

Estimating Acres Irrigated in Different Periods of Time

Gallons Per Minute (GPM)

Acres Covered with Furrow Irrigation Based on Gallons Per Minute (GPM) Flow, Gross Inches Applied and Hours of Pumping.

	Hours Pumped											
	12 Hours			18 Hours			24 Hours			36 Hours		
	Gross inches applied			Gross inches applied			Gross inches applied			Gross inches applied		
	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"
GPM	Estimated Acres Covered											
400	5	4	3	8	5	4	11	7	5	16	11	8
600	8	5	4	12	8	6	16	11	8	24	16	12
800	11	7	5	16	11	8	21	14	11	32	21	16
1,000	13	9	7	20	13	10	27	18	13	40	27	20
1,200	16	11	8	24	16	12	32	21	16	48	32	24
1,400	19	12	9	28	19	14	37	25	19	56	37	28
1,600	21	14	11	32	21	16	43	28	21	64	43	32
1,800	24	16	12	36	24	18	48	32	24	72	48	36
2000	27	18	13	40	27	20	53	36	27	80	53	40
2,200*	29	20	15	44	29	22	59	39	29	88	59	44
2,400	32	21	16	48	32	24	64	43	32	96	64	48
2,600	35	23	17	52	35	26	69	46	35	104	69	52
2,800	37	25	19	56	37	28	75	50	37	112	75	56
3,000	40	27	20	60	40	30	80	53	40	120	80	60
Note:	The Gross Inches Applied is an estimate based on soil conditions — 3 inches is a good average for most soil conditions; If the soil is a tight silt loam and/or is sealed over then it will probably take less than 3 inches to cover the field; If the soil is sandy or is a cracking clay then it will probably take more than 3 inches to cover the field.											
*Example:	A 3,300 GPM flow will apply 3 inches of water to 20 acres in approximately 12 hours, but if it takes 4 inches to cover the field, only 15 acres can be covered in approximately 12 hours, but 2 inches could be applied to 29 acres in approximately 12 hours.											

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