

# 2008 Irrigation & Energy Conservation Field Day Sprinkler Package Selection and Evaporation Losses - Kranz

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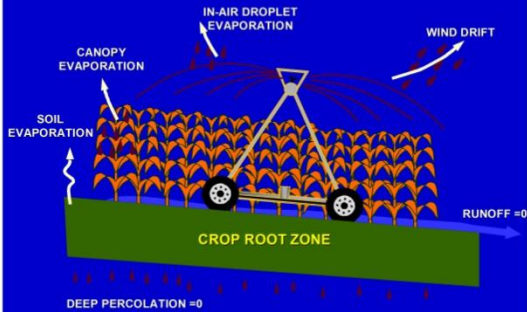
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## Understand where the water losses are



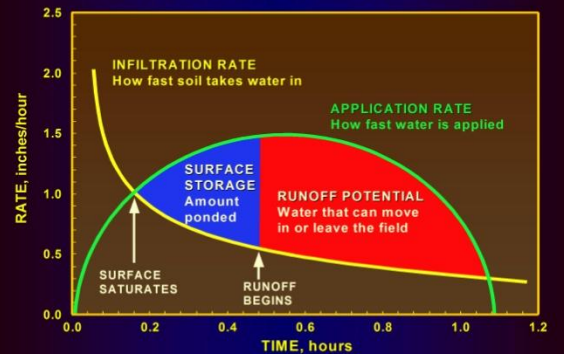
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## CANOPY EVAPORATION AND PLANT TRANSPIRATION TRENDS DURING IRRIGATION



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## RUNOFF POTENTIAL WITH CENTER PIVOTS



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## Potential Water Application Efficiencies

Sprinkler/nozzle Type	Application Efficiency	Runoff Potential
High Pressure Impact	80-85	<div style="text-align: center;"> <span>Low</span>    <span>High</span> </div>
Low Pressure Impact	82-85	
Low Pressure Spray (on top of pipeline)	85-88	
Low Pressure Spray (truss rod height)	87-92	
Low Pressure Spray (3-7ft off the ground)	90-95	
Low Pressure Spray (LEPA bubble mode)	95-98	High

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## Incanopy Sprinkler Spacings

### **Problem**

- Application pattern intercepted
- Water application rate increase
- Uniformity reduced regardless of nozzle type

### **What to Do**

- Avoid 2-7 feet above ground
- Plants and ears
- Decrease spacing to 7.5 feet or less

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