

Mobile Irrigation Labs

Irrigation System Assessments

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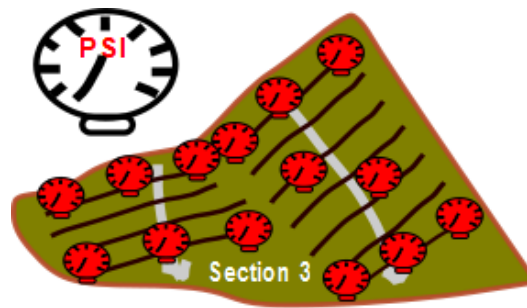
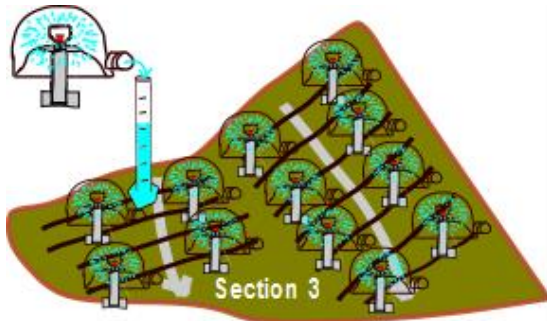
MIL Irrigation System Evaluation Service

- What Can You Expect From an Irrigation System Evaluation
 - Data and maps - flow and pressure measurements
 - An assessment of your system's distribution uniformity (DU)
 - An assortment of recommendations tailored to help you improve DU
 - A personalized report with your data, recommendations, and relevant info



Irrigation System Evaluation - What's DU

- Distribution Uniformity (DU)
 - Distribution Uniformity Low-Quarter (DU_{LQ})
 - Approach developed at Cal Poly's ITRC
 - Measures flows (and pressures)
 - $DU = \text{Low flows} \div \text{Average flow}$
 - Is water evenly applied?
 - Is enough water applied in driest area?
 - How much more water is needed to irrigate driest area?



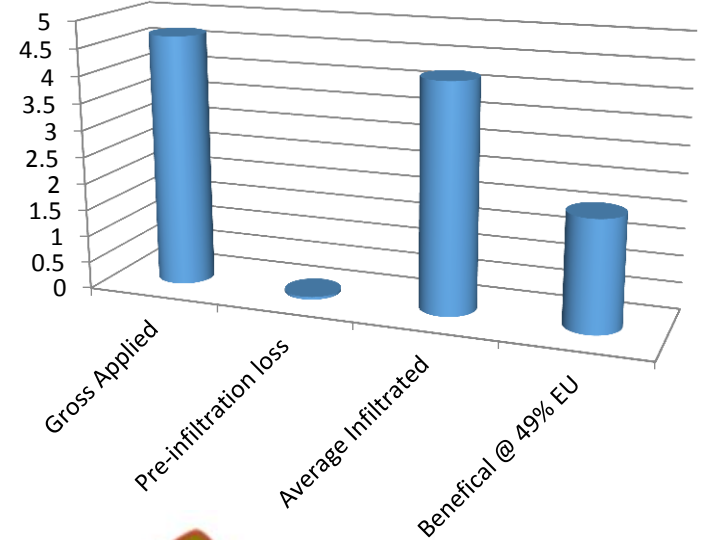
Distribution Uniformity Ratings

DU%:	100-90%	=	Excellent
DU%:	89-80%	=	Good
DU%:	79-70%	=	Fair
DU%:	69-60%	=	Poor
DU%:	≤59%	=	Unacceptable

