

Allocations for Sanitary Sewer and Public Water Capacity Cecil County Maintained Systems Policies and Procedures

Purpose

The purpose of this document is to provide guidance for the allocation of water and sewer capacity for Cecil County Government's water and wastewater treatment, distribution, and collections systems, recognizing that it is in the County's best interest to establish procedures for requesting allocations that are well known and reasonably understood and to establish policies that are equitable and serve the economic development and growth management goals established by the County.

Definitions

For purposes of this document, the following definitions shall be understood.

Allocation. A reservation for a particular building or project to draw a prescribed amount of water from the County's water system or to discharge a prescribed amount and type of flow to the County's sewer system. Expressed in Equivalent Living Units.

Benefit Assessment. Some capital projects are undertaken to satisfy a specific community's needs and/or to provide growth capacity in specific areas, whereby the beneficiaries are specific, rather than general, in nature. The costs of these projects are not anticipated in the establishment of the Connection Fee, which is paid by all new and expanded users. In these instances, the County establishes a Benefit Assessment for the project so that the actual beneficiaries of the project will retire the debt incurred. Benefit Assessments apply in addition to the Connection Fee.

Connection Fee¹. A fee paid to the County, normally when applying for a Building Permit, to help offset the capital costs of new treatment facilities, major water distribution lines, elevated storage tanks, sanitary sewer interceptors, etc. The Connection Fee is charged on an Equivalent Living Unit basis projected for the project. The Connection Fee is separate from any costs the applicant may have with private contractors for the actual connection to the water or sewer lines. All new connections to the County's water or sewer systems must pay a Connection Fee, as do any expanded uses.

Equivalent Living Unit (ELU). A unit of measure used to equate flow demand to an equivalent of one single family home. An equivalent living unit is assumed to be equal to 80,000 gallons per year (average of 220 gallons per day) of water use and/or sanitary sewage production.²

¹ In other jurisdictions, this is sometimes called a Major Facilities Fee.

² The average home typically uses less than 220 gpd and this figure is intentionally conservative to better ensure that we do not exceed our systems' capacities.

Existing Home. A residential dwelling that exists, is legally occupied, and is served by a private well and/or septic system when the County's water and/or sewer system is extended to include the dwelling's road frontage.

Gallons per Day (gpd). A unit of measure of the demand for water or sewer. Also, million gallons per day (mgd).

Allocation Request Eligibility

An applicant must meet several eligibility criteria before an allocation request can be considered:

- For a proposed commercial, industrial, or institutional facility, a Minor or Major Site Plan must be under review by the various County departments (Planning and Zoning, Public Works, etc.) and considered administratively complete, except where a site plan is not required by the Zoning Ordinance. Where a site plan is not required by the Zoning Ordinance, an administratively complete Building Permit application must be under review.
- For a proposed residential Major Subdivision, as defined by the Subdivision Regulations, Preliminary Plat approval must be received from the Planning Commission.
- For a proposed residential Minor Subdivision, as defined by the Subdivision Regulations, the application for Minor Subdivision must be under review by the various County departments and considered administratively complete.
- For an existing lot of record, an administratively complete Building Permit application must be under review.
- For an existing residential structure currently served by a private well and/or septic system, a water and/or sewer line must have been extended along the frontage of the parcel. Alternatively, an applicant must execute a Public Works Agreement with the Department of Public Works to extend public water and/or sewer lines in accordance with its requirements.

Allocation Request Procedure

Eligible applicants (see above) must submit a written request (one copy) for allocation to:

Tim Whittie, P.E., Chief
Development Services Division
Cecil County Department of Public Works
129 E. Main Street
County Courthouse, Room 308
Elkton, Maryland 21921

The written request should include at least the following information, where applicable. Fully detailed and supported allocation requests are most likely to be granted and are more likely to be quickly processed.

- Name and address of the current property owner.

- Name and address of the applicant, if different.
- Name and address of the developer, if different.
- Name, address, telephone, fax, and email address for designated contact.
- Project site's physical address (location map encouraged).
- Project site's tax map number, parcel number(s), and (if applicable) lot number(s).
- Copy of site plan, approved Preliminary Plat, or similar plan applicable to the project. An electronic version of the plan (scanned, pdf, tiff, etc.) may speed the processing of the request; electronic version can be emailed to twhittie@ccgov.org or transmitted on CD-ROM.
- Project description; level of detail should be commensurate with the complexity of the project.
- Proposed connection point with the existing County system and proposed route of sewer or water extension, if applicable.
- For commercial or industrial uses, detail square footage, number of employees at full capacity, number of transient employees or guests, seats (as with restaurants), and meals prepared daily (restaurants, banquet halls, etc.) as appropriate to the facility. Disclose any non-domestic waste streams and their chemical, biological, and physical characteristics; these include cooling system condensate and blow down.
- For residential common facilities (pools, clubhouses, recreation centers, etc.), detail square footage, facility hosting capacity, etc.
- Requested allocation amount (gpd).
- Unit basis for requested allocation amount and source of the data (excerpted copy of reference is recommended).
- Projected timeframe for first occupancy and for completion of build-out.
- Proposed phasing of the project, if applicable.

