjacent farmlands when available. The sewage treatment plant generated an estimated 465.79 wet tons of sludge at 18.57 percent solids from January 1, 2022 to December 31, 2022.

The WWTP discharges treated effluent into Piney Creek. The system includes four pumping stations, collection lines, and associated infrastructure. The plant was upgraded in 2016 to comply with Maryland's Enhanced Nutrient Removal (ENR) standards, helping to reduce nitrogen and phosphorus loads to the Chesapeake Bay watershed.

Ongoing improvements to the WWTP are focused on ensuring regulatory compliance and extending system longevity. Planned projects include replacement of aging clarifiers, biosolids handling equipment, and upgrades to pumping station generators. These investments will support continued performance within National Pollutant Discharge Elimination System (NPDES) permit limits while maintaining sufficient capacity for projected growth.

Wastewater Demand

Projected wastewater demand in Taneytown is based on anticipated residential growth

TABLE WRE-4: TANEYTOWN SEWAGE TREATMENT (2023)				
STP TREATMENT TYPE	POINT OF DISCHARGE	WWTP DESIGN CAPACITY (MGD)*	AVERAGE FLOWS (MGD)	METHOD OF SLUDGE DISPOSAL
Activated Sludge/ENR**	Piney Creek	1.100	0.831	Land Application
Source: Carroll County Water & Sewer Master Plan 2020				
*MGD stands for "million gallons per day".				
**ENR stands for "enriched nutrient removal". ENR limits are mandated by the state.				
Discharge Permit Number: 00DP0687A				
NPDES Number: MD0020672				

TABLE WRE-5: FUTURE WASTEWATER DEMAND			
CURRENT DEMAND*	CURRENT PERMITTED	SHORT TERM DEMAND (0-6 YR)	LONG TERM DEMAND (2040)
831,000	1,100,000	994,750	1,257,997
Source: Carroll County Water & Sewer Master Plan			
*This number is an average of daily use in gpd (gallons per day) for a period between 2020-2022.			

and the potential for expanded commercial and industrial development within the City's designated sewer service area. Two residential developments currently in planning are expected to result in 331 new dwelling units. Using the County's standard factor of 250 gallons per day (gpd) per unit, this would generate approximately 82,750 gpd in additional short-term residential wastewater demand.

Looking further ahead, population-based projections suggest an increase of 114,500 gpd in residential demand by 2040, in line with residential build-out and demographic trends used throughout the 2023 Carroll County Water & Sewer Master Plan.

In addition to residential growth, the Plan identifies 229,747 gpd of potential new wastewater flow from commercial and industrial sources. Approximately 81,000 gpd of this is expected to be needed within the next six years, driven by projected land use changes, zoning capacity, and developer interest in industrial expansion within the City's growth area.

These projections reflect a combined future demand of more than 426,000 gpd, emphasizing the importance of managing existing capacity, reducing I&I, and completing ongoing facility upgrades to maintain service adequacy.

Wastewater Capacity

Taneytown's WWTP has a design capacity of 1,100,000 gpd. The facility currently treats an average of approximately 829,000 gpd, including I&I, leaving a remaining operational cushion of just over 270,000 gpd under current conditions.

Based on residential and non-residential demand projections, an additional 426,997 gpd of capacity may be required to meet future wastewater needs. This anticipated demand includes new residential development, commercial and industrial growth, and background population increases projected through 2040.

To bridge the gap between available and needed capacity, the City is pursuing several strategies. These include targeted I&I reduction projects, modernization of key plant components, and reevaluation of hydraulic and treatment capacity following completion of planned ENR improvements. Together, these efforts aim to optimize current infrastructure and extend service availability without requiring major plant expansion in the short term.

Wastewater Limitations

Taneytown's WWTP has a design capacity of 1,100,000 gpd, which closely aligns with projected near-term demands. However, meeting long-term build-out demand (estimated at up to 1.74 million gpd) would require a substantial increase in permitted capacity. While the WWTP site offers sufficient land for expansion, regulatory and technical constraints could affect how and when additional treatment capacity can be brought online.

