

## MULTI-METERING OF WATER SUPPLY FOR EXISTING UNITS

### What is multi-metering ?

Multi-metering of water supply is the provision of a separate water meter to each unit in a multiple unit development. A unit is as defined in the *Unit Titles Act*.

Previous practices adopted by Power and Water Corporation only allowed a single common meter to be installed to service all units in a multiple unit development. A single water account would thus be forwarded to a body corporate in the case of unit title developments. For unit title developments the body corporate is responsible for paying the water account, generally funded from body corporate fees paid by unit owners.

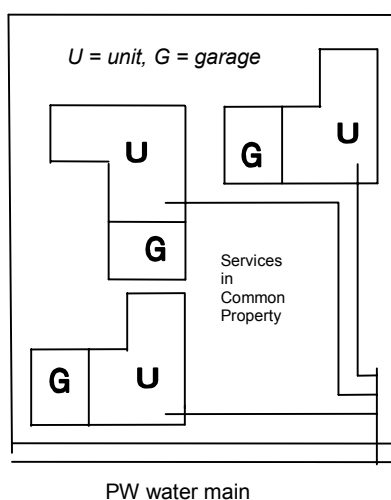
Amendments made to the *Water Supply and Sewerage Act* in 1998 allowed a change to offer customers in some residential unit developments the choice of having individual metering and billing.

### Which customers are best suited to multi-metering?

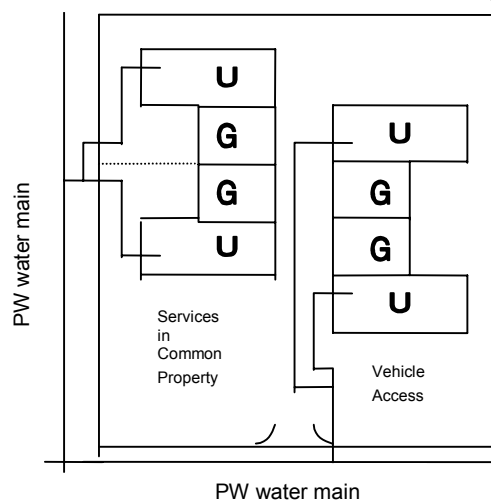
Multi-metering is best suited to existing multiple residential dwelling developments where each dwelling is detached. Some semi detached dwellings may also be suitable. Multi-metering is only permitted for multi-dwelling developments having up to 12 units and which are unit titled. Existing multistorey block building developments having dwellings on different storeys are not suited for conversion to multi-metering. This is due to the prohibitive cost of modifying plumbing to provide separate plumbing to each unit.

Typical layouts for water services under multi-metering are shown in the examples below.

**Example A: Multi-metering for 3 units**



**Example B: Multi-metering for 4 units using 2 separate water main tapplings**



## What is the “all or none” policy?

Power and Water’s multi-metering policy requires all unit owners in a multiple dwelling development to agree to:

- Provide a separate water meter for each unit and for the common water usage; and
- Install all the meters at the same time.

The multi-metering policy does not allow owners in a lot to opt for separate water meters at different times. This is termed “all or none” multi-metering. An “all or none” multi-metering policy is adopted due to the following:

- To avoid repeated modification of the water service pipework and the metering arrangement as owners opt for separate meters at different times.
- To avoid down sizing the common water meter to retain accurate metering as owners opt for separate meters at different times.
- To avoid the difficulty in apportioning charges to the latest owner who opts for a separate meter while the others remain metered via the common meter.
- To avoid the difficulty in apportioning common water consumption recorded on a meter shared by some units but not shared by units with individual meters.

## Who is responsible for multi-metering implementation?

Implementation of multi-metering is the responsibility of the body corporate in a unit title development. The responsibilities include the following:

- Obtaining agreement from all unit owners for separate metering of each unit and the common water.
- Arranging design of modifications to Power and Water’s pipework and the unit development’s plumbing for conversion to multi-metering.
- Arranging modifications of Power and Water’s pipework and the unit development’s plumbing from the metering point to the units to ensure all units have a separate water supply service
- Arranging modifications of Power and Water’s pipework and the unit development’s plumbing from the metering point to common water outlets to ensure common water outlets have a separate water supply service.
- Arranging with Power and Water for the installation of water meters following completion of all pipework and plumbing.
- Paying the account for common water usage.

## What changes are required to pipework and plumbing?

The design of modifications to implement multi-metering will need to consider all parts of supply from the main being:

- From the main up to and including the metering point - known as the water service property connection;
- External plumbing from the metering point up to the internal plumbing; and

- Internal plumbing within the units.

Depending on the type of development it may be necessary or beneficial to replace the current water service property connection or install an additional property connection. Manifold pipework will also be needed for the meter bank.

External plumbing from the metering point up to the internal plumbing that is being shared must be disconnected and separate plumbing laid to each unit. Internal plumbing must not be shared between separate units. There must be no connection between:

- New pipes and discarded pipes; and
- Plumbing serving separate units.

All plumbing inside the property from the units up to the metering point must comply with the National Plumbing and Drainage Code, AS/NZS 3500. The Building Advisory Services Branch of the Department of Infrastructure, Planning and Environment will provide advice here.

The completed installation of the water service property connection must comply with Power and Water's standard drawings.

