Non-urban water metering reform

Southern Basin Roadshow

September 2022

NSW GOVERNMENT

Non-urban metering - National commitment

1

Metering is in the interests of all rural industries and the broader community

Water sources across NSW are at increasing risk

Protects water users' social licence to operate

Better data, modelling and water planning

Effective compliance

What you need to do

Follow **3 easy steps** to get meter ready.

1 Check your details

NSW Water Register
Check your licence and approval details on the NSW Water Register to see what is listed and whether there are any existing metering conditions that you need to comply with now.

Amend your approval
WaterNSW can assist you to amend your approval if you need to update any details including the size of your installed pump or to make your work inactive.

2 See if the rules apply

Online metering guidance tool
Use the NSW Government's online metering guidance tool to see if, and how, the rules apply to you.

3 Contact a DQP

Contact a duly qualified person
If the rules apply to you, contact a duly qualified person (DQP), such as a certified meter installer (CMI) to discuss your situation.

A list of DQPs can be found on Irrigation Australia's website. Just click on 'Member Directory' to search for one near you.

Non-urban metering – a national commitment

- In 2009 all Australian states and territories agreed on a national approach to non-urban water metering.
- NSW is the most advanced in implementing these new requirements
- NSW has the largest number of water licenses in Australia and the largest volume of water to manage.

NSW commitment to water reform

2004 – all Australian states and territories agreed to the National Water Initiative.

2009 - all Australian states and territories committed to the National Framework for Non-urban Water Metering -adopting national standards for pattern approved metering

2017 - NSW Government developed Water Reform Action Plan & Non-urban Water Metering Framework in response to MDB Water Compliance Review

2018 - Basin jurisdictions including NSW, Vic, QLD, SA and the ACT- agreed to a Murray-Darling Basin Compliance Compact

NSW's new non-urban metering rules became law in **2018** and are rolling out in stages until **2023**

Do the new metering rules apply to me?

2

Types of water take covered under the non-urban metering policy?

- The metering requirements apply to works taking water from:
  - regulated rivers
  - unregulated rivers
  - groundwater systems
- Water taken under a **water supply works approval** or **water access licence**, where the take can be measured by a meter.

Metering – staged rollout dates

1 December 2020	Surface water pumps 500 mm and above in NSW
1 December 2021	Northern inland NSW*
1 December 2022	Southern inland NSW
1 December 2023	Coastal NSW

Existing licence and approval **conditions apply** until the **new compliance dates** come into effect.

What metering equipment is required under the rules?

Standards for new and replacement meters:

- Meters must be "pattern approved" (unless installed before 1 April 2019)
- Installed to AS4747 & validated by a DQP
- Tamper evident seals
- Telemetry ready local intelligence device (LID)
- Connected (via telemetry) to the NSW Government's data acquisition system (only surface pumps greater than 200mm)

Metering thresholds

Check the **mandatory conditions on your approval** as they supersede the requirements in the regulations.

Surface water

Pumps

≥ 500 mm	Compliant meter, local intelligence device (LID) and telemetry
200-499 mm	Compliant meter and LID
100-199 mm	Check multiple pump requirements
< 100 mm	

Other works

Includes works where no size is listed	Compliant meter, LID and telemetry

Groundwater

Bores

≥ 200 mm	Compliant meter and LID
< 200 mm	Check multiple pump requirements

Other works

Includes bores already required to meter	Compliant meter and LID

At-risk groundwater sources

All works	Compliant meter and LID

What is a pattern-approved meter?

- Works captured by the metering rules will need to be fitted with a **pattern-approved meter** by the regional rollout date.
- A pattern-approved meter is a meter that has been approved by the National Measurement Institute as meeting the Australian Standard for non-urban water meters (AS4747).
- A list of devices is available on Department of Agriculture, Water and Environment

https://www.awe.gov.au/sites/default/files/documents/mdb-pattern-approved-non-urban-meters.pdf

Australian Government
Department of Agriculture, Water and the Environment

What is a local intelligence device (LID)

- A local intelligence device (LID) records information about water take and either transmits it to the NSW Government's telemetry system or allows it to be downloaded on site.
- All meters captured under the rules must have an LID that is capable of transmitting data to the department.
- For now, the transmission of data using telemetry is only required for surface pumps greater than 200mm.
- You can voluntarily choose to use telemetry.
- There are currently 3 local intelligence devices that have been approved for use within the non-urban metering framework.
- A list of approved devices is available on the department's website.

https://water.dpie.nsw.gov.au/nsw-non-urban-water-metering/what-suppliers-of-metering-equipment-need-to-know/non-urban-metering

Can I keep an existing meter?

