

An irrigation systems performance should be regularly checked to ensure it is operating as per its design. There are three different types of checks –

- An *Annual Check* involves basic mechanical, pressure and flow checks to ensure your irrigation system is operating correctly.
- A *Bucket Test* is an add-on to an *Annual Check* and should be undertaken every 2-3 years, it provides a check of the depth and evenness of the irrigation being applied.
- *Full Evaluations* are recommended if you are observing issues with crop production, energy or water consumption. They are an effective means of systematically troubleshooting problems.

Annual Check

Pre-start up

- Visual inspection of pumps, valves, other fittings and irrigator for mis-alignment or loose bolts
- Verification the irrigation systems sprinklers/ emitters are the correct size and in the correct location

Post start-up

- Visual inspection of pumps, valves, other fittings, pipes, hoses and irrigator for leaks
- Pressure and where possible flow testing -
 - Before and after the headworks
 - At the inlet to each irrigator or block
 - At the end point of each irrigator or block
- Verification the flow meter and telemetry equipment is operating

Bucket Test

- Testing of -
 - Application depth
 - Distribution uniformity
 - Instantaneous application rate

Full Evaluation

- Pump efficiency
- Detailed pressure-flow tests
- Sprinkler/ Emitter and regulator testing
- Energy efficiency

If you are engaging a service provider to undertake a Bucket Test or Full Evaluation make sure you check out their capabilities first. It's easy to put out some buckets under an irrigation system and gather data, however this is a worthless exercise unless you can interpret what the data means!