# **EXPLANATORY STATEMENT**

#### Select Legislative Instrument No. 245, 2013

(Issued by the Authority of the Parliamentary Secretary to the Minister for the Environment)

Subject- Water Act 2007

Water Amendment (Interactions with State Laws and Water Information)

Regulation 2013

The Governor-General may, under section 256 of the *Water Act 2007* (the Act), make regulations prescribing matters required or permitted by the Act to be prescribed; or necessary or convenient to be prescribed for carrying out or giving effect to the Act.

The Basin States, New South Wales, Victoria, Queensland, and South Australia have each passed laws referring to the Commonwealth Parliament, for the purposes of paragraph 51(xxxvii) of the Constitution, the power to enact Parts 1A, 2A, 4, 4A 10A and 11A of the Act as originally enacted, and to make express amendments to these provisions.

Subsection 250E(1) of the Act, a referred provision under Part 11A, provides that regulations may modify the operation of Commonwealth water legislation so that:

- (a) provisions of the Commonwealth water legislation do not apply to a matter that is dealt with by a law of a referring State specified in the regulations; or
- (b) no inconsistency arises between the operation of a provision of the Commonwealth water legislation and the operation of a law of a referring State specified in the regulations.

'Commonwealth water legislation' is defined by section 250A of the Act to mean the Act, the regulations and other instruments made under the Act: this includes the *Basin Plan 2012* (Basin Plan). The Basin Plan, other than Chapter 12 which sets out the Basin water trading rules, commenced on 24 November 2012. Chapter 12 will commence on 1 July 2014. Subsection 6.04(1) of the Basin Plan provides that the long-term average sustainable diversion limits (SDLs) set out in the Basin Plan take effect on 1 July 2019.

The Water Amendment (Interactions with State Laws and Water Information) Regulation 2013 (Regulation) amends the Water Regulations 2008 (Principal Regulations). The Regulation is, in part, (Schedule 5) a referred regulation. The Intergovernmental Agreement on Murray-Darling Basin Reform – Referral provides that the Commonwealth will not make any referred regulation unless all referring Basin States affected by the legislative proposal first approve the proposal. The Premiers have agreed to the list of State plans which are provided extended recognition. The Premiers have also agreed that the requirement to have an accredited or adopted water resource plan (a Basin Plan-compliant plan) is delayed.

# <u>Transitional and interim water resource plans</u>

Part 11 of the Act provides, as a transitional measure, for the continuing operation of relevant Basin State water resource plans for a defined period after the Basin Plan first takes effect by recognising plans as transitional and interim water resource plans. Provisions of transitional and interim water resource plans which are inconsistent with the Basin Plan override the Basin Plan to the extent of the inconsistency. Current transitional water resource plans cease to be recognised under the Act on the date specified in Schedule 4 to the Principal Regulations, if the plan has not ceased to have effect under state law before that date. The period of recognition for interim water resource plans is the later of: the end of 31 December 2014 or five years after the plan is made. Current transitional and interim water resource plans do not provide an adequate transitional mechanism in the period leading up to the commencement of Basin Plan SDLs as many of the current transitional and interim water resource plans will have expired well before 1 July 2019.

#### Modified operation - provisions relating to transitional water resource plans

The Regulation modifies the operation of the provisions of the Act relating to transitional water resource plans discussed above for the purposes of section 250E of the Act. The Regulation provides for an extended period of transition by recognising State plans in Part 1 of Schedule 5 as transitional water resource plans.

The Basin Plan does not apply to any matters that are dealt with by provisions of these State plans (other than water trading rules) which are inconsistent with the Basin Plan. State plan provisions that relate to trade in water do not have extended transitional recognition by the Regulation as the Basin Plan trade rules will operate from 1 July 2014.