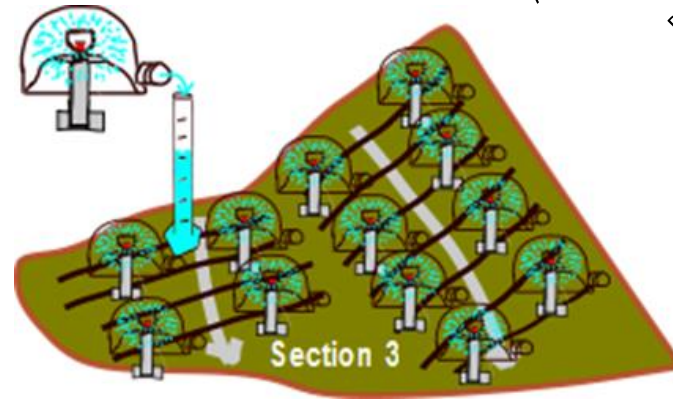
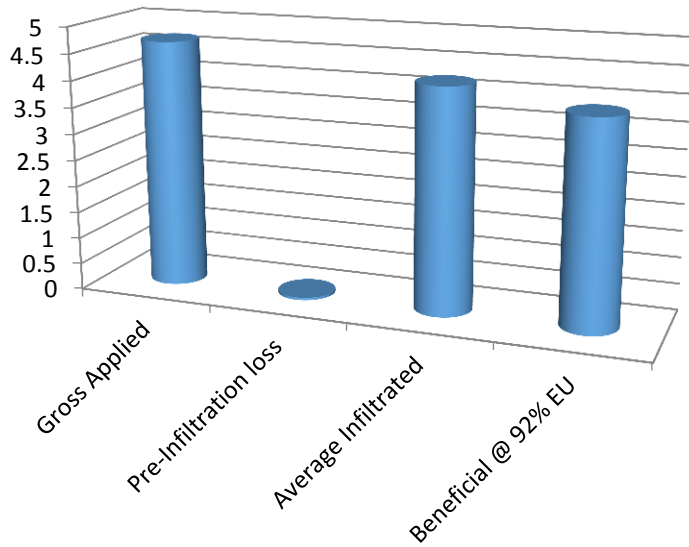


