POTABLE WATER

WATER DEMAND

Table 7.10, p 7-16, text Table 7.11, p 7-17, text

DESIGN WATER DEMAND

Distribution System - The distribution system is usually designed to handle the maximum hourly flow plus some future growth or the fire demand plus the maximum daily flow plus some future growth.

Treatment Plant - The treatment plant is usually designed to operate at a fixed, uniform rate. The plant capacity should be at least the maximum daily demand plus some part of the fire fighting demand and some future growth (part of fire fighting demand can come from storage).

Growth is up to 50% for small systems and 25% for large systems

Table 7.10
Annual Average Water Requirements (gpcd)

(Excluding fire fighting)

residential	75-130
commercial &	
industrial	70-100
public	10- 20
loss & waste	10- 20
	$\overline{165-270}$ total

Table 7.11
Demand Multipliers For Peak Periods

consumption time/period	multiplier
winter	0.80
summer	1.30
maximum daily	1.50-1.80
maximum hourly	2.00 - 3.00
early morning	$0.25 \ 0.40$
noon	1.50-2.0

Potable Water # 1