The Regulation provides extended transitional recognition for current Victorian and South Australian transitional and interim plans that have expired or will expire in the next 18 months. The latest date that these plans are recognised as transitional water resource plans under the Regulation is 30 June 2019. Further regulations may be made at a later date to list additional plans, which could include plans for other Basin States not included in this Regulation. This tranche approach is necessary as current plan expiry dates vary and plans under review cannot be relisted until they are finalised under State law. The extended period of recognition will end no later than 30 June 2019 to provide extended coverage until commencement of the SDLs.

Under the Regulation two South Australian water allocation plans, the *Water Allocation Plan for the Angas Bremer Prescribed Wells Area* and the *Water Allocation Plan for the Noora Prescribed Wells Area* are taken to be recognised again as transitional water resource plans from 3 January 2013, the day the original recognition of these plans under Schedule 4 to the Act expired. The retrospective 3 January 2013 start date of the recognition of the two plans will not adversely affect the rights of any person; nor will it impose liabilities in respect of any act or omission before the date of registration, as detailed in the <u>Attachment</u>. The start date is necessary to ensure the continued operation of the two South Australian water allocation plans.

# Modified operation - water resource plans

Section 54 of the Act provides that there is to be a water resource plan for each water resource plan area. Regulation 11A.03 modifies the operation of section 54 by providing that the section does not apply in relation to a State area specified in Part 2 of Schedule 5 until after the day specified in the Part 2 of Schedule 5. The effect of this delay is to provide Basin States seeking accreditation for their water resource plans under the Act with an extended period to prepare plans which are consistent with the Basin Plan.

The Basin Plan deferred the commencement of SDLs until 1 July 2019 to allow time for the Commonwealth to recover adequate water to meet the gap between the current levels of extraction to the SDLs required in each water resource plan area and allow a transition period for communities and industry to adjust to the new planning arrangements. An extended transitional period for water resource planning, during which pre-existing State regimes would gradually be replaced by Basin Plan-compliant water resource plans, acknowledges the varying amounts of time required to determine how to comply with the Basin Plan and prepare water resource plans for water resource plan areas. Almost all of the States' plans will be extended to 30 June 2019 under this Regulation and further proposed regulations. Where plans are not extended to 30 June 2019, the relevant State will develop a water resource plan as a 'test' case for accreditation.

Consultation on an extended transitional period was part of the consultation on the Basin Plan. In addition Basin States were extensively consulted in the preparation of this Regulation, which included several discussions with each Basin State and formal approval by Basin State Premiers.

## Water Information Requirements

The Act confers on the Bureau of Meteorology (the Bureau) the role of collecting, holding, managing, interpreting and disseminating Australia's water information. Part 7 of the Act enables the Bureau to fulfil its function of collecting water information. Part 7 of the Principal Regulations supports this role. Under section 126 of the Act, a holder of water information, specified in the regulations, must provide water information, specified in the regulations, to the Bureau. The regulations specify the types of water information and, by reference to the *Persons and Classes of Persons* document, who must provide such information.

The Regulation amends the Principal Regulations to add to the list of water information requirements which will ensure ongoing supply of updated data for the National Groundwater Information System (NGIS) and National Aquifer Framework. The system and framework will give policy makers and others access to a range of nationally consistent groundwater information. It will enable improved management of groundwater resources, including resources that span jurisdictional boundaries.

Nine state and territory agencies are affected by the requirement to provide additional water information under the Principal Regulations. The majority of these are set up to export their information from their corporate systems into the NGIS format automatically.

Paragraph 126(3)(a) of the Act provides for water information to be given in the form or manner specified in the Principal Regulations. The Regulation amends the Principal Regulations to provide for the Director of Meteorology to approve the form in which water information is to be given to the Bureau. Specifying format requirements for water information more generally has the effect of improving the Bureau's ability to effectively interpret, analyse, streamline and use the water information it receives under the Principal Regulations.

The Bureau will specify format requirements in a staged process. Category A organisations (currently comprising 10 lead water agencies) and Category K organisations (comprising eight of the lead water agencies and one additional agency) will be the first group of organisations affected by the new requirements from 28 February 2014. These agencies are already providing a majority of the specified water information in the required formats. The Bureau will add format requirements for other categories of persons over time and as organisations achieve capacity for compliance with this requirement.

