

Wastewater Capacity Report 2021 Report

Maryland Department of the Environment requires annual approval by elected body

- Identify when a treatment plant's actual flows are approaching or exceeding the design capacity.
- Provide all decision makers in a municipality with the information needed to make informed decisions about the capacity of their wastewater systems and the ability to accommodate new connections.
- Allow time to plan for needed collection and wastewater treatment system upgrades to accommodate new growth and to arrange for the financing of the improvements
- Wastewater Plant is permitted to discharge 750,000 gallons per day (GPD)
- Required to use a 3-year rolling average to determine available capacity
 - 2019 – 609,000 GPD – 49.61” Rain
 - 2020 – 630,000 GPD – 54.22” Rain
 - 2021 – 517,000 GPD – 41.82” Rain
- **Three-year average – 585,000 GPD**

Allocated Connections through subdivision, permit or proffered by agreement.

- Brightwell, Westerly Grove, Cahoon, Hartz, Jamison, Highfill, Beaulieu, Balasubranian
Total – 32 connections or 10,400 GPD
- Commercial, – 13,358 GPD

Current Available Capacity – 165,000 GPD – 23,758 GPD = 141,242 GPD

Potential Future Allocations Under Consideration

- Hartz – 8 connections or 2,600 GPD

Available Capacity After Future Connections – 138,642 GPD

Poolesville Sewage Flow Capacity Report

Date of this Report: **January 31, 2022**

Municipal Wastewater Treatment Plant Name: **Poolesville WWTP**

Permit Issued to: **Commissioners of Poolesville**

County Where Plant is Located: **Montgomery**

NPDES Wastewater Discharge Permit Number: **MD0023001**

State Wastewater Discharge Permit Number: **12-DP-0781**

Facility Address: **18901 Fisher Avenue, Poolesville, Maryland 20837**

Name/Title of Individual Completing this Form: **Wade Yost, Town Manager**

Name/Title of Individual Certifying this Form: **James E. Brown, Commission President**

Questions

1. Rated/design flow: .750 MGD and current permitted flow: **0.750 MGD or 750,000 GPD.**
2. Annual average flow in MDG for each of the three (3) complete previous years:
2019 flow/MGD: 0.609; 2020 flow/MGD: 0.630; 2021 flow/MGD: 0.517.
3-year average = 0.585.
3. Gallons and EDUs to determine the flow contribution for building permits issued per structure:
325 GPD/EDU
4. Number of building permits currently approved but not connected to the WWTP: **8**.
5. Total amount of additional flow in gallons represented approved building permits that have not been connected to date: **2,600 gpd.**
6. Potential flow when the flow from approved building permits not connected is added to the actual annual average plant flow in MGD for the last three (3) complete years: **0.588 MGD.**
7. Number of residential lots on approved record plats that have not applied for building permits and associated flow: **24 or 7,800 gpd.**
8. Number of commercial lots on approved record plats that have not applied for building permits and associated flow: **13,358 gpd.**
9. Three-year average annual flow: **0.585 MGD** (+) S1 building permits flow **0.0026 MGD** (+) prospective residential and commercial record plat flow **0.0212** (=) **0.609 MGD**
10. Were there any effluent violations, overflows, bypasses and causes reported to MDE (DMRs, Violation Notices and 5-Day Letters) associated with excessive flow at the WWTP and/or with the sewer system(s) that occurred during this reported period? **No**
11. Are there any planned WWTPs or sewer system upgrades, expansions or improvements decided on during this reporting period? **Yes**
12. Number of proposed future connections during this reporting period: **8**

13. Amount of additional flow represented by proposed future connections described above:
0.0026MGD.
14. Available treatment plant flow capacity remaining upon completion of proposed future connections described above: **0.138 MGD.**
15. Do flows from future connections and existing flow exceed flow? **No**
16. Are there any moratoriums or limitations on new building permit approvals currently in place? **No**
17. What is the “ultimate” flow capacity required if “build out” of the Town would occur based on the latest approved land use/zoning in the adopted master plan (as amended) for this reporting period?
750,000 GPD

Wade Yost, Town Manager

James E. Brown, President
Commissioners of Poolesville

2021 Annual Inflow and Infiltration Report

Monthly Flow Data

Month	Precipitation	WWTP Average Flow	WWTP Flow MG/Month
January	2.60	0.634	19.026
February	5.91	0.825	23.097
March	3.98	0.648	20.100
April	3.01	0.605	18.157
May	3.06	0.489	15.158
June	3.16	0.437	13.098
July	3.21	0.400	12.386
August	6.09	0.400	12.407
Sept	5.69	0.469	14.070
Oct	3.29	0.413	12.801
Nov	1.08	0.430	12.898
Dec	0.74	0.449	13.904
Total	41.82	6.199	187.102
Average	3.485	0.517	15.592

Amount of I&I Flows Handled by the Plant

Calculation methodology for determining the amount of I&I utilized the average of the lowest month to establish a baseline of 13.919 MG/month.

Month	Total Monthly Flow - MG	Estimated I&I Flows Handled - MG
January	19.026	6.640
February	23.097	10.711
March	20.100	7.714
April	18.157	5.771
May	15.158	2.772
June	13.098	0.712
July	12.386	0
August	12.407	0.021
Sept	14.070	1.684
Oct	12.801	0.415
Nov	12.898	0.512
Dec	13.094	0.708
		Total: 37.660
		MGD Average: 3.138

2021 I&I Reduction Actions

The Town has deployed several flow monitoring recorders throughout the Town to identify high I&I areas. Projects are under contract to correct issues at Manhole 5, Manhole 6 and WWTP Wet Well, and address several other areas that need correction within the system.

2021 Planned Reduction Actions

The Town has identified several project areas for remediation and is in the process of correcting those areas. Currently there are six project areas that are identified and being addressed.