

Water Smart: Water Use Assessments

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Water Smart
Farming Project



Water Smart Assessments: Give growers information so they can use water efficiently and decreasing volumes for treatment



Water Smart Project: Water Use Assessments

Irrigation:

- Improve the application efficiency of irrigation water systems

Vegetable Washers and Processors

- Reduce the amount of water that needs treatment - save money and allow for smaller and more economical wastewater treatment options;
- Identify opportunities to reduce, reuse and optimize current equipment.

The Glamorous World of Water Assessments





Irrigation Systems: Water Distribution Uniformity





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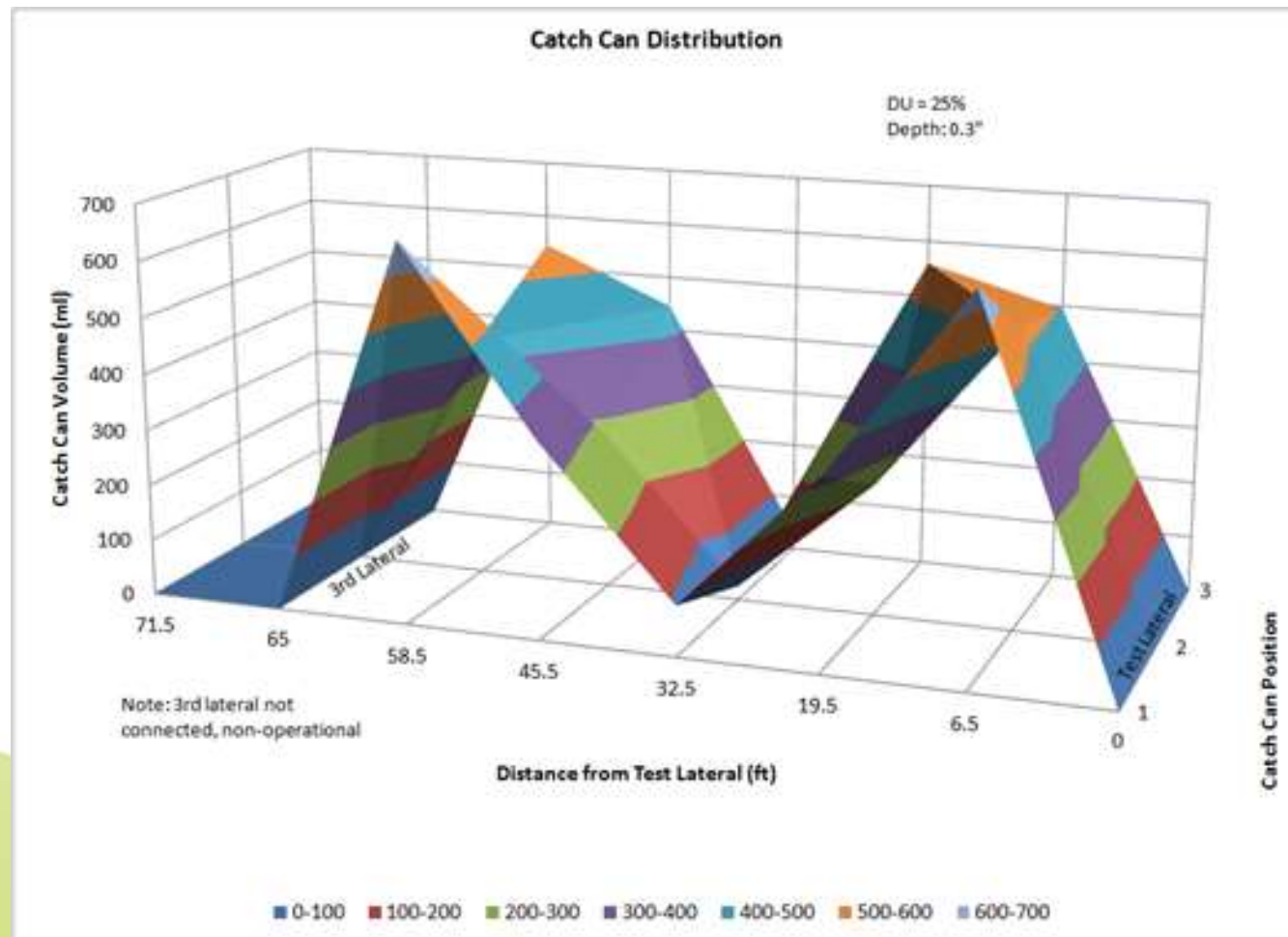


