



New South Wales

# Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020

under the

Water Management Act 2000

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Water Management Act 2000*.

Minister for Water, Property and Housing

## Explanatory note

The object of this Regulation is to amend the *Water Management (General) Regulation 2018* to impose mandatory conditions on a work approval in relation to a water supply work nominated for the purpose of capturing or storing water taken pursuant to the following arrangements—

- (a) a floodplain harvesting (regulated river) access licence,
- (b) a floodplain harvesting (unregulated river) access licence,
- (c) a basic landholder right and an access licence referred to in paragraph (a) or (b).

This Regulation is made under the *Water Management Act 2000*, including sections 91I, 91IA, 115, 115A and 400 (the general regulation-making power).

## **Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020**

under the

Water Management Act 2000

### **1 Name of Regulation**

This Regulation is the *Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020*.

### **2 Commencement**

This Regulation commences on 1 July 2021 and is required to be published on the NSW legislation website.

## Schedule 1 Amendment of Water Management (General) Regulation 2018

### [1] Clause 228 Interpretation

Insert in alphabetical order in clause 228(1)—

**faulty**, in relation to point-of-intake metering equipment or storage metering equipment, means equipment that is not operating properly or is not operating.

**mandatory floodplains condition** means the mandatory condition imposed on a work approval under clause 238B.

**metered work** means a water management work in connection with which metering equipment has been installed.

**point-of-intake metering equipment**, for a water supply work, means equipment that measures the flow of water as it enters the water supply work.

**secondary metering device** means a device or a type of device—

- (a) approved by the Minister, and
- (b) notice of the approval of which must be published in the Gazette, and
- (c) validated by a duly qualified person in accordance with the standards specified by the Minister.

**storage metering equipment**, for a water supply work, means equipment that measures the volume of water in a water supply work by reference to the water level in the work.

### [2] Clause 236 Duly qualified persons

Insert after clause 236(15)—

- (16) A person who holds a current certification as a storage meter installer and validator issued by Irrigation Australia Limited is specified for storage metering equipment.
- (17) The following persons are specified for the purposes of the mandatory metering equipment condition in relation to point-of-intake metering equipment—
  - (a) a certified practising hydrographer within the meaning of this clause,
  - (b) a registered engineer with experience in water,
  - (c) a person or class of persons approved by the Minister by notice published in the Gazette.
- (18) The following persons are specified for a secondary metering device that measures the volume of water in a water supply work by reference to the water level in the work—
  - (a) a duly qualified person within the meaning of clause 236(16),
  - (b) any of the following persons—
    - (i) a registered surveyor,
    - (ii) a person holding a degree of Bachelor of Surveying,
    - (iii) a person holding a Diploma of Surveying,
    - (iv) a person working under the supervision of a person referred to in subparagraph (i)–(iii),
    - (v) a registered engineer,
    - (vi) a person, or a class of persons, approved by the Minister by notice published in the Gazette.

- (19) The following persons are specified for validating survey benchmarks—
- (a) a registered surveyor,
  - (b) a person or a class of persons approved by the Minister by notice published in the Gazette.

**[3] Part 10, Divisions 3A and 3B**

Insert after Part 10, Division 3—

**Division 3A Metering equipment conditions for particular water supply work approvals**

**238A Application of Division**

This Division applies to a water supply work approval in relation to which a water supply work is nominated for the purpose of capturing or storing water taken—

- (a) under a floodplain harvesting (regulated river) access licence, or
- (b) under a floodplain harvesting (unregulated river) access licence, or
- (c) pursuant to a basic landholder right and an access licence referred to in paragraph (a) or (b).

**238B Mandatory metering equipment condition**

- (1) For the purposes of section 115 of the Act, it is a mandatory condition of a work approval to which this Division applies that the following equipment is installed, used and properly maintained in connection with a nominated water supply work that is or may be used to take water under the approval—
- (a) point-of-intake metering equipment,
  - (b) storage metering equipment.
- (2) The holder of an approval is taken to have complied with a particular aspect of the condition imposed by this clause if the holder has complied with the applicable requirements set out in this Regulation.

**238C Exemptions by Minister**

- (1) The Minister may, at the Minister's discretion or on the application of an approval holder, exempt an approval holder or a class of approval holders from the application of the mandatory floodplains condition to the holder or the class of holders.
- (2) The Minister may grant an exemption only if the Minister is satisfied it is not possible for water taken using the nominated water supply work to be measured by—
- (a) point-of-intake metering equipment, or
  - (b) storage metering equipment.
- (3) An exemption may be unconditional or granted subject to conditions.
- (4) The Minister may amend or revoke an exemption at any time.
- (5) The Minister is to notify the following matters relating to a class of approval holders on the Department's website—
- (a) an exemption,
  - (b) the amendment of an exemption,

- (c) the revocation of an exemption.

## **238D Reporting faulty metering equipment**

- (1) For the purposes of sections 91IA and 115 of the Act, it is a mandatory condition of an approval to which this Division applies that the approval holder must notify the Minister if the point-of-intake metering equipment or storage metering equipment for the water supply work is faulty.
- (2) The notice under subclause (1) must be in the approved form and contain the following particulars—
  - (a) the person's name and contact details,
  - (b) the type and location of the metered work,
  - (c) the relevant approval or access licence numbers,
  - (d) the purposes for which the water taken from the metered work is used,
  - (e) a description of the method to be used to determine the quantity of water taken while the equipment is faulty.

## **238E Measurement period**

- (1) For the purposes of section 115 of the Act, it is a mandatory condition of an approval to which this Division applies that the approval holder must notify the Minister of each measurement period in respect of a water supply work nominated for the approval.
- (2) The approval holder must not take water with a water supply work under the approval outside a notified measurement period for the work.
- (3) The measurement period for a water supply work begins when the overland flow collected and impounded by the work—
  - (a) is not able to be isolated from water that has been taken under other licences, or
  - (b) has commenced filling an on-farm dam.
- (4) During a measurement period an approval holder must not—
  - (a) before the end of the measurement period is nominated, use water directly from a water supply work that has storage metering equipment installed, or
  - (b) irrigate, unless the water being used to irrigate has already been debited under an access licence other than the following—
    - (i) a floodplain harvesting (regulated river) access licence,
    - (ii) a floodplain harvesting (unregulated river) access licence.
- (5) The measurement period for a water supply work ends when—
  - (a) overland flow is no longer being collected and impounded by the work, and
  - (b) all buffer zones are empty.
- (6) The approval holder must notify the Minister, in the approved form, not more than 24 hours after the beginning of a measurement period—
  - (a) that the measurement period has begun, and
  - (b) whether the approval holder will be taking water, and
  - (c) whether the water will be taken as contaminated run-off under a water sharing plan.

---

# public consultation draft

---

Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 [NSW]  
Schedule 1 Amendment of Water Management (General) Regulation 2018

---

- (7) The approval holder must record the amount of water taken with a water supply work—
  - (a) at the end of every 24-hour period during the measurement period for the work, and
  - (b) not more than 28 days after the end of the measurement period for the work, and
  - (c) at the end of the water year.
- (8) The approval holder must notify the Minister, in the approved form, not more than 24 hours after the end of a measurement period—
  - (a) that the measurement period has ended, and
  - (b) whether the approval holder has taken water, and
  - (c) whether the water was taken as contaminated run-off under a water sharing plan.
- (9) If a measurement period is specified as a period during which contaminated run-off is taken, the approval holder must not take any overland flow other than the contaminated run-off.
- (10) The approval holder must report on the water taken during a measurement period—
  - (a) not more than 28 days after the end of the measurement period, and
  - (b) at the end of the water year.
- (11) The approval holder must—
  - (a) keep a record of water added to a water supply work that was taken under the authority of another licence, and
  - (b) report fortnightly, during a measurement period for a water supply work, on records of water added to the water supply work under the authority of another licence.

## **238F Repairs to faulty metering equipment**

- (1) For the purposes of section 115 of the Act, it is a mandatory condition of an approval that the holder of an approval who takes water by means of a metered work while the metered work's point-of-intake metering equipment or storage metering equipment is faulty must comply with this clause.
- (2) The approval holder must repair the equipment, or cause it to be repaired, within—
  - (a) 21 days of becoming aware that the equipment is faulty, or
  - (b) a further period permitted under this clause.
- (3) If the approval holder becomes aware that the equipment is not able to be repaired within the period specified in subclause (2), the approval holder—
  - (a) must notify the Minister in the approved form, and
  - (b) may seek an extension of the period within which repairs are to be carried out.
- (4) An application for an extension must set out—
  - (a) the reasons why the repair is not able to be carried out within the specified period, and
  - (b) the date by which the equipment is proposed to be repaired.

- (5) The Minister may, by written notice given to the approval holder, extend the repair period by a specified period.
- (6) The approval holder may make more than 1 application to extend the repair period.
- (7) The approval holder must give the following information to the Minister in the approved form, not later than 28 days after the faulty metering equipment is repaired—
  - (a) the date the equipment was repaired,
  - (b) a description of the repairs,
  - (c) evidence that the equipment has been repaired, which may include a statement from the person who repaired the equipment,
  - (d) the name of the person who repaired the equipment.

