

## TYPICAL WATER DEMANDS FOR RURAL RESIDENTIAL PARCELS (and for other uses)

<b>Estimated daily per person water use indoors</b>		
<i>Type of use</i>	<i>Average gallons per day (GPD)</i>	<i>GPD if using water efficient fixtures*</i>
Toilet	18.5	8.2*
Clothes Washer	15	10*
Shower	11.6	8.8*
Faucet	10.9	10.8*
Other domestic	1.6	1.6
Bath	1.2	1.2
Dishwasher	1	0.7*
Leakage	9.5	4*
<b>Total</b>	<b>69.3</b>	<b>45.2</b>

*Adapted from American Water Works Association, 2008.*

<b>Estimated daily outdoor water use</b>	
<i>Type of use</i>	<i>Average gallons per day</i>
Lawn and Garden (per 1000 sq. ft.) Assumes 1-inch per day (typical)	600
Livestock Drinking (per animal):	
Beef, yearlings	20
Brood Sows, nursing	6
Cattle or Steers	12
Dairy	20
Dry Cows or Heifers	15
Goat or Sheep	2
Hogs/Swine	4
Horse or Mules	12
Livestock Facilities	
Dairy Sanitation (milkroom)	500
Floor Flushing (per 100 sq. ft.)	10
Sanitary Hog Wallow	100
Poultry (per 100 birds):	
Chicken	5 - 10
Ducks	22
Turkeys	10 - 25

*Adapted from Small Water System, Conference of State Sanitary Engineers, 1977, 1979, 1981.*

<b>Estimated Water use by Crops</b>					
Elevation	<i>Inches of water required per season*</i>				
	Pome fruits	Stone fruits	Grapes	Pasture	Christmas trees
500-1000	N/A	N/A	N/A	50	N/A
1000-1500	N/A	N/A	22	46	N/A
1500-2000	44	44	18	43	N/A
2000-2500	39	39	15	N/A	9
2500-3000	36	36	13	N/A	7
3000-3500	33	33	10	N/A	6
3500-4000	31	31	N/A	N/A	6

Some of the water needs are met by rainfall, but the vast majority requires irrigation. Pome fruits include apples and pears. Stone fruits include cherries, peaches, plum, and nectarines.

\*\*Assume 1 inch of water in 1000 square feet area is approximately 600 gallons

*El Dorado Irrigation District, Irrigation Management System, Kirk Taylor, 2008*

<b>Other types of establishments</b>	
<i>Typical water demand</i>	<i>Average gallons per day</i>
Airport (per passenger)	3 - 5
Apartment, multiple family (per resident)	50
Bathhouse (per bather)	10
Boardinghouse (per boarder)	50
Additional kitchen reqs. for nonresident boarders	10
Camp:	
Construction, semipermanent (per worker)	50
Day, no meals served (per camper)	15
Luxury (per camper)	100 - 150
Resort, day and night, limited plumbing (per camper)	50
Tourist, central bath and toilet facilities (per person)	35
Cottage, seasonal occupancy (per resident)	50
Club:	
Country (per resident member)	100
Country (per nonresident member present)	25
Factory (gallons per person per shift)	15 - 35
Highway rest area (per person)	5
Hotel:	
Private baths (2 persons per room)	50
No private baths (per person)	50
Institution other than hospital (per person)	75 - 125
Hospital (per bed)	250 - 400
Laundry, self-serviced (gallons per washing [per customer])	50
Motel:	
Bath, toilet, and kitchen facilities (per bed space)	50
Bed and toilet (per bed space)	40
Park:	
Overnight, flush toilets (per camper)	25
Trailer, own bath units, no sewer connection (per trailer)	25
Trailer, own baths, connected to sewer (per person)	50

<i>Typical water demand</i>	<i>Average gallons per day</i>
Picnic: Bathhouses, showers, and flush toilets (per picnicker)	20
Toilet facilities only (gallons per picnicker)	10
Restaurant: Toilet facilities (per patron)	7 - 10
No toilet facilities (per patron)	2-1/2 - 3
Bar and cocktail lounge (additional quantity per patron)	2
School: Boarding (per pupil)	75 - 100
Day, cafeteria, gymnasiums, and showers (per pupil)	25
Day, cafeteria, no gymnasiums or showers (per pupil)	20
Day, no cafeteria, gymnasiums or showers (per pupil)	15
Service station (per vehicle)	10
Store (per toilet room)	400
Theater: Drive-in (per car space)	5
Movie (per auditorium seat)	5
Worker: Construction (per person per shift)	50
Day (school or offices per person per shift)	15

*Adapted from Small Water System, Conference of State Sanitary Engineers, 1977, 1979, 1981.*