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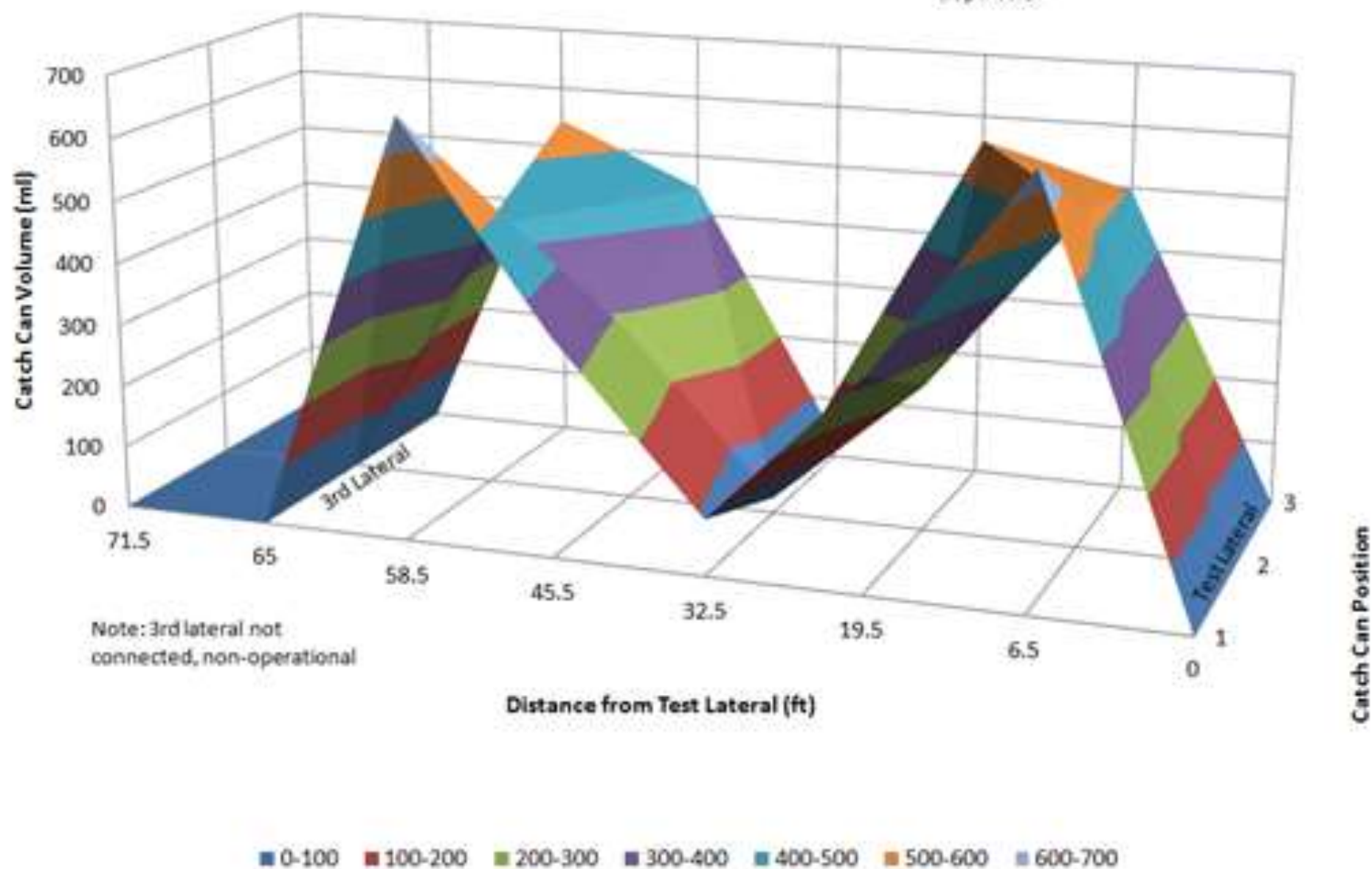
Observations to Date