The Bureau has consulted with stakeholders about these changes, including organisations named in the *Persons and Classes of Persons* document and the states and territories.

The nature of the consultation included regular meetings with jurisdictional representatives and the NGIS technical reference group. Additionally, the Bureau corresponded with all named organisations, as well as targeted correspondence to the particular groups more immediately affected by the amendment proposal. In response to feedback it received from lead water agencies, the Bureau reduced the range of water information for which format would be specified in the first instrument.

## **Regulation Impact Statement**

The Office of Best Practice Regulation has advised that a Regulation Impact Statement was not necessary for any of these amendments.

# Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Water Amendment (Interactions with State Laws and Water Information) Regulation 2013

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

This legislative instrument amends the *Water Regulations 2008* (Principal Regulations) by making the following amendments to the Principal Regulations to:

- provide for an extended period of recognition for some State water resource plans (other than provisions of those plans relating to water trading rules) as transitional water resource plans;
- delay the application of section 54 of the Act which provides that there is to be a water resource plan for each water resource plan area to a number of State areas until 30 June 2019; and
- add water information requirements and provide for the Director of Meteorology to approve the form in which water information is to be given to the Bureau.

# **Human rights implications**

This legislative instrument engages the right to an adequate standard of living and the right to health in the International Covenant on Economic, Social and Cultural Rights (ICESCR). The right to an adequate standard of living is protected in Article 11 of the ICESCR and the right to physical and mental health is protected in article 12 of the ICESCR. The Committee on Economic, Social and Cultural Rights, established to oversee the implementation of the ICESCR, has interpreted these articles as including a human right to water which encompasses an entitlement to 'sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses'.<sup>1</sup>

The human rights implications of the legislative instrument must be considered in the context of the *Water Act 2007* (the Act). The overall framework of the Act supports access to sufficient, safe, acceptable and physically accessible water for personal and domestic uses. This is reflected in the Act by section 20 which sets out the purpose of the Basin Plan and is supported through subsection 22(1) which sets out the specific content required to be included in the Basin Plan, such as a water quality and salinity management plan (Item 10). These sections together with subparagraph 86A(1)(a) which requires regard to be given to critical human water needs and water quality in the preparation of the Basin Plan support this right.

These amendments to the Principal Regulations deal with minor administrative and machinery matters which are provided for in the Act and required to support implementation of the Basin Plan.

The recognition of the State plans as transitional water resource plans, and the delayed operation of the provisions relating to water resource plans for a small number of State areas provide the Basin State with the time required to undertake comprehensive water management and planning, required to prepare water resource plans for accreditation under the Act.

The Principal Regulations, incorporating these amendments, will continue to support access to sufficient, safe, acceptable and physically accessible water for personal and domestic uses. The amendments do not change the Basin Plan, which in accordance with the Act, was prepared having regard to the fact that the Commonwealth and the Basin States have agreed that critical human water needs are the highest priority water use for communities who are dependent on Basin water resources (Act paragraph 86A(1)(a)). The amendments also do not affect the Chapter 9 water quality and salinity management plan in the Basin Plan.

Part 7 of the Act gives the Bureau specific water information powers and obligations relating to collection, interpretation and dissemination of water information aimed at enhancing understanding of Australia's water resources. This part of the Act and Part 7 of the Principal Regulations, support policy makers to make decisions in relation to access to sufficient, safe and acceptable water.

The amendments to the existing water information provisions in the Principal Regulations, which support ground water information collection, are incremental changes which will enable the Bureau to continue to provide support to water policy makers.

#### Conclusion

<sup>&</sup>lt;sup>1</sup> CESCR General Comment No. 15: The Right to Water E/C 12/2002/11.

The legislative instrument is compatible with human rights because it supports the human right to water.

# **Details of the Regulation**

The Act does not specify any conditions that need to be satisfied before the power to make the Regulation may be exercised.

The regulation is a legislative instrument for the purposes of the Legislative Instruments Act 2003.

The regulation commences on the day after it is registered except for Schedule 2 which commences on 28 February 2014.

Details of the regulation are set out in the Attachment.

Authority: Section 256 of the *Water Act 2007* 

# <u>Details of the Water Amendment (Interactions with State Laws and Water Information) Regulation</u> 2013

#### Part 1 – Preliminary

#### Section 1 - Name of Regulation

This section provides that the title of the Regulation is the *Water Amendment (Interactions with State Laws and Water Information) Regulation 2013* (the Regulation).

#### Section 2 - Commencement

This section provides that the Regulation commences on the day after it is registered except for Schedule 2 which commences on 28 February 2014.

## Section 3 - Authority

This section provides that the Regulation is made under the *Water Act 2007* (the Act).

#### Section 4 - Schedule(s)

This section provides that each instrument that is specified in a Schedule is amended or repealed as set out in the applicable items in the Schedule and any other item in a Schedule has effect according to its terms.

# Schedule 1 – Amendments relating to interactions with State laws

# Water Regulations 2008

#### Item [1] - After Part 11

This item inserts a new Part 11A–Interactions with State laws as follows:

# Part 11A - Interactions with State laws

## Regulation 11A.01 - What this Part is about

This regulation provides that for section 250E of the Act this Part modifies the operation of Commonwealth water legislation to deal with the legislation's interaction with the laws of referring States.

## Regulation 11A.02 - State plans that prevail over Basin Plan

This regulation modifies the operation of section 241 of the Act so that a plan specified in Part 1 of Schedule 5 together with any instruments made under or for the purposes of the State plan is a transitional water resource plan for the purposes of the Act to the extent to which:

- a State plan or instrument relates to the water resources of a water resource plan area; and the matters specified in subsection 22(1) of the Act other than water trading rules. Subsection 22(1) of the Act specifies the mandatory content of the Basin Plan; and
- there is an inconsistency between a provision of the State plan or instrument and a provision of the Basin Plan.

The Note refers to the definition of 'water trading rules' in subsection 4(1) of the Act. Subsection 4(1) defines 'water trading rules' to mean the rules included in the Basin Plan under item 12 in subsection 22(1)'. Chapter 12 of the Basin Plan sets out the water trading rules.

The State plans listed in Part 1 of Schedule 5 are recognised as transitional water resource plans for the period from the start day to the end day specified in Part 1 of Schedule 5.

The operation of section 243 of the Act is modified so that the State plan is taken to have been accredited by the Minister under section 63 of the Act on the day specified in Part 1 of Schedule 5 for the plan.

Subregulation 11A.02(4) provides that, to avoid doubt, all other provisions in the Act in relation to transitional water resource plans operate without modification and a reference to a transitional water resource plan is taken to be a reference to a State plan listed in Part 1 of Schedule 5. The following provisions of the Act apply without modification to the State plans listed in Schedule 5 for the period they are recognised as transitional water resource plans:

- subsection 245(2) which provides that provisions of a transitional water resource plan that are inconsistent with the Basin Plan will prevail over the Basin Plan to the extent of the inconsistency.
- subsection 245(3) which provides that the obligation that a person or body has under sections 34 or 35 of the Act to act consistently with the Basin Plan is subject to any inconsistent provisions in a transitional water resource plan; and
- section 246 of the Act which applies if a Basin State seeks accreditation of an amendment to a transitional water resource plan. Subsection 246(3) provides that the Minister must accredit an amendment to a transitional water resource plan if the Minister is satisfied that the amendment would make the transitional water resource plan no less consistent with the Basin Plan.

#### Regulation 11A.03 - Water resource plans for water resource plan areas delayed

Section 54 of the Act provides that there is to be a water resource plan for each water resource plan area. This regulation provides that section 54 does not apply in relation to a State area specified in Part 2 of Schedule 5 until after the day specified in the Schedule. The regulation provides Basin States with an extended period to prepare water resource plans for the specified areas which are consistent with the Basin Plan for accreditation under the Act.

# Item [2] - At the end of the regulations

This item adds a new Schedule 5 - Interactions with State Laws: State plans and areas to the regulations.

# <u>Part 1 – State Plans that prevail over Basin Plan</u>

The first item in Part 1 of Schedule 5 *Victoria* – *State plans that prevail over Basin Plan* lists State plans which are recognised as transitional water resources by regulation 11A.02 for Victoria. The table in this item specifies for each plan: the water resource plan area, the start date, end date and accreditation date.

The second item in Part 1 of Schedule 5 *South Australia – State plans that prevail over Basin Plan* lists State plans which are recognised as transitional water resources by regulation 11A.02 for South Australia. The table in this item specifies for each plan: the water resource plan area, the start date, end date and accreditation date.

A provision of a legislative instrument which would take effect before the date on which it is registered has no effect if the provision would adversely affect the rights of any person (other than the Commonwealth or an authority of the Commonwealth) as at the date of registration; or would impose liabilities in respect of anything done or omitted to be done before the date of registration (subsection 12(2) *Legislative Instruments Act 2003*).

Two South Australian water allocation plans, the *Water Allocation Plan for the Angas Bremer Prescribed Wells Area* and the *Water Allocation Plan for the Noora Prescribed Wells Area* were recognised as transitional water resource plans under Schedule 4 to the Act until 2 January 2013. After 2 January 2013 the two plans, while no longer recognised as transitional water resource plans, continued to operate under South Australian law. Under the regulation the two plans will be recognised as

transitional water resource plans from 3 January 2013, the day the original recognition of these plans under Schedule 4 to the Act expired. The effect of the regulation is to restore the status of these plans as transitional water resource plans. Any provisions of the plan that are inconsistent with the Basin Plan will override the Basin Plan for the period of recognition (section 245 Act). This is subject to the exception in relation to provisions of the plans which relate to water trading rules. However this exception has no practical effect until 1 July 2014 when the Basin Plan trading rules commence, as no inconsistency can arise where these rules do not yet operate.

The two South Australian water allocation plans set out the rules for managing the take and use of prescribed water resources. The relevant provisions of the Basin Plan with respect to these matters are within Chapter 6 (which deals with the long-term average sustainable diversion limits or SDLs). The SDLs take effect on 1 July 2019 (section 6.04(1) Basin Plan).

Therefore the 3 January 2013 start date of the recognition of the two South Australian water allocation plans will not adversely affect the rights of any person; nor will it impose liabilities in respect of any act or omission before the date of registration. The start date is necessary to ensure the continued operation of the two plans.

The regulation provides certainty for stakeholders that the ground rules under which water is allocated will continue to operate, in line with current South Australian water planning arrangements and policies, for the extended transitional period.

The accreditation day for each plan preserves the original date that the transitional or interim water resource plan was taken to have been accredited under the Act or sets a modified accreditation date (subregulation11A.02(3)) where a plan has been amended and is no less consistent with the Basin Plan. The accreditation day determines the version of the plan that is listed. However the extended transitional period does not commence from the accreditation day. The start day is the operational day for the extended transitional recognition.

# Part 2 – State plan areas delayed

The first item in Part 2 of Schedule 5, *New South Wales - State areas delayed* lists the water resource plan areas in New South Wales for which water resource plans are delayed by the operation of regulation 11A.03. The table lists State areas and an end date. Section 54 of the Act which provides that there is to be a water resource plan for each water resource area does not apply to the water resource plan areas until after the end date.

The second item in Part 2 of Schedule 5, *Victoria - State areas delayed* lists the water resource plan areas in Victoria for which water resource plans are delayed by the operation of regulation 11A.03. The table lists State areas and an end date. Section 54 of the Act which provides that there is to be a water resource plan for each water resource area does not apply to the water resource plan areas until after the end date.

The third item in Part 2 of Schedule 5, *Queensland - State areas delayed* lists the water resource plan areas in Queensland for which water resource plans are delayed by the operation of regulation 11A.03. The table lists State areas and an end date. Section 54 of the Act which provides that there is to be a water resource plan for each water resource area does not apply to the water resource plan areas until after the end date.

The fourth item in Part 2 of Schedule 5, *South Australia - State areas delayed* lists the water resource plan areas in South Australia for which water resource plans are delayed by the operation of regulation 11A.03. The table lists State areas and an end date. Section 54 of the Act which provides that there is to be a water resource plan for each water resource area does not apply to the water resource plan areas until after the end date.

## <u>Schedule 2 – Amendments relating to water information</u>

# Item [1] – Subregulation 1.03(1)

Regulation 1.03 defines certain terms used in the Principal Regulations, including categories of persons. The names of the persons required to provide water information to the Bureau of Meteorology (the Bureau) are grouped by category and listed in an online document incorporated by reference in the Principal Regulations called '*Persons and Classes of Persons*'. Persons may be listed in one or more categories.

Item 1 inserts a definition for 'Category K person' into the Principal Regulations. Category K consists of nine state and territory water agencies. These agencies are currently listed in other categories of the Principal Regulations and specified in the document *Persons and Classes of Persons*. As Category K persons, these agencies are required to provide State National Groundwater Information System (NGIS) and State aquifer framework information to the Bureau. Further explanation of these new water information requirements is included in the description at Item 11.

## Item [2] – At the end of regulation 7.02

Regulation 7.02 specifies the eight categories of persons (Categories A - H) to which Part 7 of the Principal Regulations applies.

Item 2 adds Category K to the regulation.

## Item [3] – Subregulation 7.03(1)

Regulation 7.03 outlines the water information that is of a kind that must be given to the Bureau under Division 7.2 of the Principal Regulations.

Subregulations 7.03 (3), (4) and (5) specify information that is not water information for the purposes of Part 7 of the Principal Regulations.

Item 3 makes it clear that the water information of a kind described in categories specified in the table in subregulation 7.03(2) is subject to subregulations (3) to (6). The Regulation adds subregulation 7.03(6).

# Item [4] – Subregulation 7.03(2) (cell at table item 2, column headed "Subcategories in category")

The table in subregulation 7.03(2) lists the range of subcategory numbers that make up each category of water information.

Item 4 substitutes subcategory numbers 2a to 2e in Part 3 of Schedule 3 to take account of new subcategories that are included in Category 2 (Ground water resource information). Water information in new subcategories 2d and 2e relates to State aquifer framework information and State NGIS information, respectively.

## **Item [5] – Subregulation 7.03(3) (heading)**

Item 5 substitutes the heading *Information that is not water information* at subregulation 7.03(3).

# Item [6] – Subregulation 7.03(3)

Item 6 removes the word 'However' from the start of subregulation 7.03(3).

# Item [7] – At the end of regulation 7.03

Item 7 provides that paragraph 7.03(3)(b), paragraph 7.03(3)(c) and subregulation 7.03(4) do not apply to water information in subcategories 2d and 2e (State aquifer framework information and State NGIS information, respectively).

Paragraph 7.03(3)(b) provides that information publicly available on the Bureau's website is not water information that must be given to the Bureau.

Paragraph 7.03(3)(c) provides that information collected from a single site for up to 12 continuous weeks is not water information that must be given to the Bureau.

Subregulation 7.03(4) provides that where a person reasonably believes that water information is already in the Bureau's possession and they have informed the Bureau in writing of their decision not to provide the information for this reason, they are not required to give that water information to the Bureau.

Item 7 provides that these three exemptions to the definition of water information do not apply to new subcategories 2d and 2e.

The Regulation requires Category K persons to give to the Bureau an annual update of the state component of aquifer framework information and the NGIS database in their possession at that point in time. This is a full refresh and includes the content of the previous year's framework and database that the person gave to the Bureau as well as any new information added since the last delivery.

Consequently, a proportion of the water information in these snapshots may be information that is already in the Bureau's possession and it may be information publicly available on the Bureau's website, but it must be given again as it is an integrated component of the framework and database held by the agency.