Pre-Allocation Request Inquiries

Often, property owners or potential purchasers conducting due diligence understandably wish to determine the likelihood of obtaining an allocation for water and/or sewer for immediately forthcoming subdivision projects or site plan submittals. Such parties are welcome to request, in writing, this insight via a detailed letter. The request should have as much of the information noted for allocation requests as is available at the time. The County will endeavor to provide whatever insight possible at the time, recognizing that an allocation is not implied or granted by any such pre-information that is provided.

Flow Projection Guidance

The allocation request must include a properly estimated design flow for the project, including the detailed basis for the estimates. In many instances, this is best developed by the project engineer; indeed, the County reserves the ability to require that the estimate for a project be prepared by a Professional Engineer or Architect licensed in the State of Maryland.

Many projects are straight forward and the Design Flow Estimation Tables at the end of this document can serve as sufficient guidance for domestic (non-industrial) flow projections. More complex or unusual projects require an engineering analysis based upon well-documented data and accepted engineering literature.

Any allocation granted by the County will be based on conservative estimates of the flow and the County may use any and all data sources in its evaluation of the projected flow.

The County does not differentiate between residential housing types; for example, no modification is made between a single family residence, a mobile home, or an apartment. Each proposed residence is considered an ELU.

Bulk flows (multiple ELUs) must be estimated carefully to ensure that the allocation will not be exceeded except in rare instances; hence, the flow estimate must be conservative. However, the estimate must not be grossly conservative, as this will unnecessarily consume treatment capacity and elevate Connection Fees and Benefit Assessments for the applicant.

Commercial or Industrial projects that can anticipate unusual variability in daily flow demands must be examined closely before allocation can be granted. The County will likely require substantially greater operational information so that the best possible projection can be made. It is likely that the County will require such facilities to enter into a Special Discharge/Consumption Permit or an Industrial Discharge Permit with the County to regulate the flow quantity and, if the (sewage) flow is not consistent with domestic sewage, its discharge characteristics.

Commercial, Industrial, and other users that expect to generate water and/or sewer demand other than seven days per week may not average their flows over seven days or otherwise smooth their usage to suggest a lesser daily demand (e.g., in an attempt to reduce Connection Fees). The allocation of flow must assume that the flow from a project will be seen by the treatment plant every day (not just five days per week). For example, a manufacturing plant that anticipates operating five days per week and using 5,000 gpd (23 ELU) would use an estimated 1.3 million gallons per year; it is not permissible to divide this by 365 days to arrive at 3,562 (17 ELU).

When a projected flow for a bulk user is estimated, it is converted to equivalent living units (for purpose of calculating Connection Fees, Benefit Assessments, etc.) by dividing the projected flow by 220 gpd/ELU. If the resulting number of ELUs is not a whole number, it is rounded up; the County may make an

exception if the projection is within 0.1 of a whole number (e.g., 3.08 ELU could be rounded down to 3 ELU, at the County's discretion).

In the unusual event that the waste will be uncharacteristic of domestic wastewater (e.g., elevated BOD, TSS, nitrogen, phosphorous, alkalinity, etc.³), the equivalent living units may be adjusted for purpose of calculating Connection Fees, Benefit Assessments, and/or User Fees. For example, an industrial discharge of 2,200 gpd (10 ELU) that is expected to contain 1,320 mg/l BOD (~six times that of typical domestic wastewater) would be considered 60 ELU for purposes of Connection Fees and User Fees, as it would consume six times the plant capacity of a similar domestic wastewater flow. In this example, Benefit Assessments for sewer capacity upgrades would probably be based upon 10 ELU, as the carrying capacity of the sewer would be unaffected by the elevated BOD; on the other hand, any Benefit Assessment associated with treatment plant capacity would likely be based upon 60 ELU.

Water and Sewer Service Applications

Water and sewer allocations are a necessary component prior to Site Plan approval or subdivision Final Plat approval. In addition, the Department of Public Works will require applicants to complete, at the time of Building Permit application, a Water and/or Sewer Service Application for commercial, industrial, institutional, or residential facilities.

