

2008 Irrigation & Energy Conservation Field Day Furrow Irrigation - Burr

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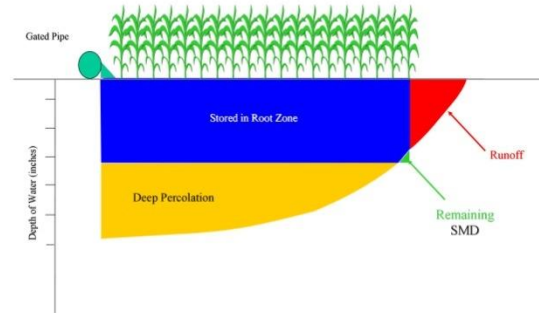
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First Irrigation

- **Typically the Most Inefficient**
- **Little Moisture Depletion**
- **Low ET**
- **Limited Root Penetration**
- **Rough Soil Surface**
- **Clods**
- **Residue**

2008Irrigation-BURR001

Typical First Irrigation



2008Irrigation-BURR002

Cutoff Ratio

- **Calculation to help Balance Runoff and Deep Percolation**
- **Equals = Average Advance Time Divided by Set Time**

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Average Advance Time

- **Half of the Rows have made it through.**
- **12 hour set Time**
- **Half of Rows Through in 9 hours**
- **CR = $9/12 = 0.75$**

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Recommended Cutoff Ratios NebGuide 97-1338.

System	Sandy Soils	Loamy Soils	Clayey Soils
Without Reuse	0.50	0.70	0.90
With Reuse	0.20	0.40	0.50
Blocked Ends	0.70	0.85	0.95

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Application in Field

- **If Observed CR is More Than Target**
 - Open Fewer Gates Next Set
 - Encourage Faster Advance Times
- **If Observed CR is Less Than Target**
 - Open More Gates Next Set
 - Encourage Slower Advance Times

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