Similarly, it is possible that the frameworks and databases may contain information collected from single sites for up to 12 continuous weeks. As part of an integrated whole, it would be difficult and not desirable, to remove this particular information prior to giving the update to the Bureau.

# Item [8] – Subregulations 7.06 (5), (6) and (7).

Regulation 7.06 deals with the continuing obligation to give new and updated information to the Bureau.

Subregulations 7.06 (5), (6) and (7) set out how water information is to be given to the Bureau on an ongoing basis. Item 8 replaces the subregulations with new subregulations 7.06 (5), (6), (7) and (8).

Subsection 126(3) of the Act provides for water information to be given in the form or manner specified in the regulations.

The form in which water information is given, relates to the shape or structure of the data file. Examples of form of water information include such things as the Water Data Transfer Format (WDTF), csv templates, web forms, Excel spreadsheet templates and database schemas (the latter being an example of a defined way of structuring information). All of these set out the arrangement to which the parts of data and metadata must conform

The manner in which water information is given, relates to how the data is provided to the Bureau. It relates to the action of giving, the mode of delivery or transfer and includes things such as:

- sending electronically over the internet within an email or using a transfer protocol (such as file transfer protocol ftp)
- mailing or hand delivering a CD, DVD or hard drive
- manually entering and transmitting over the internet via a web page
- web services.

Previously, the Principal Regulations only specified the form of water information to a limited extent. Consequently the Bureau received water information in a diversity of formats which affected its ability to efficiently interpret, analyse, streamline and use the water information.

New subregulation 7.06(5) specifies that a person must give a copy of water information to the Bureau under regulation 7.06 in a form approved by the Director of Meteorology (the Director). This information must be given by way of the internet using FTP or web services. New subregulation 7.06(7) specifies that the Director must ensure that approved forms are publicly available.

Periodically, the Director will issue an instrument approving forms for the provision of water information. The instrument will be publicly available on the Bureau's website at: <a href="http://www.bom.gov.au/water/regulations/dataFormat/">http://www.bom.gov.au/water/regulations/dataFormat/</a>. The instrument will not be a legislative instrument. For the purposes of section 7 of the *Legislative Instruments Act 2003*, the instrument will be of a kind prescribed by the Legislative Instruments Regulations 2004 in Regulation 7.

Subregulations 7.06 (6) and (8) do not materially change previous provisions in the Principal Regulations. Rather, they have been renumbered, recast and include a reference to the approved form in 7.06(8).

Subregulation 7.06(6) provides that water information in subcategory 6d (formal announcements of Australian water allocations) may be emailed to the Bureau thus permitting an alternative manner of data provision for 6d information.

Subregulation 7.06(8) provides that water information in subcategories of Category 7 (information about urban water management) must be in the approved form and expressed as volumes recorded each calendar month or more frequently. For example, under subcategory 7a (water taken from surface water), a person will meet the requirement by giving the Bureau 12 separate volumes (i.e. one volume for each month of the financial year); equally, they will meet the requirement by giving 26 separate volumes (i.e. one volume for each fortnight of the financial year).

The regulation omits the requirement for water information in subcategory 8a (information about water restrictions) to be given to the Bureau using the Water Restrictions online tool. As a specification of form, this requirement is instead included in the instrument approved by the Director under new subregulation 7.06(5).

# Item [9] – At the end of regulation 7.07

Regulation 7.07 sets out when water information must be given to the Bureau. Subregulation 7.07(2) deals with water information that is given yearly.

Item 9 specifies that subregulation 7.07(2) does not apply to water information in subcategories 2d and 2e. These subcategories of information need to be given to the Bureau by 30 September. The State aquifer framework and State NGIS information required is a snapshot of the relevant framework and database at a point in time, regardless of whether or not it has been updated during a particular year.

# Item [10] – At the end of Schedule 2

Schedule 2 itemises the particular subcategory numbers of water information that each category of persons must give to the Bureau. It also specifies the time for giving this water information.