The primary limiting factor is nutrient loading. Under the State's ENR guidelines, Taneytown's upgraded facility will be required to meet effluent concentrations of 3.0 mg/L total nitrogen and 0.3 mg/L total phosphorus. These caps are designed to reduce nutrient loads entering the Chesapeake Bay watershed. At these levels, the plant would be restricted to discharging approximately 1.47 million gpd, based on its nitrogen allocation. This constraint is below the build-out-level wastewater demand, effectively capping discharge unless nutrient credits or allocation adjustments are obtained.

In addition to nutrient limits, the facility must consistently comply with permit standards for parameters such as biochemical oxygen demand (BOD5), fecal coliform, pH, total suspended solids (TSS), ammonia, and dissolved oxygen. Any future expansion in capacity would likely require enhanced pollution control technologies, upgraded instrumentation, and potentially a revised discharge permit from MDE.

Taneytown, sewage flows have consistently exceeded recorded water use, a clear indicator of excessive I&I within the system. A primary cause of I&I in Taneytown is the continued presence of terra cotta clay pipe in the City's older sewer infrastructure. This material is prone to cracking over time, allowing water from saturated soils to infiltrate the system, particularly during and after storm events. In some locations, tree root intrusion has also contributed to blockages and pipe breaches.

To address these challenges, the City has implemented a program of systematic video inspections, targeting one-third of the collection system each year. Based on findings, Taneytown has undertaken targeted rehabilitation projects. For example, the 2019-2020 Roberts Mill Stormwater Management Facility Retrofit replaced 516 feet of sewer pipe, removing an estimated 52,875 gpd of I&I. A larger project planned for the

Meadowbrook interceptor is expected to eliminate approximately 102,000 gpd of additional I&I using cured-in-place pipe lining. These efforts are critical not only to reducing extraneous flows, but also to maintaining sufficient treatment capacity for projected growth. While progress has been made, unaddressed I&I continues to impact the system's available capacity, and its correction will play a key role in determining whether the wastewater treatment plant can accommodate full buildout within the existing service area.

These limitations underscore the importance of complementary strategies, including I&I reduction, flow equalization, and incremental upgrades to the treatment system to maximize performance within existing constraints.

Additional information related to Taneytown's wastewater treatment can be found in the Taneytown Sewer Facilities section of the 2023 Carroll County Water & Sewer Master Plan.

BACKGROUND

DRAINAGE BASINS

A drainage basin, often referred to as a watershed, is an area of land whose surface water drains to a common body of water. These areas are defined by ridges and peaks of the surrounding land; the highest points of the land dictate where flowing water will travel. Drainage basins are divided into groups, where the smaller drainage basin classifications are nested into the larger ones. The level of classification is denoted by the HUC, or Hydrologic Unit Code, which is a number that contains 2 to 12 numbers corresponding to one of 6 levels. The 6 levels are region (the largest HUC class, denoted by a 2-digit number and the identifier "HUC 2"); subregion (denoted by a 4-digit number, HUC 4); basin (denoted by a 6-digit number, HUC 6); subbasin (denoted by an 8-digit number HUC 8); watershed (denoted by a 10-digit number HUC 10); and subwatershed (denoted by a 12-digit number, HUC 12). An example of watershed classification can be found in Figure WRF-1.

Where surface water flows into streams and creeks, such as in Taneytown, it continues to flow into larger streams and rivers until it reaches the ocean. Taneytown is split into two watersheds - the Piney Creek watershed and the Big Pipe Creek watershed. Piney Creek empties into the Monocacy River, which is the next largest level of its watershed. Big Pipe Creek empties into Double

Pipe Creek, which is the next largest level of its watershed.

Upper Monocacy River Watershed

Most of Taneytown drains into the Upper Monocacy River watershed. The river itself is the boundary between Carroll County and Frederick County. The Upper Monocacy River's path begins in Adams County, PA, just north of Gettysburg with Marsh Creek and Rock Creek. These two creeks come together right at the border of Adams County and Carroll County to form the Monocacy River. From here it travels slightly southwest until it reaches the Potomac River, which separates Maryland from Virginia. The Potomac eventually empties into the Chesapeake Bay.