## Who pays for the conversion to multi-metering?

The unit owners pay for the design and installation of all changes to Power and Water's pipework and the unit development's plumbing, including any changes to the water service property connection. Except for tapping of a main, Power and Water does not organise or undertake any changes to Power and Water's pipework or the unit development's plumbing.

Power and Water will charge for applications for the following:

- Tapping of water mains for installation of a new water service property connection.
- Installation of each new meter to the meter manifold.
- Special meter reading by customer request.

The cost to unit owners of changes to Power and Water's pipework and the unit development's plumbing will in most instances make multi-metering an unattractive option.

## Who provides changes to property services ?

Where a new water service property connection is required, Power and Water will locate the main on-site where required and install a breaching piece, tapping bands and ferrule taps. The body corporate of the units must arrange exposure of the main prior to tapping, the supply of materials required for tapping, as well as the supply and installation of property service piping incorporating a meter manifold. This work must be undertaken by a self certifying plumber. On completion of the water service property connection, Power and Water will install a meter for each unit and a meter for the common water usage.

## How will water supply charges alter under multi-metering?

Power and Water will charge an application fee for each separate meter installed for multi-metering. Each meter also attracts a fixed daily charge. These two charges make the provision of a multi-metering system much more expensive than the provision of a single metering system.

In the first year of multi-metering there will be an additional special meter read fee and an application fee with having a separate meter and a shared meter for common water. In subsequent years there will be a charge increase due to the fixed daily charge.

The table below shows the water charges per unit per year. The subdivision in which the property is located is assumed to be established and an adequate water service property connection is available for multi-metering.

It is based on equal water consumption per unit and equal water consumption between multi-metering and single metering. The increase in the water charges with multi-metering is substantial.

### Power and Water water charges per unit

Number of units	Multi-metering		Single-metering	Increase in cost per unit with multi-metering	
	Cost per unit for year 1	Cost per unit for subsequent years	Cost per unit each year	Year 1	Subsequent years
	\$	\$	\$	\$	\$
2	841	734	633	208	101
3	807	717	617	190	100
4	790	709	608	182	101
5	780	704	634	146	70
6	773	700	626	147	74
7	768	698	620	148	78
8	764	696	615	149	81
9	761	695	612	149	83
10	759	694	609	150	85
11	757	693	606	151	87
12	756	692	604	152	88

Assumptions: Each unit has 2.2 persons and per person consumption is 1100 litres per day.

Charges: Meter daily charge – multi-metering-\$0.2756 for each 20 mm meter. Single common metering - \$0.2756/ meter for 2 to 4 units, \$0.7056/ meter for 5 to 12 units. Water consumption charge-\$0.66/kL. Application for supply of water service-\$55. Special meter read before switching over to multi-metering-\$50.

Explanation: Consider an example of 10 units in a lot that had an adequate property service connection (40 mm diameter). If all the 10 owners elect to have multi-metering then ten 20 mm meters are needed, as well as a 20 mm meter for the common water usage.

Single metering cost:

Year 1 and on:

Consumption cost	= $10 \times 2.2 \times 1100 \times 365 \times 0.66 / 1000$
	= \$5829.78
Fixed cost	= $0.7056 \times 365$
	= \$257.54
Total cost per unit	= $(5829.78 + 257.54) / 10$
	= \$ 608.73

Multi-metering cost:

Year 1:

Special meter read fee for switching over from single to multi-metering	= \$ 50
Application for supply of water service	= $11 \times 55$
	= \$ 605
Consumption cost	= \$ 5829.78 (same as before)
Fixed cost	= $11 \times 0.2 \times 365$
	= \$1106.53
Total cost per unit	= $(50 + 605 + 5829.78 + 1106.53) / 10$
	≅ \$ 759.13

Year 2 on:

Consumption cost	= \$ 5829.78 (same as before)
Fixed cost	= \$1106.53 (same as before)
Total cost per unit	= $(5829.78 + 1106.53) / 10$
	≅ \$ 693.63

Increase in cost per unit with multi-metering in year 1	= $759.13 - 608.73$
	= \$150.40

Increase in annual cost per unit with multi-metering in subsequent years	= $693.63 - 608.73$
	= \$84.90

For a unit to have a lower water account under multi-metering, it would require to have a much lower water consumption than the consumption allocated to the unit under single-metering.

## What should be provided to Power and Water?

The body corporate is required to provide Power and Water with the following:

1. An initial application for multi-metering to include;

- Drawings showing changes to Power and Water's pipework and the unit development's plumbing; and
  - A letter of acknowledgment showing all unit owners agree to multi-metering.
2. As required, an application for any changes to the water service property connection.
3. An application for installation of separate water meters. The application is to include a certificate of compliance from a self certifying plumber stating that after completion of pipework and plumbing modifications there were no connections between:
- New pipes and discarded pipes; and
  - Plumbing serving separate units.
4. The certificate of compliance shall also include a statement that the completed water service property connection complies with Power and Water's requirements.

## We can assist you

Prior to commencement of any changes to your current pipework/ plumbing please contact the Water Engineering Branch in your region to discuss individual requirements.

## For further information contact us

Darwin Water Engineering Branch	☎	89247470
Katherine Water Engineering Branch	☎	89739559
Tennant Creek Water Engineering Branch	☎	89517312
Alice Springs Water Engineering Branch	☎	89517312