You can keep a non-pattern approved meter that was **installed before 1st April 2019** provided:

- The meter manufacturer confirmed the meter was within +/- 2.5% accuracy **or,**
- A DQP confirms the meter is within +/- 5% accuracy in the field

The meter will also need to be fitted with a local intelligence device (LID) and tamper evident seals

The DQP is required to submit a **report to rely on transitional arrangements** to keep existing metering equipment via the DQP portal.

What do I need to do to comply with the metering rules?

3

What you need to do

Follow **3 easy steps** to get meter ready.

1 Check your details

NSW Water Register
Check your licence and approval details on the NSW Water Register to see what is listed and whether there are any existing metering conditions that you need to comply with now.

Amend your approval
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2 See if the rules apply

Online metering guidance tool
Use the NSW Government's online metering guidance tool to see if, and how, the rules apply to you.

3 Contact a DQP

Contact a duly qualified person
If the rules apply to you, contact a duly qualified person (DQP), such as a certified meter installer (CMI) to discuss your situation.

A list of DQPs can be found on Irrigation Australia's website. Just click on 'Member Directory' to search for one near you.

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DQPs – what do they do?

A duly qualified person (DQP), is a certified meter installer (CMI) or a certified practising hydrographer.

Only a DQP may:

- install or re-install metering equipment
- validate metering equipment (including accuracy testing)
- certify the design of new open channel metering equipment before it is installed, and
- carry out maintenance as required by the maintenance specifications

** DQPs can install and sign off on metering equipment on their own works by declaring it

Information you need to give your DQP

To make the process as smooth as possible, ensure you provide the **accurate information** below to your DQP.

They will need this information to set up your profile in the DQP Portal. They will complete and submit the forms and certificates required to show that your metering equipment is compliant with the rules through the DQP Portal.

- Work approval number
- ESID (extraction site ID)
- Type of LID (if known)
- Meter details (size in mm and type)

To find a DQP, visit Irrigation Australia Limited's website at irrigationaustralia.com.au.

Are there any exemptions?

4

Current exemptions

There are 6 exemptions that may be applied to non-urban water metering:

- Works that are not nominated against an **access licence.**
- Works used solely to take water under a **basic landholder right.**
- Works that have been made **inactive** (via WaterNSW).
- Works that **cannot physically comply** with the non-urban metering rules (cl 233 exemption).
- Small, low risk works used solely to take water under a **stock and domestic access licence***.
- Works notified as smaller (and under the metering size threshold) than what is listed on the work approval.

*Does not apply to at risk groundwater sources

Works that cannot physically comply

Clause 233 exemption

Authority holders can request an exemption from the mandatory metering condition under clause 233 of the Water Management (General) Regulation 2018.

Visit:

https://water.dpie.nsw.gov.au/nsw-non-urban-water-metering/what-water-users-need-to-know

An exemption may only be granted when it is **not possible** for water taken using the work to be measured by compliant metering equipment.

If an exemption is granted it is likely that it will be subject to conditions that require an alternative metering or measurement method to be used.

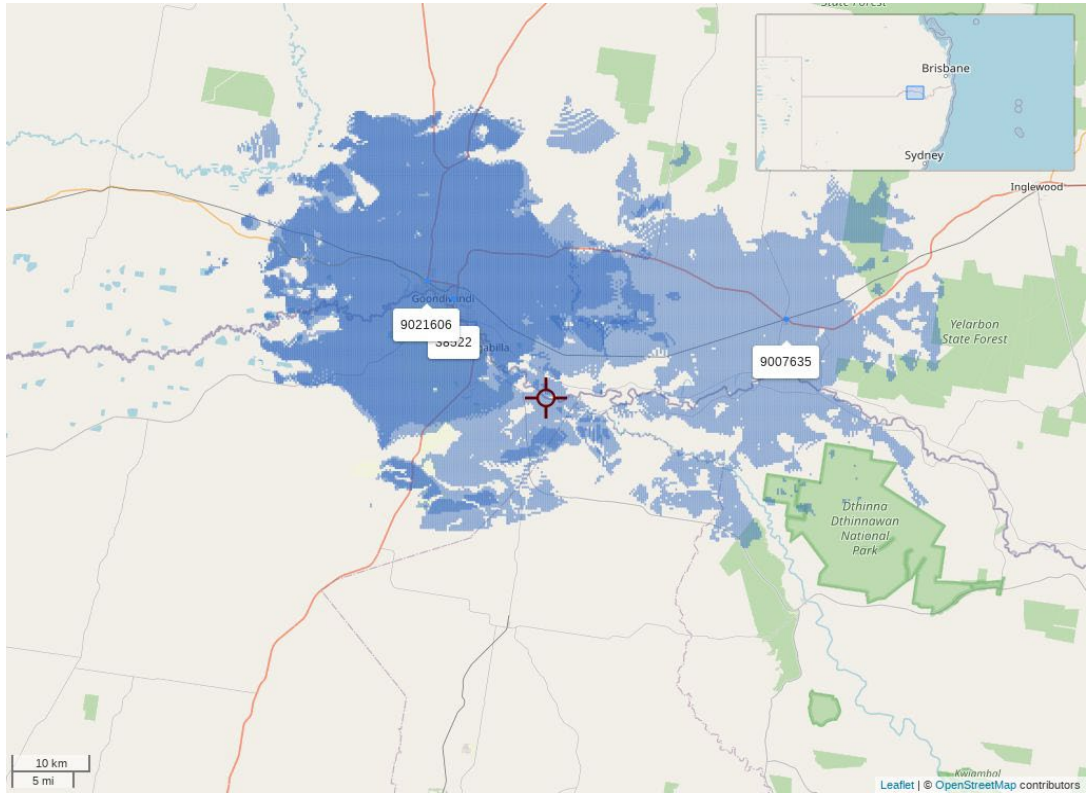
An application form is available on the department's website with details on the requirements.