There are 156,327 acres of land that drain into the Upper Monocacy River. Roughly 60 percent of the watershed is used for agricultural purposes, such as dairy and cropland, and approximately 33 percent is forested. Due to pollutants from the high number of farms draining into the river, the Maryland Department of the Environment (MDE) has declared the water quality of the Monocacy River to be impaired. The biggest pollutants are nutrients (typically nitrogen and phosphorous from fertilizers), sediment (soil runoff from exposed fields), and fecal coliform (from animal waste). This pollution, along with habitat loss, has severely affected the aquatic life in the river.



Figure WRE-1: Watershed Classification

Source: United States Geological Survey

The US Department of Agriculture runs a program called the Conservation Stewardship Program which farmers and forest-land owners may participate in. The purpose of this program is to reduce pollution from erosion and nutrient runoff. The program is voluntary and provides financial and technical assistance to aid in the conservation and restoration of natural resources.

Double Pipe Creek Watershed

Though most of Taneytown is within the Upper Monocacy River watershed, The Double Pipe Creek watershed covers the majority of Carroll County. The creek, which is formed from the Big Pipe Creek and Little Pipe Creek, flows into the Monocacy River. This watershed also contains the Little Pipe Creek Rural Legacy area. Maryland's Rural Legacy program provides funding to preserve large, contiguous tracts of land and to enhance natural resource, agricultural, forestry and environmental protection while supporting a sustainable land base for natural resource based industries.

Approximately 63.6% of the watershed's total acreage is used for farming activities. Mixed urbanized uses account for about 3% of the total land area and low-density residential accounts for around 9.4%. Approximately 24.4% of the watershed is forested. Like the Upper Monocacy River watershed, the Double Pipe Creek watershed is impaired due to agriculture-based pollution, and additionally experiences issues with urban runoff.

The entire Monocacy River watershed, which encompasses both the Upper Monocacy and Double Pipe Creek, receives water from 620,800 acres of land with an average flow of 600 million gallons per day entering the Potomac. This, along with more than 150 major rivers and streams in New York, Delaware, Pennsylvania, Virginia, and West Virginia, empties into the Chesapeake Bay, whose watershed spans 41,151,360 acres.

The Chesapeake Bay Watershed

An average of 51 billion gallons of water flow into the Chesapeake Bay every day. Its position as an intermediary for the fresh water rivers and the Atlantic Ocean results in a unique and delicate environment that supports thousands of species of plants, land animals, and aquatic life. The bay is a vital economic support for both tourism and commercial seafood.

The Chesapeake Bay Foundation releases a "State of the Bay" report every two years. Each report

grades various aspects of the Bay's health. The three main categories are pollution, habitat, and fisheries. The grading measures current Bay health against its potential peak health. The scores are averaged to determine overall Bay health. The overall score in 2022 was a D+ (a score of 32 out of 100). Areas with the lowest scores were all indicators in the pollution category (where only one indicator scored above a D), wetlands, underwater grasses, resource lands, oyster populations, and shad populations. While there are hundreds of species of animals and plants in the Bay, those used in the report are chosen for their status as indicator species, which are particularly sensitive to environmental change. The fluctuations in their numbers can serve as a reflection of changes to come.

The biggest pollution concerns in the bay are nitrogen and phosphorus. These chemical elements are the result of agricultural activity, development, and suburban and urban runoff. Because agriculture is such a significant land use in the watershed, a lot of pollution reduction efforts are being focused on farms.

Pollution does more than taint drinking water. Too many nutrients cause algal blooms which strip oxygen from the water, resulting in the death of most of the plant and animal species who need the oxygen to survive. They also reduce the clarity of the water, meaning underwater grasses cannot get the sunlight they need. Underwater grasses trap sediment, help remove nitrogen and phosphorus, and create more oxygen, and their death only compounds the nutrient imbalance and lack of oxygen.

