

# WaterForce

## Water metering and telemetry services



### Technology to help improve your system performance

**Water is a precious, limited resource. Cost-effectiveness, efficiency and reliability are vital to running a farming operation.**

WaterForce can provide a part or full turn-key service, from assisting in obtaining the water consent through to providing the turn-key irrigation system which may include telemetry, metering and measurement systems and services.

WaterForce has developed a comprehensive monitoring service in partnership with Outpost Central. Outpost Central is one of the leading design and manufacturing companies specialising in providing telemetry solutions to water industries.

A wide range of options are available to fit your particular requirements, including combinations of GPRS and meshed wireless (low and high powered) radio systems. Cabled installations are also supported.

#### Telemetry Services

Telemetry is an excellent management tool in collecting and reporting weather, water levels in bores, soil moisture, monitoring plant & equipment performance and control.

Telemetry is used to record information from one location and transmit it to another. Telemetry has emerged as a key tool in collecting information from the farm. The key driver is the requirement to collect and report water consumption for consent and compliance. As farmers install this technology, they find the up-to-the minute and continuous log of data that is recorded online provides them with a powerful management tool to assist decision making.

#### System Design – how it works

GPRS telemetry data loggers collect, log, and transmit the information from the farm to WaterForce Monitoring using the Vodafone Cellular Internet Service (also known as GPRS).

Radio wireless telemetry data loggers permit the transmission of information around the farm without the need for cables. Meshed radio networks are essential on the farm with each wireless unit relaying information directly to the main GPRS base station logger or 'hopping' through other loggers. WaterForce wireless loggers can communicate up to 4km per 'hop', with the range greatly extended by their ability to 'hop' across a number of wireless data loggers.

The units are supplied complete and configured to the farm for simplicity of installation and can be mains, solar, or battery-powered.

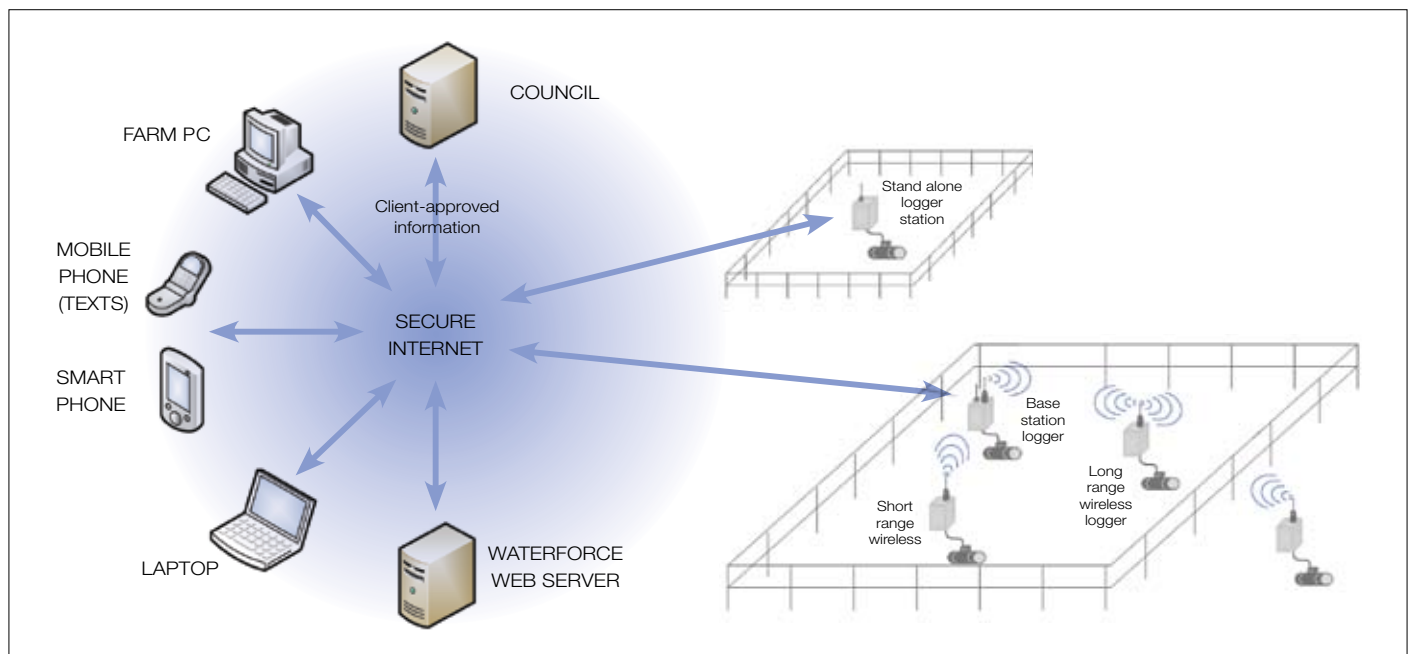
All logged information is held in the telemetry data logger memory for up to 200 days to safeguard against loss during a sustained communication failure.

WaterForce and Outpost Central offer simple stand alone telemetry data loggers which can gather information from one or two water meters.



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**Telemetry System Set-up** – This diagram shows a typical system set-up on farm with remote data loggers.



## System Flexibility

The technology is extremely versatile and can allow a group of neighbouring water users to take advantage of the meshed wireless and GPRS base station loggers. Information can be separated for viewing by a single or a group of users. This allows the tool to manage a water group's water management needs or facilitate water sharing/trading in the group.

Access to this data can be gained by any device that can connect to the internet, ie farm PC, laptop, and smart phones. Text and email notification services are available, and the WaterForce team provides a 24/7 service helpdesk.

Selected information can be automatically made available to council information systems to provide your reporting requirements for water consent and compliance.



## Water Metering

WaterForce will connect to your existing meter or can supply a suitable new meter to meet your farm requirements. WaterForce can customise a meter to suit your application – clean water to effluent slurry. This is achieved by using electromagnetic & ultrasonic flow, turbine and open channel flow systems. WaterForce is council-approved for calibration of water meter installations. Refer to our website for further information on water meters available.



## Soil Measurement

WaterForce can connect to your existing soil moisture probes or can supply suitable new soil moisture monitoring systems. The use of soil monitoring equipment ensures optimum soil moisture levels retaining nutrients within the soil root zone. This can economise your on-farm water and fertiliser budget. Refer to our website for our full range of soil moisture probes available.

## Weather

WaterForce can provide weather stations that connect to our online monitoring system to provide accurate weather reporting.

## Farm Management Tools

WaterForce supplies specialist equipment to monitor and manage:

- pumping systems
- irrigator systems
- bore levels
- pond levels
- dosing, fertigation and chemigation systems
- water conditioning systems
- on-farm advisory service.

**So, whether you are in the business of farming, irrigation supply schemes or power generation we are geared up to support and work with you.**

**Contact the branch nearest you today for a no-obligation appraisal of your monitoring requirements.**

# WaterForce

Branches nationwide  
[www.waterforce.co.nz](http://www.waterforce.co.nz)

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