

June 2020

Information for Duly Qualified Persons

The NSW non-urban water metering framework, which started on 1 December 2018, will to improve the standard and coverage of non-urban water meters across the state.

This fact sheet answers questions commonly asked by duly qualified persons (DQPs). The answers supplement other information about the NSW non-urban water metering framework available on the NSW Department of Planning Industry and Environment website at www.industry.nsw.gov.au/water/metering

Metering thresholds and installation

How can water users find a duly qualified person?

A DQP is a person with the qualifications, skills or experience to carry out certain work in relation to metering equipment. Different types of duly qualified persons are required to carry out different work in relation to metering equipment. They include certified meter installers, certified practising hydrographers, metering system designers and telemetry technicians. Attachment E of [The Non-urban Water Metering Policy](#) provides further information on the qualifications, skills and experience required by a DQP.

Does a duly qualified person need to be physically present to install a meter?

Yes, DQPs must either physically install the metering equipment themselves or supervise the installation of the metering equipment on-site.

How do the metering requirements apply to gravity-fed pipes without pumps?

Gravity-fed pipes will require a meter with tamper evident seals, a Local Intelligence Device (LID) by the appropriate regional roll out date for the water supply work.

Can a duly qualified person validate their own work?

Yes. If a duly qualified person is validating their own metering equipment, they must indicate they are validating their own metering equipment.

How do the metering thresholds apply to wells?

All wells must be metered.

If there are multiple water users taking water from one work (for example, a well), which metering threshold will apply?

If multiple water users are taking water from the same work, and that one work meets the threshold, then the obligation to meet the metering requirements will rest with the approval holder.

Which part of a surface water pump determines the size of a work?

The diameter of the pump outlet is the size used to determine the metering requirements for that work. The size of the pump listed on the statement of approval is the size used to determine

whether the authority holder meets the metering threshold. If there is no size stated, the work will be required to be metered and will require telemetry.

If the pump size is incorrect, or not stated, water users can amend the work approval to record the correct size by contacting the relevant licensing authority.

Do customers of irrigation corporations have to comply with the metering reforms?

Metering requirements apply to irrigation corporations at the intakes and offtakes, but not to the individual customers within the corporation's area of operations.

Accuracy Testing

What if there is no water to test meters?

We are monitoring the drought situation closely and understand the impacts that drought may have on compliance with the metering requirements.

The Natural Resources Access Regulator (NRAR) has published its compliance approach in relation to the new metering requirement and expects water users to make arrangements ahead of their roll out date to bring their equipment into compliance. NRAR will require users to be able to show they have made every effort to comply with the new requirements.

For more information on NRAR's compliance approach see the Metering Regulations—NRAR Compliance Approach fact sheet available at www.industry.nsw.gov.au/natural-resources-access-regulator/policies-and-guidelines

Do I have to flow test the meter every time I change its battery?

No, re-validation may be required if the metrological performance of a meter is considered to have been affected by maintenance performed or if the seals on the meter are broken or removed by a person who is not a duly qualified person.

Can a duly qualified person access meter data on-site for maintenance purposes?

Yes. Duly qualified persons are allowed to read meter data on-site for maintenance purposes.

Where can I find further information about accuracy testing methods?

The work undertaken by Manly Hydraulics Laboratory to identify appropriate and practicable methodologies to demonstrate the accuracy of existing meters is now complete. A best practice guide for duly qualified persons performing in-situ accuracy testing on non-urban water meters in NSW is available for Duly Qualified Persons via the Irrigation Australia website at <https://www.irrigationaustralia.com.au/documents/item/1116>

Pattern approved meters

Can water users with surface water pumps over 1,200 mm comply with the metering requirements?

Yes. There are now pattern-approved meters for up to 1800 mm pumps.

What will happen to existing non-pattern approved meters?

Water users can keep non-pattern approved meters installed before 1 April 2019 if:

- the metering equipment has been validated by a duly qualified person in accordance with AS 4747 prior to their regional roll out date, and
- they have a copy of a certificate from the meter manufacturer confirming the accuracy of the meter did not exceed $\pm 2.5\%$

OR

- the meter is checked in-situ by a duly qualified person and it is determined that the maximum error does not exceed $\pm 5\%$.