Temporary telemetry blackspot exemption

- The NSW Government's telemetry system operates on the Telstra NBIOT network, which is designed for remote applications, such as metering.
- If your works are in a telemetry blackspot, you can apply for a temporary exemption.
- Under the exemption you are still required to install a meter but not a data logging and telemetry device (a LID).
- Reporting requirements still apply for meters without telemetry.
- The department developed a toolkit to identify these telemetry coverage blackspots.
- The telemetry exemption lapses on 23 December 2022 when it will be reviewed.

For further information go to:

https://water.dpie.nsw.gov.au/nsw-non-urban-water-metering/what-water-users-need-to-know/telemetry-coverage-exemption



Notification of smaller works

- Water users with a pump or bore smaller than what is stated on their works approval, must notify the Minister (via WaterNSW website) of the actual size of their work.
- If the notified work size falls below the size threshold for requiring a meter, then the work is exempt from installing a meter.
- Notifying the Minister of the smaller size of your work does not amend your approval. Therefore, the fee associated with amending a work approval does not apply. A fee only applies if you are amending a work approval.
- A meter must still be installed if the work size (notified or actual) is above the size-based thresholds for metering (surface water works that are greater than or equal to 100mm and groundwater works that are greater than or equal to 200mm in size require meters).

Works used solely to take water under a basic landholder right

- The basic landholder right (BLR) exemption is based on the use of the work and applies regardless of whether the water supply work is nominated by an access licence.
- The department is progressing work which will require water users to identify these works as BLR only in order to access the exemption in the future.
- Further information on this process will be communicated when available.

Supporting programs and further information

5

Programs to support uptake of metering and telemetry

The NSW and Australian Governments have funded $36.1 million for a suite of metering programs:

- $18 million telemetry rebate program
- $14.6 million government owned meter capital upgrade program
- $1 million program First Nations metering traineeship program
  - Program for First Nations people to train to become DQPs
- $2.5 million demonstration field program
  - 50 landholders will be provided telemetry-enabled local intelligence devices, to demonstrate in-field floodplain harvesting measurement.

These programs commenced in 2021-22.

Useful resources

We want to make it easy for you to understand how the new metering rules apply to you.

Find the below resources and other helpful information on our website: https://water.dpie.nsw.gov.au/nsw-non-urban-water-metering

Metering guidance tool

Find out how the rules apply to you

Metering leaflet

When and what to do by your rollout date

For any other enquires please email us at:

metering.reform@dpie.nsw.gov.au

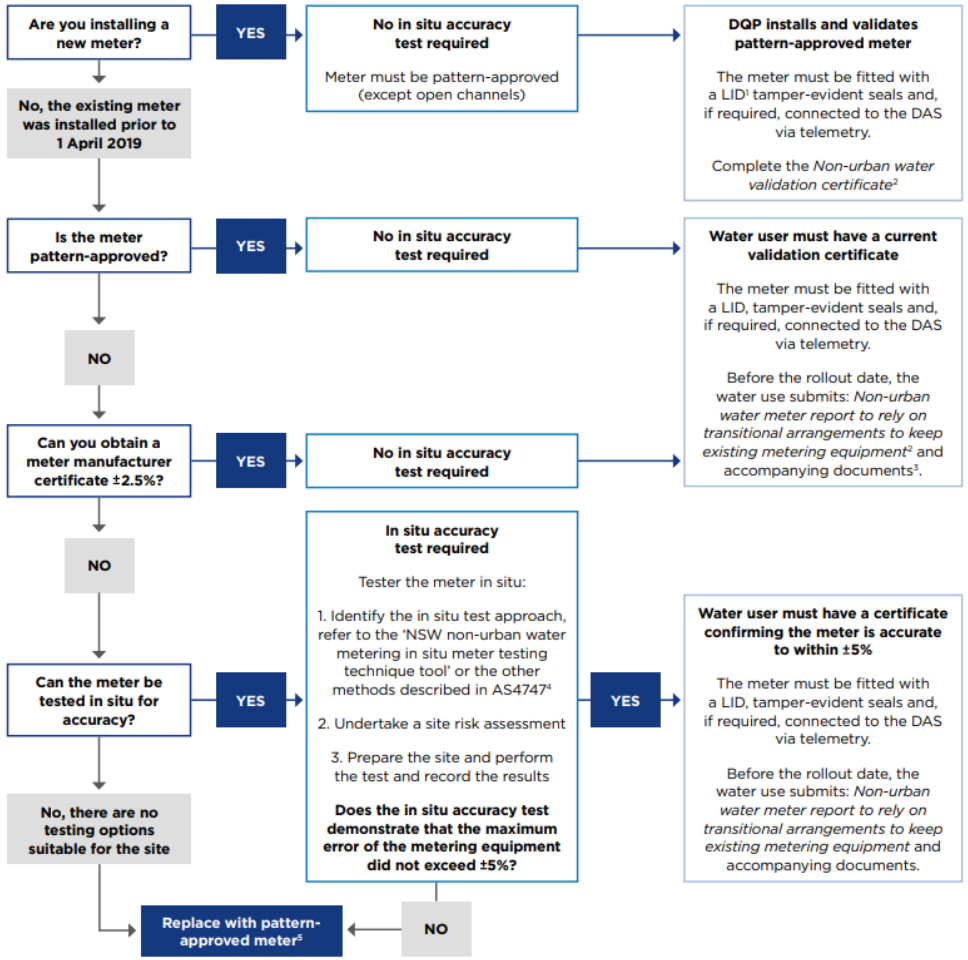
Thank you

Non-urban metering reform

Martin Brooks, WaterNSW
Russell Cocks, WaterNSW

New or existing meter?

All works captured by the metering rules will need to be fitted with a **pattern-approved meter** by the regional rollout date. It may be possible to **keep an existing meter** if it was installed before 1 April 2019.



A full list of AS4747 pattern-approved meters is available on The Department of Climate Change, Energy, the Environment and Water website. https://www.dcceew.gov.au/sites/default/files/documents/mdb-pattern-approved-non-urban-meters.pdf

Source: Department of Planning, Industry and Environment, "Non-urban water metering in NSW, What water users need to know" industry.nsw.gov.au/__data/assets/pdf_file/0006/320199/non-urban-water-metering-in-NSW-what-water-users-need-to-know.pdf

Government-owned meters

WaterNSW will continue to manage the compliance and ongoing maintenance of **government-owned meters**.

This includes ensuring they are **compliant by the relevant rollout dates**.

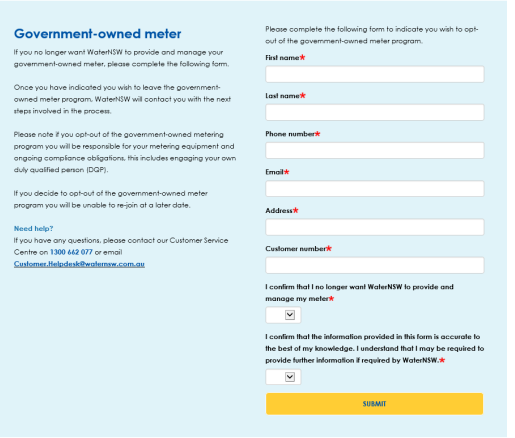
WaterNSW's responsibilities

- ✓ Contact the government-owned meter holder in writing about the metering rules ahead of their rollout date
- ✓ Visit the site to inspect the meter if requested
- ✓ Oversee the duties of a duly qualified person (DQP)
- ✓ Ensure the meter is compliant by the rollout date
- ✓ Purchase and install a local intelligence device (LID)
- ✓ Manage all maintenance including repairs and paperwork (s91i) if the meter is faulty
- ✓ Complete annual meter inspection

Option to transition meters to private ownership

Government-owned meter holders can decide if they want:

1. WaterNSW to maintain ownership of the meter
2. to transition the meter into their ownership and maintain it themselves.