Irrigation System Evaluation - Why DU Matters

Uneven application means unequal uptake

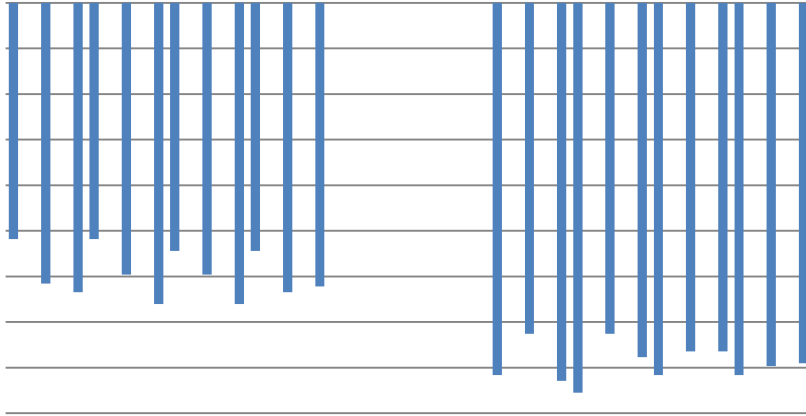


Even application means equal uptake



Irrigation System Evaluation - DU Impact

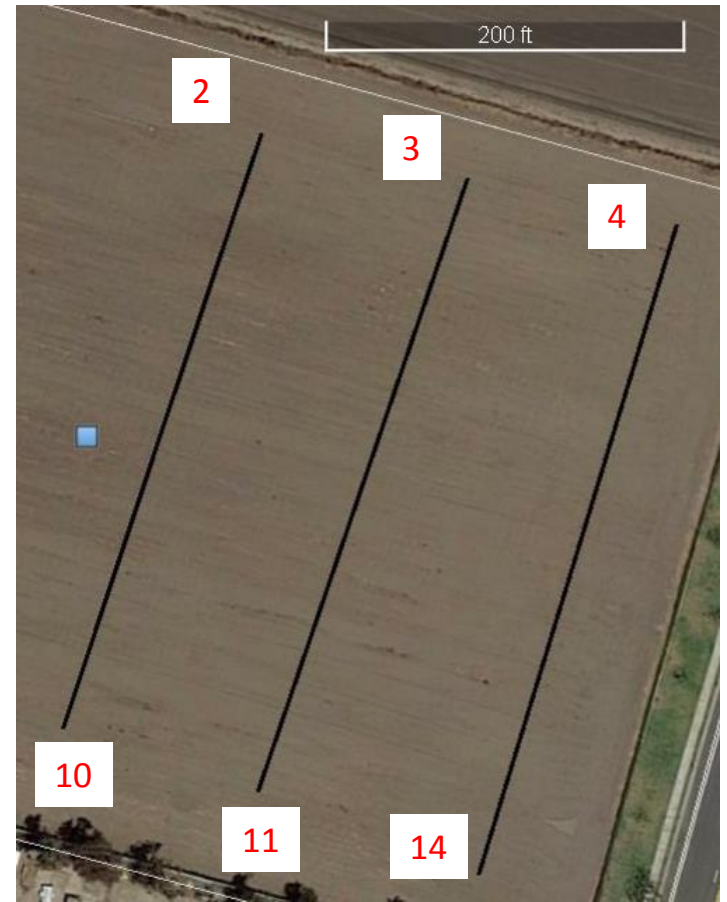
Dripline Water Infiltration Diagram



0.13 - 0.21 gph, ave = 0.17 gph, DU = 0.80



Dripline pressures, 2-14 psi



Irrigation System Evaluation - Uses for DU

CropManage...

...Wateright...and others....

Previous Crop	Celery
Initial Residue Mineralization Rate (lb N/acre/day)	15
Previous Crop Coefficient K	1
Leaching Requirement (%)	10
Sprinkler Application Rate (inches per hour)	0.36
Sprinkler Distribution Uniformity (%)	82
Germination Sprinkler Distribution Uniformity (%)	85
Drip Application Rate (inches per hour)	0.14
Drip Distribution Uniformity (%)	90
Default Days To Next Fertilization	25

Welcome to Wateright

Home Owner
Commercial Turf

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Agricultural Irrigation Scheduling

Irrigation System Data Entry

Drip Tape Irrigation

System Emission Uniformity: 85 %
Flow Rate in gpm/100 ft:
Tape Spacing in Feet:

Cancel Schedule this Field Back to Field Entry

Instructions:
1. Enter the Emission Uniformity- the system designer/installer should know this. It is always a good idea to have the system periodically evaluated.
2. Enter the tape flow rate as gallons per minute per 100 feet.
3. Enter the tape spacing in feet.

Home
References
Research Publications
FAQs
Advisories
Related Web Sites
Site Map

News & Events

- Water Sources: Wells & Surface Water
- Irrigation System Spring Cleaning and Maintenance
- Wateright - Web Based Irrigation Scheduling
- Irrigation Water: Monitoring Tools to Make the Most Out of Every Drop

All Events & News

Center for Irrigation Technology,
California State University, Fresno
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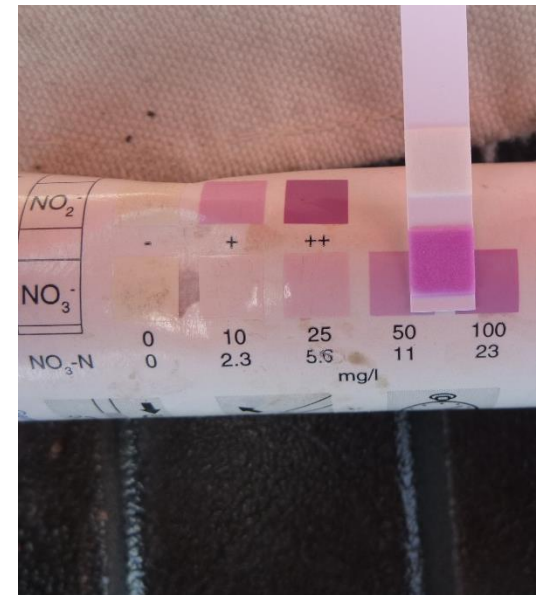