While Taneytown is far from the coasts of the Bay, the activity on its land is still vital to the health of the water. In Maryland, there are several programs that aim to increase education or provide assistance in developing more sustainable practices. Some of these are the Mountains-to-Bay Grazing Alliance, which provides educational outreach and technical assistance related to farmers with grazing livestock; Maryland's Grazers Network, which is a mentorship network of farmers providing technical assistance related to pasture and forage management, financial management, marketing, and funding resources; and Environmental Impact Bonds, which provides financing for green infrastructure related to stormwater management.

More information regarding the Chesapeake Bay health and improvement practices can be found at the Chesapeake Bay Foundation's website, [cbf.org](https://www.cbf.org).

Additional resources, including a list of the more than 600 organizations who are working to create a healthier watershed, can be found at the Chesapeake Bay Program's website, chesapeakebay.net.

MASTER PLAN FOR WATER AND SEWER

Maryland law requires that operators of public water and/or sewerage systems develop and regularly update a master plan for these services. Operators are directed to describe not only the current systems components, capacities, service areas, and operational requirements, but also plans for future service needs, demands, and capacities. Information on legislative and policy decisions that have been made by local and state governments is also included in this plan. The Carroll County Water & Sewage Master Plan is updated by the County in cooperation and consultation with each of the municipalities every three years and is amended semi-annually. This plan is reviewed by MDE prior to adoption.

Both the water and wastewater facilities are separated into service areas. Existing and planned facilities and associated infrastructure are detailed. In addition, the plan contains more specific information on the maintenance and operations of the public systems and associated infrastructure. Charts and maps illustrate where the specific water and sewer infrastructure is located, as well as the planned water service and sewer service areas. Information is included for specific privately and publicly owned systems.

Among the most important components of this master plan are the planned service areas for each system. These system service areas describe the location where the service exists or is planned to be provided. They also establish a prioritized sequence for expanding the systems. The master



In February of 2023, Mayor Wantz and Mayor Pro Rem Fuller held a walk through and open Q&A of the Taneytown Water and Sewer System. A recording of this session is available on the City's YouTube channel.

plan establishes four categories for providing either water or sewer system services:

- Existing/Final Planning Service Areas: These are locations where community systems are either in place, under construction, or have completed final plans and/or engineering specifications for that portion of the system.
- Priority Service Areas: These are areas that are likely to be served by community systems and are anticipated to begin construction within two years or where major systems components will likely either be funded or completed as part of the current six-year capital improvement program (CIP) budgeting cycle. Priority areas also include areas which are immediately adjacent to existing facilities. It is a standard requirement that any development projects occurring in a Priority Service Area will be required to connect to the community systems(s).
- Future Service Areas: These areas are those regions where community systems are anticipated to expand and be served within a seven-to ten-year period. Location in the Future Service Area, however, does not guarantee that services will be provided

within that time period or that the region will develop in any specified timeframe. Before a property can connect to the relevant community systems(s), the master plan would need to be amended to place the property in at least the priority service area(s).

- **No Planned Service Areas:** These areas are those locations which are not envisioned to be served by a public water and/or sewerage system within the current construction or CIP cycle or within a 10-year planning horizon.

This delineation process helps individual communities direct their growth and development patterns. By planning for needed expansion, system operators seek to balance the rates of residential growth with needed commercial, employment or other business development while ensuring that appropriate capacity will be available for public facilities such as schools, libraries, and other community services. These prioritized rankings are also intended to aid system operators in budgeting for and seeking funding needed to ensure that planned capacity and system needs are met on a timely basis.

For more information and details regarding operations and management or specific improvements in design and capacity, please reference the Carroll County Water & Sewer Master Plan.

CAPITAL IMPROVEMENT PLAN

The Taneytown Capital Improvement Program Report for FY 2025-2030 details the schedules and financing for several water and sewer projects. Improvements to the water system include: major renovations to the Department of Public Works Facility; water main replacements on Westview Drive, Memorial Drive, George Street, and Middle Street; a water main extension on Antrim Boulevard; a new 500,000 gallon water storage tank; and the demolition of an abandoned well to make room for water treatment upgrades.

