

## RAKAIA-SELWYN CONSENT REVIEWS

### FLOWMETER FACTSHEET

Environment Canterbury needs information about actual water use to help us make quality decisions about water use and allocation. Greater understanding of the water resource will also help consent-holders in a number of ways:

Access to information about your actual water use and that of other water-users nearby could help you to use water efficiently and provide an opportunity for farming communities to work co-operatively in times of water shortage. Understanding the water resource and how to use it most efficiently could also help reduce your impact on the environment by helping you manage nutrient budgets and reduce the cost of farming by cutting electricity and fertiliser use.

### Flowmeters

ECan's proposed metering condition would require that:

- all consented takes be metered and have a datalogger capable of recording water use for an entire irrigation season;
- for all wells hydraulically connected to a surface water body (sometimes referred to as "stream-depleting"), four 'events' per hour must be recorded;
- the flowmeter and datalogger must be tamperproof;
- meters must be accurate to +/- 5 % under field conditions i.e., in the location it is actually going to be fitted (an installer should be able to advise);
- installation and operation must be according to the manufacturer's instructions and installation must be carried out by a suitably qualified person;
- a certificate of installation must be provided. Environment Canterbury has developed its own form for this purpose which will ensure the correct information is provided;
- a turbulence-free length 15 times the pipe diameter must be provided downstream or upstream of the flowmeter for testing purposes unless the flowmeter is electromagnetic;
- all flowmeters must be recalibrated every five years.

### Telemetry

Electronic capture (by datalogger) and transmission of water-use data (telemetry) will be proposed for all consented takes classified as stream-depleting and for the largest water-takes, those that abstract greater than approximately 350,000 m<sup>3</sup> per year. These larger takes (approximately 200 of the total of 635 in the zone) account for 80 % of the Rakaia-Selwyn groundwater zone allocation block.

### Costs

The cost of meters, their installation and maintenance must be paid for by the consent-holder. Any costs associated with reporting water-use information are also to be met by the consent-holder.