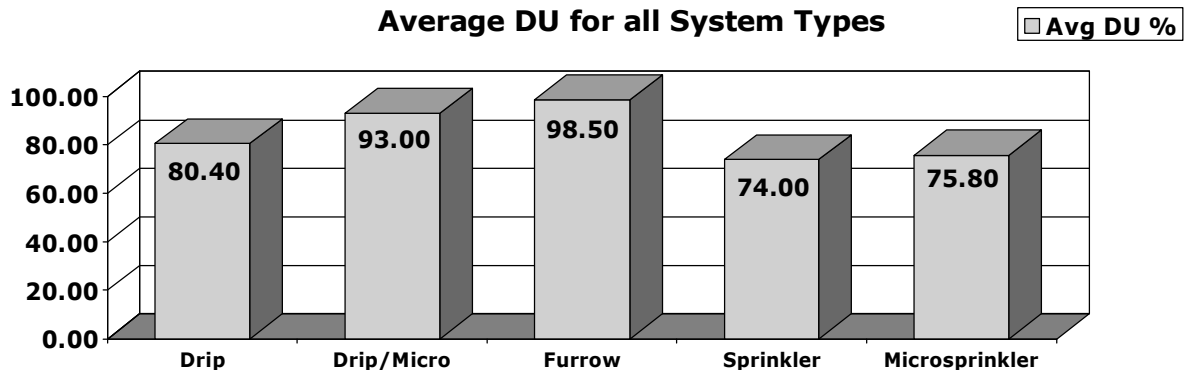


## What causes low DU averages.

- Ø For Drip and Micro systems, it is very important to keep the system clean. That means flush often.
- Ø For Hand-move sprinklers, maintenance of the nozzles and gaskets is the key to a good system. Many growers overlook this and pay in the long run.

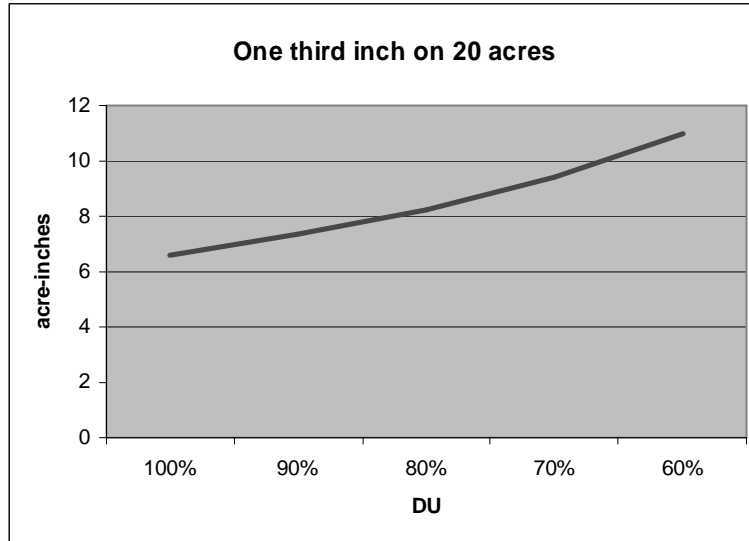
## 2004 Summary

Ø 42 Total Tests Performed	
Ø 15 Drip System Tests Performed	Avg DU 80.4%
Ø 1 Drip/Micro System Test Performed	Avg DU 93.0%
Ø 2 Furrow System Tests Performed	Avg DU 98.5%
Ø 20 Sprinkler System Tests Performed	Avg DU 74.0%
Ø 4 Microsprinkler System Tests Performed	Avg DU 75.8%