Sewer system improvements include; major renovations to the Department of Public Works Facility; upgrades on the Windy Hills pumping station; and sewer main replacements on West Baltimore Street, George Street, Middle Street, and at Memorial Park.

Stormwater management projects include a storm drain replacement on Riffles Lane and York Street. Additional projects related to the parks, streets, police department, and City Hall can be found in

the 2025-2030 Capital Improvement Plan on the Taneytown website, taneytownmd.gov.

WATER RESOURCES REGULATIONS

Clean Water Act

“The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. (The Act does not deal directly with groundwater or with water quantity issues.) The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters so that they can support ‘the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water.’

“For many years following the passage of CWA in 1972, US EPA, states, and Indian tribes focused mainly on the chemical aspects of the “integrity” goal. During the last decade, however, more attention has been given to physical and biological integrity. Also, in the early decades of the Act’s implementation, efforts focused on regulating discharges from traditional “point source” facilities, such as municipal sewage plants and industrial facilities, with little attention paid to runoff from streets, construction sites, farms, and other “wet-weather” sources.

“Starting in the late 1980s, efforts to address polluted runoff have increased significantly. For “nonpoint” runoff, voluntary programs, including cost-sharing with landowners, are the key tool. For “wet weather point sources” like urban storm sewer systems and construction sites, a regulatory approach is being employed. “Evolution of CWA programs over the last decade has also included something of a shift from a program-by-program, source-by-source, pollutant-by-pollutant approach to more holistic watershed-based strategies. Under the watershed approach equal emphasis is placed on protecting healthy waters and restoring impaired ones. A full array of issues are addressed, not just those subject to CWA regulatory authority. Involvement of stakeholder groups in the development and implementation of strategies for achieving and maintaining state water quality and other environmental goals is another hallmark of this approach.” (Source: Excerpted from the U.S. Environmental Protection

Agency (US EPA) website, “Introduction to the Clean Water Act”).

Impaired Waters and Total Maximum Daily Loads (TMDLs)

TMDLs are required by law (through the Clean Water Act) for waterways which are considerably impaired. These waterways are tracked through a list called the 303(d) list. The Chesapeake Bay and many of its tributaries have been on this list since 1998. A “load” refers to the amount of a given type of pollutant which is found in a body of water. These load limits are put in place to ensure water quality is of a healthy standard. Nitrogen and phosphorus are often the most common pollutants in a waterway for several reasons. Both are often washed into waterways through land practices which produce nitrogen and phosphorus, such as agricultural and lawn fertilizer. Nitrogen and phosphorus are also a result of human and animal waste breaking down and can be washed into waterways via storm events. Water from septic systems or sewage treatment plants might be discharged or seep directly into water bodies. Though the natural decomposition of soil and plant material does create some nitrogen and phosphorus, the excessive amount of these chemical elements in our waterways are the result of human practices.

Urban runoff, or stormwater runoff which flows over impervious surfaces like parking lots, streets, and rooftops, often contains a variety of pollutants. Some of the most common urban runoff pollutants are toxic chemicals, grease, and oil from vehicles; pesticides and fertilizers from lawns and gardens; soil from construction sites and bare ground; soaps and salts from vehicle activity and de-icing; and heavy metals from vehicles and a variety of other sources. While soil itself is not a pollutant in the typical sense, excess soil in the water increases turbidity, or how cloudy the water is. This is a problem because it decreases light and oxygen in the water which can kill plants, fish, and other aquatic life.

To combat these pollutants, a TMDL Plan is required. TMDL Plans include pollutant load targets (a maximum amount of a specified pollutant) which are developed by Bay segment, by source sector, and by county. These Plans are approved and upheld by the MDE. TMDLs require a very specific implementation plan, with “reasonable assurances” (e.g., enforceable permit limits) that pollutant load allocations will be achieved.