- Good absorption, no ponding
- Some nozzles leaking or not rotating



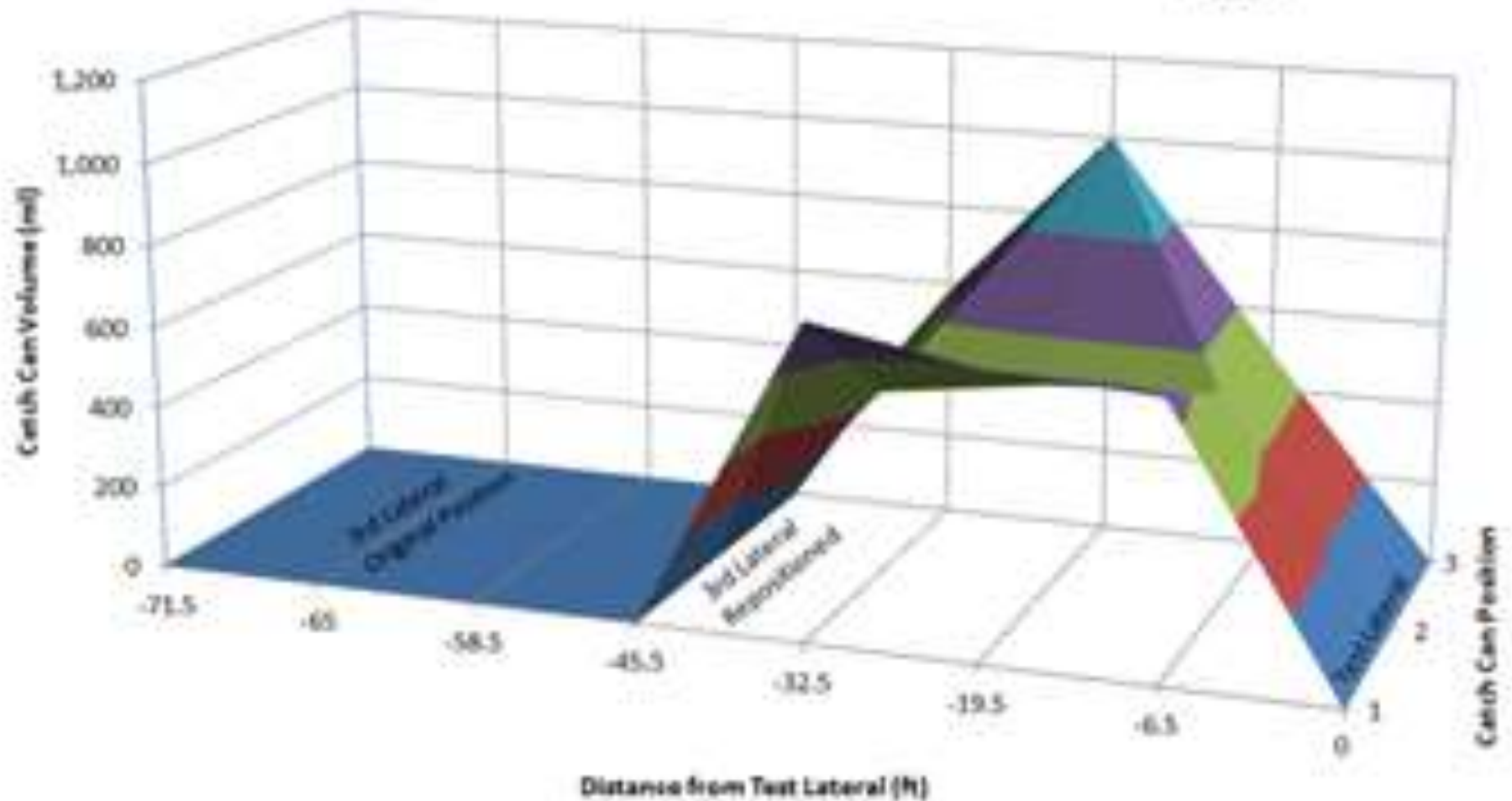
Catch Can Distribution

DU = 25%
Depth: 0.3"



Catch Can Distribution: Lateral Moved 3 Beds

DU = 75%



Repositioned lateral improves DU to 71%

0-200 200-400 400-600 600-800 800-1,000 1,000-1,200

Observations to Date:

Do a water assessment

Recommendation to this client:

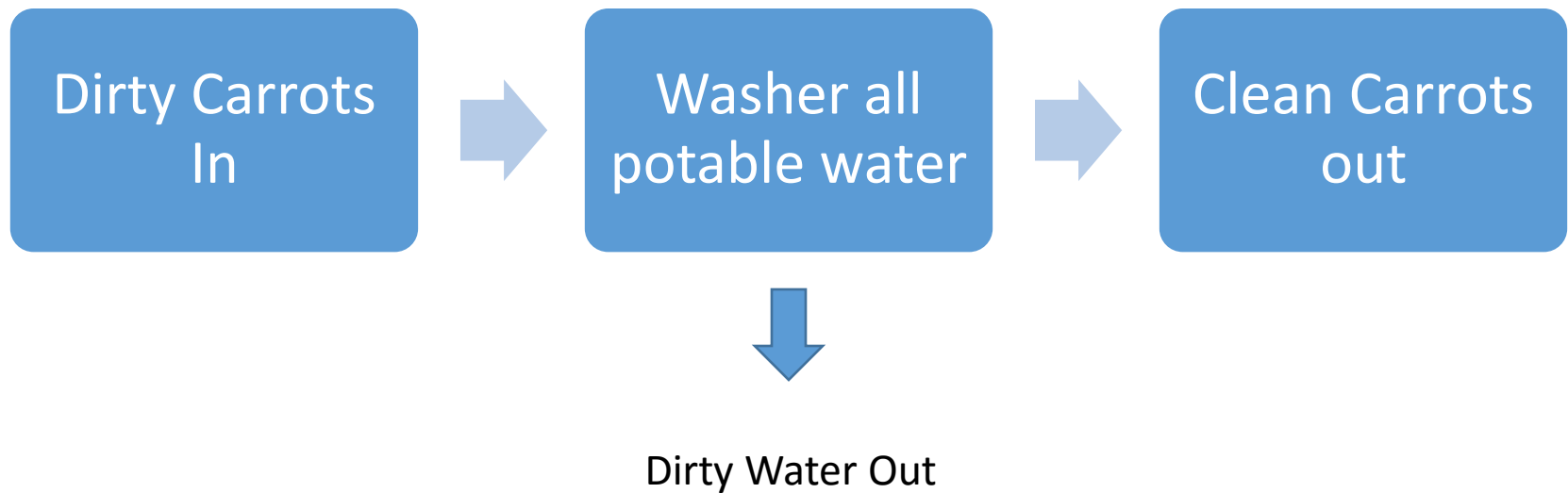
- Move laterals closer together
- Repair leaking nozzles/stand-pipe connections
- Repair/replace non-operational & slow rotating nozzles
- Use a consistent nozzle type



