

NMOSE Gallons per Capita per Day Calculations



GPCD Methodology

- GPCD is calculated for several categories:
 - System Total
 - Single Family Residential (SFR)
 - Multi Family Residential (MFR)
 - ICI
 - Other
 - Reuse
 - Non-Revenue
- Calculations can be done monthly or annually

Population

Variables in determining populations are:

- Person per household from US Census Bureau (Standard File 1, Table H12) (**PPH**)
- Number of SFR connection (**#SFR**)
 - “Zeros” Analysis to determine SFR Vacancy (“**zeros**”)
 - Vacancy Rate from US Census Bureau (**Vac**)
- Number of Multi-Family Units (**#MFU**)
 - Vacancy Rate from US Census Bureau (**Vac**)
- Institutionalized Populations (**IP**)

Population Categories

- Single Family Residential Population (**SFpop**)
 - ❖ (**#SFR** – “zeros”) x **PPH** *or*
 - ❖ (**#SFR** x **Vac** x **PPH**)
- Multi-Family Residential Population (**MFpop**)
 - ❖ (**#MFU** x **Vac** x **PPH**)

These can be calculated annually or monthly.

GPCD SFR

Annual SFR:

(SFR Consumption gal per year/
Annual **SFpop**) /365 days

Monthly SFR:

(SFR Consumption gal per month/
Monthly **SFpop**) /
Number of days in the month

GPCD System Total

Annual System Total

{Annual Water Production in Gallons/
Annual (SFpop + MFpop) + IP} / 365 days

Monthly System Total

{Monthly Water Production in Gallons/
Monthly (SFpop + MFpop) + IP} / No. of Days per Month

Sector GPCDs

- ICI

{Annual ICI Production in Gallons/
Annual (SF_{pop} + MF_{pop}) + IP } / 365 days

- Other

{Annual Other Water Production in Gallons/
Annual (SF_{pop} + MF_{pop}) + IP } / 365 days

Reuse

- Reuse

{Annual Reuse Diversions in Gallons/
Annual (SFpop + MFpop) + IP} / 365 days

Not included in any other categories.

Non-Revenue

- Non-Revenue Water

- By Volume

- {Total Annual Production in Gallons - SFR Annual Consumption - MFR Annual Consumption - ICI Annual Consumption – Other Annual Consumption}

- By GPCD

- {Volume calculated from above / Annual (SFpop + MFpop) + IP} / 365 days