The two watersheds which Taneytown impacts are the Upper Monocacy River Watershed and the Double Pipe Creek Watershed. The Upper Monocacy River has TMDL limits for total suspended solids (which may be soil or other sediment that increase turbidity), dissolved oxygen (which increases plant growth and suffocates other aquatic life), and E. Coli bacteria. The Upper Monocacy River did not need TMDL limits for mercury and PCBs as testing for these pollutants was within allowable limits. PCBs (Polychlorinated biphenyls) are harmful, man-made chemicals which were banned by the US in 1979. Many of the Upper Monocacy River’s tributaries have TMDL limits for temperature, which can be too high as a result of other polluting factors and make water unsuitable for cold-water species. Piney Creek, which runs through Taneytown, did not have a TMDL for temperature.

Double Pipe Creek has TMDL limits for total suspended solids, dissolved oxygen, E. Coli bacteria, and temperature. Double Pipe Creek did not need TMDL limits for mercury and PCBs as testing for these pollutants was within allowable limits. Approved TMDL Plans for these watersheds (along with TMDL Plans for other water bodies in Maryland) can be found at the MDE website.

National Pollutant Discharge Elimination System (NPDES) and MS4

The Federal Water Pollution Control Act Amendments, commonly known as the Clean Water Act, was passed by Congress in 1972. Since that time, several additional elements were created to support this Act and to protect water quality by imposing regulations on stormwater discharge. One of these was the NPDES Municipal Separate Storm Sewer System (MS4) created by the US EPA in 1988. MS4s are systems owned by the state, county, or municipality which convey stormwater alone, as opposed to combined systems which convey stormwater and sewage. These systems require an NPDES MS4 permit which must be renewed every 5 years, as well as an MS4 Plan developed by the municipality. Phase 1 Jurisdictions, or counties with populations more than 100,000, were required to maintain NPDES MS4 permits. Carroll County is one of the counties included in Phase 1 Jurisdiction.

The Maryland Department of Environment (MDE) requires the following tasks to accompany the necessary NPDES permit:

- Education/Outreach: The County and Municipalities must inform citizens about the

impact of pollution on water quality through the distribution of educational materials.

- **Public Participation/Involvement:** The County and Municipalities must provide opportunities to involve citizens in program implementation and activities such as storm drain stenciling, stream clean-ups, and representative involvement.
- **Illicit Discharge Protection/Elimination:** The County and Municipalities must develop and implement a plan to eliminate illicit discharges to the storm drain system, develop a system map of the storm drain network, and inform the community of hazards associated with improper disposal of waste.
- **Construction Site Runoff Control:** The County and Municipalities must develop and enforce a pollution control program for construction activities that disturb one or more acres of land by implementing temporary sediment basins, detention ponds, and other stabilization.
- **Post Construction Runoff Control:** The County and Municipalities must develop and enforce a program that addresses discharges of post-construction stormwater runoff from new development and redevelopment areas.
- **Pollution Prevention:** The County and Municipalities must develop and implement a program to address pollution from county and municipal operations.
- **Restoration:** The County and Municipalities must develop and implement restoration plans for each six of the nine 8-digit watersheds to show actions that will be taken to restore water quality.

The Carroll County Water Resource Coordination Council (WRCC) coordinates the required compliances between the County and its eight municipalities. The County and municipalities all contribute funding and administrative responsibilities for the permit. As a co-permittee, Taneytown participates in coordinated efforts to reduce pollutants in stormwater runoff, protect water quality, and comply with Clean Water Act requirements.

Taneytown supports Carroll County's implementation efforts by managing local stormwater infrastructure, promoting best management practices, and participating in outreach and reporting activities. This partnership ensures that stormwater is addressed at both the

regional and municipal levels, contributing to the protection of shared waterways such as the Double Pipe Creek and Monocacy River watersheds.

Safe Drinking Water Act (SDWA)

"The SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.)

"SDWA authorizes the US EPA to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met.

"Millions of Americans receive high quality drinking water every day from their public water systems, (which may be publicly or privately owned). Nonetheless, drinking water safety cannot be taken for granted. There are a number of threats to drinking water: improperly disposed of chemicals; animal wastes; pesticides; human wastes; wastes injected deep underground; and naturally-occurring substances can all contaminate drinking water. Likewise, drinking water that is not properly treated or disinfected, or which travels through an improperly maintained distribution system, may also pose a health risk.

"Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.

"SDWA applies to every public water system in the United States. There are currently more than 170,000 public water systems providing water to almost all Americans at some time in their lives." (Source: Excerpt from the U.S. Environmental Protection Agency (US EPA) website, "Understanding the Safe Drinking Water Act".)

The Chesapeake Bay Watershed Agreement

"In 2009, the Chesapeake Bay Program began drafting a new agreement that would accelerate restoration and align federal directives with state and local goals to create a healthy Bay. Our partners gathered input from citizens, stakeholders, academic institutions, local governments and more to draft an inclusive, goal-oriented document that would address current and emerging environmental concerns. On June 16, 2014, the Chesapeake Bay Watershed Agreement was signed, and amended on January 24, 2020.

"Signatories included representatives from the entire watershed, committing for the first time the Bay's headwater states to full partnership in the Bay Program. The agreement established 10 goals and 31 outcomes to restore the Bay, its tributaries and the lands that surround them.

"Our Goal Implementation Teams developed Management Strategies that outline the steps necessary to achieve the agreement's vision. These Management Strategies offer insight into the Bay Program partners' proposals for reaching each outcome by 2025, as well as how we will monitor, assess and report progress toward abundant life, clean waters, engaged communities, conserved lands and climate change resilience. The strategies provide broad, overarching direction and will be further supported by Logic & Action Plans, which illustrate the link between what could impact the partnership's ability to achieve an outcome and the actions it is taking to achieve the outcome.

"In 2017, the Bay Program developed the Strategy Review System (SRS), a structured process that applies adaptive management to the partnership's work toward the Chesapeake Bay Watershed Agreement." (Source: Excerpted from the Chesapeake Bay Program website, "Our History".)

State Laws and Policies

Trends in the implementation of the water appropriation and permitting process have created challenges to water resource development. Local governments are finding it difficult to secure enough water from sources to meet existing or projected demands. In some instances, the physical ability to develop groundwater sources may be limiting, but in the majority of cases, it is administrative or policy issues that create obstacles. The multitude of technical and administrative issues makes development of groundwater sources costly, time-consuming, and

quite unpredictable in the Piedmont setting. One example is finding ways to address the adequacy of water recharge areas, which has resulted in additional work and longer timeframes for moving forward with planned growth.

The utilization of surface water resources has likewise become costly and complicated. Approval for stream withdrawals currently requires additional storage capacity within a water supply system. Therefore, using streams as a water source is typically difficult, expensive, and often not a viable option.

Stormwater Management Act of 2007

In 2007, Maryland passed the Stormwater Management Act (SB 784/HB 786). Stormwater runoff is a major cause of stream erosion, Bay overnutrification, and, in Carroll County, water quality impairment and stream ecosystem disruption. The Act requires stormwater management practices to mimic natural water runoff and minimize land development impact on water resources via the use of non-structural environmental site design (ESD), as well as more careful site design techniques. ESD must be implemented to the maximum extent practicable. There have been several updates to the plan since its release. Those updates can be found on the MDE website, mde.maryland.gov.

NON-POINT SOURCE

This section of the WRE is intended to assess the current level of existing and planned land use regarding nonpoint source (NPS) pollutant loading. It is also intended to evaluate the land use planning and management processes within the City as to its effectiveness in addressing NPS loading issues. The specific NPS impacts are associated with stormwater runoff from urban/suburban development. This evaluation and analysis provides a larger, more regional assessment of NPS loading. It provides, as called for in the Models and Guidance Document #26, "preliminary assessment... crafted to provide general insight into this process, and serve as a starting point for future nonpoint source analysis."

The County and the City have historically developed and adopted programs and methods related to managing nonpoint source loadings. This effort will be continued and strengthened with the adoption of the Stormwater Management Act of 2007 requirements. The County and its municipalities are working to explore techniques,

programs, and methods to reduce NPS loadings through land use planning and zoning. The refinement of programs and techniques combined with enhancement of land use planning within and among the County and its municipalities provides the best possible scenario for continued improvements in NPS loading reductions.