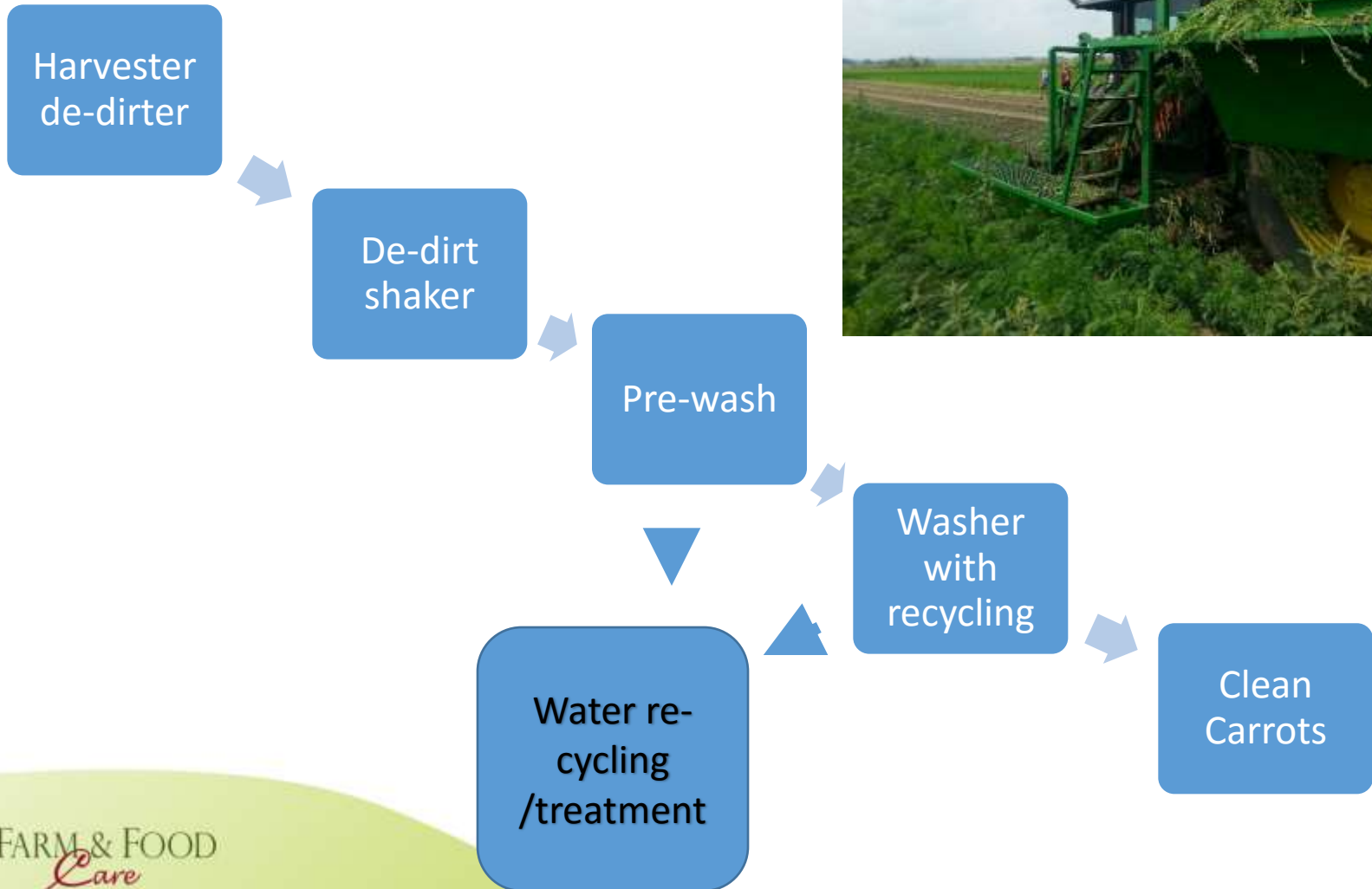




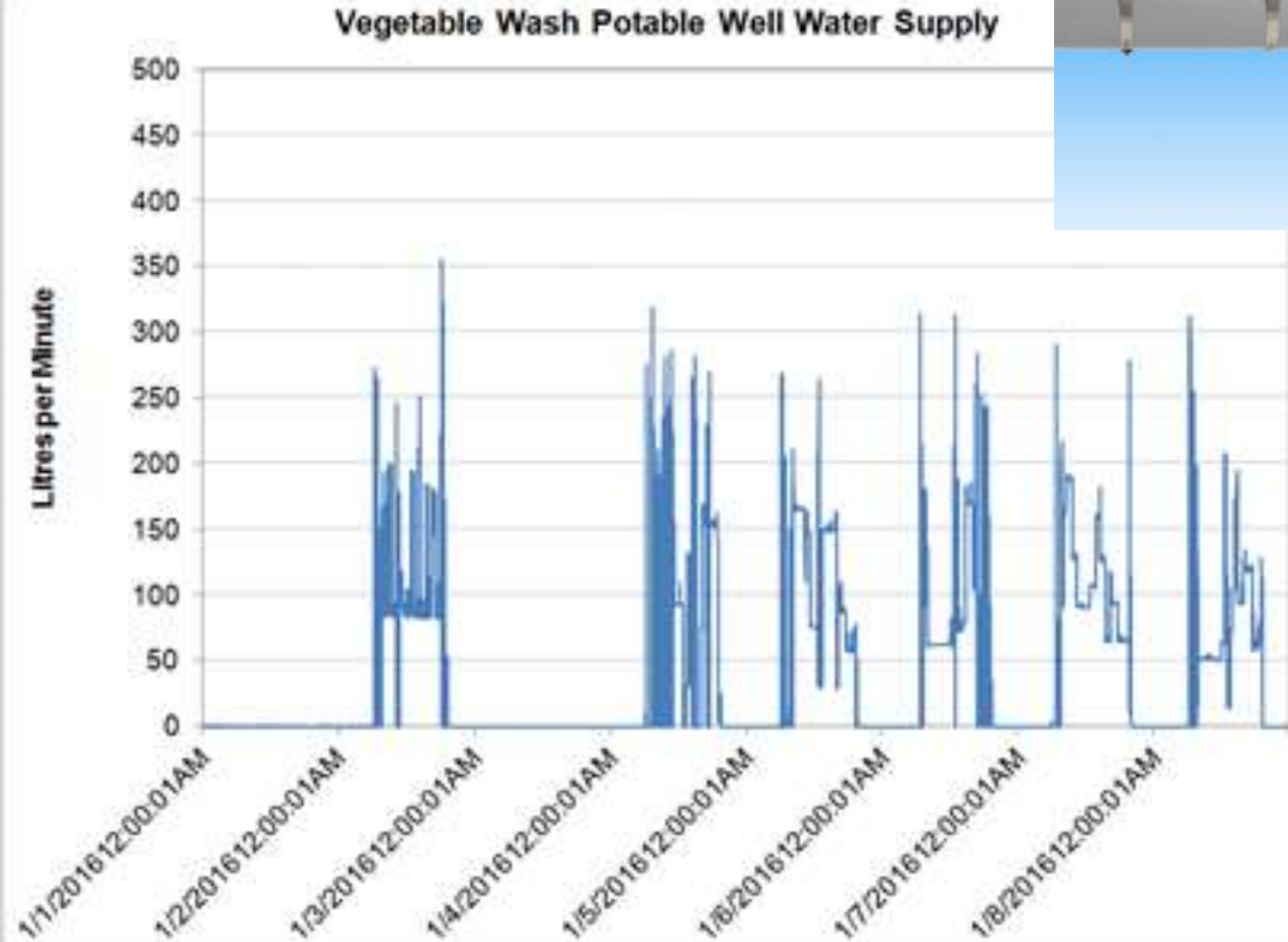
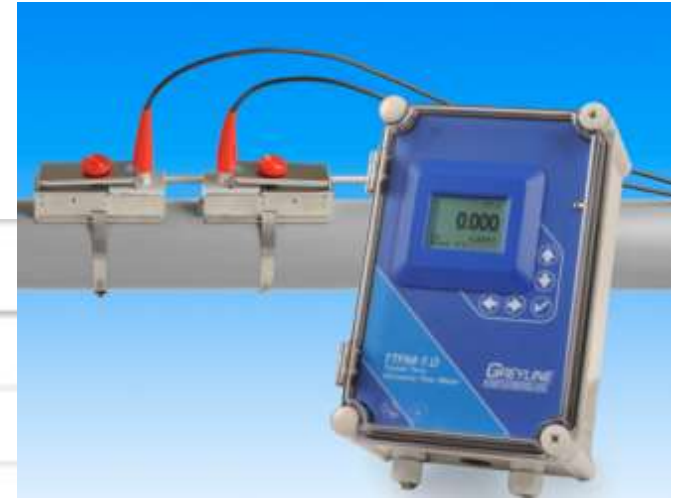
Simple System