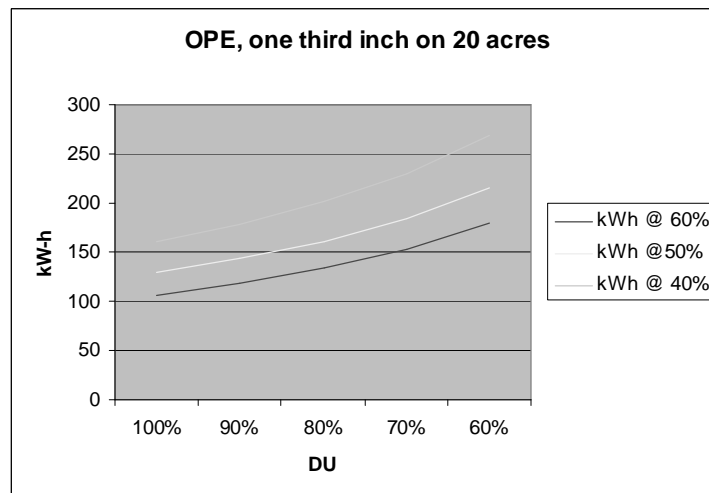
# Distribution Uniformity Does it Save Water?

Here is a graph that shows the relationship between DU and water costs.



# Pump Efficiency What does it Cost?

Here is a graph that shows the relationship between OPE and water costs.



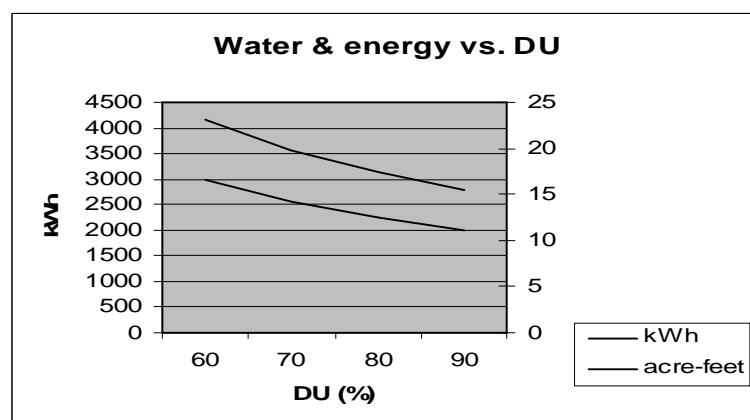
## Distribution Uniformity What does it mean?

You hear this term many times but what does it mean to the grower.

- Ø 100 % is perfect DU meaning a totally uniform distribution of the water applied.
- Ø Most irrigation systems when new range between 70% and 90% DU.
- Ø Local averages are fairly close to potential averages.
- Ø Maintenance is the key to maintaining good DU.

## Distribution Uniformity What does it Cost?

Here is a graph that shows the relationship between DU and water costs.



## How does the testing process work?

- Ø Start with the pumping plant and filter station (if you have one).
- Ø Measure Distribution Uniformity (DU) and Irrigation Efficiency (I.E.) as well as pumping plant efficiency.

## What other information will you gain from the test results?

- Ø Water requirements of your crops.
- Ø Basic data needed for you to better schedule your irrigations.
- Ø Potential money savings if you follow the BMP recommendations\*.

\*= Additional Information needed.

## Why should you have an Irrigation Evaluation?

- Ø Test can locate problems with your system before you find them the hard way.
- Ø Test can show you “Best Management Practices” (BMP’s) that can save you money or increase yields.
- Ø Test can evaluate a new system to see if you got what you paid for.

## What do you need to do to prepare for a system evaluation?

- Ø Yearly pump usage history from your utility company.
- Ø Think about your field. Which set is the most difficult to irrigate.
- Ø Schedule irrigation test to coincide with an average irrigation.
- Ø If your pump does not have an access for measuring the water levels you should consider having one installed as it will make the pump test more complete.

# Mobile Irrigation Lab Service

Power Services, Inc.  
Mobile Lab Contractor

## Introduction

Ø What can an irrigation system evaluation do for you as a grower?

Ø Power Services, Inc History

- Ø Mobile lab operation and pump testing for 15 years
- Ø Ex PG&E Pump tester and Agricultural account Representative
- Ø Completed all course work at the cal poly SLO, ITRC school for irrigation managers
- Ø Bill Power , mobile lab operator and pump tester for 15 years
- Ø Kevin Poth, mobile lab operator and pump tester for 9 years