For more details and information regarding existing nutrient loads and calculation methodology, refer to the Nonpoint Source section of the Carroll County Water Resources Element.

CURRENT PROTECTIONS, PRACTICES, AND POLICIES

Taneytown has taken several important steps to improve the reliability and capacity of its public water supply system.

- To manage growth responsibly, the City has used its Adequate Public Facilities Ordinance to pause development when water capacity is limited. In some cases, developers have been asked to wait until additional water supply becomes available or to help provide new water sources and recharge areas as part of their projects.
- The City also tracks and reduces water loss through regular water audits and professional leak detection surveys. These efforts help identify where water is being lost and guide timely repairs. As a result, the amount of unaccounted-for water has been reduced in recent years.
- While not formally adopted as policy, the City uses a consistent approach to making technical and hydrogeological decisions, including the materials and methods used for expanding and maintaining the water system. These internal guidelines help ensure that new infrastructure is compatible with long-term supply planning.
- Water supply planning is also supported through the City's coordination with Carroll County and the Maryland Department of the Environment, which manage permits and projections for long-term system capacity.
- Multiple water mains are slated to be replaced during the next five years on Westview Drive, Antrim Boulevard, Memorial Drive, George Street, and Middle Street. These projects should result in a reduction in water loss through leakage, as well as an improvement

in system pressure, system capacity, and distribution flows.

- A new 500,000 gallon water storage tank will be erected to support new growth in Taneytown.

WATER RESOURCES ELEMENT SUMMARY

WATER SUPPLY & DEMAND

Taneytown's public water system is supplied by an unconfined fractured rock aquifer via eight municipal wells and supported by two elevated storage tanks with a total usable capacity of 610,000 gallons.

- The system is currently permitted for an average daily withdrawal of 552,100 gallons per day (gpd).
- Average use in recent years was approximately 450,000 gpd, with 77% attributed to residential customers.
- Projected long-term demand is 898,045 gpd by 2040, highlighting a need for expanded supply capacity and recharge acreage to support permit increases.

WASTEWATER CAPACITY & LIMITATIONS

Taneytown's wastewater treatment plant (WWTP) uses an activated sludge process and discharges treated effluent to Piney Creek.

- The plant has a design capacity of 1.1 million gallons per day (MGD) and currently treats an average of 831,000 gpd.
- Future demand is expected to reach 1.26 MGD by 2040, prompting the City to pursue I&I (infiltration and inflow) reduction and optimize treatment performance.
- Long-term constraints include nutrient loading caps and limited ability to discharge beyond 1.47 MGD without additional nutrient allocation.

WATERSHED & ENVIRONMENTAL CONTEXT

Taneytown is part of both the Piney Creek and Big Pipe Creek watersheds, which contribute to the Monocacy River and ultimately the Chesapeake Bay.

- Both watersheds face impairments due to agricultural runoff, sedimentation, and E. coli.
- Taneytown supports Bay restoration goals through smart land use planning, stormwater controls, and coordination with Carroll County on TMDL implementation and nonpoint source pollution reduction.

- Local agricultural programs and conservation initiatives also support water quality improvements.

STORMWATER MANAGEMENT & MS4 PARTICIPATION

Stormwater runoff is managed through Taneytown's role as a co-permittee under Carroll County's Phase I MS4 NPDES permit.

- Responsibilities include public education, illicit discharge prevention, runoff control during and after construction, and pollution prevention from municipal operations.
- While no specific retrofit projects are currently documented for Taneytown, participation in countywide stormwater compliance programs ensures progress toward water quality goals.

PLANNING TOOLS & CAPITAL INVESTMENTS

The City continues to align growth with infrastructure availability through a mix of policy tools and capital projects:

- The Adequate Public Facilities Ordinance helps delay development when water or sewer capacity is constrained.
- Ongoing and planned improvements include:
 - Replacement of aging water mains
 - Construction of a new 500,000-gallon water storage tank
 - Pumping station and sewer main upgrades
- These investments are detailed in the FY 2025–2030 Capital Improvement Plan.