Expanded Flow Demand

A facility may not exceed its allocation without written authority from the County. The County will audit usage from time to time to ensure that demand is consistent with the allocation issued. A user whose demand exceeds the allocation will be notified of the excursion and directed to reduce the usage or request an expanded flow allocation (anomalous periods of flow not indicative of abuse will generally not be acted upon). Users who plan to expand their operation or change it in a manner that will increase their flow needs must request an expanded allocation in the same manner as a new allocation request.

Allocations for a revision or change of use for an existing building may be credited for recent historic flow for the previous use. The historic flow shall be determined by examination of actual consumption reflected on utility bills from the facility and other information available from the County. Typically, the previous two year period will be examined to determine trends of the use; the County will make this judgment.

³ A summary of normal strength wastewater characteristics can be found in a number of peer-reviewed texts, such as Wastewater Engineering Treatment, Disposal, and Reuse, by Metcalf & Eddy, Inc. (revised by George Tchobanoglous and Franklin L. Burton).

Authority to Allocate Water and Sewer Capacity

The Director of the Cecil County Department of Public Works and any other designee of the Board of County Commissioners of Cecil County are authorized to allocate capacity for the County maintained water and sewer facilities. No allocations are valid except those made in writing, constrained by the terms therein, and subject to all relevant local, state, and federal regulations.

Reservation of Allocations

Allocations cannot be reserved or purchased. Allocations are issued only for projects that have initial approval status, as detailed above, and are likely to proceed forward in the near future. Allocations are issued on a first come, first served basis within a category of allocation (i.e., commercial, industrial, residential, etc.). The Board of County Commissioners of Cecil County may, from time to time, execute resolutions that reserve capacity within categories (e.g., commercial, industrial, institutional, residential) to match the resource to County objectives.

Expiry

Generally, allocations will expire approximately twelve to twenty four months from the date of issue, unless renewed, in writing, by the County. Any allocations without an explicit expiration shall be considered expired two years after the issuance date. If an applicant loses eligibility (e.g., the Concept Plat expires), any issued allocations for the project will expire and a new application must be submitted. Fees paid for expired allocations are non-refundable and non-transferable. The County is not likely to extend expiry for projects that are not being diligently pursued.

An expired allocation can be re-issued at the County's discretion, upon request in writing, but the allocation shall be considered a new application as it pertains to any required documentation.

When an allocation expires, any unused balance not in substantial use shall expire and can only be re-established with a new allocation request. Unused balances may not be retained or transferred to another project. By way of examples:

- Residential subdivision lots established by recorded Final Plats shall be considered in substantial use, even if they remain unimproved at the time of expiry.
- A commercial or industrial facility with an allocation of 5,000 gpd that has been constructed and is operational at, for example, 4,200 gpd as an average shall continue to be entitled to operate up to an average of 5,000 gpd as long as the facility continuously operates.
- A commercial or industrial facility with an allocation of 5,000 gpd that has been constructed and has been operational for some time at, for example,

Allocations for Sanitary Sewer and Public Water Capacity
Cecil County Maintained Systems
Policies and Procedures

2,200 gpd as an average (perhaps the business enterprise didn't develop as was expected or as quickly as expected) will not be able to claim an historic use of 5,000 gpd in a change of use allocation. If such a facility substantially underutilizes its allocation over an extended period of time (a year or more), they may not sharply increase their flow without review by the County.

Fees

Allocation Fee. Currently, Cecil County does not charge a fee for the allocation itself and does not levy "ready to serve" charges.

Connection Fees. These are payable per ELU, typically at the time of Building Permit application. All new and expanded users of the County's water and sewer utilities must pay Connection Fees. These fees are non-refundable and non-transferable. Currently, these are:

Connection Fees (adopted November 16, 2004)	Fee/ELU
Water	
Commercial/Industrial	\$2,000
Residential/New	\$3,800
Residential/Existing ²	\$2,000
Wastewater	
Commercial/Industrial	\$2,500
Residential New	\$4,500
Residential/Existing	\$2,500

Benefit Assessments. These, where applicable, are typically payable per ELU, and typically at the time of Building Permit application. As Benefit Assessments vary, applicants should inquire whether their project is subject to a benefit assessment. These fees are non-refundable and non-transferable. Benefit Assessments are in addition to Connection Fees.

Ownership of Allocations

Applicants who are granted allocations do not own the allocations and may not transfer, trade, or sell them. The County will not unreasonably withhold approval to transfer allocations to a proposed buyer of a site if the use of the property is consistent with the allocation. A request for such transfer must be made in writing, with substantial details of the transaction as they pertain to the allocation.

