Bulk Connection Equivalency

How to add in Bulk Connections into Step 1 of the Affordability Criteria

If your utility system has (primarily) residential bulk connections, you may calculate the equivalent number of residential connections (N_{bulk equivalent residential connections}) by this bulk connection using one of the methods below. Then add the number of equivalent residential connections to the number of residential connections (R_{esidential Connections}) the utility has on record. Use this summed number as the number of residential connections in Step 1 of the Affordability Criteria:

$$N_{Step \ 1}$$
 Residential Connections $= N_{Residential \ Connections} + N_{bulk \ equivalent \ residential \ connections}$

(1) Know the number of residential connections served

If you know the number of residential connections served by the bulk connection, calculate the equivalent number of 5,000 gallon residential connections with the following equation:

bulk equiv. residential connections =
$$\left(\frac{Rates}{Rates} \right)_{5,000 \text{ gallon Bulk}} \underbrace{\text{Number of residential connections served by bulk}} \right) \left(\text{Number of residential connections served by bulk} \right)$$

where:

Rates_{5,000 gallon Bulk} = single utility bulk rates for 5,000 gallons

 $Rates_{5,000 \text{ gallon Res}} = single \text{ utility rates for the typical } 5,000\text{-gallon residential connection}$

(2) Do not know the number of residential connections served

If you do not know the number of residential connections served by the bulk connection, then calculate the equivalent number of 5,000 gallon residential connections with the following equation:

bulk equiv. residential connections =
$$\left(\frac{Rates}{Rates} \right)_{5,000 \text{ gallon Bulk}} \left(\frac{\text{Average Bulk Flow (month)}}{5,000} \right) \left(\frac{\text{Average Bulk Flow (month)}}{5,000} \right)$$

where:

Rates_{5,000 gallon} Bulk = single utility bulk rates for 5,000 gallons

Rates_{5,000 gallon Res} = single utility rates for the typical 5,000 gallon residential connection

Average Bulk Flow (monthly) = Average monthly Bulk volume of water or sewer in gallons