

## Sanitary Sewer Design Load - Conventional Layout

Reference: *"The Design of Small Water Systems"*  
 New York State Department of Health

Table 1: Estimated Water Consumption at Different Types of Establishments

Subdivision dwelling on individual well, or metered supply per bedroom  
 Flow in Gallons per Person per Day = 150

### Flow Computation

#### Conventional Size Lots

150	gal/bedroom/day
5	bedrooms/home
16	homes
<hr/>	
12,000	gal/day

#### Existing Residence and Pool House

150	gal/bedroom/day
7	bedrooms/home
1	home
<hr/>	
1,050	gal/day
15	Poolhouse Bathroom, gal/day
<hr/>	
1,065	gal/day

#### Total (gal/day):

<b>ADF: Average Daily Flow</b>	<b>13,065 gpd</b>
<b>AADF: Adjusted Average Daily Flow (ADF less 20%)<sup>1</sup> =</b>	<b>10,452 gpd</b>
<b>MDF: Maximum Daily Flow (2 times AADF)</b>	<b>20,904 gpd</b>
<b>PHF: Peak Hourly Flow (4 times AADF)</b>	<b>41,808 gpd</b>

1 ft<sup>3</sup>/s = 449 gal/min = 646,000 gal/day therefore:

#### Total (cfs):

<b>ADF: Average Daily Flow</b>	<b>0.020 cfs</b>
<b>AADF: Adjusted Average Daily Flow (ADF less 20%)<sup>1</sup> =</b>	<b>0.016 cfs</b>
<b>MDF: Maximum Daily Flow (2 times AADF)</b>	<b>0.032 cfs</b>
<b>PHF: Peak Hourly Flow (4 times AADF)</b>	<b>0.065 cfs</b>

## Sanitary Sewer Design Load - Conservation Layout

Reference: "The Design of Small Water Systems"  
 New York State Department of Health

Table 1: Estimated Water Consumption at Different Types of Establishments

Subdivision dwelling on individual well, or metered supply per bedroom  
 Flow in Gallons per Person per Day = 150

### Flow Computation

#### Conventional Size Lots

150	gal/bedroom/day
5	bedrooms/home
8	homes
<hr/>	
6,000	gal/day

#### Conservation Size Lots

150	gal/bedroom/day
3	bedrooms/home
8	homes
<hr/>	
3,600	gal/day

#### Existing Residence and Pool House

150	gal/bedroom/day
7	bedrooms/home
1	home
<hr/>	
1,050	gal/day
15	Poolhouse Bathroom, gal/day
<hr/>	
1,065	gal/day

### Total (gal/day):

<b>ADF: Average Daily Flow</b>	<b>10,665 gpd</b>
<b>AADF: Adjusted Average Daily Flow (ADF less 20%)<sup>1</sup> =</b>	<b>8,532 gpd</b>
<b>MDF: Maximum Daily Flow (2 times AADF)</b>	<b>17,064 gpd</b>
<b>PHF: Peak Hourly Flow (4 times AADF)</b>	<b>34,128 gpd</b>

1 ft<sup>3</sup>/s = 449 gal/min = 646,000 gal/day therefore:

### Total (cfs):

<b>ADF: Average Daily Flow</b>	<b>0.017 cfs</b>
<b>AADF: Adjusted Average Daily Flow (ADF less 20%)<sup>1</sup> =</b>	<b>0.013 cfs</b>
<b>MDF: Maximum Daily Flow (2 times AADF)</b>	<b>0.026 cfs</b>
<b>PHF: Peak Hourly Flow (4 times AADF)</b>	<b>0.053 cfs</b>