Maximizing The Efficiency of Flood Irrigation
Efficiency

- Irrigation Efficiency
- Application Efficiency
Efficiency

- Uniform application of an adequate volume
Factors Affecting Efficiency

- Crop
- Soil Texture
- Slope
- Field Geometry
- Volume of Water Available
- Method of Water Transport
Crop

- Timing of application
- Volume of water required
- Depth of application required
Soil Texture

- Infiltration differences
- Advance rates
- Deep percolation losses
- Roughness
Slope

- Graded vs. Level
- Uniformity
- Surface irregularities
- Land leveling
Field Geometry

- Uniformity of Dimension
- Row Length
Volume of Water Available

- Furrow stream
- Rows per set
- Border width
Method of Water Transport

- Open ditch
- Lined Ditch
- Pipelines
- Gated Pipe / Polypipe
Conclusions
Conclusions

- Biggest obstacle to efficient application is time
- Faster we can cross the field the more efficient we will be