Item 10 adds Part 9 to the Schedule. Part 9 specifies that Category K persons will give water information in subcategories 2d and 2e yearly.

#### Item [11] – Part 1 of Schedule 3

Schedule 3 contains definitions of terms used in the Schedule and descriptions of the subcategories of water information.

Item 11 defines the following terms in Part 1 of Schedule 3:

- State aguifer framework information
- State NGIS information.

State aquifer framework information means any water information in the state aquifer framework used by a State.

State NGIS information means any water information contained in a State's National Groundwater Information System (NGIS) database.

#### NGIS

The NGIS is a spatial database from which a range of groundwater information will be able to be accessed and visualised. The system collates groundwater information from states and territories and makes it nationally consistent. NGIS will be available via the Bureau web site through a central web mapping portal in late 2014.

NGIS contains standardised bore and borelog datasets and can be used to analyse and present two and three dimensional aquifer geometry. NGIS currently contains information about approximately 600,000 bore sites around Australia including details such as bore location, purpose of the bore (i.e.: monitoring, irrigation and/or commercial water use), lithology, bore construction and hydrostratigraphy logs.<sup>2</sup>

Each state and territory maintains its own jurisdictional component of the NGIS (for example there is a 'Victorian NGIS' and a 'Queensland NGIS'). The requirement in the Principal Regulations to provide State NGIS information places an obligation on state and territory agencies to provide their component of the NGIS to the Bureau. These state and territory components will be integrated into the National Groundwater Information System.

# State aquifer framework

Each state and territory uses its own terminology to describe and categorise sediments and rocks with similar hydraulic characteristics. These categorisations are referred to as geologic units, hydrogeologic units and hydrogeologic complexes<sup>3</sup> and are described in individual state aquifer frameworks.

Differences in state and territory terminology can cause many difficulties, especially for groundwater basins that span multiple jurisdictions.

The National Aquifer Framework is the first nationally agreed system for naming and grouping hydrogeologic units in Australia.

State NGIS information contains terminology described in the State aquifer framework. The Bureau is able to map jurisdictional units to the relevant National Aquifer Framework units and combine the information in the national NGIS database.

# Item [12] – Part 3 of Schedule 3 (at the end of the table)

Tables in parts 2 to 11 in Schedule 3 contain descriptions of water information in subcategories.

Item 12 adds two subcategories to the table in Category 2—ground water resource information. The additional subcategories and descriptions are:

• geologic unit – the smallest mapped or defined geological entity consistent at a national scale

A hydrostratigraphy log is a table with rock or sediment types classified into hydrogeologic units along a borehole.

The National Aquifer Framework has the following three tiers:

<sup>•</sup> *hydrogeologic unit* – one or more geologic units which have similar hydrogeological characteristics and behaviour

<sup>•</sup> *hydrogeologic complex* – the aggregation and classification of hydrogeologic units according to their age, depositional environment, rock type and whether they behave as an aquifer or aquitard.

Subcategory 2d State aquifer framework information

Subcategory 2e NGIS information.

State aquifer framework information comprises updated state or territory aquifer frameworks. Most states and territories have, or are developing, a state aquifer framework.

NGIS information includes, but is not limited to: bore location and attributes; bore logs containing lithology, hydrostratigraphy and bore construction; georasters<sup>4</sup> and geovolumes;<sup>5</sup> and groundwater management areas.

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A *raster dataset* represents geographic features by dividing the world into discrete square or rectangular cells laid out in a grid. Each cell has a value that is used to represent some characteristic of that location. A *georaster* is a catalogue of raster datasets describing properties of hydrogeologic units (e.g.: depth or elevation of hydrogeologic unit's top or base, salinity and groundwater level).

A *geovolume* is a three dimensional multipatch feature class that represents hydrogeologic units as a volume. (A *multipatch feature class* is a Geographic Information System (GIS) object that stores a collection of patches to represent the boundary of a three dimensional object as a single row in a database.)