**238G Mandatory condition relating to other reporting**

For the purposes of section 115 of the Act, it is a mandatory condition of an approval to which this Division applies that is the subject of the mandatory floodplains condition that the approval holder must, not more than 14 days after the end of each month that is part of a measurement period under clause 238E(7), give to the Minister, in the approved form—

- (a) the records made during the month, under clause 238E(7) and (8), in respect of each nominated water supply work under the approval, or
- (b) if no water was taken, a statement indicating that no water was taken.

**238H Application of Schedule 8 to floodplain access licences**

In the event of an inconsistency between a condition imposed under this Division and a provision of Schedule 8 in respect of an approval to which this Division applies, the condition imposed under this Division prevails.

**Division 3B Metering equipment standards for particular water supply work approvals**

**238I Mandatory requirements for point-of-intake metering equipment**

- (1) This clause sets out the applicable requirements for point-of-intake metering equipment for a water supply work for the purposes of clause 238B(2).
- (2) The point-of-intake metering equipment must be installed to measure the flow of water entering the water supply work.
- (3) A duly qualified person must inspect all floodplain harvesting intake points for the water supply work to determine if all water entering the work is able to be measured by point-of-intake metering equipment that complies with the requirements of Schedule 8.
- (4) A duly qualified person must inspect all floodplain harvesting intake points for the water supply work to determine if the point-of-intake metering equipment has been installed in compliance with the requirements of Schedule 8.

**238J Mandatory requirements for storage metering equipment**

- (1) This clause sets out the applicable requirements for storage metering equipment for a water supply work for the purposes of clause 238B(2).
- (2) The storage metering equipment must be installed to determine variation in the water level of water stored in the water supply work.

---

# public consultation draft

---

Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 [NSW]  
Schedule 1 Amendment of Water Management (General) Regulation 2018

---

- (3) The storage metering equipment for the water supply work must—
  - (a) meet the relevant specifications set out in the approved storage metering equipment standards, and
  - (b) be installed or validated by a duly qualified person in accordance with the approved storage metering equipment standards.
- (4) Storage metering equipment must be calibrated by a duly qualified person—
  - (a) in accordance with the approved storage metering equipment standards, and
  - (b) by reference to a survey benchmark.
- (5) The survey benchmark must be—
  - (a) installed, in relation to the work, in accordance with a survey benchmark standard by—
    - (i) a duly qualified person, or
    - (ii) a registered surveyor, or
    - (iii) a person or a class of persons approved by the Minister by notice published in the Gazette, and
  - (b) validated by—
    - (i) a registered surveyor, or
    - (ii) a person or a class of persons approved by the Minister by notice published in the Gazette.
- (6) The approval holder for the water supply work must notify the Minister within 21 days of becoming aware that an adopted storage curve is inaccurate by more than 5% of the volume of the water supply work at a specified water level.
- (7) The approval holder for the water supply work may, at any time, submit to the Minister a revised storage curve for a nominated water supply work that—
  - (a) is in the form approved by the Minister, and
  - (b) is certified by a registered surveyor as meeting the standards for storage curves approved by the Minister.
- (8) The Minister may adopt a revised storage curve submitted by the approval holder for the water supply work.
- (9) Storage metering equipment must have—
  - (a) data logging capacity that enables the equipment to collect, record and store water storage data in accordance with data logging and telemetry specifications approved by the Minister under Schedule 8, clause 10, and
  - (b) telemetry capacity to transmit data relating to water usage that complies with the approved data logging and telemetry specifications approved by the Minister under Schedule 8, clause 10, and
  - (c) tamper evident seals, locks, controls or other devices sufficient to—
    - (i) limit access to, and prevent tampering with, the equipment, and
    - (ii) be capable of clearly showing whether the equipment has been interfered with, and
    - (iii) not prevent the reading of metering equipment or affect the operation of the telemetry system for the equipment, and

---

# public consultation draft

---

Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 [NSW]  
Schedule 1 Amendment of Water Management (General) Regulation 2018

---

- (iv) be supplied by a body approved by the Minister by order published on the Department's website, and
  - (v) be installed, or broken, only by a duly qualified person, an authorised officer or a member of staff of Water NSW.
- (10) In this clause—
- adopted storage curve*** means a document that may be adopted by the Minister in relation to storage metering equipment installed for a nominated water supply work—
    - (a) that indicates the volume of water in storage when the surface level of the water is at a particular height in the work, and
    - (b) is in the form approved by the Minister, and
    - (c) the adoption of which the Minister is to give notice of to the approval holder for the work by providing a copy of, or access to, the adopted storage curve.