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MIL Irrigation System Evaluations - Finale

- Why should you schedule an irrigation evaluation?
 - Confirm your system specs are as expected
 - It is free, results are private, and there is no obligation
 - To save time & money, water & nutrients, protect crop & soil health
 - For information & recommendations on system improvements
 - To earn efficiency-based grants or certifications



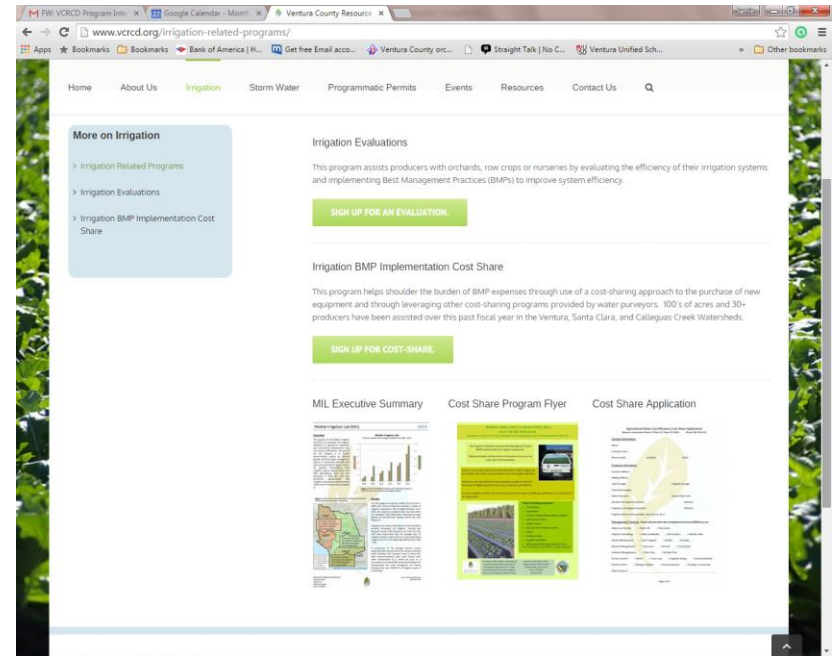
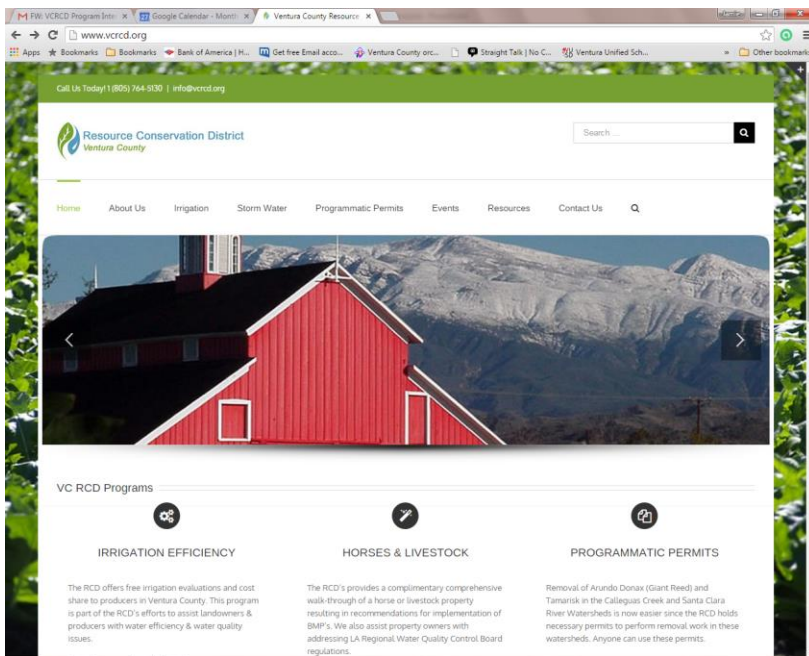
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