

Dairy Herd Water Use Data

07/12/01

Milking Herd..... 1500 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%	1275	45.7 gal	22 gal	33.85 gal		
Dry Cows	15%	225	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	20%	0	14.5 gal	8.70 gal	11.6 gal		
13-15 months	20%	0	10.6 gal	6.30 gal	8.45 gal		
9-12 months	20%	0	6.1 gal	3.70 gal	4.9 gal		
5-8 months	20%	0	3.3 gal	2.00 gal	2.65 gal		
3-4 months	20%	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.....	22,598,063 Gallons	3,053,792 Cu.Ft.
Average Intake.....	16,816,463 Gallons	2,272,495 Cu.Ft.
Low Intake.....	11,034,863 Gallons	1,491,198 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.....	9,050 Gallons	1,223 Cu.Ft.
Annual.....	3,303,250 Gallons	446,385 Cu.Ft.

All Water Used

High Usage.....	25,901,313 Gallons	3,500,177 Cu.Ft.
Average Usage.....	20,119,713 Gallons	2,718,880 Cu.Ft.
Low Usage.....	14,338,113 Gallons	1,937,583 Cu.Ft.

Acre Feet/ cfs at Varing Use Levels

High Usage.....	80.4 Acre Ft.	0.11 cfs ¹
Average Usage.....	62.4 Acre Ft.	0.09 cfs ¹
Low Usage.....	44.5 Acre Ft.	0.06 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.

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