***approved storage metering equipment standards*** means the storage metering equipment standards approved by the Minister and published in the Gazette.

***approval holder for a water supply work*** means the holder of the water supply work approval relating to the water supply work.

***registered surveyor*** means a person registered as a surveyor under the *Surveying and Spatial Information Act 2002* or a corresponding law of another State or a territory.

***survey benchmark standard*** means a survey benchmark standard approved by the Minister and published in the Gazette.

## **238K Obligations of duly qualified persons**

- (1) A duly qualified person who performs an inspection of a water supply work under clause 238I(3) must give a certificate to the approval holder for the water supply work confirming if—
  - (a) the water entering the work is able to be measured by equipment that complies with the requirements of Schedule 8, or
  - (b) the water entering the work is not able to be measured by equipment that complies with the requirements of Schedule 8.
- (2) A duly qualified person who performs an inspection of a water supply work under clause 238I(4) must give a certificate to the approval holder for the water supply work confirming if—
  - (a) the point-of-intake metering equipment for the water supply work is connected in compliance with the requirements of Schedule 8, or
  - (b) the point-of-intake metering equipment for the water supply work is not connected in compliance with the requirements of Schedule 8.
- (3) A duly qualified person who validates storage metering equipment for a water supply work in accordance with the approved standards must give a certificate to the person for whom the validation is undertaken—
  - (a) confirming that the equipment complies or does not comply with the matters required to be checked in accordance with the approved standards, and
  - (b) if the matters checked do not comply with the approved standards—
    - (i) specifying the reasons why the equipment does not comply and the modifications that are required for compliance, or

---

# public consultation draft

---

Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 [NSW]  
Schedule 1 Amendment of Water Management (General) Regulation 2018

---

- (ii) that the equipment is not able to be modified to enable compliance.
- (4) A duly qualified person who validates a survey benchmark, in relation to a water supply work, in accordance with a survey benchmark standard must give a certificate to the person for whom the validation is undertaken—
  - (a) confirming that the benchmark complies or does not comply with the matters required to be checked in accordance with the survey benchmark standard, and
  - (b) if the matters checked do not comply with the survey benchmark standard—
    - (i) specifying the reasons why the benchmark does not comply and the modifications that are required for compliance, or
    - (ii) that the benchmark is not able to be modified to enable compliance.
- (5) A duly qualified person who validates point-of-intake metering equipment for a water supply work in accordance with Schedule 8, clause 7 must give a certificate to the person for whom the validation is undertaken—
  - (a) confirming that the equipment complies or does not comply with the matters required to be checked in accordance with AS 4747, and
  - (b) if the matters checked do not comply with AS 4747—
    - (i) specifying the reasons why the equipment does not comply and the modifications that are required for compliance, or
    - (ii) that the equipment is not able to be modified to enable compliance.
- (6) A duly qualified person who checks point-of-intake metering equipment for a water supply work for accuracy under Schedule 8, clause 9 must give a certificate to the person for whom the check is undertaken that certifies whether or not the maximum permissible error of the metering equipment does or does not exceed plus or minus 5% in the field.
- (7) A duly qualified person who checks storage metering equipment for a water supply work for accuracy under Schedule 8, clause 9 must give a certificate to the person for whom the check is undertaken that certifies whether or not the maximum permissible error of the metering equipment exceeds plus or minus 10 millimetres.
- (8) A certificate referred to in subclauses (1)–(7) must be—
  - (a) in the approved form, and
  - (b) given to the approval holder for the water supply work within 7 days after the certification, validation or checking occurs.
- (9) A duly qualified person who installs metering equipment or carries out other work on metering equipment must notify the Minister in the approved form if the person knows or reasonably suspects that the equipment has been tampered with.
- (10) The notification referred to in subclause (9) must be given to the Minister within 7 days after the duly qualified person becomes aware of, or forms the suspicion about, the tampering with the equipment.
- (11) A duly qualified person must comply with this clause.  
Maximum penalty—20 penalty units.

## **238L Faulty metering equipment**

For the purposes of section 91I(3) of the Act, section 91I(1)(b) and (2) of the Act do not apply if the water supply work has a secondary metering device installed.

