



Land Development Services

Technical Bulletin

Subject: Updates to the Recommended Sanitary Sewer Average Design Flows for Single-Family Detached, Multi-Family and Office Developments **Date:** 5/24/23 **No.:** 23-02

Summary: The Department of Public Works and Environmental Services (DPWES) recommends lowering average design flows for evaluating new and existing sanitary sewers for single-family detached, multi-family and office developments. The Department of Land Development Services (LDS) concurs with these updated design flows which are presented here and are approved for use in accordance with the policy below.

Effective Date: Immediately

Background: The [Public Facilities Manual \(PFM\)](#) requires certain design flows be assumed for sanitary sewer design and analysis. After a thorough evaluation of water consumption and wastewater flow production data throughout Fairfax County, and of neighboring utilities’ design flow standards, DPWES recommends lower flow rates for designing sanitary sewer facilities serving single family detached, multi-family and office developments. Consequently, the county will accept the lower flow rates described below for single family detached, multi-family and office developments.

Policy: The updated sanitary sewer average design flows in the table below are approved for use in lieu of the current recommended values in PFM Table 10.1.

Current and Updated Average Design Flows for Single Family Detached, Multifamily and Office Developments in gallons per day (GPD)

Type of Development	Sanitary Sewer Average Design Flows (GPD)	
	Current PFM	Updated
Residential:		
Single family detached	350/residence	330/residence
Multifamily:	One bedroom	210/unit
	Two bedrooms or more	280/unit
Commercial:		
Office	0.20/ net ft ² *	0.15/ net ft ² *

* Use site specific data when available.

Average design flows for other development types are unchanged.

The PFM will be amended to reflect the new recommended rates. In the interim, these flow values are approved for use on all designs without need of a PFM modification request.

If you have any questions, please contact Sharad Regmi, P.E. in the Wastewater Planning and Monitoring Division of DPWES at sharad.regmi@fairfaxcounty.gov or 703-324-5008, TTY 771.

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