# Irrigation

**Objective** - To operate irrigation systems efficiently ensuring that the actual use of water is monitored and is efficient.

**Target 1** - New irrigation infrastructure is designed, installed and operated in accordance with industry best practice standard.

Things that you can do:

- Make sure you use an <u>accredited irrigation designer</u> when you build or upgrade your irrigation system.
- Make sure your new irrigation is commissioned properly and include this as a requirement in your contract with the irrigation installer.

Records/Evidence you can keep:

• Code of practice certificate, irrigation system evaluation, commissioning reports, maps, system design (rates and pressures) and nozzle charts.

**Target 2** - Existing irrigation systems are maintained, calibrated, and operated to apply irrigation water at the optimal efficiency.

### Things that you can do:

- Complete a <u>bucket test</u> every year, or check the pressure and flow rates of your system regularly
- Regularly check your irrigators such as a winter service, unblocking and replacing nozzles and pressure regulators, cleaning out sand traps and re-aligning your pivot to make sure the gun turns on and off when it needs to.
- Make sure you are irrigating the land and not the road or tracks, watering the road is not only a waste of water but can create safety risk for motorist.

Records/Evidence you can keep:

- Bucket/uniformity test results.
- DIY Maintenance records (e.g. Irrigation NZ Checklist)
- Keep records and invoices of maintenance you do on your system.
- Winter servicing invoice.
- Events log (e.g. noted water irrigating road/leaky seal and what you did to fix it). If a complaint has been received, proof the issue has been addressed.

**Target 3 & Target 4** - All applications of irrigation water are justified on the basis of soil moisture data, climatic information and crop requirements.

### Things that you can do:

- Install and use an objective tool to monitor soil moisture deficit, such as an Aquaflex tape, soil moisture probe, a scheduling service or a soil water budget.
- Monitor the rainfall and PET. Take crop requirements into consideration.

## Records/Evidence you can keep:

• Soil moisture (measurements or budgeting).

- Soil temperature, rainfall, PET.
- Irrigation application depths/timing.
- Keep records of when you irrigate for some other reason, such as to wash in fertiliser or to activate herbicide.

**Target 5** - Staff are trained in the operation, maintenance and use of irrigation systems.

Things that you can do:

• Make sure staff are trained up in the working of your system and have the information they need to keep everything working as it should.

#### Records/Evidence you can keep:

- Staff training/induction records.
- Standard operating procedures.