

Irrigation System Application Efficiency

Office of Agricultural Water Policy

Steering Committee

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Application Efficiency (Ea)

The fraction of the water that has been applied by the irrigation system and is available to the plant for use



Application Efficiency (Ea)

Applied water not available to the plant may have been lost from the crop root zone via:

- ❖ evaporation or wind drifts of spray droplets
- ❖ leaks in the pipe system
- ❖ surface runoff
- ❖ subsurface runoff
- ❖ deep percolation within the irrigated area



Irrigation System Application Efficiency (Ea) Ranges

Irrigation System Type	Range of Application Efficiencies
Overhead	60-80%
Seepage ¹	20-70%
Drip ²	80-95%
Micro Spray and Center Pivots [±]	70-85%

¹ Ea greater than 50% are not expected unless tailwater recovery is used

² With or without plastic mulch

Sources: UF/IFAS Publication AE260
[±] UF/IFAS Publication BUL247

