

MAXIMIZING IRRIGATION EFFICIENCY

Irrigation efficiency is defined as the percentage of beneficial water to the total water delivered. It is not a static number that is set once you have your irrigation system installed. It may go down drastically if the system is not properly maintained, operated and managed. Overall efficiency and crop productivity is improved if managed together with other tools and practices. Here are some tips to help you maximize irrigation efficiency as well as improve crop production.



Keep your system at optimum working condition

- Repair leaks as soon as possible
- Check for uniformity of application (e.g. walk system with your chart or do catch-can test)
- Check nozzles for clogging and wear/enlargement of the nozzles
- Invest on system monitoring or system failure management
- Maintain pumping plant regularly (i.e. pumps, motors/engine)
- Upgrade your system to match current well capacity and better application packages

Manage your water properly

- Adopt a good irrigation schedule using feedbacks from weather, soil or plant
- Reduce deep percolation, runoff, evaporation and drift
- Make room for rainfall
- Promote deep roots and aim for higher soil infiltration
- Do more in-season irrigation, which is better than pre- or post-season irrigation
- Check water quality periodically

Improve agronomic practices

- Minimize tillage operation and promote more crop residue cover
- Diversify and spread peak crop water demand
- Find your optimum seeding rate and crop genetics
- Improve nutrient management and weed control

For more information:

Jonathan Aguilar

Irrigation Engineer

jaguilar@ksu.edu

620.275.9164

@ksirrigation

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