

Conducting a Self-Assessment: Irrigation

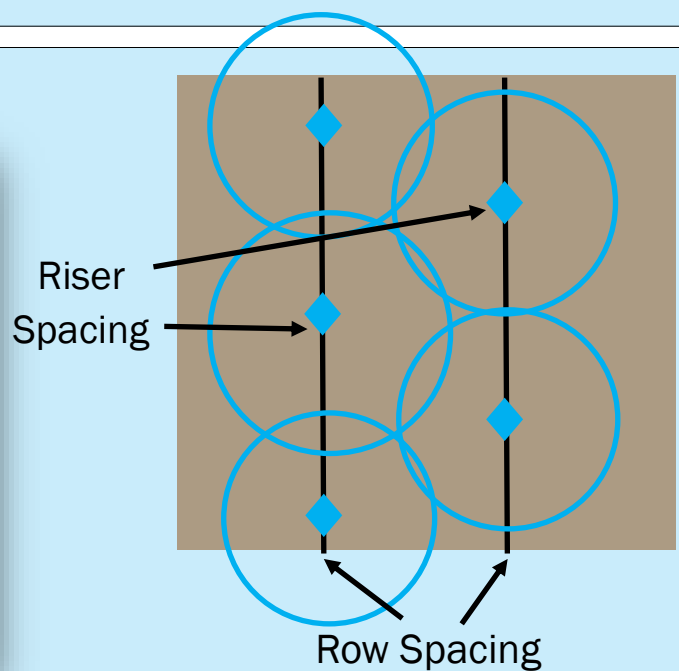


Introduction

Conducting a self-assessment of your operation's irrigation water use can benefit your farm in a variety of ways—save money, save water and fuel, and improve crop uniformity and value.

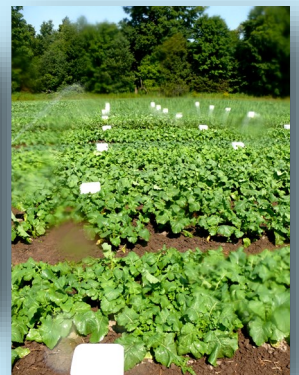
Step 1: Basic Layout Sketch

Layout a basic sketch of your row pattern and sprinkler layout. Give your best estimate of where the spray pattern overlaps.

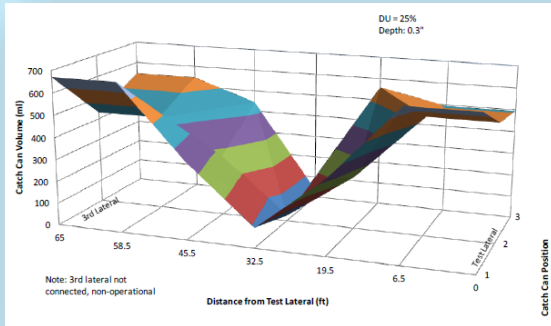


Step 2: Measure Water

Set up pails in a grid pattern across your field. This will help to determine the distribution pattern of your irrigation system. If the sprinkler patterns overlap, ensure you know which buckets get full or partial spray pattern.

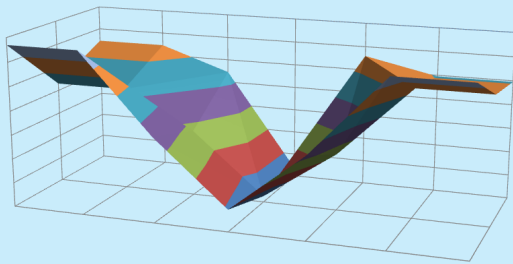


Step 3: Graph the Resulting Numbers from the Bucket

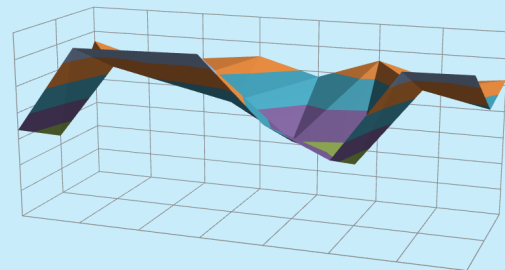


Step 4: Look at the Pattern

Assess the distribution pattern - how even is it? A valley or mountain in the pattern will show areas of over or under watering.



Here, a dip in the pattern shows an uneven distribution, where some portions of the field are consistently under-watered.



After adjusting the row spacing, the distribution pattern is more even - resulting in less over watering and more even crop growth and quality.



Common Issues:

- Row spacing too far apart
- Clogged or leaking nozzles
- Pipe runs too long and poor pressure near the end
- A variety of nozzles used causing inconsistent overlap pattern

For more information contact:

**Bruce Kelly - Farm & Food Care Ontario (bruce@FarmFoodCare.org) or
Rebecca Shortt—OMAFRA (rebecca.shortt@ontario.ca)**