Water users must provide confirmation that these requirements have been met to the department. Water users must also confirm that the metering equipment is fitted with a LID and tamper-evident seals.

There are no pattern approved meters for open channels. How can water users with those works comply?

Metering equipment for open channels does not need to be pattern-approved if:

- before the metering equipment is installed, the proposed design of the installation is certified by a duly qualified person as compliant with the relevant international or Australian standard,
- AND
- the metering equipment is validated at least every 12 months.

Authority holders with open channel systems must be compliant by their regional roll out date.

How frequently does the Murray–Darling Basin Authority update the pattern approval list?

The MDBA updates the pattern approval list as soon as any relevant new information is available. You can download the most recent update from www.mdba.gov.au/publications/mdba-reports/compliance-enforcement-documents.

Tamper-evident seals

What is classified as tampering?

Under the Water Management Act 2000, a person may be found guilty of an offence if they interfere with, damage, destroy or disconnect any metering equipment that has been installed in connection with a water management work. Additionally, a person may interfere with metering equipment by unsealing any sealed component, blocking any part of the equipment, attaching a device that may affect the operation of the equipment, or disconnecting the equipment from its power source.

A higher offence may apply if the tampering is intentional or reckless.

Where can you get tamper-evident seals?

The NSW Government has appointed Irrigation Australia Limited (IAL) as the approved provider of all tamper-evident seals under the metering rules.

Only current duly qualified persons can purchase seals and each certified person will need to login to the IAL website using their membership credentials before a purchase can be made.

Do tamper-evident seals need to have a seal number?

Yes. Each tamper-evident seal has a unique number. Duly qualified persons validating metering equipment need to record the seal numbers on the validation form via the DQP Portal.

What measures are in place to stop someone from cutting off a tamper-evident seal and replacing it with another one?

Under the metering requirements, the number of the tamper-evident seal must be recorded by a duly qualified person on the metering equipment's validation form. This record will be incorporated into a register that the department will use to check seal numbers.

Meter tampering is an offence under the Water Management Act 2000.

A duly qualified person must notify the Natural Resources Access Regulator (NRAR) if they know or reasonably suspect that any metering equipment they are installing or are carrying out work on has been tampered with.

It is an offence under the Water Management Act 2000 for a duly qualified person to fail to notify in these circumstances.

You can connect NRAR on 1800 633 362 during business hours or use the NRAR's online reporting form at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/report-suspicious-water-activities/report-suspicious-activity>.

The DQP Portal

What is the DQP Portal?

The DQP Portal is a secure website that can be used on a computer, laptop, tablet, or smartphone. It is the starting and ongoing entry point for DQPs to assist the water user to:

- register intent to order and install a new or replacement Local Intelligence Device (LID)
- notify completion of configuration, installation, and testing of the LID
- generate the Validation Certificate to notify the water user, and, on behalf of the water user, notify DPIE, NRAR, and WaterNSW, that the telemetered meter installation is compliant

The Portal is maintained and supported by WaterNSW - <https://dqp.waternsw.com.au/>

When does the water user need to provide the report to keep an existing meter to the department?

A water user who wishes to keep their existing metering equipment must provide the report to the department before their relevant roll-out date.

The report must attach one the following supporting certificates:

- If the metering equipment is pattern-approved, a copy of a validation certificate provided by a duly qualified person

OR

- If the metering equipment is not pattern-approved, a copy of:
 - the manufacturer's certificate showing the equipment is + 2.5 % in the factory and a copy of the existing validation provided by a duly qualified person

OR

- the 'Non-urban water meter—certificate of accuracy for existing meter (not pattern-approved)' provided by a duly qualified person, certifying the maximum permissible error of the equipment does not exceed + 5 % in the field.

What should duly qualified persons do with their existing records, including validation forms issued prior to 1 April 2019?

The department recommends that duly qualified persons keep copies of validation forms and any other historical information about metering works: Industry bodies such as Irrigation Australia Limited and the Australian Hydrographers Association may also require duly qualified persons to keep records.

This information will be relevant for re-validating existing meters and bringing them into the framework through the transitional arrangements.

Who is responsible for ensuring the accuracy of the validation certificate supplied to the customer by the duly qualified person?

The responsibility remains with the authority/approval holder to ensure that their metering equipment remains accurate. This extends to any forms or certificates completed by duly qualified persons.