More Complex System



We Measure Water Use



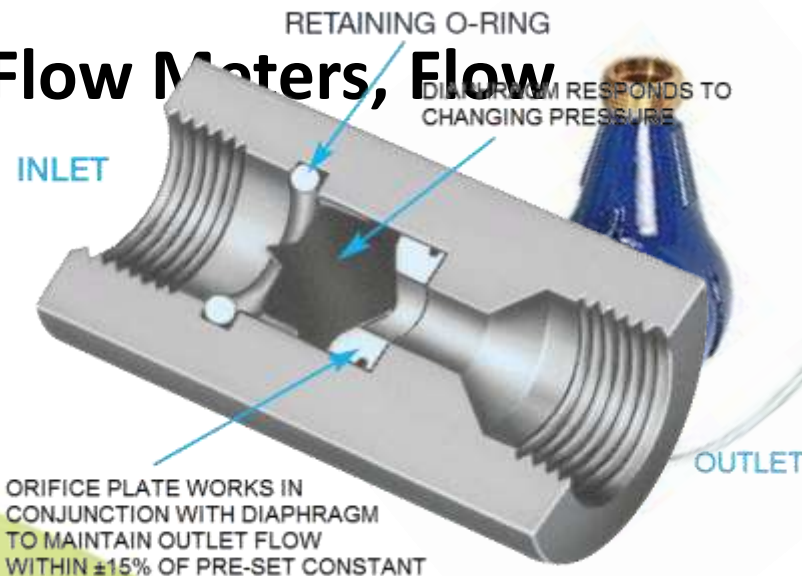
Observations to Date

- Collect & recycle cleanest water under wash drum
- Use recycled water in first portion of wash drum
- 50% savings with newer recycling equipment



Observations to Date

- Shut off water when not operating (automate)
- Flow regulators/restrictors to remove manual control to supply equipment
- **Flow Meters, Flow Meters, Flow Meters**



Thanks to OMAFRA support

**Project Champion:
Darryl Finnigan, OMAFRA**



Water Smart
Farming Project

Thank you!

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Water Smart
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