Common Misconceptions

Misconceptions, inappropriate assumptions, or poor information exchange can occur. Clearly, the intent of this document is to avoid these situations to the

extent possible, as they help no one. Some common misconceptions, in no particular order, are discussed below.

- The Connection Fee I pay the County at the time of Building Permit covers the actual work to install the line from my house to the street. Incorrect. The Connection Fee, known in some jurisdictions as a Major Facilities Fee, helps retire the debt the County's Water and Sewer Divisions incur for capital facilities. The County does not physically connect your building nor does it pay the costs of your plumber out of the Connection Fee.
- If my property is within a mapped service area, I am guaranteed service for water or sewer. Incorrect. The service area maps are but one criteria used by the County to determine eligibility for an allocation. Treatment capacity, distribution system capacity, and collection system capacity are also key factors that determine eligibility, together with reserves of allocation the County has made for classes of use and safety factors.
- I have an allocation that was issued some time ago (such as for a residential lot), so I am guaranteed service, even if I wait years to build. Incorrect. Implementation of an allocation is subject to limitations, including the available capacity for collection and treatment. Nonetheless, the County endeavors to provide at least minimal service for lots of record.

Typical Conditions of Allocations

Applicants should anticipate some or all of the following conditions if an allocation is granted. This list is not inclusive and not all of these will apply to a given allocation, but this list is intended to better prepare the applicant.

- Users are prohibited from knowingly exceeding their allocated amount without permission from the County.
- If actual flows are seen to be consistently greater than the allocated amount after occupancy begins, an additional allocation must be then requested and additional Connection Fees and Benefit Assessment would be due at that time, if allocation is available.
- Unless noted otherwise, all allocations are intended for normal strength domestic sewage. Industrial strength wastewater is not permitted under any allocation, except as noted in the specific case. No medical waste may be discharged.
- Non-domestic sewage is permitted only within approved parameters (these flows are included in the total allocation). [Example: Snack bar wastewater is permitted, conditioned upon the proper operation and maintenance of a grease interceptor. Wash down of a tire lube center floor is permitted, conditioned upon the proper operation and maintenance of an oil/water separator.]
- The allocation must be substantially in use by [a specific date] or it will expire, unless otherwise extended or revised by the County prior to that time.

Allocations for Sanitary Sewer and Public Water Capacity
Cecil County Maintained Systems
Policies and Procedures

- Utilization of the allocation is dependent upon available production and treatment capacity available at the time of building permit applications and may be limited by the Maryland Department of the Environment requirements.
- Connection Fees in effect at the time will apply to all connections, based on equivalent living units (80,000 gallons per year, 220 gallons per day) and shall be payable at the time of building permit application.
- A Benefit Assessment will apply at the time of the building permit application, as this proposal will enjoy the improvements completed as part of [a specific project]. The assessment has been established by the Board of County Commissioners of Cecil County at \$[amount] per ELU.
- The public water supply to the project must be equipped with a flow meter acceptable to the Cecil County Department of Public Works. The flow meter must have a Sensus TouchRead[®] pad for compatibility with our reader; details can be obtained from our Water and Wastewater Division at (410) 996-6260. [Alternatively, the on-site well must have a Sensus TouchRead[®] pad.]
- If actual flows from the project are seen to be consistently greater than the allocated amount after occupancy begins, an additional allocation must be then requested and, if granted, additional Connection Fees and Benefit Assessment would be due at that time.
- The allocation is contingent upon construction from a design approved by the Cecil County Department of Public Works for connection to the public sewer system at an entry point approved by the Department.
- The allocation is also contingent upon the design and construction of properly sized grease interceptors, as approved by the Cecil County Department of Public Works. The design, which must bear the seal and signature of a Professional Engineer or Architect licensed in the State of Maryland, must also include an inspection and maintenance schedule for the grease interceptors, approvable by the Cecil County Department of Public Works.
- The project owner/user must maintain service agreements with qualified contractors/vendors for the periodic maintenance of pre-treatment facilities (such as grease interceptors). The user must also maintain on-site logs of inspection and service. Said logs and maintenance contracts must be made available to the Cecil County Department of Public Works for inspection upon request. Failure to consistently inspect and maintain the pre-treatment facilities shall be considered a violation of Chapter 67 of the Cecil County Code.
- The project owner/user must ensure the proper disposal of all grease and other solid waste removed from the pre-treatment facilities.
- This allocation is not “property” of the applicant or other third parties and cannot be transferred to other parties without approval of the County. Any allocated flow not used as part of this project may not be reserved by any party or transferred to another project.