Complete our online form to let us know if you want to take private ownership at https://comms.waternsw.com.au/GOM-optout

Metering fact sheet: Government-owned meters

NRAR's compliance approach

The Natural Resources Access Regulator (**NRAR**) has a **compliance approach** for metering deemed as being on the **pathway to compliance**.

Compliance fact sheet and more information

nrar.nsw.gov.au/how-to-comply/metering

NRAR's compliance and enforcement attention is **focused on 'high-volume' water users** who needed to comply by 1 December 2021.

They expect **all water users** to have at least **entered into a formal arrangement with a meter installer before their deadline**.

Ensure you save **invoices** and **record correspondence** for any **materials** (pumps, meters, LIDs) or **services** you have procured (DQPs) to demonstrate that you are on the pathway to compliance.

Recognition of alternate pathways

Inactive works

Water users who no longer use their pumps, but might want to in the future, can apply to make their pump inactive.

Keeping a meter

A manufacture certificate is required to keep an existing meter that was installed before 1 April 2019 but isn't pattern approved. Alternatively, a meter installer can field test and verify its accuracy provided.

Connectivity issues

If a meter installer can demonstrate that it isn't possible to set up a local intelligence device, then a water user can apply for an exemption under clause 233 of the Water Management (General) Regulation 2018.

What you need to do

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Live Demonstration

WaterNSW

WaterNSW metering webpage

NSW Water Register

Requirements once you're compliant

Once you are compliant, there are still **ongoing requirements** under the NSW Government's non-urban metering reform.

Recording & reporting

After each rollout date, all water users, even those who have installed a meter, **may have ongoing recording and reporting requirements**.

Keep a **copy of all records for five years** and have them available to show an NRAR officer on request.

More information is available at

https://www.waternsw.com.au/customer-service/water-licensing/metering

Faulty equipment (s91i)

You **must** report faulty metering equipment within 24 hours by completing the online **s91i form** at waternsw.com.au/s91i

Faulty means the equipment is **not operating properly**, or is **not operating at all**.

Read our **fact sheet** for more information!

Faulty metering equipment

Ongoing maintenance

It is important that you **take care of your metering equipment** and perform **regular maintenance** as required, including:

- general cleaning
- check for leaks
- ensure site is WHS compliant
- check condition of equipment
- confirm seals are working
- change batteries or solar panels
- check electrical cables.

Re-validation

Five years after your rollout date, your metering equipment needs to be **re-validated by a DQP**.

500mm+:	1 Dec 2025
Northern inland:	1 Dec 2026
Southern inland:	1 Dec 2027
Coastal:	1 Dec 2028

Note: **Open channel meters** need to be re-validated every **12 months**.

Reporting & Recording

All manual recordings must be done on the approved forms which are located at https://www.waternsw.com.au/customer-service/water-licensing/metering/recording-and-reporting

Regulated water user requirements:

Water Type	Meter	Telemetry	BLR	Frequency	Obligations	Exemptions
Regulated	Yes	Yes	No	Monthly	None	N/A
Regulated	Yes	Yes	Yes	Monthly	Monthly BLR only R&R	Yes via a notification to suspend your R&R obligations
Regulated	Yes	No	No	Monthly	Monthly Usage Report only	Yes via a notification to suspend your Reporting obligations
Regulated	Yes	No	Yes	Monthly	Monthly Usage Report & BLR R&R	Yes via a notification to suspend your R&R obligations
Regulated	No	No	No	Annually	Annual Usage Report R&R	NA
Regulated	No	No	Yes	Annually	Annual Usage R&R & BLR R&R	NA

Note: Water users that have commence and cease to pump conditions on their licence need to record those on the approved form – there is no obligation to report but you must keep the records for up to 5 years in case NRAR wish to view them.

Reporting & Recording

All manual recordings must be done on the approved forms which are located at https://www.waternsw.com.au/customer-service/water-licensing/metering/recording-and-reporting

Unregulated & groundwater water user requirements:

Water Type	Meter	Telemetry	BLR	Frequency	Obligations	Exemptions
Unregulated/GW	Yes	Yes	No	Monthly	None	NA
Unregulated/GW	Yes	Yes	Yes	Monthly	Monthly BLR only R&R	Yes via a notification to suspend your R&R obligations
Unregulated/GW	Yes	No	No	Monthly	Monthly Usage only	Yes via a notification to suspend your Reporting obligations
Unregulated/GW	Yes	No	Yes	Monthly	Monthly Usage & BLR R&R	Yes via a notification to suspend your R&R obligations
Unregulated/GW	No	No	No	Annually	Annual Usage Report R&R	NA
Unregulated/GW	No	No	Yes	Annually	Annual Usage R&R & BLR R&R	NA

Note: Water users that have commence and cease to pump conditions on their licence need to record those on the approved form – there is no obligation to report but you must keep the records for up to 5 years in case NRAR wish to view them.

