

Dairy Herd Water Use Data

Larry Gulick Dairy

01/10/05

Milking Herd..... 335 Cows
Replacements..... 0 Heifers

Drinking Water Requirements

Milking Herd	% of herd	High Consumption		Low Consumption		Average Consumption	
		per Day		per Day		per Day	
Lactating Cows	85%	284.75	45.7 gal	22	gal	33.85	gal
Dry Cows	15%	50.25	16.2 gal	9.7	gal	12.95	gal
Consumption / 1 cow/day (gal)			41.28 gal		20 gal		31 gal
Consumption/1cow/year (gal)			15,065.38 gal		7,357 gal		11,211 gal
Consumption/1cow/year (CuFt)			2,014.09 Cu.Ft.		983.5 Cu.Ft.		1,499 Cu.Ft. 980.9 Cu.Ft.

Replacements	% of Replacements	High Consumption		Low Consumption		Average Consumption	
		per Day		per Day		per Day	
16-24 months	25%	0	14.5 gal	8.70	gal	11.6	gal
13-15 months	25%	0	10.6 gal	6.30	gal	8.45	gal
9-12 months	25%	0	6.1 gal	3.70	gal	4.9	gal
5-8 months	25%	0	3.3 gal	2.00	gal	2.65	gal
3-4 months	0%	0	3.3 gal	2.00	gal	2.65	gal
0-2 months	0%	0	1 gal	0.75	gal	0.875	gal
	100%	0					
Consumption / 1 heifer/day (gal)			- gal		- gal		- gal
Consumption/1heifer/year (gal)			- gal		- gal		- gal
Consumption/1heifer/year (CuFt)			- Cu.Ft.		- Cu.Ft.		- Cu.Ft. 0.00 Cu.Ft.

Annual Milking Herd Drinking Water

(Includes Dry Cows)

High Intake.....	5,046,901 Gallons	682,014 Cu.Ft.
Average Intake.....	3,755,677 Gallons	507,524 Cu.Ft.
Low Intake.....	2,464,453 Gallons	333,034 Cu.Ft.

Annual Replacement Drinking Water.....

High Intake.....	0 Gallons	0 Cu.Ft.
Average Intake.....	0 Gallons	0 Cu.Ft.
Low Intake.....	0 Gallons	0 Cu.Ft.

Barn Water Use from Waste System...

Daily.....	3,000 Gallons	405 Cu.Ft.
Annual.....	1,095,000 Gallons	147,973 Cu.Ft.

All Water Used

High Usage.....	6,141,901 Gallons	829,987 Cu.Ft.
Average Usage.....	4,850,677 Gallons	655,497 Cu.Ft.
Low Usage.....	3,559,453 Gallons	481,007 Cu.Ft.

Acre Feet/ cfs at Varing Use Levels

High Usage.....	19.1 Acre Ft.	0.03 cfs ¹
Average Usage.....	15.0 Acre Ft.	0.02 cfs ¹
Low Usage.....	11.0 Acre Ft.	0.02 cfs ¹

¹Cubic Feet Per Second for 24hrs per day for 365 days to deliver the quantity of water specified in Acre Feet
This is not the same cfs as is used for irrigation since irrigation is for less than a full year.