Allocations for Sanitary Sewer and Public Water Capacity
Cecil County Maintained Systems
Policies and Procedures

- By accepting this allocation, you are hereby agreeing to the terms and conditions herein. A note must be placed on the plat or other document bearing the property owner's signature, certifying, "We, the project owners, understand and accept the terms, conditions, and obligations contained in this allocation, including the Policies and Procedures for Allocations for Sanitary Sewer and Public Water Capacity for Cecil County Maintained Systems, and together with all ancillary requirements of the Cecil County Department of Public Works and we understand that failure to adhere with the conditions shall be considered a violation of Chapter 67 of the Cecil County Code."

Design Flow Estimation Tables⁴

Flow Projection Based Upon Gallons
Per Person per Day

Type of Establishment	Gallons per Person per Day (Unless Otherwise Noted)
Airports (per passenger)	5
Auditorium or Assembly Hall (per seat)	3
Bathhouses and swimming pools	10
Camps:	
Campground with central comfort stations	35
With flush toilets, no showers	25
Day camps (no meals served)	15
Resort camps (night and day) with limited plumbing	50
Luxury camps	100
Country clubs (based on rated capacity)	50
Dwellings:	
Boarding houses (per room)	100
Multiple family dwellings (per apartment)	220
Single family dwellings (per address)	220
Factories (gallons per person, per shift, exclusive of industrial wastes)	35
Hospitals (per bed space)	350
Hotels (per room)	120
Institutions other than hospitals (per bed space)	125
Laundries, self-service (per washing machine)	550
Mobile home parks (per space)	220
Motels (per room)	100
Picnic Parks (toilet wastes only) (per picnicker)	5
Picnic Parks with bathhouses, showers and flush toilets	10
Restaurants, bars, lounges (per seat)	25
Schools:	
Boarding	100
Day, without gyms, cafeterias or showers	15
Day, with gyms, cafeterias and showers	25
Day, with cafeterias, but without gyms or showers	20
Service Stations (per vehicle served)	10
Swimming pools and bathhouses	10

⁴ Adapted from "MDE Guidelines for Estimating Water and/or Wastewater Flow," Maryland Department of the Environment, July 2005 Draft and "Design Guidelines for Sewerage Facilities; Technical Bulletin M-DHMH-EHA-S-001," Environmental Health Administration, Department of Health and Mental Hygiene, State of Maryland, 1978 Edition. Additional modifications based upon Wastewater Engineering Treatment, Disposal, and Reuse, Third Edition, Metcalf & Eddy, Inc., 1991.

Allocations for Sanitary Sewer and Public Water Capacity
Cecil County Maintained Systems
Policies and Procedures

Theaters:	
Indoor (per auditorium seat)	3
Drive-in (per car space)	5
Travel (transient or seasonal) Trailer Parks without individual water and sewer hook-ups (per space)	50
Travel (transient or seasonal) Trailer Parks with individual water and sewer hook-ups (per space)	110

Guiding Factors For Flow Projection Related With Commercial Establishments, Public Service Buildings or Dwelling Units

Type of Establishment

Office Buildings	Gross Sq. Ft. x 0.09 = gpd
Medical Office Buildings	Gross Sq. Ft. x 0.62 = gpd
Warehouses	Gross Sq. Ft. x 0.03 = gpd
Retail Stores	Gross Sq. Ft. x 0.05 = gpd
Supermarkets (without food preparation)	Gross Sq. Ft. x 0.20 = gpd
Drug Stores	Gross Sq. Ft. x 0.13 = gpd
Beauty Salons	Gross Sq. Ft. x 0.35 = gpd
Barber Shops	Gross Sq. Ft. x 0.20 = gpd
Department Store with Lunch Counter	Gross Sq. Ft. x 0.08 = gpd
Department Store without Lunch Counter	Gross Sq. Ft. x 0.05 = gpd
Banks	Gross Sq. Ft. x 0.05 = gpd
Service Stations	Gross Sq. Ft. x 0.18 = gpd
Laundries & Cleaners	Gross Sq. Ft. x 0.31 = gpd
Laundromats	Gross Sq. Ft. x 3.68 = gpd
Car Wash without Wastewater Recirculation Equipment	Gross Sq. Ft. x 4.90 = gpd
Dry Goods Stores	Gross Sq. Ft. x 0.05 = gpd
Shopping Centers	Gross Sq. Ft. x 0.18 = gpd

Flow Projection for Country Clubs and Public Parks

Type of Fixture	Gallons Per Day	Per Fixture
Showers		500
Baths		300
Toilets		150
Urinals		100
Sinks		50