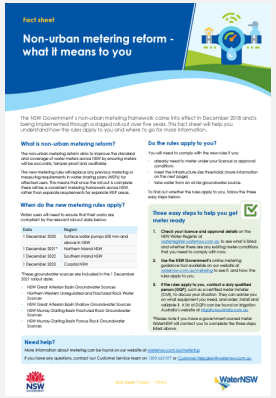
We're here to help

We want to make it easy for you to understand how the metering rules apply to you.
For information, resources and to book a one-on-one meeting to discuss your metering questions with our team.

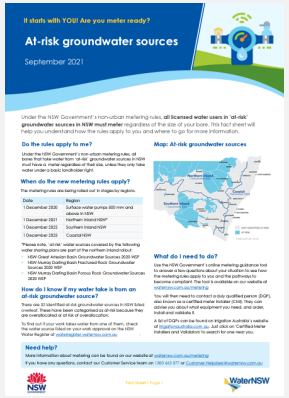
https://www.waternsw.com.au/customer-service/water-licensing/metering

Metering explained fact sheets

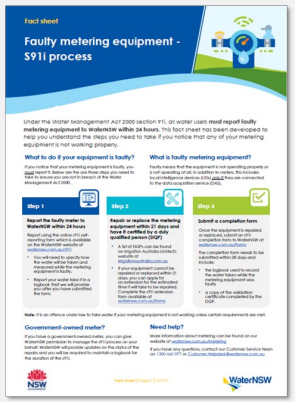
We've developed a **series of fact sheets** to answer your questions and break down the information you need to know



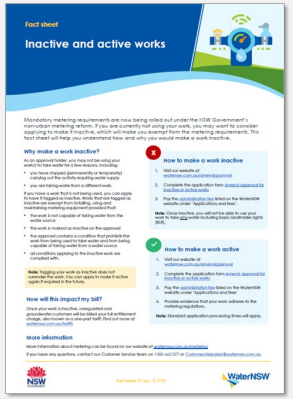
[Non-urban metering reform – what it means]



[At-risk groundwater sources]

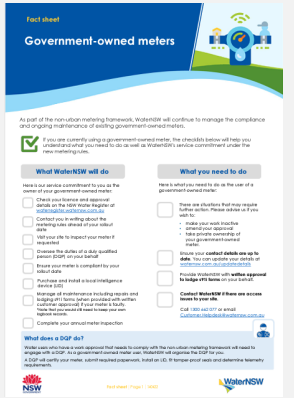


[Faulty metering equipment – s91i process]



[Inactive and active works]

[Telemetry – what it is and what you need to know]



[Government-owned meters]

Thank you

Contact us

Call us on **1300 662 077**

Visit us at **waternsw.com.au/metering**

NSW metering compliance

Presentation by NRAR

Greg Abood, Director of Education and Engagement
Ian Bernard, Director Regulatory Initiatives

