

# Typical Water Management Issues

## General

- Don't know how much water is necessary and when to apply it
- Watering too much "to be safe"
- Lack of available water in peak irrigation season
- Lack of soil management to increase soil water storage
- Spreading limited water too thinly, poor "bang for buck" in yields
- Pressure, flow, nozzle/emitter variations — poor distribution
- Leaky mainlines and laterals

## Gardens and Orchards

- High labour — manual valves instead of automated controllers
- Mixed irrigation systems — complex scheduling
- Mixed crops and soils with different watering needs — complex design
- Watering non-productive areas

## Handmoves, Wheelmoves, Sprinklers, ...

- High labour — stop, drain, move, start, repeat
- Left in one place too long — leaching, infertility
- Moved too infrequently — plant stress, low yields
- Limits crops to height of standpipes/laterals

## Centre Pivots and Travelling Booms

- High capital expense — is the cost justified?
- Difficult to fit to odd shapes and topographies
- Alternatives with similar low labour, high efficiency, high yields?

## Drip & Microspray

- Poorly maintained
- Emitters and spacing mismatched to root zone and soil type
- Difficult to assess — clogs and leaks may go undetected.
- Watering too little — salt build-up in root zones.

## Stationary and Travelling Guns

- Application rates too high — pooling, erosion.