



Estimating Acres Irrigated in Different Periods of Time

Cubic Feet Per Second (CFS)

Acres Covered with Furrow Irrigation Based on Cubic Feet Per Second (CFS) Flow,
Gross Inches Applied and Hours of Pumping.

| | Hours Pumped | | | | | | | | | | | |
|-----------|---|------|------|----------------------|------|------|----------------------|------|------|----------------------|------|------|
| | 6 Hours | | | 12 Hours | | | 18 Hours | | | 24 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" |
| CFS | Estimated Acres Covered | | | | | | | | | | | |
| 1.0 | 3.0 | 2.0 | 1.5 | 6.0 | 4.0 | 3.0 | 9.0 | 6.0 | 4.5 | 12.0 | 8.0 | 6.0 |
| 1.5 | 4.5 | 3.0 | 2.3 | 9.0 | 6.0 | 4.5 | 13.5 | 9.0 | 6.8 | 18.0 | 12.0 | 9.0 |
| 2.0 | 6.0 | 4.0 | 3.0 | 12.0 | 8.0 | 6.0 | 18.0 | 12.0 | 9.0 | 24.0 | 16.0 | 12.0 |
| 2.5 | 7.5 | 5.0 | 3.8 | 15.0 | 10.0 | 7.5 | 22.5 | 15.0 | 11.3 | 30.0 | 20.0 | 15.0 |
| 3.0 | 9.0 | 6.0 | 4.5 | 18.0 | 12.0 | 9.0 | 27.0 | 18.0 | 13.5 | 36.0 | 24.0 | 18.0 |
| 3.5 | 10.5 | 7.0 | 5.3 | 21.0 | 14.0 | 10.5 | 31.5 | 21.0 | 15.8 | 42.0 | 28.0 | 21.0 |
| 4.0 | 12.0 | 8.0 | 6.0 | 24.0 | 16.0 | 12.0 | 36.0 | 24.0 | 18.0 | 48.0 | 32.0 | 24.0 |
| 4.5 | 13.5 | 9.0 | 6.8 | 27.0 | 18.0 | 13.5 | 40.5 | 27.0 | 20.3 | 54.0 | 36.0 | 27.0 |
| 5.0 | 15.0 | 10.0 | 7.5 | 30.0 | 20.0 | 15.0 | 45.0 | 30.0 | 22.5 | 60.0 | 40.0 | 30.0 |
| 5.5 | 16.5 | 11.0 | 8.3 | 33.0 | 22.0 | 16.5 | 49.5 | 33.0 | 24.8 | 66.0 | 44.0 | 33.0 |
| 6.0* | 18.0 | 12.0 | 9.0 | 36.0 | 24.0 | 18.0 | 54.0 | 36.0 | 27.0 | 72.0 | 48.0 | 36.0 |
| 6.5 | 19.5 | 13.0 | 9.8 | 39.0 | 26.0 | 19.5 | 58.5 | 39.0 | 29.3 | 78.0 | 52.0 | 39.0 |
| 7.0 | 21.0 | 14.0 | 10.5 | 42.0 | 28.0 | 21.0 | 63.0 | 42.0 | 31.5 | 84.0 | 56.0 | 42.0 |
| 7.5 | 22.5 | 15.0 | 11.3 | 45.0 | 30.0 | 22.5 | 67.5 | 45.0 | 33.8 | 90.0 | 60.0 | 45.0 |
| 8.0 | 24.0 | 16.0 | 12.0 | 48.0 | 32.0 | 24.0 | 72.0 | 48.0 | 36.0 | 96.0 | 64.0 | 48.0 |
| 8.5 | 25.5 | 17.0 | 12.8 | 51.0 | 34.0 | 25.5 | 76.5 | 51.0 | 38.3 | 102.0 | 68.0 | 51.0 |
| 9.0 | 27.0 | 18.0 | 13.5 | 54.0 | 36.0 | 27.0 | 81.0 | 54.0 | 40.5 | 108.0 | 72.0 | 54.0 |
| 9.5 | 28.5 | 19.0 | 14.3 | 57.0 | 38.0 | 28.5 | 85.5 | 57.0 | 42.8 | 114.0 | 76.0 | 57.0 |
| 10.0 | 30.0 | 20.0 | 15.0 | 60.0 | 40.0 | 30.0 | 90.0 | 60.0 | 45.0 | 120.0 | 80.0 | 60.0 |
| 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 6.0 CFS flow will apply 3 inches of water to 12 acres in approximately 6 hours, but if it takes 4 inches to cover the field, only 9 acres can be covered in approximately 6 hours, but 2 inches could be applied to 18 acres in approximately 6 hours. | | | | | | | | | | | |

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