Natural Resources Access Regulator

September 2022

What we’re going to cover today

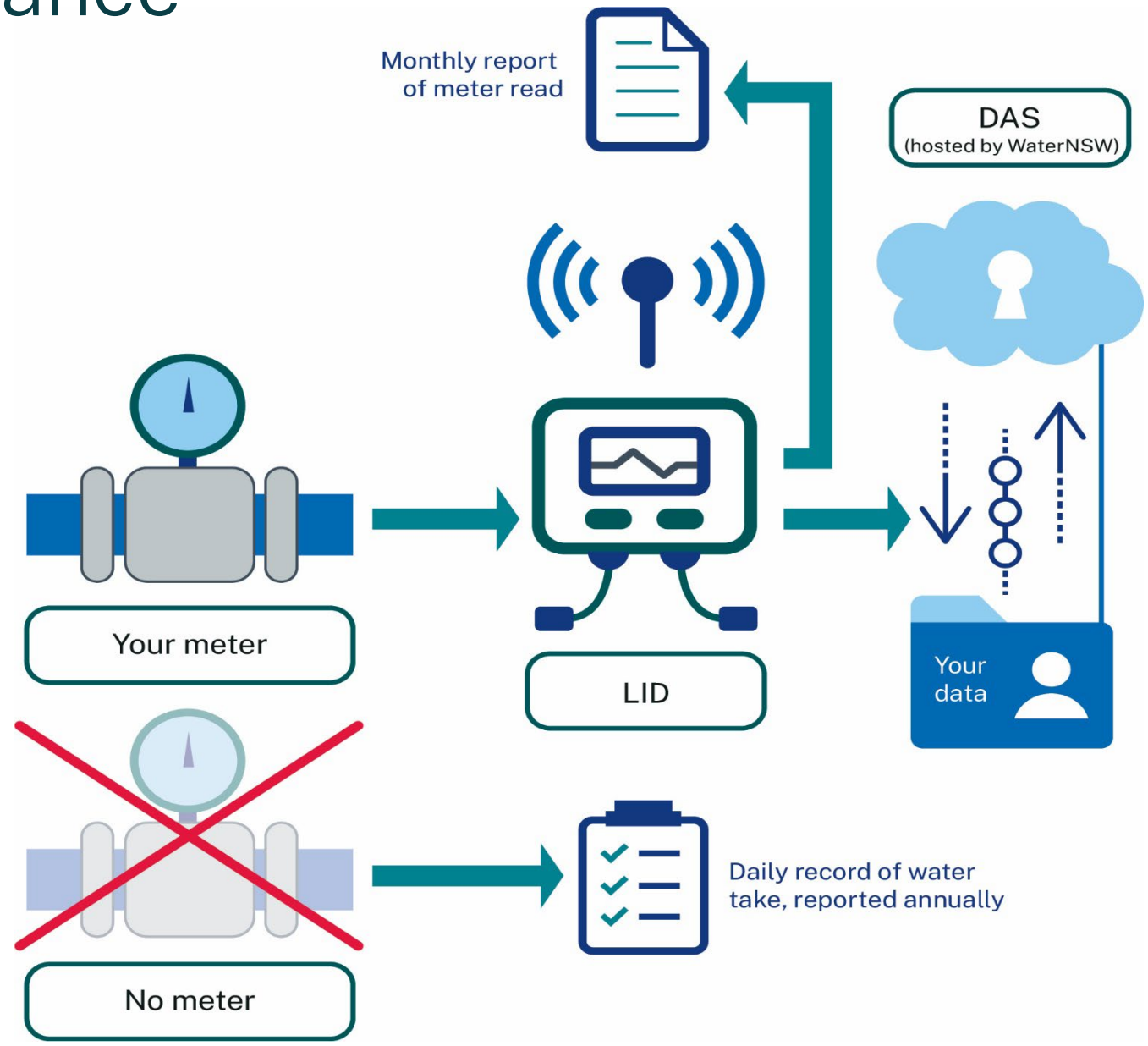
Agenda

- What compliance looks like
- Alternative pathways to compliance
- On-farm benefits of accurate metering equipment
- Our compliance approach and the consequences of non-compliance

What does compliance look like?

Check your licence and approval details on the NSW Water Register

Use the department's metering guidance tool to find out exactly what compliance looks like for you



We recognise alternative pathways

Inactive works

Water users who no longer use their pumps, but might want to in the future, need to contact WaterNSW to apply to make their pump inactive using this online form https://www.waternsw.com.au/customer-service/water-licensing/approvals/amend-an-approval

Keeping a meter

A manufacture's certificate is required to keep an existing meter that was installed before 1 April 2019 but isn't pattern approved. Alternatively, a meter installer can field test and verify its accuracy provided. In both cases, a meter installer is required to validate the installation and fit the meter with an intelligence device.

Connectivity issues

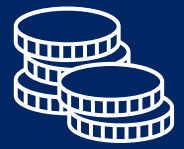
Water users can use the department's telemetry coverage tool to check their coverage. If a water user is in a blackspot, they are eligible for a temporary exemption from the telemetry requirements. To apply for the exemption, water users can submit the report from the telemetry coverage tool to the department.

The benefits of accurate measurement

Water trading

- You can't trade what you've already used, so measurement is a crucial component of an effective trading scheme

Equity gains

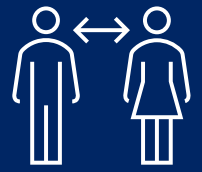


- Reduction in deliberate or inadvertent water use
- Installing accurate meters and telemetry can help you reduce waste, save money and improve your yield

Informed choices

- Greater certainty about on-farm water use allows you to make more informed decisions

Social licence



- Address accusations of misuse with independent and verifiable data about your water use

Our compliance approach

We will:

- focus our compliance and enforcement attention on ‘high-volume’ water users who need to comply
- expect water users to have made a reasonable effort to comply before their deadline
- report periodically on the rates of compliance we observe

We won’t:

focus compliance and enforcement attention on:

- low volume, low use works – we will contact these owners, encourage them and track their progress;

or

- no volume works (inactive)

What is a reasonable effort?

Accurate metering equipment installed

You install accurate metering equipment on all of your works in line with the non-urban water metering requirements **on or before 1 December 2022**

Formal agreement with an installer

You enter into a formal agreement with a certified meter installer **before 1 December 2022**

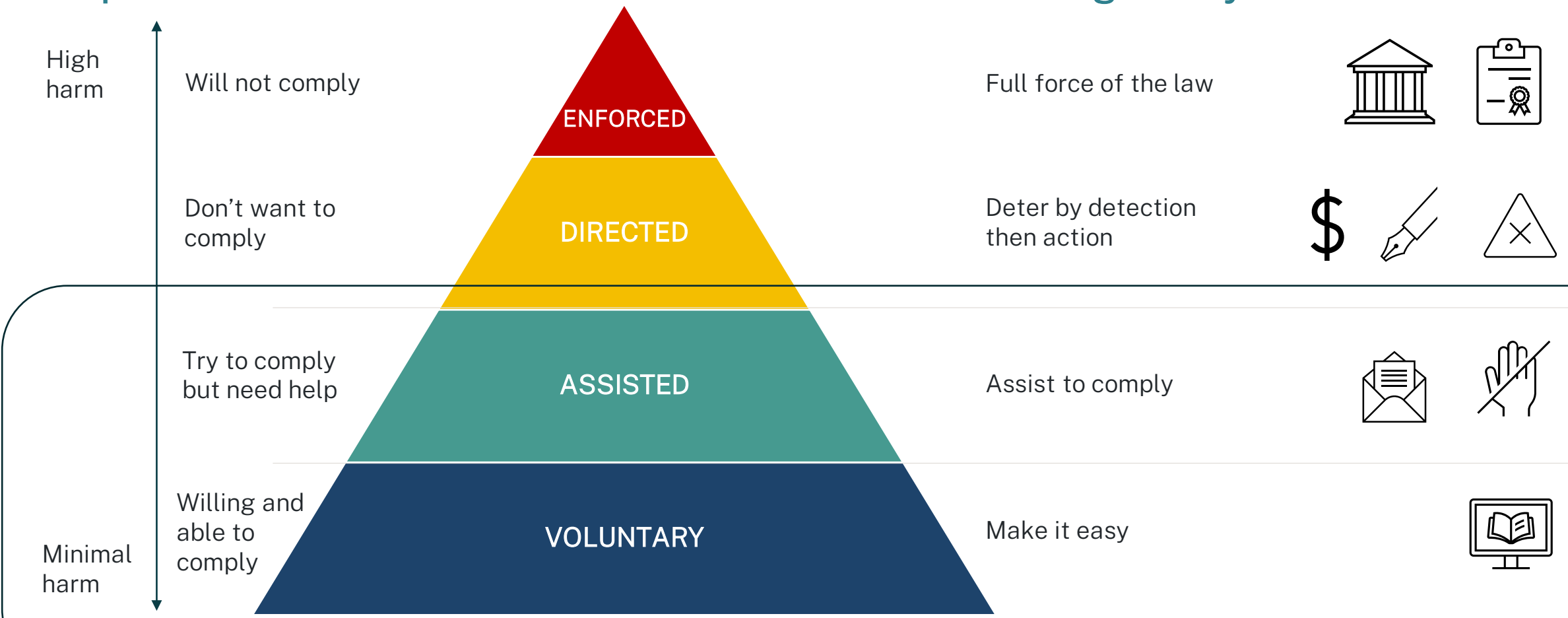
Alternative pathways

You commence an alternative pathway to compliance **before 1 December 2022** or are exempt from the rules

What happens if I don't comply?

Impact / Attitude

Our regulatory tools



Actions at the top of the pyramid support actions at the bottom by clarifying expectations and demonstrating that those who don't comply will be held to account.

What is NRAR's purpose?

We build public trust and confidence as a regulator by:

- Educating, enabling and encouraging people to actively comply with natural resources law
- Enforcing the law to provide a deterrent, and to ensure fairness for the compliant
- Championing improvements to the management of natural resources.

Summary

Ahead of the upcoming 1 December 2022 deadline take these easy steps to get meter ready:

Step 1 – check your licence and approval details on the NSW Water Register

Step 2 - use the department's metering guidance tool to find out what compliance looks like for you

Step 3 – contact a certified meter installer to get the ball rolling, or commence an alternative pathway to compliance

Be prepared to show use evidence that you've made a reasonable effort to comply before your deadline.

Want to know more?

Visit our website: nrar.nsw.gov.au

Follow us:
facebook.com/NaturalResourcesAccessRegulator

Subscribe to our newsletter: nrar.nsw.gov.au/join-the-nrar-mailing-list

Phone: 1800 633 362

Email: nrar.enquiries@nrar.nsw.gov.au

Write to us: Locked bag 5022, Parramatta NSW 2124

Natural Resources Access Regulator

NSW GOVERNMENT