

THE REGULATIONS

On 10 November 2010, the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 (the Regulations) came into effect.

The Regulations have been established as a tool for better planning, monitoring and management of New Zealand's water resources. Under the Regulations, all holders of water permits allowing fresh water to be taken at a rate of 5 litres per second or greater must measure and record the amount of water taken.

The Regulations apply to all existing and new water permits over the 5 litres per second threshold. To aid existing permit holders to meet their obligations under the Regulations, a transitional period for compliance has been established. For new water permits granted on or after the 10 November 2010, compliance is required immediately.

WATER PERMIT	DATE FOR COMPLIANCE WITH THE REGULATIONS
20L/s or more	10 November 2012
10L/s or more but less than 20L/s	10 November 2014
5L/s or more, but less than 10L/s	10 November 2016
Less than 5L/s	Not required to comply with the Regulations



What is the difference between calibration & verification?

Calibration is the regular process of checking and adjusting the water measurement system (including its measurement parameters and ratings) to achieve the required accuracy. Calibration differs from verification, which is a formal assessment of the water measurement system for compliance with the accuracy requirements of the Regulations.



Does my water measuring system need verification?

The Regulations require that all water measurement systems are verified as suitably accurate. The verification process must be undertaken by a person who in the opinion of your regional council is suitably qualified. Regardless of whether a measurement device/system is installed by you or someone else (e.g. professional service provider), it must pass the accuracy verification to comply with the Regulations. Your regional council will be able to provide you with a list of approved verifiers.



Where can I get further help?

The systems required for the measuring and monitoring of water takes can be complex. Specialist knowledge may be needed to ensure that the system is able to be verified as meeting the level of accuracy required by the Regulations.

It is recommended that you approach your regional council before selecting and installing a water measurement device or system. Your regional council will be able to inform you of any particular requirements they have in addition to the Regulations. They will also be able to refer you to suitable professionals to provide specialist advice.





USER GUIDE HOLDERS



Measurement & Reporting of Water Takes

INTRODUCTION



This user guide summarises the process you should follow to obtain a water measuring device or system that complies with the requirements of the Regulations.

The process has been outlined for:

- » Full pipe systems
- » Open channel systems

This user guide has been produced to help water permit holders and is supplementary to the document "Guidance for the Measurement and Reporting of Water Takes". The guidance document should be referred to for further information.

FULL PIPE SYSTEMS

OPEN CHANNEL SYSTEMS

* SEE THE FULL GUIDANCE DOCUMENT FOR STRAIGHTFORWARD SITE DEFINITION

A full pipe is a pipe that is completely full when conveying Channels open to the atmosphere that flow under gravity, water, usually under pressure from a pump. The following such as races, canals, flumes, or ditches, are open channel flow chart outlines the process for establishing a compliant systems. Measuring flow in an open channel is often complex water measuring system for a full pipe system. as site conditions can have a significant effect and there is no single "off the shelf" solution. A recommended decision process is outlined below. CHECK REQUIREMENTS OF REGULATIONS CHECK REQUIREMENTS OF REGIONAL COUNCIL SPECIFIC PERMIT CONDITIONS REGULATIONS REGIONAL COUNCIL SPECIFIC PERMIT CONDITIONS PERFORM A SITE INVESTIGATION May require TO IDENTIFY SUITABLE LOCATION professional May obtain FOR METER PERFORM A THOROUGH SITE advice professional INVESTIGATION advice IDENTIFY CHARACTERISTICS May obtain OF THE WATER E.G. SEDIMENT IS IT POSSIBLE TO CONVERT TO Refer to Full professional FULL PIPE FLOW? CONTENT, ALGAE ETC Pipe section of advice Recommended ARE YOU CONFIDENT IN YOUR May obtain Engage COMPETENCE TO SELECT AND IS IT A STRAIGHTFORWARD SITE?* professional a suitably INSTALL A SUITABLE WATER METER? advice professional qualified hydrologist ARE YOU CONFIDENT IN YOUR May engage May require COMPETENCE TO SELECT & INSTALL professional SELECT AND INSTALL WATER METER professional A SUITABLE MEASUREMENT SYSTEM assistance advice AND WANT TO DO SO YOURSELF? COMMISSION THE WATER installation report May require METER SYSTEM & PERFORM ANY professional and submit to May obtain CALIBRATION PROCEDURES Regional Council SELECT SITE & CONSTRUCT/ advice professional if requested **INSTALL SYSTEM** advice Verifier to Installer to submit May obtain prepare CALIBRATE AND COMMISSION installation report professional WATER MEASURING SYSTEM ENGAGE AN APPROVED VERIFIER verification report to Regional Council advice for permit holder; TO VERIFY THE ACCURACY OF THE WATER METER permit holder to submit report to Verifier to prepare Regional Council verification report ENGAGE AN APPROVED VERIFIER if requested for permit holder; TO VERIFY THE ACCURACY OF THE permit holder to WATER MEASURING SYSTEM submit report to Submit recorded Regional Council if START COLLECTING AND data to Regional requested RECORDING MEASUREMENT DATA Council annually and as requested Submit recorded START COLLECTING AND data to Regional RECORDING MEASUREMENT DATA Council annually and as requested