## **238M Metering records**

- (1) For the purposes of section 91J of the Act, the holder of a water supply work approval subject to the mandatory floodplains condition must keep the following metering records for a period of 5 years—
  - (a) a certificate provided under this Division by a duly qualified person in relation to any of the following—
    - (i) point-of-intake metering equipment,
    - (ii) storage metering equipment,
    - (iii) a survey benchmark,
    - (iv) a storage curve document,
    - (v) a redundancy measurement device,
  - (b) a copy of a report given to the Minister under Schedule 8, clause 8 or 9,
  - (c) a copy of a written certification given to the Minister under Schedule 8, clause 9(2)(b).
- (2) For the purposes of section 115 of the Act, it is a condition of an approval subject to the mandatory floodplains condition that the approval holder must give the Minister the following within 28 days of receiving the certificate—
  - (a) a copy of a certificate provided under clause 238K(5)–(7),
  - (b) a copy of a certificate referred to in subclause (1)(a).

## **238N Transitional provision—metering equipment**

- (1) If a meter was installed on or before 14 February 2020 on a water supply work nominated under a floodplain harvesting (regulated river) access licence or a floodplain harvesting (unregulated river) access licence for the purpose of measuring water taken or collected under a licence, the work may continue to be used for the life of the meter despite a new condition imposed under this Division if—
  - (a) tamper evident seals are affixed in accordance with Schedule 8, clause 5, and
  - (b) for point-of-intake metering equipment or storage metering equipment, the equipment is fitted with a device that complies with the data logging and telemetry specifications approved by the Minister, and
  - (c) for storage metering equipment, a duly qualified person certifies that—
    - (i) the meter includes a digital measurement sensor, and
    - (ii) the meter is fitted with a telemetry device that complies with paragraph (b), and
    - (iii) the meter and the telemetry device are operating properly, and
    - (iv) the meter was installed in accordance with the manufacturer's instructions, and
    - (v) the meter was calibrated by a duly qualified person by reference to a survey benchmark that was installed and validated as described in clause 238J(5), and

---

# public consultation draft

---

Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 [NSW]  
Schedule 1 Amendment of Water Management (General) Regulation 2018

---

- (d) for storage metering equipment that does not meet the approved storage metering equipment standards—
    - (i) evidence from the manufacturer that the equipment operated within 10 millimetres accuracy in laboratory conditions before it was installed, or
    - (ii) a certificate from a certified storage meter installer and validator or a certified practising hydrographer that the equipment operated within 10 millimetres accuracy in-situ after it was installed, or
    - (iii) evidence that the equipment operated within 10 millimetres in a NATA-accredited laboratory, which is accredited for the relevant test method, after the equipment was installed, and
  - (e) for point-of-intake measuring equipment—
    - (i) that measures open-flow channels, the equipment was validated by a duly qualified person in accordance with AS 4747 not more than 12 months before the report is given to the Minister under subclause (2), or
    - (ii) that measures closed or partially closed conduit flows, the equipment was validated by a duly qualified person in accordance with AS 4747 not more than 5 years before the report is given to the Minister under subclause (2), and
    - (iii) the equipment was found by the duly qualified person to comply with the matters required to be checked on validation, and
  - (f) for a secondary metering device, the device was installed in accordance with—
    - (i) the manufacturer's instructions, or
    - (ii) the standards specified by the Minister in the approval notice for the device.
- (2) An approval holder who intends to rely on this clause must give a report to the Minister in accordance with the following—
- (a) before 1 July 2021,
  - (b) in the approved form,
  - (c) setting out the steps taken in relation to the metering equipment,
  - (d) accompanied by documents given to the approval holder by the duly qualified person that report on or relate to the checks carried out by the duly qualified person,
  - (e) certifying that the checks were carried out not more than 5 years before the report is given to the Minister.
- (3) In this clause—
- NATA-accredited laboratory* means a testing laboratory accredited by the National Association of Testing Authorities, Australia (NATA) or recognised by NATA either solely or with someone else.

**2380 Transitional provision—small capacity and infrequently used water supply works**

- (1) From 1 July 2021 to 1 July 2022, a person is not required to comply with the mandatory floodplains condition in relation to a water supply work that is not used to take water if—

---

## public consultation draft

---

Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 [NSW]  
Schedule 1 Amendment of Water Management (General) Regulation 2018

---

- (a) the maximum capacity of the work that is permitted by the approval is less than 1,000 meglitres, or
  - (b) the maximum capacity of the work that is permitted by the approval is equal to or more than 1,000 meglitres, and
    - (i) the work was used to collect or store water in less than 1 in every 7 years on average between 1987 and 2019, and
    - (ii) the approval holder notifies the Minister, in the approved form, that the work will not be used to take water.
- (2) Despite subclause (1), a work referred to in that subclause may be used to take water between 1 July 2021 and 1 July 2022 if—
- (a) the work has a secondary metering device installed in accordance with the mandatory floodplains condition, and
  - (b) the approval holder notifies the Minister, in the approved form, of the intention to use the work during that period.