

WAC 246-290-221 Water demand design criteria. (1) Except as provided in this section, expanding systems shall use water demand design for average day demand (ADD), and peak periods of demand such as maximum day demand (MDD), and peak hourly demand (PHD) that are based upon actual metered water use records. The data collected shall be sufficient to account for seasonal or other cyclic changes in water demand, and shall correlate to the maximum number of full-time or part-time equivalent residential units in service at any time.

(2) For seasonally used, transitory noncommunity, or recreational developments the design for ADD, MDD, and PHD shall be based upon metered water uses whenever such data is available. The data must account for the daily population using the water over the time that records are collected, and must reflect the uses associated with maximum occupancy for the development. The design demands for these developments apply only to part-time uses, and may not be applied to structures or dwellings that can be permanently occupied.

(3) In the absence of metered use or other comparable information, the following sources of design information may be used:

(a) Comparable metered water use data from analogous water systems. Analogous systems are those with similar characteristics, such as demographics, housing sizes, income levels, lot sizes, climate, water pricing structure, water use efficiency practices, use restrictions, and soils and landscaping; or

(b) Design criteria or guidelines in the most recent edition of the department manual for design of Group A public water systems.

(4) The design for water systems based upon metered water use records shall have an MDD no lower than three hundred fifty gallons per day per equivalent residential unit (ERU), except for the design of any expansion to an existing water system that has a minimum of two years of meter records that clearly demonstrate that a lower design value for MDD may be used without significant risk of pressure loss. The meter records must correlate the demand data to the actual level of occupancy for the periods covered by the records.

(5) The minimum water demand and duration required for fire flow and/or fire suppression storage shall be determined by the local fire control authority, or chapter 246-293 WAC for systems within the boundaries of a designated critical water supply service area (CWSSA). Public water systems that are not required to comply with minimum fire flow standards shall coordinate with the local fire control authorities to ensure that any hydrants on the system, if they can possibly be used in the course of fire suppression activities, do not create adverse pressure problems within the water system as a result of fire control actions.

[Statutory Authority: RCW 70.119A.180. WSR 07-02-025B, § 246-290-221, filed 12/22/06, effective 1/22/07. Statutory Authority: RCW 43.02.050 [43.20.050]. WSR 99-07-021, § 246-290-221, filed 3/9/99, effective 4/9/99.]