When do forms completed by a duly qualified person need to be provided to the customer?

A duly qualified person should provide the validation form within 7 days of carrying out the validation.

How will another duly qualified person know if a meter has failed a validation?

The department recognises that accessing historical validation certificates can help duly qualified persons perform their functions.

The department encourages duly qualified persons to ask water users for a copy of their previous validation certificates before going on-site.

The department is considering options for making these certificates available to duly qualified persons while protecting the privacy of water users.

Faulty metering equipment

What happens if metering equipment stops working?

All water users must report faulty metering equipment within 24 hours to WaterNSW – using their online Section911 form, available at www.waternsw.com.au/customer-service/service-and-help/forms/s91i-application-for-an-authority-to-take-water

An offence applies for failing to report faulty metering equipment within 24 hours.

Metering equipment includes telemetry.

If a meter fails and it is not being used, does the water user still need to notify the department, or can they wait until they want to take water?

Water users must notify WaterNSW within 24 hours of becoming aware that a meter is not working properly or has stopped working, even if they are not taking water.

Telemetry

Where can I find out more information on the telemetry requirements?

All surface water works, except for pumps below 200mm, need to be fitted with an accurate meter and a compatible local intelligence device (LID) under NSW's metering rules,

A LID is a device, such as a telemetry-enabled data logger or other telemetry-capable field solution that is able to connect to a water meter and transmit metering data to government via telemetry.

All other works that are captured by the metering rules need to be fitted with an accurate meter and a compatible LID.

Further information on telemetry is available on the department's website at www.industry.nsw.gov.au/water/metering.

Why isn't groundwater required to be telemetered as part of this framework?

Based on the feedback during the 2018 public consultation, water users believed that in the current market, the benefits of telemetry do not currently outweigh the costs for groundwater users and smaller surface water users.

The current framework will be reviewed in five years and the requirement for telemetry could be adjusted at that time. All data loggers installed under the new requirements must be telemetry capable, which will help reduce the cost of retrofitting telemetry should the telemetry threshold be adjusted down the track.

Groundwater users can voluntarily choose to install a telemetry system.

Can water users access their data via telemetry?

Water users will be able to access their data after it is uploaded to the Data Acquisition System (DAS). The data is uploaded at least once a day.

Who pays for the ongoing telemetry costs?

Water users are responsible for the costs associated with buying, installing and maintaining all metering equipment, including the meter, LID, and the purchase of a SIM card and monthly telemetry subscription.

How are the devices being tested for inclusion on the list of compatible devices?

The Department has designed the data acquisition service to be supportive of an open market.

The department encourages manufacturers to nominate solutions that meet the Data Logging and Telemetry Specifications so they can be bench tested and field tested for compatibility.

Solutions that are successfully tested, including LIDs, will be included in a publicly available [list of 'compatible devices'](#).

Will duly qualified persons be able to test telemetry for the LIDs they want to install before going to site?

Yes, the DQP will have temporarily access to the water user dashboard to check the LID is connected to the DAS and transmitting data.

Note: once the site is registered in the DQP Portal, all site details will be locked and the duly qualified person will not be able to edit these in the field.

Can water users use third party telemetry systems to connect to the data acquisition service?

The department recognises that many water users have already installed 'on farm' telemetry systems to help monitor and manage water use.

The department is exploring options to allow these systems to connect to the data acquisition service while maintaining an appropriate level of security.

Where can I get further training on telemetry requirements in NSW?

Irrigation Australia provides an online course for DQPs to gain a general understanding of how telemetry supports NSW Non-Urban Water Metering Policies, how the data is transmitted, compatible data-logging and telemetry solutions as well as about the responsibilities associated with the collection and transmission of data.

Further information can be found at IAL website at <https://www.irrigationaustralia.com.au/training>

Engagement

What is the government doing to inform unqualified meter installers and validators of the new metering requirements?

Together with Irrigation Australia Limited and the Australian Hydrographers Association, the department is working to better inform industry representatives of the metering reforms.

What is the role of WaterNSW's customer field officers as part of the metering framework?

More information on the roles and responsibilities of the three water management agencies in NSW is available in the 'Roles of water management agencies in NSW' fact sheet available from the department's website (visit www.industry.nsw.gov.au/water and search for 'roles of water management agencies').

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