

Irrigation Management Plan

Resource Consent RM

1. PROPERTY INFORMATION

A Physical address and legal description

Business/property:

Name:

Address:

Legal description:

B Map showing boundaries of the property

Insert here

C Ownership and contact details

Property owner: _____ Name: _____

Address: _____

Phone number: _____ Mobile: _____

D Is the property leased? Yes No

Name of lessee: _____ Phone number/mobile: _____

Postal address: _____

Email address: _____

E Person responsible for implementing the irrigation plan

Name: _____

F Climate information relevant to the areas to be irrigated

E.g. Typical Waimea Plains weather patterns _____

Average rainfall (summer months)? _____

Average evapo transpiration? _____

G Identify any flowing streams, water bodies, contaminated site etc

E.g Nil _____

H Slope, aspect and elevation

E.g. Flat _____

I Irrigation area

Total area covered by this irrigation plan (ha) _____

Does the irrigated area include water from another source? Yes No

If yes what is the source? E.g. another consented take, storage water etc. _____

J Area to be irrigated map

Insert here

2. SOIL TYPES TO BE IRRIGATED

A Nature and scale of soil variability over the area to be irrigated

E.g. Some variability to the stoniness of the property but overall quite consistent

B Soil type, depth of soil, stoniness etc

E.g. Soil is typical Waimea plains stony loam, with approximately 30cm of topsoil and stony gravel type soil beneath.
Note: Soil types and TRMP stated irrigation application rates are detailed in every resource consent decision.

C Soil's water-holding capacity

E.g. Water-holding capacity of the soil at (address) _____ is over 50mm.
Due to the free draining nature of the soil, micro sprinklers are utilised to ensure proper saturation of trees rooting areas.

3. LAND USE OR CROP TYPES TO BE IRRIGATED

A Rooting depth and cover

Crop is _____ . Roots can go down to _____ m and root cover, with mature trees, is _____ %.

4. APPLICATION RATES

A Describe the proposed irrigation rotation and application rates that account for the soil types and their individual water holding capacities

E.g. Assuming typical seasonal weather, evapotranspiration rates per day for stone fruit trees in this area are roughly as follows:

(Note: this can vary greatly depending on season and weather)

Sept mm _____ Oct mm _____

Nov mm _____ Dec mm _____

Jan mm _____ Feb mm _____

Mar mm _____ Apr mm _____

B Maximum quantities required per hour, day and week

E.g. As a baseline, 30 – 35mm of irrigation per week is to be used. This would be typical for a mild summer. Due to the widely variable timings of ripening of various varieties and possible extreme weather events it may be necessary to significantly increase irrigation volumes.

5. TYPE OF APPLICATION SYSTEM DETAILING

A The pipe configuration, irrigation equipment, application rates

B Photographs of irrigation system (including bore/surface water intake, pump and shed)

Please supply in digital format upon submitting your application.

6. MEASURES USED TO AVOID SUBSURFACE DRAINAGE BELOW THE CROP ROOTING ZONE OR SURFACE PONDING OR ANY SURFACE RUN-OFF TO PROTECT WATER QUALITY

E.g. By following the calculations for irrigation durations we are able to refill the soil water holding capacity and reduce subsurface drainage.

There is no surface ponding or run off at this property due to excellent soil drainage. Irrigation at appropriate times (i.e. not immediately after and not prior to forecast heavy rain). Use of spray irrigation equipment rather than heavy application rate equipment like old style guns or heavy rate travelling irrigators.

7. MEASURES TAKEN TO ENSURE EFFICIENT USE OR CONSERVATION OF WATER INCLUDING

A Soil moisture monitoring

E.g. The soil moisture content is to be monitored by

B Metering of usage

E.g. Weekly water meter readings are to be provided to the TDC as per the requirements. The water meter is to be verified 5 yearly for takes over 5l/s by an Irrigation NZ blue tick accredited service provider or halfway through the term of the consent for takes of less than 5l/s. Reports are sent to TDC as per the requirements.

C Leak detection programmes

E.g. A pre-season check is to be carried out yearly on all irrigated blocks to ensure no leaks or faulty irrigation equipment. Visual checks must be regularly carried out throughout season to ensure no leaks or damage.

D Repairs and maintenance

E.g. Any leaks or damage are to be repaired as soon as possible. Any major problems requires for the irrigation to be stopped and repaired properly before irrigation re-commences.

8. METHOD USED TO MEASURE AND RECORD ABSTRACTION AND APPLICATION RATES

A Including accuracy levels and calibration of equipment or evidence showing compliance with verification requirements for water meters

E.g. An Irrigation NZ blue tick accredited service provider tests calibration of equipment and forwards results to TDC as per requirements. As a check the calculated figures can be used to give an approximate value that can then be compared to the water meter reading to check for any erroneous readings that may point towards a problem, fault or leak.

Feel free to contact us: