



Australian Government
Bureau of Meteorology

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory – Version 3.0



Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

This document outlines the Service Level Specification for Flood Forecasting and Warning Services provided by the Commonwealth of Australia through the Bureau of Meteorology for the State of New South Wales and the Australian Capital Territory in consultation with the New South Wales and the Australian Capital Territory Flood Warning Consultative Committee.

Service Level Specification for Flood Forecasting and Warning Services for New South Wales

Published by the Bureau of Meteorology
GPO Box 1289
Melbourne VIC 3001
(03) 9669 4000
www.bom.gov.au

With the exception of logos, this guide is licensed under a Creative Commons Australia Attribution Licence. The terms and conditions of the licence are at www.creativecommons.org.au

© Commonwealth of Australia (Bureau of Meteorology) 2013.

Cover image: Major flooding on the Hunter River at Morpeth Bridge in June 2007. Photo courtesy of New South Wales State Emergency Service

Table of Contents

1	Introduction	2
2	Flood Warning Consultative Committee	4
3	Bureau flood forecasting and warning services	5
4	Level of service and performance reporting.....	13
5	Limitations of service.....	14
6	Service Level Specification consultation, review and updating	15
7	Signature of parties	16

List of Schedules

Schedule 1: Flood Warning Consultative Committee	17
Schedule 2: Forecast locations and levels of service	18
Schedule 3a: Information locations with flood class levels defined	29
Schedule 3b: River and rainfall alert conditions.....	31
Schedule 4: River data locations.....	32
Schedule 5: Enviromon base stations installed in New South Wales.....	53
Schedule 6: List of Data Sharing Agreements for data provision.....	55
Schedule 7: List of sites owned and maintained by the Bureau.....	56
Schedule 8: List of sites where the Bureau assists other agencies with maintenance	66
Schedule 9: List of sites where the Bureau co-locates equipment and the site is owned by another agency	67
Schedule 10: List of flood warning related products issued by the Bureau in New South Wales (warning, watched, bulletins, river alerts)	68
Schedule 11: Changes to this Service Level Specification	74

List of Appendices

Appendix A: Glossary of terms.....	75
Appendix B: References	77

1 Introduction

- 1.1 The purpose of this Service Level Specification is to document and describe the flood forecasting and warning services provided for by the Bureau of Meteorology (the Bureau) in New South Wales and the Australian Capital Territory.
- 1.2 The Bureau's flood forecasting and warning services are provided within the context of the Total Flood Warning System as defined in the Australian Emergency Manuals Series, Manual 21 Flood Warning (Australian Government, 2009 and illustrated in Figure 1).

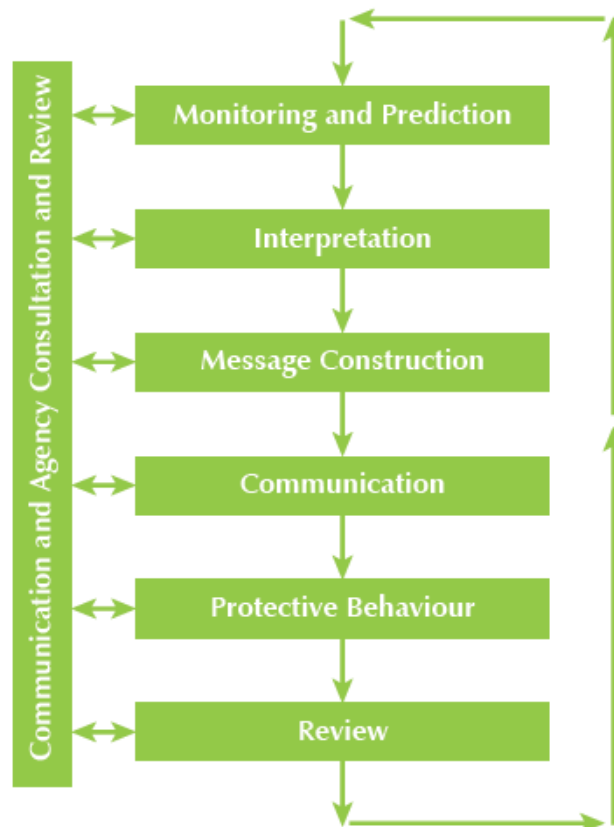


Figure 1: The components of the Total Flood Warning System (Australian Emergency Manual Series, Manual 21 Flood Warning, Australian Government 2009)

- 1.3 The Total Flood Warning System recognises that a fully effective flood warning service is multi-faceted in nature and its development and operation involves input from a number of agencies each with specialised roles to play. It is vital that the agencies involved work in close cooperation through all stages of developing and operating the system. The services described here are the Bureau's contribution to the Total Flood Warning System.
- 1.4 The Bureau's main role in the Total Flood Warning System is focussed on monitoring and prediction, and to a lesser extent interpretation, message construction and communication components (see Appendix A for descriptions). The Bureau also contributes to the review activities and takes a role in the planning and coordination activities associated with ensuring that the activities of all agencies and appropriate linkages are well coordinated. The roles and responsibilities of all key stakeholders involved in the provision of a flood warning

service in New South Wales and the Australian Capital Territory are described in the National Arrangements for Flood Forecasting and Warning (Bureau of Meteorology, 2015)¹.

- 1.5** This Service Level Specification is concerned with describing the Bureau's role in the Total Flood Warning System and its interaction with other stakeholders as described in the National Arrangements. This is to ensure that the service the Bureau is providing in support of each of the relevant components of the Total Flood Warning System is understood by the Bureau and other stakeholders.
- 1.6** A description of the activities that make up the Bureau's flood forecasting and warning services for New South Wales and the Australian Capital Territory is given in Section 3. This set of activities, associated products and target levels of service constitute the current standard services provided freely by the Bureau. The Bureau also provides supplementary services on a commercial or cost recovery basis but they are not covered in this document.

¹ The National Arrangements for Flood Forecasting and Warning (2015) is available on the Bureau's website: <http://www.bom.gov.au/water/floods/index.shtml>

2 Flood Warning Consultative Committee

- 2.1** The New South Wales and the Australian Capital Territory Flood Warning Consultative Committee provides the Bureau's key stakeholder's with a consultation mechanism for its flood forecasting and warning services. As such, the committee is responsible for reviewing this Service Level Specification on an annual basis or as required.
- 2.2** The overall role of the New South Wales and the Australian Capital Territory Flood Warning Consultative Committee is to coordinate the development and operation of flood forecasting and warning services in New South Wales and the Australian Capital Territory, acting as an advisory body to the Bureau and participating State and Local government agencies. Membership and terms of reference for this committee in New South Wales and the Australian Capital Territory are detailed in Schedule 1.
- 2.3** The Bureau chairs and provides the secretariat support to the New South Wales and the Australian Capital Territory Flood Warning Consultative Committee, which meets six monthly depending on need and activity.

3 Bureau flood forecasting and warning services

3.1 The scope of services covered by this Service Level Specification is confined to those dealing with riverine flooding caused by rainfall where typical rain-to-flood times are six hours or more. Flash flooding (rain-to-flood times less than six hours) and flooding caused purely by elevated sea levels are not covered, nor are the weather forecasting and other services the Bureau provides that contribute to the flood forecasting and warning service, including Severe Weather and Severe Thunderstorm Warnings, Tropical Cyclone Warnings, provision of radar data and rainfall forecasts. Schedule 2 is an up-to-date version (as at June 2013) of the information contained in Annex C of the New South Wales State Flood Plan (State Emergency Service, 2008) which also defines warning lead time requirements for most locations.

3.1.1 In New South Wales flood warnings are also provided for 13 smaller sub-catchments with faster catchment response times (rain-to-flood times less than six hours) that have specialised warning systems in place. As stated in Annex C of the New South Wales State Flood Plan the reliability of the service for these 13 locations is not as high as for other sites along the major streams listed in Schedule 2.

3.2 The nature of the services covered by this Service Level Specification include undertaking the routine catchment monitoring and river height prediction activities necessary for operation of the Total Flood Warning System, as well as issuing and publishing specific warning and data products. These activities are listed below with further detail and associated performance measures provided in subsequent sections.

- Collect and publish rainfall and river level data
- Routine monitoring of flood potential
- Flood modelling and prediction
- Automated information and alerting
- Issue flood watches
- Issue flood warnings
- Communication of flood warnings and flood watches
- Data networks, communications and storage
- Operations
- Maintain systems to collect data and flood information
- Planning and liaison
- Support for emergency management training and training exercises

3.3 Collect and publish rainfall and river level data

3.3.1 The collection and publishing of rainfall and river level data is an important component of the overall service. Apart from use by the Bureau for data analysis and its hydrological modelling for flood predictions, the data is also used by the emergency service agencies, numerous operational agencies, businesses and the public to monitor rainfall and river conditions. To assist in describing the service, the locations where river height; dam, weir or lake level; and tidal observations are made are categorised into three types; namely forecast location (Schedule 2), information location (Schedule 3a and 3b) and data location (Schedule 4).

- **Forecast location** is a location for which the Bureau provides a forecast of future water level either as the class of flood that is predicted (minor, moderate or major) or as a level and class – refer to Appendix A for definitions. At these

locations observed data, flood classifications and additional qualifying information will also be available (Schedule 2).

- **Information location** is a forecast location at which flood classifications are defined and observations of water level data are provided. At these locations forecasts of future water level are not produced. Other key thresholds may be defined and reported against (Schedule 3a and 3b).
- **Data location** is a location for which just the observed water level data is provided. Flood classifications are not available for these locations and forecasts of future water level are not produced (Schedule 4).

3.3.2 An indicative level of priority has been assigned to each observing site and key communication infrastructure such as radio repeaters (Schedules 2-4 and 7-9) based on a three tiered scheme (Table 1). The priority level is based on the expected impact to the Bureau’s services. The impacts identified are the expected outcome of a service outage at that site during a flood emergency. Impact is described in terms of forecast performance and the Bureau’s ability to provide a flood warning service. Note that the scope of this priority scheme is limited to consideration of the requirements of forecasting and prediction only and should not be confused with any other priority assigned to that site by third party owners or other users.

Table 1: Site Priority

Priority Level	Impact on performance	Impact on service delivery	Description
High	Very difficult to meet target	Direct and significant high level impact for the site and/or downstream locations	Degradation of service highly likely.
Medium	Difficult to meet target	Some impact for the site and/or downstream locations.	Possible degradation of service.
Low	Not likely to affect meeting targets	Little impact on the site and/or downstream location	No change in service. Lower possibility of degradation of service.

Note: Multiple outages within a given network will lead to a higher impact levels and greater service degradation. Table 1 indicates the effect of a single site failure within an otherwise functional network.

3.4 Routine monitoring of flood potential

3.4.1 The Bureau will maintain an awareness of catchment conditions and monitor the potential for riverine flooding. This monitoring activity will be supported by the Bureau’s weather services as required and is an activity undertaken to plan future flood operations.

3.5 Flood modelling and prediction

3.5.1 The Bureau will develop and maintain prediction systems for the forecast locations listed in Schedule 2.

3.5.2 The Bureau prediction systems can include real-time hydrologic models, simple peak to peak correlations and other hydrologic techniques as appropriate.

3.5.3 The Bureau prediction systems will be maintained and updated following significant events or when new data becomes available.

3.5.4 The target level of performance for the prediction at each forecast location is given in Schedule 2.

3.6 Automated information and alerting

3.6.1 A threshold based rainfall and river alerting service is provided to the New South Wales State Emergency Services using the Bureau Enviromon system which sends simple SMS and email messages based on rainfall rates as outlined in Schedule 3b.

3.7 Issue flood watches

3.7.1 The Bureau will issue flood watches when the combination of forecast rainfall and catchment conditions indicates flooding is possible. The catchments and basins covered by flood watches include all those listed in Schedule 10. Note that flood watches may cover catchments that do not have established flood warning services.

3.7.2 The primary purpose of a flood watch is to provide early advice to communities and the relevant emergency service organisations of the potential flood threat from a developing weather situation. Typically, a flood watch is issued 1 to 4 days before an anticipated flood event depending on the confidence in rainfall forecasts

3.7.3 Flood watches will be communicated using the dissemination methods detailed in section 3.9.

3.8 Issue flood warnings

3.8.1 In general flood warnings are issued based on the following criteria:

- The river level of at least one forecast location (listed in Schedule 2) is expected to reach and or exceed or has exceeded the minor flood level;
- The flood class levels or trigger heights defined at forecast locations are expected to be exceeded (refer to Schedule 2);
- River levels above the minor flood levels are expected at widespread information locations (refer to Schedule 3).

The specific initiating criteria, if any, for each flood warning product is listed in Schedule 10.

3.8.2 Flood warnings may include either **qualitative** or **quantitative** predictions at forecast locations or a statement about future flooding in more **generalised** terms as outlined in Table 2. The type of prediction included is commensurate with user requirements, the availability of real time rainfall and river level data, and the capability of available flood prediction systems. A flood warning may contain **generalised, quantitative and qualitative** predictions and typically start with more **generalised** information and become more specific as data becomes available as the event develops and progresses.

- 3.8.3** In New South Wales and the Australian Capital Territory, the Bureau will issue flood warnings with either **quantitative** and/or **qualitative** predictions, for those catchments, and the locations within those catchments (consistent with Annex C of the New South Wales State Flood Plan) as listed in Schedule 2.
- 3.8.4** **Quantitative** predictions include expected flood class (minor, moderate or major) with specific information on the height and time of water levels at the forecast locations identified in Schedule 2. A **quantitative** prediction can be a specific level or a range of levels, and has detailed timing down to blocks of a minimum of 3-6 hours. **Quantitative** predictions are based on all available information at the time of warning issue. The target lead time of the river height prediction for each forecast location where **quantitative** predictions are provided is given in Schedule 2. For an example of a **quantitative** prediction refer to Table 2.
- 3.8.4.1** For the Bureau to be able to provide a **quantitative** prediction at a location, it is essential to have a suitable network of rainfall and river level sites upstream with data coming in real time, sufficient historical data to calibrate the flood forecasting model, a reliable rating table and documented flood impacts and flood classifications.
- 3.8.5** **Qualitative** predictions include expected flood class (minor, moderate or major) and timing of flooding at the forecast locations identified in Schedule 2. The timing is indicated in blocks of six, 12 or 24 hours, using the terms such as early morning, afternoon or overnight. Such predictions are based on all available information at that time and may include advice on the peak classification that is expected or has occurred at that location. The target lead time for each forecast location where only **qualitative** predictions are provided are given in Schedule 2. For an example of a **qualitative** prediction refer to Table 2.
- 3.8.5.1** For the Bureau to be able to provide a **qualitative** prediction at a location, it is essential to have at least some rainfall and river level sites upstream of the location with data coming in real time, at least some historical flood data to calibrate the flood forecasting model, a reasonable rating table and documented flood impacts and flood classifications.
- 3.8.6** The Bureau may also issue flood warnings with more **generalised** predictions and information when there are not enough data to make specific predictions or in the developing stages of a flood. These warnings contain generalised statements advising that flooding is expected and may include forecast trend (rising or falling) (for examples refer to Table 2).
- 3.8.7** The typical target accuracy of a **quantitative** water river level prediction is that 70% are within 0.3 or 0.6 metres of the observed water level. Specific accuracy targets by location are defined in Schedule 2. Achievement of these targets is not possible in all floods or at all locations. In general predictions of a flood peak are more accurate than “reach” or “exceed” predictions that are issued during the developing stages of a flood. This is due to uncertainty of future rainfall rates and/or upstream flood behaviour that are used when making those predictions.
- 3.8.8** A list of the flood warnings issued in New South Wales and the Australian Capital Territory, along with the basin/river to which they apply is included in Schedule 10. Details about forecast locations in each basin/river are included in Schedule 2.

- 3.8.9** Flood warning summaries – a summary of flood watches and warnings that are current is provided to help media and other users readily access information. This product is not issued in New South Wales and the Australian Capital Territory.

Table 2. Prediction types description

Prediction type	Height prediction	Time of prediction	Example
Quantitative	Numerical prediction - Any Height - Peak Height Can refer to flood class	More specific, typically in blocks of 3 to 6 hours	The Clarence River at Grafton will exceed minor flood level (2.1 metres) around 3 pm Saturday evening The Clarence River at Grafton is expected to peak near 6.5 metres with (major flooding) around 6 pm on Sunday
Qualitative	Refers to flood class (minor, moderate or major)	Range of times (6, 12 or 24 hour blocks)	Minor flooding is expected in the Hunter River at Singleton during Saturday afternoon The Hunter River at Singleton is expected to peak above the Major Flood Level (13.0 metres) during Sunday evening
Generalised	No height prediction - forecast trend (rising or falling)	Range of times (24 hour blocks)	Flooding is expected in the Parramatta River catchment during Saturday with higher levels possible depending on future rainfall.

3.9 Communication of flood warnings and flood watches

- 3.9.1** Flood watches and warnings will be issued directly to a list of stakeholders with emergency management responsibilities. This list is maintained by the Bureau but is not detailed in this document. The direct dissemination methods supported include email, fax and the internet protocols such as File Transfer Protocol (FTP).

- 3.9.2** The format of messaging in flood related products will conform to a nationally consistent standard determined by the Bureau, in consultation with the Flood Warning Consultative Committee.

- 3.9.3** Flood watches and warnings are also communicated by the Bureau via:

- 3.9.3.1 Radio:** Radio stations, particularly the ABC, broadcast flood warning information as part of their news bulletins, or whenever practicable. This form of broadcast may be covered in separate agreements between the Bureau and broadcasters.
- 3.9.3.2 Weather warning service:** Flood warning information is recorded on a contracted telephone information service. Calls to this service incur a fee-for-service charge.
- 3.9.3.3 Internet:** Flood watches and warnings are published on the Bureau's public web site and available by File Transfer Protocol (FTP) and Rich Site Summary (RSS) along with related rainfall and river level information (see 3.12).
- 3.9.3.4 Social Media:** The Bureau endeavours to issue Tweets related to flood watches, flood warnings and relevant information, subject to operational constraints and in connection with other weather information. The

Bureau website remains the main platform for the publishing of flood information.

- 3.9.4** Emergency management partners² and media can also access flood level and warning information directly from the Bureau Flood Warning Centre and Bureau National Operations Centre, subject to operational constraints. The Bureau does not publish to the public the contact details for the Flood Warning Centres and Bureau National Operations Centre.

3.10 Data networks, communications and storage

- 3.10.1** The services to be provided by the Bureau under this Service Level Specification depend on provision of data from networks of stations owned and operated by the Bureau and partner agencies. Permanent or temporary loss of real time data may necessitate a downgrading of the flood warning service from **quantitative** predictions to **qualitative** or then **generalised**.

- 3.10.2** The Bureau contribution to this network of stations includes:

- the operation and maintenance of equipment at the sites which are fully owned and maintained by the Bureau as listed in Schedule 7.
- assisting with maintenance of equipment for other agencies at the sites listed in Schedule 8.
- operating and maintaining Bureau-owned equipment at sites where this equipment is co-located at a site owned by another agency Schedule 9.

- 3.10.3** Where the site is owned or operated by other parties, installation, maintenance and repairs of Bureau equipment will depend on adequate access being provided to the Bureau and any of its contractors. The Bureau will confirm access arrangements with relevant land owners before entering the premises. The Bureau also requires that the site operators provide timely advice regarding any possible faults or other issues affecting the performance of the data network.

- 3.10.4** The flood forecasting and warning service for New South Wales and the Australian Capital Territory also depends on the provision of data from partner agency data networks. The provision of these data for each of the agencies concerned is detailed in a Data Sharing Agreement between the Bureau and each partner (Schedule 6).

- 3.10.5** The Bureau will maintain the essential set of metadata describing the network of stations and related infrastructure regarding the Bureau's component of the data network, along with metadata required to inform the data ingest process for partner agency related networks and sites.

- 3.10.6** The Data Sharing Agreements are intended to reflect operational arrangements and are not legally binding and allow multiple agreements between individual and/or multiple agencies.

- 3.10.7** The parties agree to the provision of data as set out in the Data Sharing Agreements during periods of routine site operation and increased frequency during flood periods.

² Emergency management partners include those organisations that have an emergency management responsibility for the wider community (e.g. State Emergency Service)

- 3.10.8** Data transfer protocols and conditions regarding fitness for purpose as provided by each stakeholder will be adhered to as set out in the Data Sharing Agreements for data provision.
- 3.10.9** The sharing of data as set out in the Data Sharing Agreements can be amended by following the process described in the agreement.
- 3.10.10** The Bureau has developed special purpose software (Enviromon) for collecting, alarming, storing, on-forwarding and display of data from Event-Reporting Telemetry Systems (ERTS) (field equipment) based on Automated Local Evaluation in Real Time (ALERT) and Integrated Flood Observing and Warning System (IFLOWS) data protocols.
- 3.10.11** The Bureau provides a range of supplementary services associated with Enviromon including: installation of Enviromon software; the commissioning of an Enviromon base station or maintenance and support; and onsite Enviromon training. Software licensing and limited support for Enviromon base stations listed in Schedule 5 is currently a standard service (free of charge).

3.11 Operations

- 3.11.1** The Bureau will use reasonable endeavours to provide 24 hours a day, seven days a week operational systems capability necessary to support flood warning operations. This will include on-line computer and data ingestion systems, along with appropriate communications infrastructure.
- 3.11.2** The Bureau operates a regional Flood Warning Centre in each capital city and a Bureau National Operations Centre in Melbourne on an as-required basis.
- 3.11.3** Through the regional Flood Warning Centre and Bureau National Operations Centre, the Bureau will provide operational coverage for up to 24 hours per day during flood events, subject to event requirements and operational constraints. The Bureau will advise its key emergency management clients of any impact in services if it is unable to provide sufficient staff coverage to meet the service levels set out in this Service Level Specification (see also 4.2)
- 3.11.4** Staff in the Bureau National Operations Centre will support regional operations either remotely or by providing additional capacity to a regional Flood Warning Centre where reasonably possible during significant and long duration events. When necessary, staff from regional offices in areas not impacted by current flooding will endeavour to assist.
- 3.11.5** The Bureau will maintain an internal catchment directive for each catchment where a warning service is provided. The catchment directive documents and describes the forecast process for the particular catchment and includes flood intelligence information, flood history, contact details for partners with local knowledge and warning issue criteria.
- 3.11.6** The operation of the Flood Warning Centres will endeavour to be compliant with the fatigue management guidelines developed under the Bureau's Work Health and Safety Procedures. Particular attention to fatigue management will be provided during the management of extreme events. The requirement to comply with these guidelines applies to all personnel present at these centres.

3.11.7 The Bureau will assist in meeting the needs of the Australian Government's National Crisis Coordination Centre. The Bureau will use reasonable endeavours to support and participate in relevant critical event briefings as resources permit.

3.12 Maintain systems to collect data and flood information

3.12.1 The Bureau will maintain the systems to ingest all data being gathered through the flood warning data network.

3.12.2 The river height and rainfall data received by the Bureau will be published as soon as practicable (the data is supplied at different frequencies and by various methods) upon receipt into Bureau operational systems. The data will be published in the form of tables, maps and plots and will also be included in warnings and alerting messages and used in modelling systems.

3.12.3 Data collected in Bureau systems will be available for use by the Bureau as it requires and for distribution to the public on suitable open source licence terms³.

3.13 Planning and liaison

3.13.1 The Bureau undertakes a range of routine planning, maintenance and liaison activities that support the Total Flood Warning System. This includes contributing to related flood risk management activities within the State or Territory impacting on, or related to flood warning along with the ongoing coordination and liaison activities essential to the smooth operation of the Total Flood Warning System.

3.14 Support for emergency management training and exercises

3.14.1 The Bureau will, within operational constraints, endeavour to support and participate in relevant disaster management activities outside of flood operational periods, including training exercises and flood response planning.

³ Please refer to the Creative Commons License:
<http://www.bom.gov.au/water/regulations/dataLicensing/ccLicense.shtml>

4 Level of service and performance reporting

- 4.1** Achievable levels of performance provided by the Bureau are dependent on many factors including adequate access to Bureau equipment where located on sites owned by other agencies, data availability in near real time from Bureau and partner agencies, modelling and prediction capability, geomorphology of the catchment and meteorological considerations such as rainfall patterns.
- 4.2** If during a flood event the achievable service level is expected to be reduced, for any reason, below the target level as stated in this Service Level Specification, the Bureau will inform the key emergency management clients in New South Wales and the Australian Capital Territory of the reduced service level via email and phone.
- 4.3** The Bureau's performance during significant events will be reviewed and reported on within the context of the Total Flood Warning System using a standard performance structure based on the performance indicators and the service levels defined in Schedule 2.
- 4.4** The annual performance of service report will be tabled at the last Flood Warning Consultative Committee meeting of the calendar year. This report will be published on the Bureau's website (www.bom.gov.au).
- 4.5** Event based performance reports with more detailed technical information may also be produced for significant and high profile events.

5 Limitations of service

5.1 Performance of services provided under this document are subject to:

- (a) The availability of funds and human resources of the Bureau and its partner agencies and changes to organisational policies that may affect the terms and conditions of the Service Level Specification.
- (b) Circumstances beyond the control of the Bureau including where the performance is the responsibility of another entity.
- (c) The existence of a reliable and ongoing supply of quality real time rainfall, water level and flow data.
- (d) The reliable and ongoing availability of the computing and communication infrastructure required for the performance of the services.
- (e) Adequate communication between the Bureau and all relevant partners under this Service Level Specification and related Data Sharing Agreements and any other agreement relevant to it including on any faults or issues.

5.2 In New South Wales there is one key document that describes the State's arrangements for flood warning and flood risk management. This Service Level Specification does not replace or reduce the value of this document. The document is:

- (a) New South Wales State Flood Plan 2015 (New South Wales State Emergency Service)

6 Service Level Specification consultation, review and updating

6.1 The initial and annual process for acceptance of this Service Level Specification will be:

6.1.1 The Flood Warning Consultative Committee members will be provided with the draft or amended Service Level Specification in advance of a special or scheduled committee meeting.

6.1.2 The members of the Flood Warning Consultative Committee will distribute the draft or amended Service Level Specification within their organisations and provide feedback from their organisation at the committee meeting.

6.1.3 After consultation and discussion at the Flood Warning Consultative Committee meeting, the Bureau will update the Service Level Specification.

6.1.4 The Chair of the Flood Warning Consultative Committee (Bureau's Regional Director) will accept and sign the document on behalf of the committee.

6.1.5 The Assistant Director Water Forecasting Services will sign the Service Level Specification on behalf of the Director of Meteorology.

6.1.6 The Bureau will then distribute the Service Level Specification to all members of the Flood Warning Consultative Committee and publish a copy on the Bureau website.

6.2 The schedules of this Service Level Specification will be reviewed annually and either updated following review, or when a significant change is made that impacts on the level of services described in this document. Updates to this document will be recorded in Schedule 11.

6.3 Any changes to the categorisation of a location into data, information or forecast location or to the level of services described in this document will be through a consultative process using agreed arrangements in New South Wales and when required coordinated by the Flood Warning Consultative Committee.

7 Signature of parties

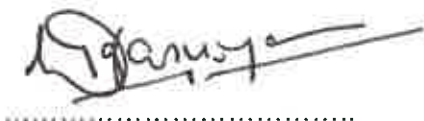
7.1 This Service Level Specification has been prepared by the Bureau of Meteorology in consultation with the New South Wales and the Australian Capital Territory Flood Warning Consultative Committee.



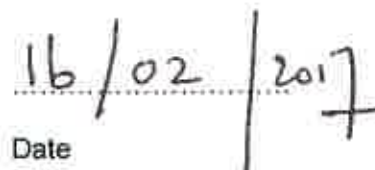
Mr Stephen Lellyett
Chair of the New South Wales
and the Australian Capital Territory
Flood Warning Consultative Committee, and
Acting Regional Director – New South Wales
Bureau of Meteorology



Date



Dr Dasarath (Jaya) Jayasuriya
Assistant Director
Water Forecasting Services
Bureau of Meteorology



Date

Schedule 1: Flood Warning Consultative Committee

The New South Wales Flood Warning Consultative Committee was formed in late 1989, and in 2016 was extended to include Australian Capital Territory. The Committee's role is to coordinate the development and operations of the State's flood forecasting and warning services. It is an advisory body and reports to the Bureau of Meteorology and participating state and local government agencies as required. The membership includes:

- Bureau of Meteorology (Chair/Secretariat)
- New South Wales State Emergency Service
- New South Wales Office of Environment and Heritage
- Floodplain Management Australia
- WaterNSW
- Australian Capital Territory State Emergency Service

The nationally consistent Terms of Reference for Flood Warning Consultative Committees are:

1. Identify requirements and review requests for new and upgraded forecasting and warning services.
2. Establish the priorities for the requirements that have been identified using risk based analyses of the Total Flood Warning System.
3. Review and provide feedback on the Service Level Specification for the Bureau's Flood Forecasting and Warning services on an annual basis.
4. Coordinate the implementation of flood warning systems in accordance with appropriate standards.
5. Promote effective means of communication of flood warning information to the affected communities.
6. Monitor and review the performance of flood forecasting and warning services.
7. Build awareness and promote the Total Flood Warning System concept.

Schedule 2: Forecast locations and levels of service

Column definitions:

Bureau number: Refers to the unique number assigned to a particular station by the Bureau. External refers to stations which do not currently have a Bureau number assigned to them.

Forecast location: Is the specific location that will be referred to in flood warnings (refer to Clause 3.3.1) * indicates this is also a key location for downstream predictions. u/s refers to predictions refer to upstream levels. n/a refers to flood classifications have not yet be defined by the New South Wales State Emergency Service. # refers to provisional flood classifications to be confirmed by the New South Wales State Emergency Service

Station owner: Refers to the owning and operating agency of the station. The Bureau may co-own stations. (refer to Schedules 7 and 8)

Gauge type: Either manual (read by human) or automatic

Flood classification: For definitions please refer to Appendix A.2.

Prediction type: The type of warning service that particular location can expect. (refer to Clause 3.8)

Target warning lead time: The minimum lead time that will be provided before the height or the flood class level given is exceeded. (Refer 3.8) # provisional minimum lead time not specified in Annex C of the New South Wales State Flood Plan

Target peak accuracy: The error within which peak river level height is predicted (refer to Clause 3.8.7)

Priority: The impact a temporary or permanent loss of site will have on service delivery and in meeting performance targets (refer to Clause 3.3.2)

To view the New South Wales Flood Plan please follow this link: <https://www.emergency.nsw.gov.au/publications/plans/sub-plans/flood.html>

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
201 – Tweed River Valley												
058186	201420	Murwillumbah	NSW OEH – MHL	Automatic	3.0	4.0	4.8	Quantitative	6 hrs 12 hrs	>3.5 m >6.6m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
201 – Tweed River Valley (continued)												
558010	201426	Chinderah - Barneys Point	NSW OEH – MHL	Automatic	1.3	1.7	2.0	Quantitative	6 hrs [#]	>1.3m	+/- 0.3 m	High
202 – Brunswick River Valley												
558020	202400	Billinudgel ^	NSW OEH – MHL	Automatic	2.5	3.0	3.5	Quantitative	3 hrs [#]	>2.5 m	+/- 0.3 m	High
558006	202402	Mullumbimby ^	NSW OEH – MHL	Automatic	2.5	3.5	4.5	Quantitative	3 hrs [#]	>2.5 m	+/- 0.3 m	High
203 – Richmond and Wilsons River Valley												
058176	203904	Lismore AHD	Local Council	Automatic	4.2	7.2	9.7	Quantitative	12 hrs	>10 m	+/- 0.3 m	High
558001	203005	Wiangaree	WaterNSW	Automatic	11.0	15.5	n/a	Quantitative	6 hrs [#]	>11 m	+/- 0.3 m	High
558002	203900	Kyogle	WaterNSW	Automatic	12.0	14.4	16.0	Quantitative	6 hrs	13.0 m	+/- 0.3 m	High
058179	203907	Casino	Local Council	Manual	9.2	12.2	15.0	Quantitative	6 hrs	>9.2 m	+/- 0.3 m	High
058175	203403	Coraki	NSW OEH – MHL	Automatic	3.4	5.0	5.7	Quantitative	24 hrs	3.8	+/- 0.3 m	High
058184	203450	Bungawalbin	NSW OEH – MHL	Automatic	3.0	4.5	5.0	Quantitative	24 hrs	4.5	+/- 0.3 m	High
058061	203412	Woodburn	NSW OEH – MHL	Automatic	3.2	3.7	4.2	Quantitative	12 hrs [#]	>3.2 m	+/- 0.3 m	High
204 – Clarence River Valley												
058178	204400	Grafton	NSW OEH – MHL	Automatic	2.1	3.6	5.4	Quantitative	6 hrs 24 hrs	>3.6 m >8.2 m	+/- 0.3 m	High
058188	204480	Ulmarra	NSW OEH – MHL	Automatic	2.1	3.4	4.9	Quantitative	6 hrs 12 hrs	>3.4 m >3.3 m	+/- 0.3 m	High
558022	204410	Maclean	NSW OEH – MHL	Automatic	1.6	2.2	2.5	Quantitative	6 hrs 24 hrs	>2.2 m >3.3 m	+/- 0.3 m	High
059123	204907	Glenreagh	Bureau	Manual	4.0	7.0	10.0	Quantitative	6 hrs	>5.8 m	+/- 0.3 m	High
558030	204909	Coutts Crossing	Local Council	Manual	5.0	9.0	12.0	Quantitative	6 hrs [#]	>9.0 m	+/- 0.3 m	High
205 – Bellinger River Valley												
059121	205002	Thora	WaterNSW	Automatic	3.0	4.3	5.8	Quantitative	3 hrs	>3.0 m	+/- 0.3 m	High
059126	205442	Bellingen	NSW OEH – MHL	Automatic	3.7	6.7	8.2	Quantitative	6 hrs	>4.9 m	+/- 0.3 m	High
559024	205403	Repton	NSW OEH – MHL	Automatic	2.0	n/a	3.0	Quantitative	6 hrs [#]	>2.0 m	+/- 0.3 m	High
559011	205407	Urunga	NSW OEH – MHL	Automatic	1.5	2.0	2.4	Quantitative	6 hrs [#]	>1.5 m	+/- 0.3 m	High
559012	205439	Coffs Creek ^	NSW OEH – MHL	Automatic	3.0	n/a	4.7	Quantitative	1 hr [#]	>3.0 m	+/- 0.3 m	High
558060	205463	Wooli Caravan Park ^	NSW OEH – MHL	Automatic	1.9 [#]	2.2 [#]	2.5 [#]	Quantitative	6 hrs [#]	>1.9m	+/- 0.3 m	High
205 – Nambucca River Valley												
559001	205006	Bowraville	Bureau	Manual	5.5	5.8	10.1	Quantitative	3 hrs	>5.5 m	+/- 0.3 m	High
559006	205416	Macksville	NSW OEH – MHL	Automatic	1.7	2.1	2.6	Quantitative	6 hrs 12 hrs	>2.0 m >3.0 m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
206 – Macleay River Valley												
556017	206032	Armidale – Stephens Bridge ^	WaterNSW	Automatic	2.9	n/a	n/a	Quantitative	1 hr [#]	>2.9 m	+/- 0.3 m	High
557001	206024	Georges Creek	WaterNSW	Automatic	6.0	8.0	10.0	Quantitative	6 hrs	>8.0 m	+/- 0.3 m	High
059122	206019	Bellbrook	Local Council	Automatic	6.5	10.5	13.5	Quantitative	6 hrs [#]	>6.5 m	+/- 0.3 m	High
059127	206402	Kempsey AHD	NSW OEH – MHL	Automatic	4.5	5.7	6.6	Quantitative	12 hrs 24 hrs	4.5 m >5.7m	+/- 0.3 m	High
559040	206406	Smithtown	NSW OEH – MHL	Automatic	3.4	4.0	4.2	Quantitative	12 hrs [#]	>4.0 m	+/- 0.3 m	High
207 – Hastings and Camden Haven River Valleys												
060116	207004	Kindee Bridge	WaterNSW	Automatic	3.0	5.5	7.6	Quantitative	6 hrs	>8.7 m	+/- 0.3 m	High
060124	207401	Wauchope	NSW OEH – MHL	Automatic	2.5	4.3	5.5	Quantitative	6 hrs 12 hrs	>2.5 m >5.5 m	+/- 0.3 m	High
060133	207418	Settlement Point	NSW OEH – MHL	Automatic	1.2	1.5	1.75	Quantitative	12 hrs	>1.2 m	+/- 0.3 m	High
560017	207428	Logans Crossing ^	NSW OEH – MHL	Automatic	7.0	7.6	7.9	Quantitative	3 hrs [#]	>7.0 m	+/- 0.3 m	High
560018	207425	Laurieton	NSW OEH – MHL	Automatic	1.1	1.5	1.7	Quantitative	3 hrs 6 hrs	>1.1 m >1.5 m	+/- 0.3 m	High
208 – Manning River Valley												
560062	208020	Gloucester	WaterNSW	Automatic	4.3	4.9	5.2	Quantitative	3 hrs [#]	>4.0 m	+/- 0.3 m	High
060120	208400	Wingham AHD	NSW OEH – MHL	Automatic	4.9	8.9	11.9	Quantitative	12 hrs 24 hrs	>5.0 m >12 m	+/- 0.3 m	High
060119	208410	Taree AHD	NSW OEH – MHL	Automatic	1.8	2.4	3.7	Quantitative	12 hrs 24 hrs	>2.1 m >4 m	+/- 0.3 m	High
560008	208404	Croki	NSW OEH – MHL	Automatic	1.5	n/a	n/a	Quantitative	12 hrs [#]	>1.5m	+/- 0.3 m	High
560027	208425	Harrington	NSW OEH – MHL	Automatic	1.9	2.2	2.8	Quantitative	12 hrs [#]	>1.9 m	+/- 0.3 m	High
209 – Karuah River Valley												
560057	209906*	Tuncurry	Local Council	Automatic	0.9	1.5 [#]	1.9 [#]	Quantitative	3 hrs [#]	>0.9 m	+/- 0.3 m	High
560040	209460	Bulahdelah ^	NSW OEH – MHL	Automatic	3.0	n/a	4.5 [#]	Quantitative	3 hrs [#]	>3.0 m	+/- 0.3 m	High
210 – Hunter River Valley												
061360	210904*	Scone ^	Local Council	Automatic	3.2	3.5	3.7	Quantitative	3 hrs [#]	>3.2 m	+/- 0.3 m	High
561005	210002	Muswellbrook	WaterNSW	Automatic	7.2	8.0	10.0	Quantitative	4 hrs 12 hrs	>7.2 m >10.0 m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
210 – Hunter River Valley (continued)												
561015	210055	Denman	WaterNSW	Automatic	6.5	7.9	9.0	Quantitative	8 hrs	9.0 m	+/- 0.3 m	High
061347	210028	Bulga	WaterNSW	Automatic	3.0	3.7	4.6	Quantitative	12 hrs	3.0 m	+/- 0.3 m	High
561010	210001	Singleton	WaterNSW	Automatic	10.0	11.5	13.0	Quantitative	6 hrs 24 hrs	>10 m >14.2 m	+/- 0.3 m	High
061268	210458	Maitland AHD - Belmore Br.	NSW OEH – MHL	Automatic	5.9	8.9	10.5	Quantitative	12 hrs 24 hrs	>5.9 m >7.1 m	+/- 0.3 m	High
061349	210402	Gostwyck Br.	NSW OEH– MHL	Automatic	9.1	10.7	12.2	Quantitative	12 hrs	>9.1 m	+/- 0.3 m	High
061267	210903*	Dungog	WaterNSW	Automatic	4.9	7.6	8.5	Quantitative	3 hrs [#]	>4.9m	+/- 0.3 m	High
061339	210010	Mill Dam Falls	WaterNSW	Automatic	6.1	7.6	9.1	Quantitative	12 hrs	6.1 m	+/- 0.3 m	High
561037	210452	Raymond Terrace	NSW OEH – MHL	Automatic	2.5	3.1	3.5	Quantitative	6 hrs 18 hrs	>2.5 m >3.5 m	+/- 0.3 m	High
211 – Lake Macquarie, Tuggerah Lake and Wyong River												
561025	211002	Wyong	Local Council	Automatic	2.7	3.8	4.0	Quantitative	6 hrs [#]	>2.7m	+/- 0.3 m	High
561080	211402	Tuggerah Lake – Long Jetty	NSW OEH – MHL	Automatic	0.9	1.8	2.2	Quantitative	6 hrs [#]	>0.9 m	+/- 0.3 m	High
561070	211461	Lake Macquarie - Belmont	NSW OEH – MHL	Automatic	0.7	0.9	1.1	Quantitative	6 hrs [#]	>0.7 m	+/- 0.3 m	High
212 – Hawkesbury Nepean River Valley												
068216	212904*	Menangle	Bureau	Automatic	5.2	9.2	12.2	Quantitative	6 hrs [#]	>5.2 m	+/- 0.3 m	High
568154	212216	Camden Weir	WaterNSW	Automatic	6.8	8.3	13.8	Quantitative	12 hrs	>6.8 m	+/- 0.3 m	High
067093	212202	Wallacia Weir	WaterNSW	Automatic	5.0	8.7	11.0	Quantitative	12 hrs	> 5.0 m	+/- 0.3 m	High
567047	212201	Penrith	WaterNSW	Automatic	3.9	7.9	10.4	Quantitative	6 hrs 8 hrs	>8.9 m >11.3m	+/- 0.3 m	High
63282	212902	North Richmond Bridge	Bureau	Manual	4.3	8.4	11.0	Quantitative	6 hrs 15 hrs	>16 m >18 m	+/- 0.3 m	High
063280	212406	Sackville	NSW OEH – MHL	Automatic	4.6	7.3	9.7	Quantitative	18 hrs	>4.6	+/- 0.3 m	High
063288	212908*	Putty Road	Bureau	Manual	2.7	5.7	10.7	Quantitative	12 hrs	>5.7	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
212 – Hawkesbury Nepean River Valley (continued)												
067095	212903	Windsor	Bureau	Manual	5.8	7.0	12.2	Quantitative	6hrs if peak>16 15hrs if peak>16 12-18 hrs	9.6m 13.7m Peak	+/- 0.3 m	High
067094	212407	Lower Portland	NSW OEH – MHL	Automatic	4.6	6.1	7.6	Quantitative	18 hrs	>4.6	+/- 0.3 m	High
561004	212408	Wisemans Ferry	NSW OEH – MHL	Automatic	n/a	3.5	4.2	Quantitative	12hrs	>3.5 m	+/- 0.3 m	High
213 – Georges River and Sydney Coast												
566054	213400	Liverpool	NSW OEH – MHL	Automatic	2.0	3.0	4.5	Quantitative	6 hrs 12 hrs	>2.0 m >4.0 m	+/- 0.3 m	High
066168	213405	Milperra	NSW OEH – MHL	Automatic	2.0	3.3	4.2	Quantitative	6 hrs 12 hrs	>2.0 m >4.0 m	+/- 0.3 m	High
566011	213410	Picnic Point	NSW OEH – MHL	Automatic	2.0 [#]	n/a	n/a	Quantitative	6 hrs [#]	>2.0m	+/- 0.3 m	High
566045	213904*	Woronora Bridge ^	Local Council	Automatic	1.5	3.4	3.9	Quantitative	3 hrs [#]	>1.5 m	+/- 0.3 m	High
n/a	n/a	Parramatta River	No specific forecast location exists – forecast based on exceedence of a rainfall threshold as per trigger height column.					Generalised	3 hrs [#]	>1%	n/a	n/a
566012	213415	Cooks River – Tempe Bridge ^	NSW OEH – MHL	Automatic	1.3	n/a	n/a	Quantitative	3 hrs [#]	>1.3 m	+/- 0.3 m	High
215 – Shoalhaven River Valley												
068213	215411	Nowra – AHD	NSW OEH – MHL	Automatic	2.3	3.3	4.3	Quantitative	6 hrs 9 hrs 12 hrs	>2.3m >3.3 m >4.3 m	+/- 0.3 m	High
068221	215420	Terara	NSW OEH – MHL	Automatic	2.2 [#]	3.0 [#]	3.9 [#]	Quantitative	6 hrs [#]	>3.0m	+/- 0.3 m	High
216 – Clyde River Valley – St Georges Basin												
568200	216415	Island Point Road	NSW OEH – MHL	Automatic	1.2 [#]	1.5 [#]	1.8 [#]	Quantitative	3 hrs [#]	>1.2m	+/- 0.3 m	High
568198	216412	Sussex Inlet	NSW OEH – MHL	Automatic	0.9 [#]	1.2 [#]	1.8 [#]	Quantitative	3 hrs [#]	>0.9m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
217 – Moruya River Valley												
069136	217002	Wamban	Bureau	Manual	4.4	6.2	8.0	Quantitative	3 hrs [#]	>4.4 m	+/- 0.3 m	High
069130	217410	Moruya	NSW OEH – MHL	Automatic	2.0	2.6	3.2	Quantitative	6 hrs	>2.6 m	+/- 0.3 m	High
219 – Bega River Valley												
069120	219900	Bega	WaterNSW	Automatic	4.6	7.0	8.0	Quantitative	3 hrs [#]	>4.6m	+/- 0.3 m	High
222 – Snowy River Valley												
570020	220019	Bombala	WaterNSW	Automatic	3.0	5.0	8.0	Quantitative	3hrs [#]	>3.0m	+/- 0.3 m	High
422 – Culgoa River Valley												
048212	422016	Brenda	WaterNSW	Automatic	4.9	5.5	5.9	Quantitative	3days	>5.9m	+/- 0.3 m	High
048230	422017	Weilmoringle	WaterNSW	Automatic	5.2	n/a	5.8	Quantitative	2 days 3 days	>5.6m >6.2m	+/- 0.3 m	High
048052	422006	Kenebree	WaterNSW	Automatic	4.7	5.7	6.3	Quantitative	3 days 3 days	>6.1m >6.5m	+/- 0.3 m	High
048215	422014	Goodooga (Bokhara)	WaterNSW	Automatic	2.7	3.4	4.2	Quantitative	2 days	>3.7m	+/- 0.3 m	High
548011	422013	Goodooga (Birrie)	WaterNSW	Automatic	3.2 [#]	4.0 [#]	5.0 [#]	Quantitative	2 days [#]	>4.0m	+/- 0.3 m	High
548012	422005	Goodwins	WaterNSW	Automatic	2.0	2.6	3.5	Quantitative	2 days [#]	>2.0 m	+/- 0.3 m	High
048168	NA	New Angledool	Bureau	Manual	1.8	2.0	2.3	Quantitative	2 days	>2.8m	+/- 0.3 m	High
423 – Warrego River Valley												
548003	423004	Barrington 2	WaterNSW	Automatic	2.8	3.8	5.0	Quantitative	24 hrs	>2.8m	+/- 0.3 m	High
048039	423903	Enngonia	Bureau	Manual	2.0	2.5	3.0	Quantitative	24 hrs 2 days	>2.0m >3.1 m	+/- 0.3 m	High
548002	423002	Ford's Bridge Bywash	WaterNSW	Automatic	1.7	2.3	3.2	Quantitative	24 hrs	>2.3m	+/- 0.3 m	High
424 – Paroo River Valley												
548008	424002	Willara Crossing	WaterNSW	Automatic	0.7	n/a	n/a	Quantitative	1 day [#]	>0.7m	+/- 0.3 m	High
048181	424001	Wanaaring	Bureau	Manual	2.4	3.3	4.0	Quantitative	3 days	>4.0 m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
416 – Macintyre River Valley												
056227	416009	Inverell (Ross Hill)	Local Council	Manual	3.0	4.3	5.2	Quantitative	3 hrs [#]	>3.0 m	+/- 0.3 m	High
054145	416006	Ashford	WaterNSW	Automatic	2.2	4.0	6.0	Quantitative	3 hrs [#]	>2.2 m	+/- 0.3 m	High
554014	416058	Yetman Bridge	WaterNSW	Automatic	5.0	7.6	9.1	Quantitative	6 hrs [#]	>5.0 m	+/- 0.3 m	High
053101	416002	Boggabilla	WaterNSW	Automatic	5.0	11.5	12.0	Quantitative	6 hrs [#]	>5.0 m	+/- 0.3 m	High
425 – Barwon Darling River												
052068	416001	Mungindi	WaterNSW	Automatic	6.1	6.7	7.2	Quantitative	24 hrs [#]	>6.1m	+/- 0.3 m	High
548000	422004	Mogil Mogil	WaterNSW	Automatic	7.5	n/a	8.3	Quantitative	24 hrs [#]	>7.5m	+/- 0.3 m	High
048226	422003	Collarenebri	WaterNSW	Automatic	5.8	7.9	8.5	Quantitative	24 hrs [#]	>5.8m	+/- 0.3 m	High
552014	422001	Walgett	WaterNSW	Automatic	10.5	12.0	12.5	Quantitative	24 hrs [#]	>10.5m	+/- 0.3 m	High
048214	422002	Brewarrina	WaterNSW	Automatic	6.4	7.0	9.5	Quantitative	3 days	>10m	+/- 0.3 m	High
548004	425003	Bourke	WaterNSW	Automatic	9.5	11.4	12.7	Quantitative	3 days	>13.2 m	+/- 0.3 m	High
548005	425004	Louth	WaterNSW	Automatic	8.6	10	12.0	Quantitative	3 days	>13.6 m	+/- 0.3 m	High
048213	425900	Tilpa	WaterNSW	Automatic	9.0	10.5	11.5	Quantitative	3 days	>12.2 m	+/- 0.3 m	High
546010	425002	Wilcannia	WaterNSW	Automatic	9.0	9.7	10.4	Quantitative	3 days	>10 m	+/- 0.3 m	High
047101	425001	Menindee	WaterNSW	Automatic	8.5	9.1	9.7	Quantitative	2 days	>8.8 m	+/- 0.3 m	High
047103	425005	Pooncarie	WaterNSW	Automatic	6.8	7.6	8.7	Quantitative	2 days [#]	>6.8m	+/- 0.3 m	High
547015	425007	Burtundy	WaterNSW	Automatic	6.1	n/a	7.7	Quantitative	2 days [#]	>6.1m	+/- 0.3 m	High
418 – Gwydir River Valley												
556007	418008	Bundarra	WaterNSW	Automatic	8.0	9.1	10.7	Quantitative	3 hrs [#]	>8 m	+/- 0.3 m	High
054141	418013	Gravesend	WaterNSW	Automatic	6.1	9.4	12.0	Quantitative	12 hrs	>6.1 m	+/- 0.3 m	High
553000	418001	Pallamallawa	WaterNSW	Automatic	6.0	9.5	10.4	Quantitative	12 hrs	>6 m	+/- 0.3 m	High
553002	418004	Yarraman Bridge	WaterNSW	Automatic	4.0	6.5	7.0	Quantitative	12 hrs 24 hrs	5.5 m >7 m	+/- 0.3 m	High
553001	418002	Moree	WaterNSW	Automatic	5.5	7.6	8.8	Quantitative	12 hrs 24 hrs	>5.5 m >7.0 m	+/- 0.3 m	High
419 – Namoi and Peel River Valley												
055277	419022	Manilla	WaterNSW	Automatic	6.1	9.7	10.7	Quantitative	7 hrs	>6.1 m	+/- 0.3 m	High
055307	419009	Tamworth	WaterNSW	Automatic	3.0	4.2	6.0	Quantitative	6 hrs	>3 m	+/- 0.3 m	High
555024	419909	Carroll Village	Local village	Manual	8.2	8.8	9.3	Quantitative	6 hrs [#]	>8.2 m	+/- 0.3 m	High
555000	419001	Gunnedah	WaterNSW	Automatic	7.3	7.6	7.9	Quantitative	24 hrs	>7.3 m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
419 – Namoi and Peel River Valley (continued)												
555004	419012	Boggabri	WaterNSW	Automatic	7.0	n/a	n/a	Quantitative	12 hrs	>7.0m	+/- 0.3 m	High
054152	419003	Narrabri Creek	WaterNSW	Automatic	4.9	6.4	6.7	Quantitative	6 hrs [#]	>4.9m	+/- 0.3 m	High
053105	419900	Wee Waa	WaterNSW	Automatic	5.3	6.4	6.7	Quantitative	12 hrs [#]	>5.3m	+/- 0.3 m	High
552000	419021	Bugilbone	WaterNSW	Automatic	4.9	5.5	n/a	Quantitative	12 hrs [#]	>4.9m	+/- 0.3 m	High
552011	419026	Goangra	WaterNSW	Automatic	5.5	6.7	7.8	Quantitative	12 hrs [#]	>5.5 m	+/- 0.3 m	High
420 – Castlereagh River Valley												
564000	420004	Mendooran	WaterNSW	Automatic	3.3	5.0	9.0	Quantitative	6 hrs [#]	>3.3m	+/- 0.3 m	High
051144	420001	Gilgandra	Local Council	Manual	5.0	6.4	7.9	Quantitative	6 hrs [#]	>5.0m	+/- 0.3 m	High
051143	420005	Coonamble	Local Council	Manual	n/a	4.9	5.2	Quantitative	6 hrs [#]	>4.9m	+/- 0.3 m	High
421 – Macquarie River Valley												
063287	421908	Bathurst	Local Council	Automatic	3.0	4.5	5.7	Quantitative	12 hrs	>6m	+/- 0.3 m	High
565002	421003	Wellington-Macquarie	WaterNSW	Automatic	4.0	9.1	12.2	Quantitative	3 hrs [#]	>4.0m	+/- 0.3 m	High
562006	421008	Wellington-Bell	Local Council	Manual	3.4	5.9	8.4	Quantitative	3 hrs [#]	>3.4m	+/- 0.3 m	High
563026	421911	Molong – Wellington Bridge ^	Local Council	Manual	n/a	3.3	3.9	Quantitative	1 hr [#]	>3.3m	+/- 0.3 m	High
n/a	n/a	Orange	No specific forecast location exists – forecast based on exceedence of a rainfall threshold as per trigger height column					Generalised	1 hr	>70mm in 6rs	n/a	n/a
565001	421001	Dubbo	WaterNSW	Automatic	5.5	7.9	11.0	Quantitative	6hrs [#]	>5.5m	+/- 0.3 m	High
551000	421006	Narromine	Local Council	Manual	5.5	9.1	13.7	Quantitative	6hrs [#]	>5.5m	+/- 0.3 m	High
051145	421014	Warren	WaterNSW	Manual	7.5	8.5	9.0	Quantitative	12hrs [#]	>7.5m	+/- 0.3 m	High
421 – Bogan River Valley												
550001	421076	Peak Hill	WaterNSW	Automatic	2.5	4.6	6.0	Quantitative	3 hrs [#]	>2.5m	+/- 0.3 m	High
551002	421083	Dandaloo	WaterNSW	Automatic	4.1	5.2	6.0	Quantitative	12 hrs [#]	>4.1m	+/- 0.3 m	High
051155	421905	Mudall	Bureau	Manual	2.7	3.0	3.6	Quantitative	24 hrs [#]	>2.7m	+/- 0.3 m	High
051156	421138	Nyngan	WaterNSW	Automatic	n/a	3.5	4.2	Quantitative	24 hrs [#]	>3.5m	+/- 0.3 m	High
048225	421902	Mulgawarrina	Bureau	Manual	4.2	5.0	5.5	Quantitative	24 hrs [#]	>4.2m	+/- 0.3 m	High
548010	421023	Gongolgon	WaterNSW	Automatic	0.8	1.0	1.3	Quantitative	24 hrs [#]	>0.8m	+/- 0.3 m	High
412 – Lachlan River Valley												
063278	412002	Cowra	WaterNSW	Automatic	8.5	10.7	13.4	Quantitative	6 hrs	>8.5 m	+/- 0.3 m	High
065087	412009	Canowindra	WaterNSW	Automatic	4.0	4.5	5.5	Quantitative	3 hrs [#]	>4.0m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
412 – Lachlan River Valley (continued)												
565007	412057	Nanami	WaterNSW	Automatic	7.4	9.7	10.7	Quantitative	6 hrs 12 hrs	>7.4m >10.7m	+/- 0.3 m	High
065086	412904	Eugowra Town	Bureau	Manual	8.0	n/a	9.0	Quantitative	6 hrs [#]	>8.0m	+/- 0.3 m	High
065088	412901	Forbes	Local Council	Automatic	8.8	9.5	10.55	Quantitative	12 hrs 24 hrs	>8.8 m >10.4 m	+/- 0.3 m	High
565003	412004	Cottons Weir	WaterNSW	Automatic	3.5	5.3	6.6	Quantitative	24 hrs [#]	>3.5m	+/- 0.3 m	High
565000	412036	Jemalong Weir	WaterNSW	Automatic	7.2	7.5	7.7	Quantitative	48 hrs	>7.2 m	+/- 0.3 m	High
550000	412006	Condobolin	WaterNSW	Automatic	5.2	5.9	6.7	Quantitative	48 hrs	>5.2 m	+/- 0.3 m	High
049125	412903	Euabalong	Bureau	Manual	6.4	n/a	6.8	Quantitative	3 days	>5.8 m	+/- 0.3 m	High
575013	412039	Hillston Weir	WaterNSW	Automatic	2.4	2.8	3.0	Quantitative	3 days [#]	>2.4 m	+/- 0.3 m	High
075171	412005	Booligal Weir	WaterNSW	Automatic	2.4	n/a	n/a	Quantitative	3 days [#]	>2.4 m	+/- 0.3 m	High
410 – Queanbeyan Molonglo River Valley												
570033	410901	Queanbeyan	Local Council	Manual	4.2	7.4	8.2	Quantitative	6 hrs	>4.2m	+/- 0.3 m	High
570943	410729	Oaks Estate	ACT Government	Automatic	4.6	5.8	6.4	Quantitative	6 hrs	>4.5m	+/- 0.3 m	High
410 – Murrumbidgee River Valley												
n/a	n/a	Cootamundra	No specific forecast location exists – forecast based on exceedence of a rainfall threshold as per trigger height column.					Generalised	1 hr [#]	>50mm in 6hrs	n/a	n/a
n/a	n/a	Stockinbingal	No specific forecast location exists – forecast based on exceedence of a rainfall threshold as per trigger height column					Generalised	1 hr [#]	>50mm in 6hrs	n/a	n/a
570031	410902	Cooma SMEC	Local Council	Automatic	n/a	n/a	1.8	Quantitative	1 hr [#]	>1.8 m	+/- 0.3 m	High
570035	410081	Cooma – Koolaroo	Local Council	Automatic	n/a	n/a	3.8	Quantitative	1 hr [#]	>3.8m	+/- 0.3 m	High
572014	410006	Tumut	WaterNSW	Automatic	2.0	2.6	3.7	Quantitative	3 hrs [#]	>2.0 m	+/- 0.3 m	High
073132	410004	Gundagai	WaterNSW	Automatic	6.1	7.6	8.5	Quantitative	12 hrs	>6.1 m	+/- 0.3 m	High
573000	410001	Wagga Wagga	WaterNSW	Automatic	7.3	9.0	9.6	Quantitative	12 hrs 24 hrs 30 hrs	7.3 m 9.0 m >9.6 m	+/- 0.3 m	High
574020	410005	Narranderra	WaterNSW	Automatic	6.7	7.3	8.2	Quantitative	5 days	6.7 m	+/- 0.3 m	High
575011	410021	Darlington Point	WaterNSW	Automatic	5.5	7.0	7.3	Quantitative	7 days	5.5 m	+/- 0.3 m	High
075170	410078	Carrathool	WaterNSW	Automatic	7.0	7.5	8.5	Quantitative	10 days	7.0 m	+/- 0.3 m	High
575010	410002	Hay-town	Local Council	Manual	6.5	7.5	8.0	Quantitative	10 days	6.5 m	+/- 0.3 m	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Forecast location	Station owner	Gauge type	Flood classification (m)			Prediction type	Target warning lead time		70% of peak forecasts within	Priority
					Minor	Moderate	Major		Time (hrs)	Trigger height (m)		
410 – Murrumbidgee River Valley (continued)												
549001	410130	Balranald-Weir Downstream	WaterNSW	Automatic	6.7	6.9	7.1	Quantitative	10 days	>6.7 m	+/- 0.3 m	High
409 – Murray River Valley												
572000	409001	Albury	WaterNSW	Automatic	4.3	4.9	5.5	Quantitative	12 hrs	>5.5 m	+/- 0.3 m	High
582003	409002	Corowa	WaterNSW	Automatic	4.6	5.9	8.6	Quantitative	24 hrs	>6.0 m	+/- 0.3 m	High
074246	409025	Yarrowonga D/S	WaterNSW	Automatic	6.4	6.7	7.8	Quantitative	24 hrs [#]	>6.4 m	+/- 0.3 m	High
574004	409202	Tocumwal	Murray Darling Basin Authority	Automatic	6.4	6.7	7.3	Quantitative	24 hrs [#]	>6.4 m	+/- 0.3 m	High
574000	409200	Moama/Echuca	Murray Darling Basin Authority	Automatic	93.5	93.9	94.4	Quantitative	24 hrs [#]	>93.5 m	+/- 0.3 m	High
574003	409207	Torumbarry Weir	Murray Darling Basin Authority	Automatic	7.3	7.6	7.8	Quantitative	24 hrs [#]	>7.3 m	+/- 0.3 m	High
575000	409005	Barham	WaterNSW	Automatic	5.5	5.8	6.1	Quantitative	24 hrs [#]	>5.5 m	+/- 0.3 m	High
076112	409204	Swan Hill	Murray Darling Basin Authority	Automatic	4.5	4.6	4.7	Quantitative	24 hrs [#]	>4.5 m	+/- 0.3 m	High
574010	409003	Deniliquin	WaterNSW	Automatic	4.6	7.2	9.4	Quantitative	24 hrs [#]	>4.6 m	+/- 0.3 m	High
575001	409014	Moulamein	WaterNSW	Automatic	4.6	5.2	6.1	Quantitative	24 hrs [#]	>4.6 m	+/- 0.3 m	High
574024	409023	Stevens Weir	WaterNSW	Automatic	5.5	5.8	6.6	Quantitative	24 hrs [#]	>5.5 m	+/- 0.3 m	High
049115	414203	Euston Weir	Murray Darling Basin Authority	Automatic	9.1	9.8	10.3	Quantitative	24 hrs [#]	>9.1m	+/- 0.3 m	High
076124	414210	Mildura AHD	Murray Darling Basin Authority	Manual	36.0	37.5	38.5	Quantitative	24 hrs [#]	>36.0 m	+/- 0.3 m	High
047100	425010	Wentworth Weir	WaterNSW	Automatic	7.3	7.9	9.1	Quantitative	24 hrs [#]	>7.3 m	+/- 0.3 m	High
076120	414200	Wakool Junction	Murray Darling Basin Authority	Automatic	8.8	10.5	11.5	Quantitative	24 hrs [#]	>8.8 m	+/- 0.3 m	High
076135	414201	Boundary Bend	Murray Darling Basin Authority	Automatic	8.0	8.5	9.0	Quantitative	24 hrs [#]	>8.0 m	+/- 0.3 m	High

Notes:

- # = Provisional flood classification or Warning Lead time not specified in Annex C of the New South Wales State Flood Plan

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

- ^ = Indicates one of the 13 identified locations where forecasts are provided for small catchments.
- All levels are in metres to local gauge datums unless indicated otherwise.
- AHD - Australian Height Datum. See Geoscience Australia for further information.
- n/a: Refers to stations flood classifications have not yet been defined by the New South Wales SES.
- u/s: Refers to upstream levels acting as a trigger for forecasts at the given location.
- AWRC number: Australian Water Resources Council number
- MHL: Manly Hydraulics Laboratory
- NSW OEH: NSW Office of Environment and Heritage
- Gauges owned by Murray Darling Basin Authority are managed as part of the Northern RWMP: Northern Regional Water Monitoring Partnership (Victoria)

Schedule 3a: Information locations with flood class levels defined

Bureau number	AWRC number	Station name	Station owner	Gauge type	Flood classification (m)			Priority
					Minor	Moderate	Major	
207 – Hastings/Camden Haven								
560045	207423	North Haven *	NSW OEH – Manly Hydraulics Laboratory	Automatic	1.0	1.5	1.7	High
208 – Manning								
060017	208440	Mount George *	NSW OEH – Manly Hydraulics Laboratory	Automatic	5.5	7.6	10.6	High
210 – Hunter								
561032	210406	Paterson #	NSW OEH – Manly Hydraulics Laboratory	Automatic	6.1	7.6	9.1	Medium
561022	210448	Hexham *	NSW OEH – Manly Hydraulics Laboratory	Automatic	1.9	2.9	3.8	High
561088	210456	Stockton	NSW OEH – Manly Hydraulics Laboratory	Automatic	1.2	1.3	1.7	High
418 – Gwydir								
554009	418025	Bingara	WaterNSW	Automatic	5.5	7.6	9.1	High
419 – Namoi								
055310	419027	Breeza *	WaterNSW	Automatic	n/a	3.9	4.8	High
555033	419910	Peel River at Pearly Gates *	Local Council	Automatic	n/a	n/a	n/a	High
412 – Lachlan								
065095	412030	Eugowra Smithfield *	WaterNSW	Automatic	6.5	8.1	8.5	High
575006	412011	Lake Cargellico #	WaterNSW	Automatic	1.5	1.9	2.0	High
410 – Queanbeyan/Molonglo								
570965	410734	Tinderry – NSW *	ACT Government	Automatic	3.0	3.8	5.0	High
570938	410760	Wickerslack – NSW *	ACT Government	Automatic	2.0	4.0	5.0	High
570012	410705	Burbong – NSW *	ACT Government	Automatic	1.6	2.2	2.8	High
410 – Murrumbidgee								
570003	410761	Lobbs Hole - ACT #	ACT Government	Automatic	4.5	11.0	13.0	Medium
570017	410738	Mt MacDonald *	ACT Government	Automatic	3.2	9.2	10.0	High
549005	410003	Balranald Town	WaterNSW	Manual	6.4	6.7	7.0	Medium

Notes:

- n/a refers to locations at which the New South Wales State Emergency Service have yet to define flood classifications for.
- All levels are in metres to local gauge datums unless indicated otherwise.
- All flow rates are in cubic metres per second (m³/sec) unless indicated otherwise
- n/a indicates flood class levels not yet determined
- All levels indicate flooding in the local reaches of the stream
- AHD - Australian Height Datum. See Geoscience Australia for further information

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

- AWRC number: Australian Water Resources Council number
- NSW OEH: NSW Office of Environment and Heritage

Schedule 3b: River and rainfall alert conditions

River alerting stations

Basin	Station name	Criteria	Priority
Namoi/Peel	Nundle (Pearly Gates)	3.0m (assumed datum)	High

Rainfall alerting stations

Basin	Station name	Criteria	Priority
Cooma	Cooma (Benefield)	20mm in 30 minutes	High
Cooma	Cooma (Bondo)	20mm in 30 minutes	High
Cooma	Cooma (Cherry Tree)	20mm in 30 minutes	High
Cooma	Cooma (Myalla Lake)	20mm in 30 minutes	High
Cooma	Cooma (Willarney)	20mm in 30 minutes	High
Cooma	Cooma (Willow Grove)	20mm in 30 minutes	High
Cooma	Cooma SMEC (Back Ck)	20mm in 30 minutes	High
Cooma	Koolaroo (Cooma Creek)	20mm in 30 minutes	High
Molong	Molong (Bonnie Doon)	25mm in 30 minutes	High
Molong	Molong TM	25mm in 30 minutes	High
Molong	Borenore (Lyden Brae)	25mm in 30 minutes	High
Namoi/Peel	Nundle (Head of Peel)	20mm in 30 minutes	High
Namoi/Peel	Nundle (Keeva)	20mm in 30 minutes	High
Namoi/Peel	Nundle (Malonga)	20mm in 30 minutes	High
Namoi/Peel	Nundle (Pearly gates)	20mm in 30 minutes	High
Namoi/Peel	Crawney mountain	20mm in 30 minutes	High
Murrumbidgee	Stockinbingal (Sunnydale)	25mm in 30 minutes	High
Orange	Canobolas (Hillview)	20mm in 30 minutes	High
Orange	Orange (Agriculture)	20mm in 30 minutes	High
Orange	Canobolas (Hillview)	20mm in 30 minutes	High
Orange	Orange (Kite St)	20mm in 30 minutes	High
Orange	Orange (North Orange WTP)	20mm in 30 minutes	High
Orange	Orange (Spring Ck WTP)	20mm in 30 minutes	High
Orange	Orange (STP)	20mm in 30 minutes	High

Schedule 4: River data locations

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
201 – Tweed Valley					
058204	201906	BOAT HARBOUR	Local Council	Automatic	High
558077	201005	BOAT HARBOUR (NOBBYS CREEK)	WaterNSW	Automatic	Low
558065	201455	BRAY PARK WEIR	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
058011	201008	CHILLINGHAM	Local Council	Automatic	High
558028	201905	CLARRIE HALL DAM	Local Council	Automatic	Low
558009	n/a	CLARRIE HALL DAM D/S	Local Council	Automatic	Low
558045	201448	COBAKI	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
558029	201428	DRY DOCK (TERRANORA INLET)	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
058193	201001	EUNGELLA	WaterNSW	Automatic	High
558051	201422	KYNNUMBOON	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558041	201429	LETITIA 2A	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558067	201465	MURWILLUMBAH BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
558018	n/a	PALMERS ROAD	Local Council	Automatic	Low
558056	201447	TERRANORA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558014	201432	TUMBULGUM	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
558088	n/a	TYALGUM BRIDGE	Local Council	Automatic	Medium
058167	201900	UKI	WaterNSW	Automatic	High
202 – Brunswick Valley					
558043	202416	BOGANGAR	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558063	202403	BRUNSWICK HEADS	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558050	202418	KINGSCLIFF	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558005	202901	MIDDLE POCKET	Local Council	Automatic	High
558004	202903	THE POCKET	Local Council	Automatic	High
558008	202904	MULLUMBIMBY CREEK	Local Council	Automatic	High
558007	202001	SHERRYS BRIDGE (DURRUMBUL)	WaterNSW	Automatic	High
558095	n/a	WOORYUNG RD	North Byron Parklands – Manly Hydraulics Laboratory	Automatic	Medium
558096	n/a	YELGUN	North Byron Parklands – Manly Hydraulics Laboratory	Automatic	Medium
203 – Richmond/Wilsons Valley					
558097	203471	BALLINA	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
058202	203009	BENTLEY	WaterNSW	Automatic	High
558044	203461	BYRNES POINT	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558013	203004	CASINO (AUTOMATIC)	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
203 – Richmond/Wilsons Valley (continued)					
058206	203909	CORNDALE	WaterNSW	Automatic	High
558037	203034	DOUBTFUL	WaterNSW	Automatic	High
558047	203427	EAST GUNDERIMBA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
058200	203014	ELTHAM	WaterNSW	Automatic	High
558048	203462	EVANS HEAD	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558075	n/a	GOOLMANGAR	Local Council	Automatic	Medium
558052	203455	LAKE AINSWORTH	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
558087	n/a	LISMORE DAWSON STREET	Local Council	Automatic	Medium
058162	203902	NASHUA	Local Council	Automatic	High
058180	203901	NIMBIN	Local Council	Automatic	High
558015	203030	RAPPVILLE (MYRTLE CK)	WaterNSW	Automatic	High
558000	203002	REPENTANCE	WaterNSW	Automatic	High
058199	203010	ROCK VALLEY	WaterNSW	Automatic	High
558070	n/a	TEVEN	WaterNSW	Automatic	Low
058147	203906	THE CHANNON	WaterNSW	Automatic	High
External	203023	TOONUMBAR DAM D/S	WaterNSW	Automatic	Medium
558039	203042	TOONUMBAR DAM WL	WaterNSW	Automatic	Medium
058201	203443	TUNCESTER	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
558054	203432	ROCKY MOUTH CREEK	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558038	203041	YORKLEA	WaterNSW	Automatic	High
558076	n/a	TUCKURIMBA (BAXTER LANE)	Local Council	Automatic	Low
558058	203480	TUCOMBIL HIGHWAY BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
058061	203412	WOODBURN	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
558012	203402	WOODLAWN	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
204 – Clarence Valley					
557011	204030	ABERFOYLE	WaterNSW	Automatic	High
057114	204900	BARYULGIL	WaterNSW	Automatic	High
558074	204041	BAWDEN BRIDGE	WaterNSW	Automatic	High
560032	204003	BILLYRIMBA	WaterNSW	Automatic	High
557004	204043	BONALBO	WaterNSW	Automatic	Medium
057116	204015	BROADMEADOWS	WaterNSW	Automatic	High
558027	204406	BRUSHGROVE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
058181	204903	COPMANHURST	Local Council	Manual	Medium
559025	204017	DORRIGO	WaterNSW	Automatic	High
557007	204046	DRAKE	WaterNSW	Automatic	High
557009	204008	EBOR	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
204 – Clarence Valley (continued)					
557008	204056	GIBALTAR RANGE	WaterNSW	Automatic	Low
059123	204906	GLENREAGH (u/s automatic)	WaterNSW	Automatic	High
058178	204904	GRAFTON-PRINCE ST (manual)	Local Council	Manual	Medium
058158	204902	HEIFER STATION (manual)	Local Council	Manual	Medium
057113	204004	JACKADGERY	WaterNSW	Automatic	High
559023	204025	KARANGI	WaterNSW	Automatic	High
557005	204007	LILYDALE	WaterNSW	Automatic	High
557003	204014	MITCHELL	WaterNSW	Automatic	High
059124	204001	NYMBOIDA	WaterNSW	Automatic	High
558040	204069	NYMBOIDA R D/S NYMBOIDA WEIR	WaterNSW	Automatic	Medium
559018	204068	ORANGE GROVE	WaterNSW	Automatic	High
558042	204426	PALMERS CHANNEL	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
558055	204414	ROGANS BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
556024	204036	SANDY HILL	WaterNSW	Automatic	High
556023	204031	SHANNON VALE	WaterNSW	Automatic	Medium
557000	204002	TABULAM	WaterNSW	Automatic	High
558073	204465	TYNDALE (COLDSTREAM RIVER JUNCTION)	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
556026	204039	WYLIE CREEK	WaterNSW	Automatic	Medium
558062	204452	YAMBA TIDE GAUGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
205 – Bellingen and Nambucca Valleys					
n/a	205425	BOWRAVILLE DOWNSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
559045	205015	BOWRAVILLE UPSTREAM	WaterNSW	Automatic	High
n/a	205490	WARRELL CREEK	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
559055	n/a	COFFS HARBOUR (BAKERS RD)	Local Council	Automatic	Low
559057	n/a	COFFS HARBOUR (BRAY STREET)	Local Council	Automatic	Low
559059	n/a	COFFS HARBOUR (ENGLANDS ROAD)	Local Council	Automatic	Low
559058	n/a	COFFS HARBOUR (GUNDAGAI STREET)	Local Council	Automatic	Low
559053	n/a	COFFS HARBOUR (INDUSTRIAL DRIVE)	Local Council	Automatic	Low
559056	n/a	COFFS HARBOUR (LOADERS LANE)	Local Council	Automatic	Low
559054	n/a	COFFS HARBOUR (SAWTELL)	Local Council	Automatic	Low
559014	205470	COFFS INNER HARBOUR	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
559047	205016	FOSTERS	WaterNSW	Automatic	Medium
559004	205014	GLENNIFFER	WaterNSW	Automatic	High
559008	205440	KOOROWI	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
559039	205460	NEWPORTS CREEK	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
559020	205458	NEWRY ISLAND	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
205 – Bellinger and Nambucca Valleys (continued)					
559042	205466	STUARTS ISLAND DOWNSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
559005	205414	UTUNGUN TAYLORS ARM	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
559043	205441	WOOLGOOLGA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
559044	205462	WOOLI RIVER ENTRANCE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
559063	n/a	BENNETTS ROAD (COFFS HARBOUR)	Local Council	Automatic	Low
559068	n/a	BOWRAVILLE (SOUTH CREEK)	Local Council	Automatic	Low
559069	n/a	PACIFIC HIGHWAY (CORINDI RIVER)	Local Council	Automatic	Low
559070	n/a	PACIFIC HIGHWAY (CORINDI RIVER)	Local Council	Automatic	Low
206 – Macleay Valley					
559151	206459	ALDAVILLA DOWNSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
557012	206018	APSLEY FALLS	WaterNSW	Automatic	High
557013	206033	APSLEY GORGE	WaterNSW	Automatic	High
559003	206405	BELMORE ENTRANCE	Local Council	Automatic	Low
559029	n/a	BELMORE US FLOODGATES	Local Council	Automatic	Low
559032	n/a	CLYBUCCA CK US FLOODGATES	Local Council	Automatic	Low
557006	206002	CONINSIDE (WOLLOMOMBI)	WaterNSW	Automatic	High
559037	n/a	COOLAMBATTI	Local Council	Automatic	Low
556022	206037	DUMARESQ DAM D/S	WaterNSW	Automatic	Low
External	206906	GLEN FORRES	WaterNSW	Automatic	Medium
557002	206001	JEOGLA	WaterNSW	Automatic	High
559013	206459	JERSEYVILLE	Local Council	Automatic	Low
559031	206460	KINCHELA DS FLOODGATES	Local Council	Automatic	Low
559010	206426	KINCHELA CREEK	Local Council	Automatic	Low
556016	206027	KIRBY FARM	Local Council	Automatic	High
059056	206900	KOGAL	Local Council	Automatic	High
556034	206039	MALPAS DAM	WaterNSW	Automatic	Low
059128	206904	MOPARRABAH	Local Council	Automatic	High
556020	206026	NEWHOLME	WaterNSW	Automatic	High
559035	n/a	PLUMMERS LANE	Local Council	Automatic	Low
559036	n/a	RAINBOW BEACH	Local Council	Automatic	Low
559034	n/a	SEVEN OAKS	Local Council	Automatic	Low
559026	206601	SEALE ROAD	Local Council	Automatic	Low
559041	206456	SOUTH WEST ROCKS	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
057112	206009	TIA	WaterNSW	Automatic	High
556021	206008	TIVERTON	WaterNSW	Automatic	Low
559038	206907	TOOROOKA	Local Council	Automatic	High
559002	206011	TURNERS FLAT	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
206 – Macleay Valley (continued)					
556033	206038	URANDANGIE	WaterNSW	Automatic	Low
556031	206035	WILLOW GLEN	WaterNSW	Automatic	Low
059125	206903	WITTITRIN	Local Council	Automatic	High
556012	206025	DANGARS FALLS	WaterNSW	Automatic	Low
559067	n/a	SHERWOOD BRIDGE	Local Council	Automatic	Low
556022	206037	DUMARESQ DAM D/S	WaterNSW	Automatic	Low
559037	n/a	COLLOMBATTI	Local Council	Automatic	Low
207 – Hastings/Camden Haven Valley					
560033	207014	AVENAL	WaterNSW	Automatic	High
060138	207010	BEECHWOOD	WaterNSW	Automatic	High
560031	207006	BIRDWOOD	WaterNSW	Automatic	High
560000	207013	BUNOO RIVER D/S ELLENBOROUGH	WaterNSW	Automatic	High
559033	207452	CRESCENT HEAD	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
560042	207444	DENNIS BRIDGE DOWNSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
560022	207909	HERONS CREEK BRIDGE	Local Council	Automatic	High
560020	207442	KOREE ISLAND	Local Council	Automatic	Low
560016	207904	LONG FLAT	Local Council	Automatic	High
560025	n/a	LORNE BRIDGE	Local Council	Automatic	Medium
560003	207406	MARIA RIVER (GREEN VALLEY)	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560002	207015	MT SEAVIEW	WaterNSW	Automatic	High
560045	207423	NORTH HAVEN	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560012	207906	REDOAK	Local Council	Automatic	High
560047	207437	WEST HAVEN	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
560011	207415	TELEGRAPH POINT	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560064	207905	TELEGRAPH POINT (COUNCIL)	Local Council	Automatic	Medium
560010	207908	UPSALLS CREEK BRIDGE	Local Council	Automatic	High
560047	207437	HASTINGS RIVER BREAKWATER (TIDAL)	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
560050	n/a	TELEGRAPH POINT (WTP)	Local Council	Automatic	Low
208 – Manning Valley					
060128	208009	BARRY	WaterNSW	Automatic	High
560065	208436	ASHLEA BRIDGE D/S (DINGO CK)	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560060	208028	WAUKIVORY	WaterNSW	Automatic	High
560063	208907	BELLEVUE	WaterNSW	Automatic	High
060137	208011	BRETTI (MACKAY)	WaterNSW	Automatic	High
560008	208404	CROKI	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560051	208471	CROWDY BOAT HARBOUR (TIDAL)	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560006	208003	DOON AYR	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
208 – Manning Valley (continued)					
560041	208415	FARQUHAR INLET	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560001	208006	FORBESDALE (BARRINGTON R)	WaterNSW	Automatic	High
560061	208008	FORBESDALE (GLOCESTER R)	WaterNSW	Automatic	High
060129	208004	KILLAWARRA	WaterNSW	Automatic	High
560037	208015	LANSDOWNE	WaterNSW	Automatic	High
060117	208440	MOUNT GEORGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560035	208007	NOWENDOC	WaterNSW	Automatic	Medium
060118	208005	ROCKS CROSSING	WaterNSW	Automatic	High
209 – Karuah Valley					
560059	209905	COOMBA PARK	Local Council	Automatic	Low
560058	209904	CRAWFORD PARK	Local Council	Automatic	High
560044	209470	FORSTER TIDE GAUGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
561106	209485	KARUAH	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561040	209003	KARUAH R AT BOORAL	WaterNSW	Automatic	Low
561060	209461	MALLABULA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561104	209902	MARKWELL (MYALL R)	Local Council	Automatic	High
560048	209404	NABIAC	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
n/a	209406	PACIFIC PALMS WHARF	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
561153	209474	SHOAL BAY	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
560053	209401	TUNCURRY WALLAMBA R	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
560056	209903	UPPER MARKWELL	Local Council	Automatic	High
560049	209006	WILLINA (WANG WAUK RIVER)	WaterNSW	Automatic	High
560057	n/a	TUNCURRY (POINT RD)	Local Council	Automatic	High
210 – Hunter Valley					
561024	210056	ABERDEEN	WaterNSW	Automatic	High
561042	210039	BELLTREES	WaterNSW	Automatic	Medium
061372	210061	BLANDFORD	WaterNSW	Automatic	High
561061	210459	BOLWARRA UPSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561071	210451	BOLWARRA DOWNSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561058	210135	BRICKMANS BRIDGE	WaterNSW	Automatic	High
External	210033	CAMYR ALLYN	WaterNSW	Automatic	High
561048	210114	CARROWBROOK	WaterNSW	Automatic	Medium
561059	210007	CHICHESTER	WaterNSW	Automatic	High
External	210006	COGGAN	WaterNSW	Automatic	High
561101	210906	CRESSFIELD	WaterNSW	Automatic	High
561075	210409	DUNMORE	WaterNSW	Automatic	Medium
561055	210130	FOY BROOK D/S BOWMANS CK BRIDGE	WaterNSW	Automatic	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
210 – Hunter Valley (continued)					
561012	210097	GLENBAWN DAM WL	WaterNSW	Automatic	High
061185	210015	GLENBAWN DAM D/S	WaterNSW	Automatic	High
External	210071	GLENDON BROOK	WaterNSW	Automatic	Medium
561049	210117	GLENNIES CREEK DAM WL	WaterNSW	Automatic	High
561021	210432	GREEN ROCKS	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561016	210064	GRETA	WaterNSW	Automatic	High
061348	210052	GUNDY	WaterNSW	Automatic	High
561019	210022	HALTON	WaterNSW	Automatic	High
561022	210448	HEXHAM BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
561023	210410	HINTON BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561121	210908	CROUDACE RD,NEWCASTLE	Local Council	Automatic	High
561120	210909	KATORA (NEWCASTLE)	Local Council	Automatic	High
062094	210016	KERRABEE	WaterNSW	Automatic	High
561017	210083	LIDDELL PUMP STN	WaterNSW	Automatic	High
561047	210110	LIDDELL (BAYSWATER CK)	WaterNSW	Automatic	Low
561011	210021	LOSTOCK DAM D/S	WaterNSW	Automatic	High
561013	210102	LOSTOCK DAM WL	WaterNSW	Automatic	Low
561053	210128	MAISON DIEU	WaterNSW	Automatic	High
561064	210455	MCKIMMS CORNER	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
External	210091	MERRIWA	WaterNSW	Automatic	Medium
561014	210044	MIDDLE FALBROOK	WaterNSW	Automatic	High
561003	210018	MOONAN DAM SITE	WaterNSW	Automatic	Medium
561041	210017	MOONAN BROOK	WaterNSW	Automatic	Medium
561002	210430	MORPETH	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561039	210475	OAKHAMPTON BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
61373	210093	PARKVILLE	WaterNSW	Automatic	High
561032	210406	PATERSON D/S RAILWAY BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561046	210089	ROTHBURY	WaterNSW	Automatic	High
561007	210014	ROUCHEL BROOK	WaterNSW	Automatic	High
561008	210031	SANDY HOLLOW	WaterNSW	Automatic	High
561087	210462	SEAHAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561099	210907	SCONE (DRY CREEK)	Local Council	Automatic	High
561088	210456	STOCKTON BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561045	210084	THE ROCKS NO.2	WaterNSW	Automatic	High
561033	210011	TILLIGRA	WaterNSW	Automatic	High
561050	210125	U/S BAYSWATER CK JN	WaterNSW	Automatic	Medium
561051	210126	U/S FOY BROOK	WaterNSW	Automatic	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
210 – Hunter Valley (continued)					
561052	210127	U/S GLENNIES CK	WaterNSW	Automatic	Medium
561054	210129	U/S SINGLETON	WaterNSW	Automatic	Medium
561130	210066	U/S VALLANCE	WaterNSW	Automatic	Medium
561020	210079	VACY	WaterNSW	Automatic	Medium
561093	210428	WALLIS CREEK UPSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561095	210457	WALLIS CREEK DOWNSTREAM	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561094	210453	WALLIS CREEK AT LOUTH PARK	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561006	210004	WARKWORTH	WaterNSW	Automatic	High
561009	210040	WYBONG	WaterNSW	Automatic	High
561018	210124	YARRANDI BRIDGE	WaterNSW	Automatic	Medium
561100	n/a	WINGEN	Local Council	Automatic	Low
561057	210134	LONG POINT	WaterNSW	Automatic	Low
211 – Macquarie-Tuggerah Lakes/Wyong Valley					
561068	211450	BARNSLEY VALE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561073	211455	COCKLE RAILWAY STATION	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561074	211470	COORANBONG	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
061383	211991	GEARS	Local Council	Automatic	High
561038	211009	GRACEMERE	WaterNSW	Automatic	High
061380	211010	JILLIBY	WaterNSW	Automatic	High
561062	211475	KALANG RD	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
061384	211990	KANGY ANGY	Local Council	Automatic	High
561063	211460	MARMONG POINT	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
561152	211912	OURIMBAH	Local Council	Automatic	Low
561034	211013	OURIMBAH CK U/S WEIR	WaterNSW	Automatic	Medium
561086	211425	OURIMBAH CK AT LEES BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561131	211913	PORTERS CREEK	Local Council	Automatic	Low
561089	211480	STOCKTON CREEK (MORRISET)	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561090	211462	SWANSEA CHANNEL	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
561000	211401	TOUKLEY - TUGGERAH LAKE	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
561092	211419	TUMBI UMBI CREEK	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
561066	211417	U/S WYONG WEIR	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
561091	211420	WALLARAH CREEK (BRIDGE)	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
061386	211992	WYONG BRIDGE U/S	Local Council	Automatic	High
561031	211014	YARRAMALONG	WaterNSW	Automatic	High
561001	211418	THE ENTRANCE (TUGGERAH LAKE)	Local Council	Automatic	Low
212 – Central Coast					
561129	212911	ERINA HEIGHTS	Local Council	Automatic	Low

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
212 – Central Coast (continued)					
561128	212912	KINCUMBER CREEK	Local Council	Automatic	Low
561126	212435	NARARA	Local Council	Automatic	Low
561127	212913	WEST GOSFORD	Local Council	Automatic	Low
561125	n/a	LISAROW	Local Council	Automatic	Low
212 – Nepean/Hawkesbury Valley					
568142	212211	AVON DAM WL	WaterNSW	Automatic	Medium
568211	212204	AVON DAM ROAD	WaterNSW	Automatic	High
568215	212272	BERRIMA	WaterNSW	Automatic	Low
568156	212233	BROUGHTONS PASS	WaterNSW	Automatic	High
567045	212404	CASTLEREAGH	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
568143	212232	CATARACT DAM WL	WaterNSW	Automatic	High
563039	212260	CEDAR FORD	WaterNSW	Automatic	High
068211	212220	CORDEAUX DAM WL	WaterNSW	Automatic	High
563010	212427	EBENEZER	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
563011	212410	FREEMANS REACH	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
563075	212018	GLEN DAVIS	WaterNSW	Automatic	Medium
568152	212271	GOLDEN VALLEY	WaterNSW	Automatic	High
068215	212009	GREENSTEAD	WaterNSW	Automatic	High
561076	212429	GUNDERMAN CARAVAN PARK	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
563024	212025	GROSEWOLD	WaterNSW	Automatic	High
561036	212021	HOWES VALLEY	WaterNSW	Automatic	Medium
568144	212270	JOORILAND	WaterNSW	Automatic	High
563000	212250	KELPIE POINT	WaterNSW	Automatic	High
563074	212011	LITHGOW	WaterNSW	Automatic	Low
568171	212238	MENANGLE WEIR	WaterNSW	Automatic	High
570027	212217	MURRAYS FLAT	WaterNSW	Automatic	Medium
068212	212205	NEPEAN DAM WL	WaterNSW	Automatic	High
563021	212203	PHEASANTS NEST	WaterNSW	Automatic	High
568172	212053	PICTON	WaterNSW	Automatic	Low
568140	212280	SMALLWOODS CROSSING	WaterNSW	Automatic	Low
567070	212915	SOUTH CREEK (ELIZABETH DR)	WaterNSW	Automatic	Medium
567071	212916	GT WESTERN HWY	WaterNSW	Automatic	Medium
561065	212431	SPENCER	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
061353	212010	ST ALBANS	WaterNSW	Automatic	High
563033	212290	UPPER COLO	WaterNSW	Automatic	High
563076	212054	WALLERAWANG	WaterNSW	Automatic	Low
563077	212055	WALLERAWANG COLLIERY U/S	WaterNSW	Automatic	Low

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
212 – Nepean/Hawkesbury Valley (continued)					
567099	212243	WARRAGAMBA DAM	WaterNSW	Automatic	High
568214	n/a	WEROMBI	WaterNSW	Automatic	Low
053068	212001	YARRAMUNDI	WaterNSW	Automatic	Low
563089	2122512	GLENROY BRIDGE	WaterNSW	Automatic	Low
567044	212426	WINDSOR PWD	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
567062	212903	WINDSOR SWC	WaterNSW	Automatic	High
567073	212049	DEBRINCAT AVENUE	WaterNSW	Automatic	Low
567098	212200	NORTH RICHMOND WPS	WaterNSW	Automatic	High
570062	n/a	THE TOWERS	Local Council	Automatic	Low
570066	n/a	LANDSDOWN BRIDGE	Local Council	Automatic	Low
570067	n/a	INVERALOCHY BRIDGE	Local Council	Automatic	Low
570068	n/a	PEJAR DAM	Local Council	Automatic	Low
570069	n/a	SOOLEY DAM	Local Council	Automatic	Low
570070	n/a	MARSDEN WEIR	Local Council	Automatic	Low
561149	212440	PATONGA (TIDAL)	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
213 – Georges River Valley					
567088	213012	BUNBURY CURRAN CK AT R'WAY PDE	WaterNSW	Automatic	Medium
567061	213407	IRELANDS BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
567060	213903	KELSO CREEK D/S LEVEE	Local Council	Automatic	High
567048	213902	KELSO CREEK U/S LEVEE	Local Council	Automatic	Low
567067	213402	LANSDOWNE BRIDGE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
566014	213401	LANSVALE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
567080	203011	ORANGE GROVE ROAD	WaterNSW	Automatic	Medium
567089	203014	SACKVILLE RD	WaterNSW	Automatic	Medium
566085	213452	BUNDEENA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
568145	213013	REDFERN RD	WaterNSW	Automatic	High
566013	213404	SCRIVENER ST.	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
567041	213009	SMITHFIELD RD	WaterNSW	Automatic	Low
566062	213901	THE NEEDLES	Local Council	Automatic	Low
068070	213210	WORONORA DAM LEVEL	WaterNSW	Automatic	Low
566082	213018	MINTO HEIGHTS	WaterNSW	Automatic	Low
213 – Parramatta River Valley					
567057	213991	DARLING MILLS CK	Greater Sydney Local Land Services	Automatic	Medium
567072	213994	LOYALTY ROAD BASIN	Greater Sydney Local Land Services	Automatic	Medium
567074	213005	BRIENS RD	Greater Sydney Local Land Services	Automatic	Medium
567058	213993	JOHNSTONS BRIDGE	Greater Sydney Local Land Services	Automatic	Medium
567056	213990	REDBANK ROAD	Greater Sydney Local Land Services	Automatic	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
213 – Parramatta River Valley (continued)					
567107	213004	MARSDEN WEIR	Greater Sydney Local Land Services	Automatic	Medium
567109	n/a	BLACKTOWN CREEK	Greater Sydney Local Land Services	Automatic	Low
213 – Sydney Basin					
566007	213411	CANTERBURY ROAD (COOKS R)	NSW OEH – Manly Hydraulics Laboratory	Automatic	High
215 – Shoalhaven Valley					
568044	215471	CROOKHAVEN HEADS	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
568226	n/a	BROUGHTON CREEK	Local Council	Automatic	Low
568159	215904	DANJERA DAM	Local Council	Automatic	Medium
568196	215906	DANJERA CREEK	Local Council	Automatic	High
068232	215207	FOSSICKERS FLAT	WaterNSW	Automatic	High
568179	215410	GERORA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
n/a	215430	GRADYS CARAVAN PARK	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
068233	215200	GRASSY GULLY	WaterNSW	Automatic	High
568180	215417	GREENWELL POINT	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
068181	215220	HAMPDEN BRIDGE	WaterNSW	Automatic	High
070335	215208	HILLVIEW	WaterNSW	Automatic	High
568183	215454	LAKE WOLLUMBOOLA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
569010	215210	MONGARLOWE	WaterNSW	Automatic	High
569019	215209	MOUNTVIEW	WaterNSW	Automatic	High
568195	215470	SHOALHAVEN HEADS	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
568157	215212	TALLOWA DAM	WaterNSW	Automatic	High
568202	n/a	TOMERONG CREEK	Local Council	Automatic	Low
570037	215002	WARRI	WaterNSW	Automatic	Medium
216 – Clyde Valley – Jervis Bay					
569018	216002	BROOMAN	WaterNSW	Automatic	Low
568173	216004	CURRAMBENE CK AT FALLS CK	WaterNSW	Automatic	Low
568182	216420	LAKE CONJOLA	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
568194	216470	HMAS CRESWELL (TIDAL)	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
568198	216412	SUSSEX INLET	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
568200	216415	ISLAND POINT ROAD	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
568225	216405	CURRARONG	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
569036	216440	LAKE TABOURIE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
569037	216435	BURRILL LAKE	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
569038	n/a	MILLARDS CREEK	Local Council	Automatic	Low
217 – Moruya					
069123	217402	MORUYA HOSPITAL	NSW OEH – Manly Hydraulics Laboratory	Automatic	Medium
569041	217007	RIVERVIEW	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
217 – Moruya (continued)					
569025	217006	NERINGLA	WaterNSW	Automatic	Medium
218 – Tuross Valley					
569012	218001	TUROSS VALE	WaterNSW	Automatic	Low
569015	218008	EUROBODALLA	WaterNSW	Automatic	Low
569011	218007	WADBILLIGA	WaterNSW	Automatic	Low
569026	218007	D/S WADBILIGA JUNCTION	WaterNSW	Automatic	Low
569031	218415	BARLOWS BAY	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
219 – Bega Valley					
569008	219025	ANGLEDALE	WaterNSW	Automatic	High
569016	219027	BROGO DAM STORAGE	WaterNSW	Automatic	Low
569021	219022	CANDELO DAMSITE	WaterNSW	Automatic	High
569013	219003	MORANS CROSSING	WaterNSW	Automatic	High
569027	219017	DOUBLE CK NEAR BROGO	WaterNSW	Automatic	Medium
569028	219032	BEGA R AT KANOONA	WaterNSW	Automatic	Medium
569032	219405	REGATTA POINT	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
569033	219470	BERMAGUI HARBOUR (TIDAL)	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
220 – Towamba Valley					
569040	220470	EDEN BOAT HARBOUR	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
569014	220003	LOCHIEL	WaterNSW	Automatic	Low
569029	220410	MERIMBULA WHARF	NSW OEH – Manly Hydraulics Laboratory	Automatic	Low
569017	220004	TOWAMBA	WaterNSW	Automatic	Low
222 – Snowy Valley					
570020	222019	BOMBALA	WaterNSW	Automatic	High
070008	222013	BURNT HUT CROSSING	WaterNSW	Automatic	High
071019	222026	DALGETY WEIR	WaterNSW	Automatic	High
569017	220004	TOWAMBA	WaterNSW	Automatic	High
570056	222017	THE HUIT	WaterNSW	Automatic	High
070309	222008	QUIDONG	WaterNSW	Automatic	Medium
570018	222004	WELLESLEY (ROWES)	WaterNSW	Automatic	Medium
422 – Culgoa Valley					
548007	422011	MUNDIWA (U/S COLLERINA)	WaterNSW	Automatic	High
422 – Warrego Valley					
548018	423005	TURRA	WaterNSW	Automatic	High
548001	423001	FORDS BRIDGE	WaterNSW	Automatic	High
422 – Severn/MacIntyre Valley					
556010	416021	WESTHOLME	Local Council	Automatic	High
541066	416305	BEEBO	Queensland Station	Automatic	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
422 – Severn/MacIntyre Valley (continued)					
556004	416023	BOLIVIA	WaterNSW	Automatic	Medium
054155	416007	BONSHAW	WaterNSW	Automatic	High
041519	416415	BOOBA SANDS	Queensland Station	Automatic	Medium
553027	416054	BOOLATAROO	WaterNSW	Automatic	Medium
553024	416037	BOOMI OFFTAKE	WaterNSW	Automatic	Medium
052084	416043	BOOMI WEIR 3	WaterNSW	Automatic	Low
556003	416003	CLIFTON	WaterNSW	Automatic	Medium
554015	416020	COOLATI	WaterNSW	Automatic	Medium
556002	416032	DONALDSON	WaterNSW	Automatic	Medium
554012	416067	DUCCA MARRIN	WaterNSW	Automatic	High
556011	416057	ELSMORE BRIDGE	WaterNSW	Automatic	High
042106	417204	FENTON	WaterNSW	Automatic	Medium
556013	416055	FERNDALE	Local Council	Automatic	High
556019	416022	FLADBURY	WaterNSW	Automatic	Medium
552019	416052	GALLOWAY	WaterNSW	Automatic	Medium
541051	416315	GLENLYON DAM WL	Queensland Station	Automatic	High
541052	416309	GLENLYON DAM D/S	Queensland Station	Automatic	High
541067	416040	GLENARBON WEIR D/S	WaterNSW	Automatic	Medium
554017	416069	GLENORCHY	WaterNSW	Automatic	High
541030	416201	GOONDIWINDI WEIR	WaterNSW	Automatic	Low
556025	416059	GRED	Local Council	Automatic	High
054146	416008	HAYSTACK	WaterNSW	Automatic	High
054156	416012	HOLDFAST	WaterNSW	Automatic	High
041520	416402	INGLEWOOD	WaterNSW	Automatic	High
556008	416016	INVERELL (MIDDLE CREEK)	WaterNSW	Automatic	High
052085	416029	KANOWNA (BOOMI)	WaterNSW	Automatic	High
552012	416048	KANOWNA (MACINTYRE)	WaterNSW	Automatic	High
556014	416056	LITTLE VALLEY	Local Council	Automatic	High
556013	416055	MIDDLE CREEK (FERNDALE)	Local Council	Automatic	High
041507	416917	NEW KILDONAN	WaterNSW	Automatic	Medium
556036	416062	NEWSTEAD NORTH	Local Council	Automatic	High
556035	416061	PARADISE STATION	Local Council	Automatic	High
554001	416030	PINDARI DAM LEVEL	WaterNSW	Automatic	High
554002	416031	RIDGELANDS	WaterNSW	Automatic	High
556039	416066	RIVERSTONE	WaterNSW	Automatic	Medium
042055	416907	RIVERVIEW	Queensland Station	Automatic	High
056158	416011	ROSENEATH	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
422 – Severn/MacIntyre Valley (continued)					
554004	416039	STRATHBOGIE	WaterNSW	Automatic	High
556038	416064	STANNIFER	Local Council	Automatic	High
042076	417901	THALLON	Queensland Station	Automatic	High
554016	416068	TINTOT	Local Council	Automatic	High
054147	416010	WALLANGRA	WaterNSW	Automatic	High
552010	416027	WEEMELAH	WaterNSW	Automatic	High
556037	416063	WYOMING	Local Council	Automatic	High
53101	416002	BOGGABILLA	WaterNSW	Automatic	High
53109	416047	TERREWAH	WaterNSW	Automatic	High
425 – Barwon Darling River					
External	422028	BEEMERY	WaterNSW	Automatic	High
548015	422026	BOOROOMA	WaterNSW	Automatic	High
External	422027	GEERA	WaterNSW	Automatic	High
548006	417001	GUNDABLOUIE	WaterNSW	Automatic	High
547001	425012	MENINDEE WEIR 32	WaterNSW	Automatic	High
548009	416050	PRESBURY WEIR	WaterNSW	Automatic	High
546000	425018	TALYAWALKA (BARRIER HWY)	WaterNSW	Automatic	High
548014	422025	TARA (U/S NAMOI JUNCTION)	WaterNSW	Automatic	High
548012	425999	WARRAWEENA	WaterNSW	Automatic	Medium
418 – Gwydir					
552004	418061	ALMA BRIDGE	WaterNSW	Automatic	Medium
552006	418068	BALLIN BORA CK U/S	WaterNSW	Automatic	Medium
552057	418091	BELARRE (THALABA CREEK)	WaterNSW	Automatic	Medium
554009	418025	BINGARA (HALLS CK)	WaterNSW	Automatic	High
553005	418011	CAROLE REGULATOR	WaterNSW	Automatic	Low
553011	418087	CHINOOK	Local Council	Automatic	High
553023	418067	CLARENDON BR (HEATHFIELD)	WaterNSW	Automatic	Low
552001	418055	COLLARENEBRI (MEHI RIVER)	WaterNSW	Automatic	Medium
553016	418037	COMBADELLO D/S	WaterNSW	Automatic	Low
556000	418026	COPETON DAM D/S	WaterNSW	Automatic	High
556001	418035	COPETON DAM WL	WaterNSW	Automatic	High
553019	418052	GARAH	WaterNSW	Automatic	Low
553022	418060	GLENDELLO	WaterNSW	Automatic	Low
553003	418032	HORSESHOE LAGOON	WaterNSW	Automatic	High
554010	418027	HORTON DAM SITE	WaterNSW	Automatic	High
556009	418005	KIMBERLEY	WaterNSW	Automatic	Low
552013	418066	MILLEWA	WaterNSW	Automatic	Low

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
418 – Gwydir (continued)					
553025	418048	MOOMIN OFFTAKE	WaterNSW	Automatic	Low
552017	418070	MOOMIN PLAINS	WaterNSW	Automatic	Low
554007	418012	PINEGROVE	WaterNSW	Automatic	High
554008	418015	RIDER	WaterNSW	Automatic	High
553028	418056	TYREEL D/S REGULATOR	WaterNSW	Automatic	Low
556006	418014	YARROWYCK	WaterNSW	Automatic	Medium
419 – Namoi/Peel					
555016	419073	APPLEBY	WaterNSW	Automatic	High
555027	419051	AVOCO EAST	WaterNSW	Automatic	High
555018	419074	BECTIVE	WaterNSW	Automatic	High
554013	419053	BLACK SPRINGS	WaterNSW	Automatic	Medium
555013	419032	BOGGABRI (COXS)	WaterNSW	Automatic	High
555004	419012	BOGGABRI (NAMOI)	WaterNSW	Automatic	High
053098	419905	BOHENA CREEK	WaterNSW	Automatic	High
555019	419085	BOMERA CREEK	WaterNSW	Automatic	High
055285	419020	BRABRI	WaterNSW	Automatic	High
055310	419027	BREEZA STATION	WaterNSW	Automatic	High
553015	419083	THARLANE	WaterNSW	Automatic	High
555021	419085	BUNDELLA	WaterNSW	Automatic	High
552025	419095	NAMOI BULLAWA	WaterNSW	Automatic	Low
555005	419034	CAROONA	WaterNSW	Automatic	High
055284	419006	CARROLL GAP	WaterNSW	Automatic	High
555006	419045	CHAFFEY DAM D/S	WaterNSW	Automatic	High
555012	419069	CHAFFEY DAM STORAGE	WaterNSW	Automatic	High
552026	419082	DUNCAN JUNCTION	WaterNSW	Automatic	High
055313	419035	GOONOO GOONOO	WaterNSW	Automatic	High
553007	419059	GUNIDGERA D/S	WaterNSW	Automatic	Medium
553009	419061	GUNIDGERA OFFTAKE	WaterNSW	Automatic	Low
553008	419060	GUNIDGERA WEIR	WaterNSW	Automatic	Low
555035	419099	KOOTINGAL	WaterNSW	Automatic	High
555034	419097	MEADOWS LANE	Local Council	Automatic	High
555034	419039	MOLLEE WEIR D/S	WaterNSW	Automatic	High
553006	419062	MOLLEE WEIR WL	WaterNSW	Automatic	High
055321	419016	MULLA CROSSING	WaterNSW	Automatic	High
553026	419002	NARRABRI (NAMOI)	WaterNSW	Automatic	Medium
555003	419005	NORTH CUERINDI	WaterNSW	Automatic	High
555033	419910	NUNDLE (PEARLY GATES)	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
419 – Namoi/Peel (continued)					
555017	419076	OLD WARRAH	WaterNSW	Automatic	Medium
556005	419024	PARADISE WEIR	WaterNSW	Automatic	High
055315	419015	PIALLAMORE	WaterNSW	Automatic	High
555026	419028	RETREAT	WaterNSW	Automatic	High
552009	419064	ROSSMORE	WaterNSW	Automatic	Medium
555022	419084	RUVIGNE	WaterNSW	Automatic	High
555025	419075	SOMERTON	WaterNSW	Automatic	High
555011	419043	SPLIT ROCK DAM D/S	WaterNSW	Automatic	High
555002	419080	SPLIT ROCK DAM WL	WaterNSW	Automatic	High
555028	419093	SPRING RIDGE YARRAMAN CK	WaterNSW	Automatic	Medium
555007	419033	TAMBAR SPRINGS	WaterNSW	Automatic	High
555008	419070	TAMWORTH WATER SUPPLY	WaterNSW	Automatic	Medium
555009	419081	TAROONA (U/S CHAFFEY DAM)	WaterNSW	Automatic	Low
554005	419023	TURRAWAN (WALLAH)	WaterNSW	Automatic	High
555023	419029	UKOLAN	WaterNSW	Automatic	Medium
555020	419056	UPPER MANILLA	WaterNSW	Automatic	Medium
552022	419091	WALGETT U/S	WaterNSW	Automatic	Medium
552005	419049	WAMINDA	WaterNSW	Automatic	Medium
553012	419068	WEETA WEIR D/S	WaterNSW	Automatic	High
552020	419067	WEETA WEIR WL	WaterNSW	Automatic	High
554006	419047	WOODS REEF	WaterNSW	Automatic	Low
559000	419010	WOOLBROOK	WaterNSW	Automatic	High
420 – Castlereagh Valley					
564005	420022	COONABARABAN	WaterNSW	Automatic	High
564006	420007	BINNAWAY	WaterNSW	Automatic	High
551020	420020	GUNGALMAN	WaterNSW	Automatic	High
564003	420017	HIDDEN VALLEY	WaterNSW	Automatic	High
551008	420901	LUCAS BRIDGE	Local Council	Automatic	High
551010	420015	WARRANA (manual)	Local Council	Manual	High
564001	420003	WARKTON	WaterNSW	Automatic	High
421 – Macquarie Valley					
551007	421127	BAROONA	WaterNSW	Automatic	High
563015	421025	BRUINBUN	WaterNSW	Automatic	High
562000	421040	BURRENDONG DAM D/S	WaterNSW	Automatic	High
562001	421077	BURRENDONG DAM WL	WaterNSW	Automatic	High
051142	421012	CARINDA	WaterNSW	Automatic	High
051141	421011	CARINDA MARTHAGUY CK	WaterNSW	Automatic	Low

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
421 – Macquarie Valley (continued)					
563008	521915	CHIFLEY DAM	Local Council	Automatic	Low
063298	421101	CHIFLEY DAM U/S	Local Council	Automatic	High
External	421056	COOLAH	WaterNSW	Automatic	Medium
563005	421178	D/S BORENORE CK	Local Council	Automatic	High
564002	421042	ELONG ELONG	WaterNSW	Automatic	High
563061	421053	GEORGES PLAIN	WaterNSW	Automatic	High
551003	421031	GIN GIN WEIR	WaterNSW	Automatic	Low
565018	421027	GOWAN GREEN	WaterNSW	Automatic	High
551015	421146	GUM COWAL AT BIFURCATION	WaterNSW	Automatic	Low
051130	421005	GUNNINGBAR OFFTAKE	WaterNSW	Automatic	Medium
551005	421088	MAREBONE BREAK	WaterNSW	Automatic	Low
551006	421090	MAREBONE D/S	WaterNSW	Automatic	Medium
551012	421135	MILTARA	WaterNSW	Automatic	Low
563017	421050	MOLONG (BELL)	WaterNSW	Automatic	High
562008	421156	MUMBIL	WaterNSW	Automatic	High
551016	421164	NAPALI	WaterNSW	Automatic	Low
562004	421018	NEUREA	WaterNSW	Automatic	High
565005	421048	OBLEY	WaterNSW	Automatic	High
563081	421916	ORANGE (DALTON ST BRIDGE)	Local Council	Automatic	High
563049	421917	ORANGE (KITE ST)	Local Council	Automatic	High
051146	421022	OXLEY STATION	WaterNSW	Automatic	Low
541027	421147	PILLIGAWARRINA	WaterNSW	Automatic	Low
565009	421055	RAWSONVILLE	WaterNSW	Automatic	High
562002	421149	ROCKY WATERHOLE	WaterNSW	Automatic	Low
563016	421026	SOFALA	WaterNSW	Automatic	High
565004	421068	SPICERS CK	WaterNSW	Automatic	Medium
063297	421035	TARANA	WaterNSW	Automatic	High
551009	421004	WARREN WEIR	WaterNSW	Automatic	High
563080	421105	WHITE ROCK	Local Council	Automatic	Medium
562003	421150	WILBERTREE ROAD	WaterNSW	Automatic	Medium
062093	421148	WINDAMERE DAM	WaterNSW	Automatic	Low
562007	421079	WINDAMERE DAM D/S	WaterNSW	Automatic	Medium
065090	421900	WOOLLOMBI	WaterNSW	Automatic	High
562005	421019	YAMBLE BRIDGE	WaterNSW	Automatic	High
421 – Bogan Valley					
550005	421158	MONKEY BRIDGE	WaterNSW	Automatic	High
551004	421039	NEURIE PLAINS	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
412 – Lachlan Valley					
563091	4120029	ABERCROMBIE NO 2	WaterNSW	Automatic	High
563087	412080	BENEREE FLYERS CREEK	WaterNSW	Automatic	Low
565013	421195	CANOWINDRA U/S	WaterNSW	Automatic	High
563146	412077	CARCOAR DAM D/S	WaterNSW	Automatic	Medium
550003	412014	CONDOBOLIN (GOOBANG CK)	WaterNSW	Automatic	Medium
549002	412045	CORRONG	WaterNSW	Automatic	Medium
573013	412134	DUDAUMAN	WaterNSW	Automatic	Low
065095	412030	EUGOWRA (SMITHFIELD)	WaterNSW	Automatic	High
550004	412023	FAIRHOLME	WaterNSW	Automatic	High
563018	412066	HADLEY NO2	WaterNSW	Automatic	Medium
565006	412033	HELENSHOLME	WaterNSW	Automatic	Medium
550006	412058	ISLAND CREEK O/TAKE	WaterNSW	Automatic	Low
575006	412011	LAKE CARGELLIGO	WaterNSW	Automatic	Low
565010	412141	MULYANDRY CREEK	WaterNSW	Automatic	High
070333	412065	NARRAWA	WaterNSW	Automatic	High
573005	412029	PROSSERS CROSSING	WaterNSW	Automatic	High
563023	412165	THE BELLS	WaterNSW	Automatic	High
563014	412056	THE NEEDLES	WaterNSW	Automatic	High
065084	412139	TOOGONG (GLEN AYR)	WaterNSW	Automatic	High
549008	412129	U/S BLOCKBANK	WaterNSW	Automatic	Low
575005	412078	WHEALBAH	WaterNSW	Automatic	High
549007	412012	WILLANDRA CK AT ROAD BR	WaterNSW	Automatic	Low
549003	412038	WILLANDRA WEIR	WaterNSW	Automatic	High
563145	412067	WYANGALA DAM D/S	WaterNSW	Automatic	High
063267	412010	WYANGALA DAM WL	WaterNSW	Automatic	High
550000	412006	CONDOBOLIN BRIDGE	WaterNSW	Automatic	Medium
575006	412011	LAKE CARGELLIGO	WaterNSW	Automatic	Medium
410 – Queanbeyan/Molonglo Valley					
570001	410770	ACT BORDER	Australian Capital Territory Government	Automatic	Medium
570775	410775	BARRY DRIVE	Australian Capital Territory Government	Automatic	Low
570013	410717	BENDORA DAM WL	Australian Capital Territory Government	Automatic	Low
570012	410705	BURBONG	Australian Capital Territory Government	Automatic	High
570002	410774	BURRA CREEK	Australian Capital Territory Government	Automatic	Medium
570986	410759	CARWOOLA	Australian Capital Territory Government	Automatic	High
570007	410756	COPPINS CROSSING	Australian Capital Territory Government	Automatic	Medium
570925	410757	COPPINS CROSSING BELOW	Australian Capital Territory Government	Automatic	Medium
570742	410752	CORIN DAM	Australian Capital Territory Government	Automatic	Low

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
410 – Queanbeyan/Molonglo Valley (continued)					
570742	410742	CORIN DAM	Australian Capital Territory Government	Automatic	Low
570010	410704	COTTER DAM	Australian Capital Territory Government	Automatic	Low
570008	410700	COTTER KIOSK	Australian Capital Territory Government	Automatic	Low
570046	410789	DAIRY FLAT	Australian Capital Territory Government	Automatic	Low
570730	n/a	GINGERA	Australian Capital Territory Government	Automatic	Low
570751	410751	GINNINDERRA CREEK (U/S BARTON HWY)	Australian Capital Territory Government	Automatic	Low
570750	410750	GINNINDERRA CREEK (U/S CHARNWOOD RD)	Australian Capital Territory Government	Automatic	Low
570029	410748	GOOGONG DAM LEVEL	Australian Capital Territory Government	Automatic	High
570781	410781	GOOGONG DAM U/S	Australian Capital Territory Government	Automatic	High
570045	410790	HINDMARSH	Australian Capital Territory Government	Automatic	Low
570006	410744	L BURLEY GRIFFIN AT BOAT H	Australian Capital Territory Government	Automatic	Low
570016	410732	LAKE BURLEY GRIFFIN AT DAM	Australian Capital Territory Government	Automatic	Low
570711	410711	NAAS	Australian Capital Territory Government	Automatic	Low
570713	410713	RIVERLEA	Australian Capital Territory Government	Automatic	Low
570016	410718	SCRIVENER DAM (LAKE BURLEY GRIFFIN)	Australian Capital Territory Government	Automatic	High
570772	410772	SOUTHWELL	Australian Capital Territory Government	Automatic	Low
570741	410741	STURT ISLAND	Australian Capital Territory Government	Automatic	Low
570965	410734	TINDERRY	Australian Capital Territory Government	Automatic	High
570779	410779	TUGGERANONG CREEK (U/S OF SEWER)	Australian Capital Territory Government	Automatic	Low
570771	410755	TUGGERANONG CREEK (WEIR)	Australian Capital Territory Government	Automatic	Low
570983	410760	WICKERSLACK	Australian Capital Territory Government	Automatic	High
410 – Murrumbidgee Valley					
549005	410003	BALRANALD TOWN	Local Council	Manual	Medium
572009	410061	BATLOW ROAD	WaterNSW	Automatic	High
572010	410155	BELMORE BR	WaterNSW	Automatic	High
574019	410023	BEREMBED WEIR	WaterNSW	Automatic	High
573017	41000207	BERTHONG RD	WaterNSW	Automatic	Medium
057011	410050	BILLILINGRA	WaterNSW	Automatic	High
072145	410073	BLOWERING DAM D/S (ODDYS BR)	WaterNSW	Automatic	High
072153	410102	BLOWERING DAM W/L	WaterNSW	Automatic	High
572008	410156	BOOK BOOK	WaterNSW	Automatic	High
573002	410039	BRUNGLE BRIDGE	WaterNSW	Automatic	High
073131	410008	BURRINJUCK DAM D/S	WaterNSW	Automatic	High
573008	410131	BURRINJUCK DAM WL	WaterNSW	Automatic	High

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
410 – Murrumbidgee Valley (continued)					
574007	410017	CONARGO (PUCKAWIDGEE)	WaterNSW	Automatic	Low
573004	410044	COOLAC	WaterNSW	Automatic	High
573003	410038	DARBALARA	WaterNSW	Automatic	High
575007	410134	DARLOT	WaterNSW	Automatic	Low
573001	410143	ERINGOARRAH	WaterNSW	Automatic	High
574037	410148	FOREST CK AT WARRISTON WEIR	WaterNSW	Automatic	Low
074216	410082	GOGELDRIE WEIR D/S	WaterNSW	Automatic	High
570777	410777	HALLS	Australian Capital Territory Government	Automatic	Low
575004	410136	HAY WEIR D/S	WaterNSW	Automatic	High
075172	410995	HAY WEIR W/L	WaterNSW	Automatic	Low
574014	410016	JERILDERIE	WaterNSW	Automatic	Low
573009	410112	JINDALEE	WaterNSW	Automatic	Low
573007	410025	JUGIONG CREEK	WaterNSW	Automatic	High
572011	410057	LACMALAC	WaterNSW	Automatic	High
572025	410048	LADYSMITH	WaterNSW	Automatic	High
570003	410761	LOBS HOLE	WaterNSW	Automatic	Medium
575012	410040	MAUDE WEIR D/S	WaterNSW	Automatic	High
575008	41010941	MAUDE WEIR WL	WaterNSW	Automatic	Low
570019	410033	MITTAGONG CROSSING	WaterNSW	Automatic	High
574017	410014	MORUNDAH (COLOMBO CK)	WaterNSW	Automatic	Medium
574016	410015	MORUNDAH (YANCO CK)	WaterNSW	Automatic	Medium
572007	410043	MT ADRAH	WaterNSW	Automatic	High
570017	410738	MT MACDONALD	Australian Capital Territory Government	Automatic	High
574036	410137	MUNDOWEY	WaterNSW	Automatic	Low
574032	410013	MULWALA M CANAL AT O/TAKE	WaterNSW	Automatic	Low
573010	410068	GLENDALE	WaterNSW	Automatic	High
575016	409086	MALLAN SCHOOL	WaterNSW	Automatic	Low
570038	410062	NUMERALLA	WaterNSW	Automatic	Medium
572012	410047	OLD BORAMBOLA	WaterNSW	Automatic	High
549011	41010966	REDBANK WEIR WL	WaterNSW	Automatic	Low
575009	410041	REDBANK WEIR D/S	WaterNSW	Automatic	High
570015	410731	TENNENT	Australian Capital Territory Government	Automatic	Medium
574015	410091	WALBUNDRIE	WaterNSW	Automatic	Medium
573006	410024	WEE JASPER	WaterNSW	Automatic	High
572033	410058	WESTBROOK	WaterNSW	Automatic	High
574021	410007	YANCO OFFTAKE	WaterNSW	Automatic	Low
574022	410036	YANCO WEIR D/S	WaterNSW	Automatic	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	AWRC number	Station name	Owner	Gauge type	Priority
410 – Murrumbidgee Valley (continued)					
574039	410169	YANCO BRIDGE	WaterNSW	Automatic	Low
570039	410176	RIVERVIEW (YASS R U/S BJ)	WaterNSW	Automatic	Low
570009	410026	YASS	WaterNSW	Automatic	High
401 – Upper Murray Valley					
582015	401012	BIGGARA	WaterNSW	Automatic	High
572004	401001	BRINGENBRONG	WaterNSW	Automatic	High
582016	401217	GIBBO PARK	Victorian Gauge	Automatic	High
572006	401013	JINGELIC CREEK	WaterNSW	Automatic	High
572005	401014	PINEGROVE	WaterNSW	Automatic	High
082106	401204	TALLANDOON	Victorian Gauge	Automatic	High
409 – Murray River					
574008	409056	ARATULA RD (SITE 11)	WaterNSW	Automatic	Low
582013	402205	BANDIANA	Victorian Gauge	Automatic	High
576000	414207	COLIGNAN	Victorian Gauge	Automatic	High
574031	409024	COLLIGEN CK D/SREGULATOR	WaterNSW	Automatic	Low
572003	409017	DOCTORS POINT	WaterNSW	Automatic	High
574026	409008	EDWARD R AT OFFTAKE	WaterNSW	Automatic	Low
574006	409029	EDWARD RIVER ESCAPE	WaterNSW	Automatic	Medium
575015	409044	FRANKLINS BRIDGE	WaterNSW	Automatic	Low
574033	409030	GULPA CK AT OFFTAKE	WaterNSW	Automatic	Low
572002	409016	HEYWOODS	WaterNSW	Automatic	High
574034	409037	HOWLONG	WaterNSW	Automatic	High
572001	409011	HUME DAM (MANUAL)	Murray Darling Basin Authority	Manual	High
575003	409035	LIEWAH	WaterNSW	Automatic	High
580000	405232	MCCOYS BRIDGE	Victorian Gauge	Automatic	High
582012	402203	MONGANS BR	Victorian Gauge	Automatic	High
580011	406202	ROCHESTER	Victorian Gauge	Automatic	High
575002	409013	STONEY CROSSING	WaterNSW	Automatic	High
574012	409047	TOONALOOK	WaterNSW	Automatic	Medium
574029	409021	WAKOOL R AT MAIN CANAL OFFTAKE	WaterNSW	Automatic	Low
574027	409022	WAKOOL R AT OFFTAKE REGULATOR	WaterNSW	Automatic	Low
582033	403200	WANGARATTA	Victorian Gauge	Automatic	High

Notes:

- External: Refers to a station which does not currently have a station number but data is referred to externally.
- Data from MANUAL stations are not available in (near) real time.
- AWRC number: Australian Water Resources Council number

Schedule 5: Enviromon base stations installed in New South Wales and the Australian Capital Territory

Owner	City/town	License number	Number of users	Date of registration	License version
Upper Parramatta Catchment Auth.	Parramatta	61020005	3	3/08/2005	3.11.2
Western Sydney State Emergency Service	Seven Hills	61020006	3	18/01/2004	3.11.2
Lismore City Council	Lismore	61020007	10	19/11/2004	3.11.2
Hastings Council	Port Macquarie	61020008	10	16/11/2004	3.11.2
Kempsey State Emergency Service	Kempsey	61020009	10	16/11/2004	3.11.2
Kempsey Council	Kempsey	61020010	10	16/11/2004	3.11.2
Murwillumbah State Emergency Service	Murwillumbah	61020013	10	16/11/2004	3.11.2
Tweed Shire Council	Murwillumbah	61020015	10	16/11/2004	3.11.2
Tweed Shire Council	Chinderah	61020014	10	16/11/2004	3.11.2
Richmond -Tweed State Emergency Service	Lismore	61020016	10	16/11/2004	3.11.2
Byron Shire Council	Mullumbimby	61020018	10	16/11/2004	3.11.2
Mullumbimby State Emergency Service	Mullumbimby	61020019	10	16/11/2004	3.11.2
Nambucca State Emergency Service	Macksville	61020020	10	19/11/2004	3.11.2
Bellingen Council	Bellingen	61020021	10	19/11/2004	3.11.2
Bathurst City Council	Bathurst	61020022	10	31/01/2005	3.11.2
Shoalhaven City Council	Nowra	61020023	3	31/01/2005	3.11.2
SES Wollongong	Wollongong	61020024	3	31/01/2005	3.11.2
WaterNSW	Penrith	61020025	3	8/02/2005	3.11.2
Scone State Emergency Service	Scone	61020026	3	18/03/2005	3.11.2
West Nowra	Nowra	61020027	3	19/05/2005	3.11.2
Wyong Council	Wyong	61020028	3	27/06/2005	3.11.2
Cooma City Council	Cooma	61020029	3	27/06/2005	3.11.2
Sothern Sydney	Bankstown	61020030	3	27/06/2005	3.11.2
Northern Sydney State Emergency Service	Hornsby	61020031	3	24/03/2010	3.11.2
Great Lakes Council	Forster	61020032	3	29/07/2005	3.11.2
Bellingen State Emergency Service	Bellingen	61020033	3	16/09/2005	3.11.2
National Capital Authority	Canberra	61020034	3	30/09/2005	3.11.2
Sutherland State Emergency Service	Heathcote	61020036	3	11/02/2005	3.11.2
Bathurst Council Depot	Bathurst	61020037	3	31/01/2006	3.11.2
Pacific Farm State Emergency Service	Forster	61020038	3	31/01/2006	3.11.2
Coffs Harbour State Emergency Service	Coffs Harbour	61020039	3	31/01/2006	3.11.2
Tamworth Council	Tamworth	61020042	3	16/03/2016	3.11.2
Tamworth State Emergency Service	Tamworth	61020043	3	16/03/2006	3.11.2
ALS- Penrith (ECOWISE)	Penrith	61020044	3	27/03/2006	3.11.2
Office of Water -Armidale	Armidale	61020046	3	12/04/2006	3.11.2
Nundle State Emergency Service	Nundle	61020047	3	25/05/2006	3.11.2
Nowra State Emergency Service	Nowra	61020048	3	12/07/2006	3.11.2
Shoalhaven -Bomaderry	Bomaderry	61020049	3	12/07/2006	3.11.2

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Owner	City/town	License number	Number of users	Date of registration	License version
Banora State Emergency Service	Murwillumbah	61020050	3	15/01/2007	3.11.2
Manley Hydraulics Lab	Manley	61020051	3	11/04/2007	3.11.2
Gladstone State Emergency Service	Gladstone	61020052	3	11/07/2007	3.11.2
Lismore State Emergency Service	Lismore	61020053	3	24/07/2007	3.11.2
SES -Wilberforce	Wilberforce	61020056	3	10/08/2007	3.11.2
Thiess Services Blacktown	Blacktown	61020059	3	19/02/2007	3.11.2
Ballina State Emergency Service	Ballina	61020060	3	16/10/2007	3.11.2
Gloucester State Emergency Service	Gloucester	61020061	3	29/10/2007	3.11.2
Bureau of Meterology (nsw-hycomms -op)	Sydney	61020063	10	01/01/1999	3.11.2
Hunter Water	Newcastle	61020064	3	30/03/2009	3.11.2
Gosford City Council	Gosford	61020065	3	17/08/2009	3.11.2
Southern Highland State Emergency Service - Goulburn	Goulburn	61020066	3	10/02/2010	3.11.2
Sentinal - ACT	Canberra	61020067	3	13/07/2010	3.11.2
Orange City Council	Orange	61020068	3	15/09/2010	3.11.2
Orange State Emergency Service	Orange	61020070	3	15/09/2010	3.11.2
Coffs Harbour City Council	Coffs Harbour	61020070	3	19/07/2012	3.11.2
Bathurst SES	Bathurst	61020072	3	18/06/2013	3.11.2
Inverell SES	Inverell	61020073	3	05/07/2013	3.11.2
South Coast Illawarra SES	Wollongong	61020074	3	17/12/2013	3.11.2
Molong SES	Molong	61020075	3	21/01/2014	3.11.2
Blacktown City Council	Blacktown	61020076	3	21/01/2014	3.11.2
Goulburn SES	Goulburn	61020077	3	21/01/2014	3.11.2
Newcastle City Council	Newcastle	61020078	3	16/04/2015	3.11.2
Goulburn Mulwaree Council	Goulburn	61020081	3	10/03/2016	3.11.2

Schedule 6: List of Data Sharing Agreements for data provision

A Data Sharing Agreement for data provision has been set up or is in development for the following agencies.

Agency	Status	Date of completion	Number of sites
WaterNSW	In development	Expected Feb 2017	624
NSW Office of Environment and Heritage (Manly Hydraulics Laboratory data)	In development	Expected Feb 2017	229
Transport Canberra and City Services	In development	Expected Feb 2017	81

Schedule 7: List of sites owned and maintained by the Bureau

Bureau number	Station name	Gauge type	Data type	Priority
201 – Tweed River				
058177	BALLINA SES	AUTOMATIC	BASESTATION	Medium
058230	BANORA SES - MURWILLUMBAH	AUTOMATIC	BASESTATION	Medium
558010	BARNEYS POINT (TWEED RIVER)	AUTOMATIC	RAINFALL	Medium
058204	BOAT HARBOUR (ROUS RIVER)	AUTOMATIC	RAINFALL	Medium
058005	BRAYS CREEK (MISTY MOUNTAIN)	AUTOMATIC	RAINFALL	Medium
058224	BYRON SHIRE COUNCIL	AUTOMATIC	BASESTATION	Medium
058019	DOON DOON (MCCABES ROAD)	AUTOMATIC	RAINFALL	Medium
058193	EUNGELLA (OXLEY RIVER)	AUTOMATIC	RAINFALL	Medium
058129	KUNGHUR (THE JUNCTION)	AUTOMATIC	RAIN/REPEATER	High
558032	LIMPINWOOD (BALD MOUNTAIN)	AUTOMATIC	RAINFALL	Medium
058227	MURWILLUMBAH SES	AUTOMATIC	BASESTATION	Medium
058186	MURWILLUMBAH (TWEED RIVER)	AUTOMATIC	RAINFALL	Medium
558014	TUMBULGUM (TWEED RIVER)	AUTOMATIC	RAINFALL	Medium
058228	TWEED SHIRE COUNCIL	AUTOMATIC	BASESTATION	Medium
NA	TWEED SHIRE COUNCIL - CHINDERAH	AUTOMATIC	BASESTATION	Medium
058167	UKI (TWEED RIVER)	AUTOMATIC	RAINFALL	Medium
202 – Brunswick River				
058216	CAPE BYRON AWS	AUTOMATIC	AWS	Medium
558025	MULLUMBIMBY (CHINCOGAN)	AUTOMATIC	RAIN/REPEATER	High
058225	MULLUMBIMBY SES	AUTOMATIC	BASESTATION	Medium
558034	MULLUMBIMBY (UPPER MAIN ARM)	AUTOMATIC	RAINFALL	Medium
558036	MYOCUM	AUTOMATIC	RAINFALL	Medium
203 – Richmond River				
058198	BALLINA AIRPORT AWS	AUTOMATIC	AWS	Medium
058202	BENTLEY (BACK CREEK)	AUTOMATIC	RAINFALL	Medium
058207	BUSBYS FLAT	AUTOMATIC	RAINFALL	Medium
058208	CASINO AIRPORT AWS	AUTOMATIC	AWS	Medium
558024	CAWONGLA (ALERT)	AUTOMATIC	RAINFALL	Medium
058194	DAIRY FLAT	AUTOMATIC	RAINFALL	Medium
558031	DUNOON	AUTOMATIC	RAIN/REPEATER	High
058206	EWING BRIDGE CORNDALE (COOPERS CK)	AUTOMATIC	RAINFALL	Medium
558035	GOONELLABAH (WYREEMA RD REPEATER)	AUTOMATIC	REPEATER	High
558033	GOONENGERRY (ALERT)	AUTOMATIC	RAINFALL	Medium
058113	GREEN PIGEON (MORNING VIEW)	AUTOMATIC	RAINFALL	Medium
058148	LILLIAN ROCK (WILLIAMS ROAD)	AUTOMATIC	RAINFALL	Medium
058214	LISMORE AIRPORT AWS	AUTOMATIC	AWS	Medium
058229	LISMORE CITY COUNCIL	AUTOMATIC	BASESTATION	Medium
058141	LOADSTONE (HIGH VIEW)	AUTOMATIC	RAINFALL	Medium
058162	NASHUA (WILSONS RIVER)	AUTOMATIC	RAINFALL	Medium
058180	NIMBIN (GOOLMANGAR CREEK)	AUTOMATIC	RAINFALL	Medium
558000	REPENTANCE (COOPERS CREEK)	AUTOMATIC	RAINFALL	Medium
058226	RICHMOND-TWEED SES	AUTOMATIC	BASESTATION	Medium
058199	ROCK VALLEY (LEYCESTER CREEK)	AUTOMATIC	RAINFALL	Medium
058147	THE CHANNON	AUTOMATIC	RAINFALL	Medium
058201	TUNCESTER (LEYCESTER CREEK)	AUTOMATIC	RAINFALL	Medium
058099	WHIPORIE POST OFFICE	AUTOMATIC	RAINFALL	Medium
204 – Clarence River				
058028	COALDALE (BELLONA)	AUTOMATIC	RAINFALL	Medium
059140	DORRIGO (OLD CORAMBA RD)	AUTOMATIC	RAINFALL	Medium
057005	DRAKE (VILLAGE RESOURCE CENTRE)	AUTOMATIC	RAINFALL	Medium
056199	WYLIE CREEK (BURRENBAR)	AUTOMATIC	RAINFALL	Medium
058212	EVANS HEAD RAAF BOMBING RANGE AWS	AUTOMATIC	AWS	Medium
057014	GLEN ELGIN (GLENBROOK)	AUTOMATIC	RAINFALL	Medium
059054	GLENREAGH (ERTS)	AUTOMATIC	RAINFALL	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
204 – Clarence River (continued)				
059123	GLENREAGH	MANUAL	RIVER	Medium
056161	GUYRA (GOWAN BRAE)	AUTOMATIC	RAINFALL	Medium
058068	LAWRENCE ROAD (PRINGLES WAY)	AUTOMATIC	RAINFALL	Medium
059152	LOWANNA (LOWANNA ROAD)	AUTOMATIC	RAINFALL	Medium
059045	MELDRUM (COOLAWARRAH)	AUTOMATIC	RAINFALL	Medium
057123	NEWTON BOYD (ABBAY GREEN)	AUTOMATIC	RAINFALL	Medium
058079	PILLAR VALLEY	AUTOMATIC	RAINFALL	Medium
058231	SOUTH GRAFTON (CLARENCE REGIONAL LANDFILL)	AUTOMATIC	RAINFALL	Medium
057095	TABULAM (MUIRNE)	AUTOMATIC	RAINFALL	Medium
057020	URBENVILLE OLD POST OFFICE	AUTOMATIC	RAINFALL	Medium
056038	WYLIE CREEK (ALOOMBA)	AUTOMATIC	RAINFALL	Medium
205 – Bellinger River				
059078	BELLINGEN (CRYSTAL CREEK)	AUTOMATIC	RAINFALL	Medium
059086	BELLINGEN SES	AUTOMATIC	BASESTATION	Medium
059088	BELLINGEN SHIRE COUNCIL	AUTOMATIC	BASESTATION	Medium
059138	BOWRA SUGARLOAF	AUTOMATIC	RAIN/REPEATER	High
559046	BOWRAVILLE WTP	AUTOMATIC	RAINFALL	Medium
059040	COFFS HARBOUR MO	AUTOMATIC	RAINFALL	Medium
059040	COFFS HARBOUR MO	AUTOMATIC	BASESTATION	Medium
059142	COFFS HARBOUR SES	AUTOMATIC	BASESTATION	Medium
059147	COOKS CK (KALANG)	AUTOMATIC	RAINFALL	Medium
559015	DORRIGO (MOUNTAIN TOP)	AUTOMATIC	RAINFALL	Medium
059107	GIRRALONG	AUTOMATIC	RAINFALL	Medium
059146	KOOROOWI (SHARABEL)	AUTOMATIC	RAINFALL	Medium
059112	NAMBUCCA SES	AUTOMATIC	BASESTATION	Medium
059148	SPICKETTS CK (NOONANNIE)	AUTOMATIC	RAINFALL	Medium
059032	TAYLORS ARM	AUTOMATIC	RAINFALL	Medium
059070	UPPER DARKWOOD	AUTOMATIC	RAINFALL	Medium
206 – Macleay River				
056238	ARMIDALE AIRPORT AWS	AUTOMATIC	AWS	Medium
059122	BELLBROOK (MACLEAY RIVER)	AUTOMATIC	RAINFALL	Medium
559022	BOONANGHI	AUTOMATIC	RAIN/REPEATER	High
059145	GLADSTONE SES	AUTOMATIC	BASESTATION	Medium
056240	GUYRA (BOX POINT)	AUTOMATIC	RAINFALL	Medium
059007	KEMPSEY AIRPORT AWS	AUTOMATIC	AWS	Medium
059141	KEMPSEY SES	AUTOMATIC	BASESTATION	Medium
059085	KEMPSEY SHIRE COUNCIL	AUTOMATIC	BASESTATION	Medium
059131	MILLBANK	AUTOMATIC	RAINFALL	Medium
059128	MOPARRABAH (PARRABEL CREEK)	AUTOMATIC	RAINFALL	Medium
NA	OFFICE OF WATER - ARMIDALE	AUTOMATIC	BASESTATION	Medium
057124	POINT LOOKOUT	AUTOMATIC	RAIN/REPEATER	High
057045	TIA (HIGHRENT)	AUTOMATIC	RAINFALL	Medium
057091	URALLA (BLUE NOBBY)	AUTOMATIC	RAINFALL	Medium
056234	WALCHA (THEE ST)	AUTOMATIC	RAINFALL	Medium
059060	WITTITRIN	AUTOMATIC	RAINFALL	Medium
057079	WOLLOMOMBI (WOLLOMOMBI RIVER)	AUTOMATIC	RAINFALL	Medium
207 – Hastings River				
060161	COMBOYNE PUBLIC SCHOOL	AUTOMATIC	RAINFALL	Medium
060121	ELANDS (BLACK SANDS CREEK)	AUTOMATIC	RAINFALL	Medium
060130	FORBES RIVER (BIRDWOOD)	AUTOMATIC	RAINFALL	Medium
060149	FORSTER PACIFIC PALMS SES	AUTOMATIC	BASESTATION	Medium
060150	GREAT LAKES COUNCIL - FOSTER	AUTOMATIC	BASESTATION	Medium
060166	LONG FLAT (REPEATER)	AUTOMATIC	REPEATER	High
060151	HASTINGS COUNCIL - PORT MACQUARIE	AUTOMATIC	BASESTATION	Medium
060139	PORT MACQUARIE AIRPORT AWS	AUTOMATIC	AWS	Medium
060067	UPPER PAPPINBARRA (HILLCREST)	AUTOMATIC	RAINFALL	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
207 – Hastings River (continued)				
060052	UPPER ROLLANDS PLAINS (GREENACRES)	AUTOMATIC	RAINFALL	Medium
060085	YARRAS (MOUNT SEAVIEW)	AUTOMATIC	RAINFALL	Medium
060163	YARRAS MOUNTAIN	AUTOMATIC	RAINFALL	Medium
208 – Manning River				
061413	CAREYS PEAK (BARRINGTON TOPS)	AUTOMATIC	RAIN/REPEATER	High
060152	COBARK	AUTOMATIC	RAINFALL	Medium
060069	COOPLACURRIPA	AUTOMATIC	RAINFALL	High
060162	COOPLACURRIPA (HAWKINS RD)	AUTOMATIC	RAINFALL	Medium
060154	COPELAND TOPS (COPELAND)	AUTOMATIC	REPEATER	High
060042	CRAVEN (LONGVIEW)	AUTOMATIC	RAINFALL	Medium
560028	CURRICABARK	AUTOMATIC	RAINFALL	Medium
060015	GLOUCESTER POST OFFICE	AUTOMATIC	RAINFALL	Medium
060156	GLOUCESTER SES	AUTOMATIC	BASESTATION	Medium
060147	KILLABAKH	AUTOMATIC	RAINFALL	Medium
060165	MOORAL CREEK (THE DEN)	AUTOMATIC	RAIN/REPEATER	High
060153	MOPPY LOOKOUT (BARRINGTON TOPS)	AUTOMATIC	RAINFALL	Medium
060104	NOWENDOC (GREEN HILLS)	AUTOMATIC	RAINFALL	Medium
060141	TAREE AIRPORT AWS	AUTOMATIC	AWS	Medium
060075	UPPER BOWMAN	AUTOMATIC	RAINFALL	Medium
060155	WAUKIVORY	AUTOMATIC	RAINFALL	Medium
060164	YARROWITCH (RUSHBROOK)	AUTOMATIC	RAINFALL	Medium
209 – Karuah River				
060095	BUNGWahl	AUTOMATIC	RAINFALL	Medium
060096	CABBAGE TREE MOUNTAIN	AUTOMATIC	RAINFALL	Medium
060099	CRAWFORD	AUTOMATIC	RAINFALL	Medium
060103	KRAMBACH (TIPPERARY)	AUTOMATIC	RAINFALL	Medium
060148	WILLINA	AUTOMATIC	RAINFALL	Medium
060065	WOOTTON	AUTOMATIC	RAINFALL	Medium
210 – Hunter River				
561044	ANTIENE CK AT LIDDELL	AUTOMATIC	RAINFALL	Medium
061423	BAERAMI (THE OLD DAIRY)	AUTOMATIC	RAINFALL	Medium
561122	BARRINGTON (BONNIE DOON SALISBURY)	AUTOMATIC	RAINFALL	Medium
061100	BROKE (HARROWBY)	AUTOMATIC	RAINFALL	Medium
061007	BUNNAN (MILHAVEN)	AUTOMATIC	RAINFALL	Medium
062102	BYLONG (BYLONG ROAD)	AUTOMATIC	RAINFALL	Medium
062107	BYLONG (GLENVIEW)	AUTOMATIC	RAIN/REPEATER	High
061146	CARROW BROOK	AUTOMATIC	RAINFALL	Medium
062108	CASSILIS (THISTLEDALE)	AUTOMATIC	RAINFALL	Medium
061260	CESSNOCK AIRPORT AWS	AUTOMATIC	AWS	Medium
061017	DUNOG POST OFFICE	AUTOMATIC	RAINFALL	Medium
061092	ELDESLIE	AUTOMATIC	RAINFALL	Medium
061024	GRESFORD POST OFFICE	AUTOMATIC	RAINFALL	Medium
061346	HUNTER SPRINGS (WONDECLA)	AUTOMATIC	RAINFALL	Medium
061316	MERRIWA (MAR-LEA)	AUTOMATIC	RAINFALL	Medium
061287	MERRIWA (ROSCOMMON)	AUTOMATIC	RAINFALL	Medium
061422	MILBRODALE SCHOOL	AUTOMATIC	RAINFALL	Medium
061420	MIRANNIE (MAERANIE STATION)	AUTOMATIC	RAINFALL	Medium
061417	MOUNT ALLYN REPEATER	AUTOMATIC	REPEATER	High
061418	MOUNT BARRINGTON	AUTOMATIC	RAIN/REPEATER	High
061195	MURRURUNDI (TIMOR)	AUTOMATIC	RAINFALL	Medium
061051	MURRURUNDI POST OFFICE	AUTOMATIC	RAINFALL	Medium
061281	NEWCASTLE RADAR	AUTOMATIC	BASESTATION	Medium
061056	POKOLBIN (BEN EAN)	AUTOMATIC	RAINFALL	Medium
061401	SCONE (FIGTREE GULLY)	AUTOMATIC	RAIN/REPEATER	High
061410	SCONE SES	AUTOMATIC	BASESTATION	Medium
061402	SCONE (STONEY CREEK)	AUTOMATIC	RAIN/REPEATER	High
061363	SCONE AIRPORT AWS	AUTOMATIC	AWS	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
210 – Hunter River (continued)				
061421	TANGORY MOUNTAIN	AUTOMATIC	RAIN/REPEATER	High
062036	ULAN WATER	AUTOMATIC	RAINFALL	Medium
061290	UPPER ALLYN TOWNSHIP	AUTOMATIC	RAINFALL	Medium
061350	UPPER CHICHESTER (SIMMONDS)	AUTOMATIC	RAINFALL	Medium
061415	UPPER MYALL CREEK	AUTOMATIC	RAINFALL	Medium
061135	UPPER ROUCHEL (MOUNT VIEW)	AUTOMATIC	RAINFALL	Medium
061201	WATAGAN CENTRAL	AUTOMATIC	RAINFALL	Medium
061226	WOLLOMBI (ST JOHNS CHURCH)	AUTOMATIC	RAINFALL	Medium
211 – Macquarie-Tuggerah Lakes				
061406	BLACKSMITHS	AUTOMATIC	RAINFALL	Medium
061012	COORANBONG (AVONDALE)	AUTOMATIC	RAINFALL	Medium
061383	GEARS (WYONG RIVER)	AUTOMATIC	RAINFALL	Medium
061380	JILLIBY (JILLIBY CREEK)	AUTOMATIC	RAINFALL	Medium
561136	GOSFORD CITY COUNCIL	AUTOMATIC	BASESTATION	Medium
563072	MT PANORAMA	AUTOMATIC	REPEATER	High
061384	KANGY ANGY (OURIMBAH CREEK)	AUTOMATIC	RAINFALL	Medium
061382	KULNURA (JEAVONS)	AUTOMATIC	RAINFALL	Medium
061412	LAKE MACQUARIE AWS	AUTOMATIC	AWS	Medium
061381	MOUNT ELLIOT	AUTOMATIC	RAINFALL	Medium
061366	NORAH HEAD AWS	AUTOMATIC	AWS	Medium
561030	SCADDENS RIDGE	AUTOMATIC	REPEATER	High
061385	WYONG (OLNEY FOREST)	AUTOMATIC	RAINFALL	Medium
561025	WYONG D/S BRIDGE (WYONG RIVER)	AUTOMATIC	RAINFALL	Medium
061409	WYONG SHIRE COUNCIL	AUTOMATIC	BASESTATION	Medium
212 – Hawkesbury River				
568164	APPIN (WILTON ROAD)	AUTOMATIC	RAIN/REPEATER	High
066053	AVALON (WOLLSTONECRAFT AVE)	AUTOMATIC	RAINFALL	Medium
570023	BIG HILL (LONGVIEW)	AUTOMATIC	RAIN/REPEATER	High
063118	BILPIN (FERN GROVE)	AUTOMATIC	RAINFALL	Medium
063295	BLACKHEATH (WOMBAT STREET)	AUTOMATIC	RAINFALL	Medium
068255	BOWRAL (ORCHARD ST)	AUTOMATIC	RAINFALL	Medium
068102	BOWRAL (PARRY DRIVE)	AUTOMATIC	RAINFALL	Medium
067104	BOX HILL (HYNDS ROAD)	AUTOMATIC	RAINFALL	Medium
067015	BRINGELLY (MARYLAND)	AUTOMATIC	RAINFALL	Medium
068257	CAMPBELLTOWN (MOUNT ANNAN)	AUTOMATIC	RAINFALL	Medium
567066	CECIL PARK (ERTS)	AUTOMATIC	REPEATER	High
563031	CLARENCE (ZIG ZAG)	AUTOMATIC	RAINFALL	Medium
561035	COLO HEIGHTS (SAWMILL)	AUTOMATIC	RAIN/REPEATER	High
063081	FAULCONBRIDGE (GREAT WESTERN HWY)	AUTOMATIC	RAINFALL	Medium
061334	GLEN ALICE	AUTOMATIC	RAINFALL	Medium
570022	GOULBURN (MT GRAY)	AUTOMATIC	RAIN/REPEATER	High
070330	GOULBURN AIRPORT AWS	AUTOMATIC	AWS	Medium
061396	GRASSY HILL	AUTOMATIC	REPEATER	High
568166	HIGH RANGE (MERRIOOLA)	AUTOMATIC	RAIN/REPEATER	High
067119	HORSLEY PARK EQUESTRIAN CENTRE AWS	AUTOMATIC	AWS	Medium
061110	HOWES VALLEY	AUTOMATIC	RAIN/REPEATER	High
563025	KURRAJONG HEIGHTS (ERTS)	AUTOMATIC	RAIN/REPEATER	High
070036	LAKE BATHURST (SOMERTON)	AUTOMATIC	RAINFALL	Medium
061375	MANGROVE MOUNTAIN AWS	AUTOMATIC	AWS	Medium
567063	MAROOKA (TOBRUK)	AUTOMATIC	RAIN/REPEATER	High
068216	MENANGLE BRIDGE (NEPEAN RIVER)	AUTOMATIC	RAIN/RIVER	Medium
068239	MOSS VALE AWS	AUTOMATIC	AWS	Medium
063292	MOUNT BOYCE AWS	AUTOMATIC	AWS	Medium
568158	MT PIDDINGTON (ERTS)	AUTOMATIC	REPEATER	High
563009	NORTH RICHMOND (HOSPITAL)	AUTOMATIC	RAIN/REPEATER	High
067113	PENRITH LAKES AWS	AUTOMATIC	AWS	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
212 – Hawkesbury River (continued)				
061336	PUTTY (THE GIBBA)	AUTOMATIC	RAINFALL	Medium
061336	PUTTY (THE GIBBA)	AUTOMATIC	RAINFALL	Medium
061209	PUTTY TEA ROOMS	AUTOMATIC	RAINFALL	Medium
063288	PUTTY ROAD	MANUAL	RIVER	Medium
067105	RICHMOND RAAF	AUTOMATIC	RAINFALL	Medium
068054	ROBERTSON (CAALONG STREET)	AUTOMATIC	RAINFALL	Medium
068224	ROBERTSON (THE PIE SHOP)	AUTOMATIC	RAIN/REPEATER	High
067061	ROSSMORE (SOUTH CREEK)	AUTOMATIC	RAINFALL	Medium
567068	SACKVILLE	AUTOMATIC	RAIN/REPEATER	High
563028	SHOOTERS HILL (ERTS)	AUTOMATIC	RAIN/REPEATER	High
061217	ST ALBANS (ESPIE ST)	AUTOMATIC	RAINFALL	Medium
061426	ST ALBANS (JACKS TRAIL)	AUTOMATIC	REPEATER	High
067102	ST CLAIR (JUBA CLOSE)	AUTOMATIC	RAINFALL	Medium
570026	TARALGA (SUMMERLEE)	AUTOMATIC	RAINFALL	Medium
567099	WARRAGAMBA DAM	AUTOMATIC	RAINFALL	Medium
NA	WILBERFORCE SES	AUTOMATIC	BASESTATION	Medium
067116	WILLMOT (RESOLUTION AVE)	AUTOMATIC	RAINFALL	Medium
067066	ERSKINE PARK RESERVOIR	AUTOMATIC	RAINFALL	Medium
067027	WARRAGAMBA	AUTOMATIC	RAINFALL	Medium
213 – Sydney Coast-Georges River				
566059	AUBURN (ROSNAY GOLF CLUB)	AUTOMATIC	RAINFALL	Medium
066137	BANKSTOWN AIRPORT AWS	AUTOMATIC	AWS	Medium
066194	CANTERBURY RACECOURSE AWS	AUTOMATIC	AWS	Medium
066011	CHATSWOOD BOWLING CLUB	AUTOMATIC	RAINFALL	Medium
068024	DARKES FOREST (KINTYRE)	AUTOMATIC	RAINFALL	Medium
067114	FAIRFIELD CITY FARM	AUTOMATIC	RAINFALL	Medium
066182	FRENCHS FOREST (FRENCHS FOREST RD)	AUTOMATIC	RAINFALL	Medium
566060	GUILDFORD (WOODVILLE GOLF CLUB)	AUTOMATIC	RAINFALL	Medium
067117	HOLSWORTHY CONTROL RANGE	AUTOMATIC	RAINFALL	Medium
566058	HURSTVILLE (ERTS)	AUTOMATIC	REPEATER	High
566057	INGLEBURN (LONG POINT)	AUTOMATIC	RAIN/REPEATER	High
068160	KENTLYN (GEORGES RIVER ROAD)	AUTOMATIC	RAINFALL	Medium
566064	LIDCOMBE (CARNARVON GOLF CLUB)	AUTOMATIC	RAINFALL	Medium
066051	LITTLE BAY (THE COAST GOLF CLUB)	AUTOMATIC	RAINFALL	Medium
067020	LIVERPOOL (MICHAEL WENDEN CENTRE)	AUTOMATIC	RAINFALL	Medium
566013	LIVERPOOL-SCRIVENER ST (GEORGES RIVER)	AUTOMATIC	RAINFALL	Medium
066078	LUCAS HEIGHTS (ANSTO)	AUTOMATIC	RAINFALL	Medium
NA	MANLY HYDRAULICS LABORATORY	AUTOMATIC	BASESTATION	Medium
066036	MARRICKVILLE GOLF CLUB	AUTOMATIC	RAINFALL	Medium
066168	MILPERRA BRIDGE (GEORGES RIVER)	AUTOMATIC	RAINFALL	Medium
066141	MONA VALE GOLF CLUB	AUTOMATIC	RAINFALL	Medium
566000	PARRAMATTA (ERTS)	AUTOMATIC	RAIN/REPEATER	High
066148	PEAKHURST GOLF CLUB	AUTOMATIC	RAINFALL	Medium
067019	PROSPECT RESERVOIR	AUTOMATIC	RAINFALL	Medium
568069	REVERCES	AUTOMATIC	RAINFALL	Medium
066098	ROSE BAY (ROYAL SYDNEY GOLF CLUB)	AUTOMATIC	RAINFALL	Medium
066058	SANS SOUCI (PUBLIC SCHOOL)	AUTOMATIC	RAINFALL	Medium
066070	STRATHFIELD GOLF CLUB	AUTOMATIC	RAINFALL	Medium
066125	SUTHERLAND SES		BASESTATION	Medium
066062	SYDNEY (OBSERVATORY HILL)	AUTOMATIC	RAINFALL	Medium
066037	SYDNEY AIRPORT AMO	AUTOMATIC	RAINFALL	Medium
067028	WATERNSW - PENRITH	AUTOMATIC	BASESTATION	Medium
067038	SYDNEY NORTHERN SES	AUTOMATIC	BASESTATION	Medium
066212	SYDNEY OLYMPIC PARK AWS (ARCHERY CENTRE)	AUTOMATIC	AWS	Medium
066207	SYDNEY SOUTHERN SES	AUTOMATIC	BASESTATION	Medium
067034	SYDNEY WESTERN SES	AUTOMATIC	BASESTATION	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
213 – Sydney Coast-Georges River (continued)				
NA	THEISS SERVICES BLACKTOWN	AUTOMATIC	BASESTATION	Medium
566063	TERREY HILLS REPEATER	AUTOMATIC	REPEATER	High
067041	UPPER PARRAMATTA RIVER CATCHMENT TRUST	AUTOMATIC	BASESTATION	Medium
066211	WAHROONGA (ADA AVENUE)	AUTOMATIC	RAINFALL	Medium
068159	WEDDERBURN (BOOALBYN)	AUTOMATIC	RAINFALL	Medium
566052	WORONORA DAM (HELIPORT)	AUTOMATIC	RAIN/REPEATER	High
214 – Wollongong Coast				
068000	ALBION PARK POST OFFICE	AUTOMATIC	RAINFALL	Medium
066176	AUDLEY (ROYAL NATIONAL PARK)	AUTOMATIC	RAINFALL	Medium
068228	BELLAMBI AWS	AUTOMATIC	AWS	Medium
568131	CRINGILA (JARVIE RD)	AUTOMATIC	RAIN/REPEATER	High
066014	CRONULLA SOUTH BOWLING CLUB	AUTOMATIC	RAINFALL	Medium
068241	WOLLONGONG AIRPORT	AUTOMATIC	RAINFALL	Medium
215 – Shoalhaven River				
068217	BARRENGARRY (OLD SCHOOL HOUSE)	AUTOMATIC	RAINFALL	Medium
069132	BRAIDWOOD RACECOURSE AWS	AUTOMATIC	AWS	Medium
568084	BUMBULLA	AUTOMATIC	RAINFALL	Medium
570058	DOUGHBOY HILL	AUTOMATIC	RAINFALL	Medium
068248	FITZROY FALLS (RED HILLS)	AUTOMATIC	RAINFALL	Medium
068233	GRASSY GULLY (SHOALHAVEN RIVER)	AUTOMATIC	RAINFALL	Medium
068181	HAMPDEN BRIDGE (KANGAROO RIVER)	AUTOMATIC	RAINFALL	Medium
070335	HILLVIEW (SHOALHAVEN RIVER)	AUTOMATIC	RAINFALL	Medium
069150	MONGARLOWE (LEWESTON)	AUTOMATIC	RAINFALL	Medium
569019	MOUNTVIEW (SHOALHAVEN RIVER)	AUTOMATIC	RAINFALL	Medium
069049	NERRIGA COMPOSITE	AUTOMATIC	RAINFALL	Medium
068213	NOWRA BOAT SHED (SHOALHAVEN RIVER)	AUTOMATIC	RAINFALL	Medium
068072	NOWRA RAN AIR STATION AWS	AUTOMATIC	AWS	Medium
NA	NOWRA SES	AUTOMATIC	BASESTATION	Medium
NA	NOWRA WEST	AUTOMATIC	BASESTATION	Medium
568169	RED ROCKS (ERTS)	AUTOMATIC	REPEATER	High
068256	SHOALHAVEN CITY COUNCIL	AUTOMATIC	BASESTATION	Medium
069062	SNOWBALL	AUTOMATIC	RAINFALL	Medium
568155	TALLONG (THROSBY POINT)	AUTOMATIC	RAIN/REPEATER	High
068249	TOUGA	AUTOMATIC	RAINFALL	Medium
068218	WATTAMOLLA (GRIFFITHS)	AUTOMATIC	RAINFALL	Medium
568146	YALWAL	AUTOMATIC	RAIN/REPEATER	High
216 – Clyde River-Jervis Bay				
069121	BROOMAN (CARISBROOK)	AUTOMATIC	RAINFALL	Medium
069138	ULLADULLA AWS	AUTOMATIC	AWS	Medium
217 – Moruya River				
069127	ARALUEN LOWER (ARALUEN RD)	AUTOMATIC	RAINFALL	Medium
569020	BENDETHERA	AUTOMATIC	RAINFALL	Medium
069006	BETTOWYND (CONDY)	AUTOMATIC	RAINFALL	Medium
069035	BETTOWYND (NOBBYS HILL)	AUTOMATIC	RAINFALL	Medium
070061	MAJORS CREEK (THE OLD SCHOOL)	AUTOMATIC	RAINFALL	Medium
069033	MORUYA (BURRA CREEK)	AUTOMATIC	RAINFALL	Medium
069145	MORUYA (PLUMWOOD)	AUTOMATIC	RAIN/REPEATER	High
069042	MORUYA (THE LAGOON)	AUTOMATIC	RAINFALL	Medium
069148	MORUYA AIRPORT AWS	AUTOMATIC	AWS	Medium
218 – Tuross River				
069036	BODALLA POST OFFICE	AUTOMATIC	RAINFALL	Medium
219 – Bega River				
069139	BEGA AWS	AUTOMATIC	AWS	Medium
069133	BEMBOKA (THE KNOB)	AUTOMATIC	RAINFALL	Medium
069107	KAMERUKA (KAMERUKA ESTATE)	AUTOMATIC	RAINFALL	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
219 – Bega River (continued)				
069152	MOUNT DARRAGH TM	AUTOMATIC	RAINFALL	Medium
069144	BLACK RANGE (GRANDVIEW LANE)	AUTOMATIC	RAINFALL	Medium
220 – Towamba River				
069137	GREEN CAPE AWS	AUTOMATIC	AWS	Medium
069147	MERIMBULA AIRPORT AWS	AUTOMATIC	AWS	Medium
222 – Snowy River				
070328	BOMBALA AWS	AUTOMATIC	AWS	Medium
070237	NIMMITABEL (COTTESLOE)	AUTOMATIC	RAINFALL	Medium
071032	THREDBO AWS	AUTOMATIC	AWS	Medium
401 – Upper Murray River				
072162	KHANCOBAN AWS	AUTOMATIC	AWS	Medium
409 – Murray Riverina				
072160	ALBURY AIRPORT AWS	AUTOMATIC	AWS	Medium
410 – Murrumbidgee River				
072152	ARGALONG (SANDY CREEK)	AUTOMATIC	RAINFALL	Medium
072004	BATLOW POST OFFICE	AUTOMATIC	RAINFALL	Medium
073005	BINALONG POST OFFICE	AUTOMATIC	RAINFALL	Medium
073050	BOWNING (WANGANUI)	AUTOMATIC	RAINFALL	Medium
071073	BRINDABELLA (KOOLAMI)	AUTOMATIC	RAINFALL	Medium
073115	BRUNGLE (BONNIE DOON)	AUTOMATIC	RAINFALL	Medium
072161	CABRAMURRA SMHEA AWS	AUTOMATIC	AWS	Medium
070351	CANBERRA AIRPORT	AUTOMATIC	RAINFALL	Medium
070341	CAPTAINS FLAT (COWANGERONG RADAR)	AUTOMATIC	BASESTATION	Medium
070016	CAPTAINS FLAT (FOXLOW ST)	AUTOMATIC	RAIN/REPEATER	High
072012	CARABOST	AUTOMATIC	RAINFALL	Medium
070217	COOMA AIRPORT AWS	AUTOMATIC	AWS	Medium
073142	COOTAMUNDRA AIRPORT	AUTOMATIC	RAINFALL	Medium
070201	GOOGONG HILL	AUTOMATIC	REPEATER	High
070352	COOMA-MONARO SES	AUTOMATIC	BASESTATION	Medium
070353	ECOWISE ENVIRONMENTAL - FYSHWICK	AUTOMATIC	BASESTATION	Medium
075041	GRIFFITH AIRPORT AWS	AUTOMATIC	AWS	Medium
073141	GUNDAGAI (WILLIAM ST)	AUTOMATIC	RAINFALL	Medium
075019	HAY AIRPORT AWS	AUTOMATIC	AWS	Medium
070321	JERANGLE (LYONS CREEK)	AUTOMATIC	RAINFALL	Medium
070349	MOUNT GININI AWS	AUTOMATIC	AWS	Medium
073029	MURRUMBURRAH OLD POST OFFICE	AUTOMATIC	RAINFALL	Medium
073137	MUTTAMA (GROVENE)	AUTOMATIC	RAINFALL	Medium
570057	NATIONAL CAPITAL AUTHORITY CANBERRA	AUTOMATIC	BASESTATION	Medium
070214	PARKERS GAP	AUTOMATIC	RAINFALL	Medium
072150	WAGGA WAGGA AMO	AUTOMATIC	RAINFALL	Medium
074037	YANCO AGRICULTURAL INSTITUTE	AUTOMATIC	RAINFALL	Medium
070091	YASS (LINTON HOSTEL)	AUTOMATIC	RAINFALL	Medium
412– Lachlan River				
063294	BLAYNEY (ORANGE ROAD)	AUTOMATIC	RAINFALL	Medium
050137	CONDOBOLIN AIRPORT AWS	AUTOMATIC	AWS	Medium
065111	COWRA AIRPORT AWS	AUTOMATIC	AWS	Medium
065010	CUDAL POST OFFICE	AUTOMATIC	RAINFALL	Medium
070112	DALTON POST OFFICE	AUTOMATIC	RAINFALL	Medium
049125	EUABALONG	MANUAL	RIVER	Medium
065013	EUGOWRA -TOWN	MANUAL	RIVER	Medium
065103	FORBES AIRPORT AWS	AUTOMATIC	AWS	Medium
063032	GOLSPIE (AYRSTON)	AUTOMATIC	RAINFALL	Medium
073014	GRENFELL (MANGANESE RD)	AUTOMATIC	RAINFALL	Medium
075032	HILLSTON AIRPORT	AUTOMATIC	RAINFALL	Medium
049000	IVANHOE AERODROME AWS	AUTOMATIC	AWS	Medium
075039	LAKE CARGELLIGO AIRPORT	AUTOMATIC	RAINFALL	Medium
065096	MANDAGERY (RAWENE)	AUTOMATIC	RAINFALL	Medium
063245	MANDURAMA POST OFFICE	AUTOMATIC	RAINFALL	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
412– Lachlan River (continued)				
065022	MANILDRA (HAZELDALE)	AUTOMATIC	RAINFALL	Medium
065068	PARKES AIRPORT AWS	AUTOMATIC	AWS	Medium
073150	STOCKINBINGAL (SUNNYDALE)	AUTOMATIC	RAINFALL	Medium
063061	TRUNKEY (OLD POST OFFICE)	AUTOMATIC	RAINFALL	Medium
050017	WEST WYALONG AIRPORT AWS	AUTOMATIC	AWS	Medium
073138	YOUNG AIRPORT	AUTOMATIC	RAINFALL	Medium
416 – Border rivers				
056139	BEN LOMOND (KOALA)	AUTOMATIC	RAINFALL	Medium
054159	BUKKULLA (ASHFORD ROAD)	AUTOMATIC	RAINFALL	Medium
056111	ELSMORE (DANTHONIA)	AUTOMATIC	RAINFALL	Medium
056237	ELSMORE VILLAGE	AUTOMATIC	RAINFALL	Medium
056009	EMMAVILLE POST OFFICE	AUTOMATIC	RAINFALL	Medium
056013	GLEN INNES AG RESEARCH STN	AUTOMATIC	RAINFALL	Medium
056243	GLEN INNES AIRPORT AWS	AUTOMATIC	AWS	Medium
056242	INVERELL (RAGLAN ST)	AUTOMATIC	RAINFALL	Medium
056018	INVERELL RESEARCH CENTRE	AUTOMATIC	RAINFALL	Medium
054076	KINGS PLAINS (WINDERMERE)	AUTOMATIC	RAINFALL	Medium
052020	MUNGINDI POST OFFICE	AUTOMATIC	RAINFALL	Medium
054065	NULLAMANNA (SILVERDALE)	AUTOMATIC	RAINFALL	Medium
054104	PINDARI DAM	AUTOMATIC	RAINFALL	Medium
556015	STANNIFER (RUBICON)	AUTOMATIC	RAINFALL	Medium
056128	SWAN VALE (NUMERALLA)	AUTOMATIC	RAINFALL	Medium
418 – Gwydir Rivers				
054021	BARRABA (MOUNT LINDESAY)	AUTOMATIC	RAINFALL	Medium
054039	BINGARA (KEERA)	AUTOMATIC	RAINFALL	Medium
054004	BINGARA POST OFFICE	AUTOMATIC	RAINFALL	Medium
056006	BUNDARRA POST OFFICE	AUTOMATIC	RAINFALL	Medium
054153	CARODA (PALEROO)	AUTOMATIC	RAINFALL	Medium
054013	DELUNGRA POST OFFICE	AUTOMATIC	RAINFALL	Medium
053115	MOREE AERO	AUTOMATIC	RAINFALL	Medium
053108	TERRY HIE HIE	AUTOMATIC	RAINFALL	Medium
056033	TINGHA POST OFFICE	AUTOMATIC	RAINFALL	Medium
054138	UPPER HORTON (DUNBEACON)	AUTOMATIC	RAINFALL	Medium
056034	URALLA (DUMARESQ ST)	AUTOMATIC	RAINFALL	Medium
054029	WARIALDA POST OFFICE	AUTOMATIC	RAINFALL	Medium
419 – Namoi River				
053002	BARADINE FORESTRY	AUTOMATIC	RAINFALL	Medium
054003	BARRABA POST OFFICE	AUTOMATIC	RAINFALL	Medium
055308	BENDEMEER (BONNA)	AUTOMATIC	RAINFALL	Medium
055286	NAMOI (MT BLACK JACK)	AUTOMATIC	BASESTATION	Medium
055006	BLACKVILLE POST OFFICE	AUTOMATIC	RAINFALL	Medium
054105	BUNDARRA (GRANITE HEIGHTS)	AUTOMATIC	RAINFALL	Medium
055337	CRAWNEY MOUNTAIN	AUTOMATIC	RAIN/REPEATER	High
055257	DURI (DUNGOWAN RD)	AUTOMATIC	RAINFALL	Medium
055309	GLENDOWER MOUNTAIN (LECONFIELD)	AUTOMATIC	RAIN/REPEATER	High
055202	GUNNEDAH AIRPORT AWS	AUTOMATIC	AWS	Medium
055082	MANILLA (WARRABAH)	AUTOMATIC	RAINFALL	Medium
055031	MANILLA POST OFFICE	AUTOMATIC	RAINFALL	Medium
061419	MOUNT PALMER	AUTOMATIC	RAIN/REPEATER	High
055322	MOUNT SANDON	AUTOMATIC	RAINFALL	Medium
055038	MULLALEY POST OFFICE	AUTOMATIC	RAINFALL	Medium
061392	MURRURUNDI GAP AWS	AUTOMATIC	AWS	Medium
054038	NARRABRI AIRPORT AWS	AUTOMATIC	AWS	Medium
054151	NARRABRI (MT KAPUTAR NATIONAL PARK)	AUTOMATIC	RAIN/REPEATER	High
055336	NUNDLE (HEAD OF THE PEEL)	AUTOMATIC	RAINFALL	Medium
055245	NUNDLE (KEEVA)	AUTOMATIC	RAINFALL	Medium
055335	NUNDLE (MALONGA)	AUTOMATIC	RAINFALL	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
419 – Namoi River (continued)				
555032	NUNDLE SES	AUTOMATIC	BASESTATION	Medium
055262	OGUNBIL (AMAROO)	AUTOMATIC	RAINFALL	Medium
055046	PINE RIDGE (BILLABONG)	AUTOMATIC	RAINFALL	Medium
053114	ROCKY GLEN (BORAH STATION)	AUTOMATIC	RAINFALL	Medium
055325	TAMWORTH AIRPORT AWS	AUTOMATIC	AWS	Medium
555031	TAMWORTH REGIONAL COUNCIL	AUTOMATIC	BASESTATION	Medium
555030	TAMWORTH SES	AUTOMATIC	BASESTATION	Medium
052088	WALGETT AIRPORT AWS	AUTOMATIC	AWS	Medium
055164	WEABONGA (STONELEIGH)	AUTOMATIC	RAINFALL	Medium
420 – Castlereagh River				
064027	COONABARABRAN (BARINA -TM)	AUTOMATIC	RAINFALL	Medium
064017	COONABARABRAN AIRPORT AWS	AUTOMATIC	AWS	Medium
051161	COONAMBLE AIRPORT AWS	AUTOMATIC	AWS	Medium
064007	NEILREX (CAIGAN)	AUTOMATIC	RAINFALL	Medium
064020	PURLEWAUGH (KEODOEL LANE)	AUTOMATIC	RAINFALL	Medium
421 – Macquarie-Bogan Rivers				
050119	ALECTOWN (VANVILLA)	AUTOMATIC	RAINFALL	Medium
063291	BATHURST AIRPORT AWS	AUTOMATIC	AWS	Medium
063239	BATHURST REGIONAL COUNCIL	AUTOMATIC	BASESTATION	Medium
NA	BATHURST REGIONAL COUNCIL DEPOT	AUTOMATIC	BASESTATION	Medium
063287	BATHURST STANLEY STREET (MACQUARIE RIVER)	AUTOMATIC	RAINFALL	Medium
563034	BEN BULLEN (CLEARVIEW)	AUTOMATIC	RAIN/REPEATER	High
065110	BORENORE (LYNDEN-BRAE)	AUTOMATIC	RAINFALL	Medium
063298	CAMPBELLS RIVER (UPSTREAM CHIFLEY)	AUTOMATIC	RAINFALL	Medium
064025	COOLAH (BINNIA ST)	AUTOMATIC	RAINFALL	Medium
065051	CUMNOCK TM	AUTOMATIC	RAINFALL	Medium
065070	DUBBO AIRPORT AWS	AUTOMATIC	AWS	Medium
064029	DUNEDOO (SHELL)	AUTOMATIC	RAINFALL	Medium
051160	GILGANDRA COUNCIL DEPOT	AUTOMATIC	RAINFALL	Medium
050016	GOONUMBLA (CORADGERY)	AUTOMATIC	RAINFALL	Medium
063283	HAMPTON (BINDO)	AUTOMATIC	RAINFALL	Medium
062106	MOLONG (BONNIE DOON)	AUTOMATIC	RAINFALL	Medium
065041	MOLONG TM	AUTOMATIC	RAINFALL	Medium
062101	MUDGEER AIRPORT AWS	AUTOMATIC	AWS	Medium
048225	MULGAWARRINA	MANUAL	RIVER	Medium
065098	NEUREA (FERNFIELD)	AUTOMATIC	RAINFALL	Medium
063264	NEWBRIDGE (STRINGYBARK RD)	AUTOMATIC	RAINFALL	Medium
062100	NULLO MOUNTAIN AWS	AUTOMATIC	AWS	Medium
063293	OBERON (JENOLAN CAVES ROAD)	AUTOMATIC	RAINFALL	Medium
063302	OBERON (MOUNT DAVID)	AUTOMATIC	RAINFALL	Medium
063254	ORANGE AGRICULTURAL INSTITUTE	AUTOMATIC	RAINFALL	Medium
063303	ORANGE AIRPORT AWS	AUTOMATIC	AWS	Medium
563082	ORANGE STP	AUTOMATIC	BASESTATION	Medium
563086	ORANGE SES	AUTOMATIC	BASESTATION	Medium
050031	PEAK HILL POST OFFICE	AUTOMATIC	RAINFALL	Medium
063304	ROCKLEY (GLENLEA)	AUTOMATIC	RAINFALL	Medium
062010	STUART TOWN (MOOKER HILL)	AUTOMATIC	RAINFALL	Medium
063297	TARANA (FISH RIVER)	AUTOMATIC	RAINFALL	Medium
051049	TRANGIE RESEARCH STATION AWS	AUTOMATIC	AWS	Medium
065036	YEOVAL POST OFFICE	AUTOMATIC	RAINFALL	Medium
423 – Warrego River				
048245	BOURKE AIRPORT AWS	AUTOMATIC	AWS	Medium
048039	ENNGONIA	MANUAL	RIVER	Medium
424 – Paroo River				
046012	WILCANNIA AERODROME AWS	AUTOMATIC	AWS	Medium
048181	WANAARING	MANUAL	RIVER	Medium
425 – Darling River				
047007	BROKEN HILL (PATTON STREET)	AUTOMATIC	RAINFALL	Medium

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Bureau number	Station name	Gauge type	Data type	Priority
425 – Darling River (continued)				
047048	BROKEN HILL AIRPORT AWS	AUTOMATIC	AWS	Medium
048027	COBAR MO	AUTOMATIC	RAINFALL	Medium

Notes:

- Does not include daily rainfall and other Bureau synoptic stations.
- AWS – Automatic Weather Station which is owned and operated by the Bureau of Meteorology but its primary purpose is not for flood warning

Schedule 8: List of sites where the Bureau assists other agencies with maintenance

Bureau number	Station name	Owner	Gauge type	Data type	Priority
205 – Bellinger River Valley					
058222	MINNIE WATER PUMP SHED	COUNCIL	AUTOMATIC	RAINFALL	Medium
058223	SANDSTONE HILL	COUNCIL	AUTOMATIC	RAIN/REPEATER	High
558068	WOOLI (BROWNS KNOB)	COUNCIL	AUTOMATIC	RAINFALL	Medium
558060	WOOLI RIVER AT CARAVAN PARK	COUNCIL	AUTOMATIC	RAINFALL	Medium
210 – Hunter River Valley					
561101	CRESSFIELD	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
561099	DRY CREEK (SCONE)	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
061360	KINGDOM PONDS	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
061373	PARKVILLE	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
061401	SCONE (FIGTREE GULLY)	BUREAU	AUTOMATIC	RAIN/REPEATER	High
061402	SCONE (STONEY CREEK)	COUNCIL	AUTOMATIC	RAIN/REPEATER	High
561100	WINGEN	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
410 – Murrumbidgee River					
570025	BONDO	COUNCIL	AUTOMATIC	RAINFALL	Medium
570021	CHERRY TREE	COUNCIL	AUTOMATIC	RAINFALL	Medium
570036	COOMA (BENEFIELD)	COUNCIL	AUTOMATIC	RAIN/REPEATER	High
570031	COOMA SMEC (COOMA BACK CREEK)	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
570035	KOOLAROO (COOMA CREEK)	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
570032	MYALLA LAKE	COUNCIL	AUTOMATIC	RAINFALL	Medium
570028	WILLARNEY	COUNCIL	AUTOMATIC	RAINFALL	Medium
570030	WILLOW GROVE	COUNCIL	AUTOMATIC	RAINFALL	Medium
421 – Macquarie River Valley					
065110	BORENORE (LYDEN-BRAE)	COUNCIL	AUTOMATIC	RAINFALL	Medium
062106	MOLONG (BONNIE DOON)	COUNCIL	AUTOMATIC	RAINFALL	Medium
062000	MOLONG (FERNLEIGH-TM)	COUNCIL	AUTOMATIC	RAINFALL	Medium
065041	MOLONG TM	COUNCIL	AUTOMATIC	RAINFALL	Medium
563083	CANOBOLAS (HILLVIEW)	COUNCIL	AUTOMATIC	RAIN/REPEATER	High
563081	ORANGE (DALTON ST BRIDGE)	COUNCIL	AUTOMATIC	RIVER	Medium
563049	ORANGE (KITE ST)	COUNCIL	AUTOMATIC	RAINFALL/RIVER	Medium
563085	ORANGE (NORTH ORANGE WTP)	COUNCIL	AUTOMATIC	RAINFALL	Medium
563084	ORANGE (SPRING CREEK WTP)	COUNCIL	AUTOMATIC	RAINFALL	Medium
563082	ORANGE STP	COUNCIL	AUTOMATIC	RAINFALL	Medium

Notes:

- Does not include daily rainfall and other Bureau synoptic stations.

Schedule 9: List of sites where the Bureau co-locates equipment and the site is owned by another agency

Bureau number	Station name	Owner	Gauge type	Data type	Priority
201 – Tweed River Valley					
558010	BARNEYS POINT (TWEED RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
058204	BOAT HARBOUR (ROUS RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
558014	TUMBULGUM (TWEED RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
203 – Richmond River					
058202	BENTLEY (BACK CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
058193	EUNGELLA (OXLEY RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
058206	EWING BRIDGE CORNDALE (COOPERS CK)	COUNCIL	AUTOMATIC	RIVER	Medium
558035	GOONELLABAH (WYREEMA RD REPEATER)	COUNCIL	AUTOMATIC	RIVER	Medium
058186	MURWILLUMBAH (TWEED RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
058162	NASHUA (WILSONS RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
058180	NIMBIN (GOOLMANGAR CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
558000	REPENTANCE (COOPERS CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
058199	ROCK VALLEY (LEYCESTER CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
058147	THE CHANNON	COUNCIL	AUTOMATIC	RIVER	Medium
058201	TUNCESTER (LEYCESTER CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
058167	UKI (TWEED RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
558012	WOODLAWN (WILSONS RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
206 – Macleay River					
059122	BELLBROOK (MACLEAY RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
059128	MOPARRABAH (PARRABEL CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
211 – Macquarie-Tuggerah Lakes					
061383	GEARS (WYONG RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
061380	JILLIBY (JILLIBY CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
061384	KANGY ANGY (OURIMBAH CREEK)	COUNCIL	AUTOMATIC	RIVER	Medium
561025	WYONG D/S BRIDGE (WYONG RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
213 – Sydney Coast-Georges River					
066168	MILPERRA BRIDGE (GEORGES RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
215 – Shoalhaven River					
568226	BROUGHTON CREEK	COUNCIL	AUTOMATIC	RIVER	Medium
068233	GRASSY GULLY (SHOALHAVEN RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
068181	HAMPDEN BRIDGE (KANGAROO RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
070335	HILLVIEW (SHOALHAVEN RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
569019	MOUNTVIEW (SHOALHAVEN RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
068213	NOWRA BOAT SHED (SHOALHAVEN RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
568169	RED ROCKS (ERTS)	COUNCIL	AUTOMATIC	RIVER	Medium
421 – Macquarie River Valley					
063287	BATHURST STANLEY STREET (MACQUARIE RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium
063298	CAMPBELLS RIVER (UPSTREAM CHIFLEY)	COUNCIL	AUTOMATIC	RIVER	Medium
063297	TARANA (FISH RIVER)	COUNCIL	AUTOMATIC	RIVER	Medium

Notes:

- Does not include daily rainfall, automatic weather stations and other Bureau synoptic stations.

Schedule 10: List of flood warning related products issued by the Bureau in New South Wales (warning, watches, bulletins, river alerts)

Flood warnings

Time preceding this symbol signifies the update time during the developing stages of a flood

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN33601	Tweed River	> minor flood level	3 hrs #	> minor flood level
IDN36602	Richmond/Wilson	> minor flood level	3 hrs #	> minor flood level
IDN36603	Clarence River	> minor flood level	3 hrs #	> minor flood level
IDN36604	Bellinger	> minor flood level	3 hrs #	> minor flood level
IDN36605	Macleay River	> minor flood level	3 hrs #	> minor flood level
IDN36606	Hastings River	> minor flood level	3 hrs #	> minor flood level
IDN36607	Manning River	> minor flood level	3 hrs #	> minor flood level
IDN36608	Hunter River	> minor flood level	3 hrs #	> minor flood level
IDN36609	Nepean-Hawkesbury	> minor flood level	3 hrs #	> minor flood level
IDN36610	Georges and Woronora Rivers	> minor flood level	3 hrs #	> minor flood level
IDN36611	Shoalhaven River	> minor flood level	3 hrs #	> minor flood level
IDN36612	Moruya and Deua Rivers	> minor flood level	3 hrs #	> minor flood level
IDN36613	Bega River	> minor flood level	3 hrs #	> minor flood level
IDN36615	Wyong River and Tuggerah Lake	> minor flood level	3 hrs #	> minor flood level
IDN36616	Parramatta River	> 1% flood level	3 hrs #	Rain easing
IDN36618	Orara River	> minor flood level	3 hrs #	> minor flood level
IDN36619	Lake Macquarie	> minor flood level	3 hrs #	> minor flood level
IDN36620	Upper Macintyre	> minor flood level	3 hrs #	> minor flood level
IDN36621	Gwydir River	> minor flood level	3 hrs #	> minor flood level
IDN36622	Peel and Namoi	> minor flood level	3 hrs #	> minor flood level
IDN36623	Castlereagh River	> minor flood level	3 hrs #	> minor flood level
IDN36624	Macquarie River	> minor flood level	3 hrs #	> minor flood level
IDN36625	Bogan River	> minor flood level	3 hrs #	> minor flood level
IDN36626	Lachlan River	> minor flood level	3 hrs #	> minor flood level
IDN36627	Queanbeyan and Molonglo Rivers	> minor flood level	3 hrs #	> minor flood level
IDN36628	Murrumbidgee Rivers	> minor flood level	3 hrs #	> minor flood level
IDN36629	Murray River	> minor flood level	3 hrs #	> minor flood level
IDN36630	Culgoa, Bokhara and Narran Rivers	> minor flood level	24 hrs #	> minor flood level
IDN36631	Warrego River	> minor flood level	24 hrs #	> minor flood level
IDN36632	Paroo River	> minor flood level	24 hrs #	> minor flood level
IDN36633	Bulloo River	> minor flood level	24 hrs #	> minor flood level
IDN36634	Barwon-Darling Rivers	> minor flood level	24 hrs #	> minor flood level
IDN36636	Belubula River and Mandagery Creek	> minor flood level	3 hrs #	> minor flood level
IDN36637	Brunswick River	> minor flood level	3 hrs #	> minor flood level
IDN36638	Wallis Lake	> minor flood level	3 hrs #	> minor flood level
IDN36639	Patterson/Williams Rivers	> minor flood level	3 hrs #	> minor flood level
IDN36640	Nambucca River	> minor flood level	3 hrs #	> minor flood level
IDN36641	Camden Haven River	> minor flood level	3 hrs #	> minor flood level
IDN36666	Macquarie River to Bathurst	> minor flood level	3 hrs #	> minor flood level
IDN36669	St Georges Basin	> minor flood level	3 hrs #	> minor flood level

Flood warnings: Smaller sub-catchments with faster catchment response times

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN36650	Coffs Creek	> minor flood level	3 hrs #	< minor flood level
IDN36652	Myall R	> minor flood level	3 hrs #	< minor flood level
IDN36654	Cooma	> minor flood level	3 hrs #	< minor flood level
IDN36658	Cooks River	> minor flood level	3 hrs #	< minor flood level
IDN36659	Armidale	> minor flood level	3 hrs #	< minor flood level
IDN36660	Cootamundra	> 50mm in 6hrs	3 hrs #	Rain easing
IDN36661	Wooli	> minor flood level	3 hrs #	< minor flood level
IDN36667	Stockinbingal	> 50mm in 6hrs	3 hrs #	Rain easing
IDN36667	Orange	> 70mm in 6hrs	3 hrs #	Rain easing

Flood watches

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN36501	Flood Watch 1	> minor flood level	24 hrs #	Rain easing

River alerts

Product ID	Product name	Initiating criteria	Updated	Finalising
n/a	River Alert – Nundle (Pearly Gates) at 3.0m	To be issued when water level at station has exceeded the indicated threshold.	n/a	n/a

River (rainfall) alerts

Product ID	Product name	Initiating criteria	Updated	Finalising
n/a	Rainfall Alert – Cooma (Benefield) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Cooma (Bondo) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Cooma (Cherry Tree) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Cooma (Myalla Lake) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Product ID	Product name	Initiating criteria	Updated	Finalising
n/a	Rainfall Alert – Cooma (Willarney) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Cooma (Willow Grove) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Cooma SMEC (Back Creek) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Koolaroo (Cooma Creek) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Molong (Bonnie Doon) at 25 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Molong TM at 25 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Borenore (Lyden Brae) at 25 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Nundle (Head of Peel) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Product ID	Product name	Initiating criteria	Updated	Finalising
n/a	Rainfall Alert – Nundle (Keeva) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Nundle (Malonga) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Nundle (Pearly Gates) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Crawney Mountain at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Stockinbingal (Sunnydale) at 25 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Canobolas (Hillview) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Orange (Agriculture) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Canobolas (Hillview) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a

Service Level Specification for Flood Forecasting and Warning Services for New South Wales and the Australian Capital Territory

Product ID	Product name	Initiating criteria	Updated	Finalising
n/a	Rainfall Alert – Orange (Kite Street) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Orange(North Orange WTP) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Orange (Spring Creek WTP) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a
n/a	Rainfall Alert – Orange (STP) at 20 mm	To be issued when total rainfall accumulated in the previous 30 minutes at the station has exceeded the indicated threshold.	n/a	n/a

Notes:

- n/a: These alerts are provided via Enviromon and do not have formal product ID's. They are not updated or finalised as the initial alert is to be used as a “heads-up” or “trigger” for action.
- WTP/STP: Water/Sewerage Treatment Plant.
- SMEC: Snowy Mountains Engineering Corporation

River bulletins

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60140	Northern Rivers	None	Hourly	Never
IDN60141	Mid North Coast	None	Hourly	Never
IDN60143	Central Coast	None	Hourly	Never
IDN60144	South Coast	None	Hourly	Never
IDN60145	North West	None	Hourly	Never
IDN60146	Central Coast	None	Hourly	Never
IDN60147	South West	None	Hourly	Never
IDN60148	Far West	None	Hourly	Never

Rainfall bulletins (1 hourly)

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60152	Northern Rivers	None	Hourly	Never
IDN60153	Mid North Coast	None	Hourly	Never
IDN60154	Central Coast	None	Hourly	Never
IDN60159	Sydney Metropolitan	None	Hourly	Never
IDN60155	South Coast	None	Hourly	Never
IDN60156	North West	None	Hourly	Never

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60157	Central West	None	Hourly	Never
IDN60158	South West	None	Hourly	Never
IDN60176	Far West	None	Hourly	Never

Rainfall bulletins (3 hourly)

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60160	Northern Rivers	None	Each three hours	Never
IDN60161	Mid North Coast	None	Each three hours	Never
IDN60162	Central Coast	None	Each three hours	Never
IDN60167	Sydney Metropolitan	None	Each three hours	Never
IDN60163	South Coast	None	Each three hours	Never
IDN60164	North West	None	Each three hours	Never
IDN60165	Central West	None	Each three hours	Never
IDN60166	South West	None	Each three hours	Never
IDN60177	Far West	None	Each three hours	Never

Rainfall bulletins (24 hourly)

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60168	Northern Rivers	None	Hourly	Never
IDN60169	Mid North Coast	None	Hourly	Never
IDN60170	Central Coast	None	Hourly	Never
IDN60175	Sydney Metropolitan	None	Hourly	Never
IDN60171	South Coast	None	Hourly	Never
IDN60172	North West	None	Hourly	Never
IDN60173	Central West	None	Hourly	Never
IDN60174	South West	None	Hourly	Never
IDN60178	Far West	None	Hourly	Never

Rainfall bulletins (Daily)

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60003	Daily Rainfall Bulletin for NSW	None	Daily	Never

Rainfall bulletins (Weekly)

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60004	Weekly Rainfall Bulletin for NSW	None	Weekly	Never

Rainfall bulletins (Monthly)

Product ID	Product name	Initiating criteria	Updated	Finalising
IDN60018	Monthly Rainfall Bulletin for NSW	None	Monthly	Never

Schedule 11: Changes to this Service Level Specification

Version	Date	Name	Update
1.0	20/11/2013	Nicole Pana	Version 1.0 signed
2.0	March 2015	Nicole Pana	Additional sentence to clause 1.6 highlighting supplementary services
			Addition of priorities to stations in schedules 2-4 and 7-9. This is defined in clause 3.3.2 and Table 1 which are also new additions.
			Quantitative and Qualitative clauses better described (3.8.3 and 3.8.4)
3.0	June 2016	Nicole Pana	Additional clause added to include the Bureau's social media service
			Update various network changes throughout the schedules

Appendix A: Glossary of terms

A.1. General

Bureau Flood Warning Centre: an operational area set aside in each capital city to fulfil the Bureau's role in the Total Flood Warning System specifically flood forecasting and warning.

Bureau National Operations Centre: The principal role of the National Operations Centre is to augment regional flood forecasting teams during major floods and to provide operational system support. The National Operations Centre is also responsible for leading new initiatives to enhance the quality of operations and services.

Catchment Directive: A catchment directive provides guidance specific to a catchment to help develop forecasting and warning products.

Flood warning: A written product to provide advice on impending flooding so people can take action to minimise its negative impact. This will involve some people taking action on their own behalf and others doing so as part of agency responsibilities.

Flood watch: A written product that alerts when the combination of forecast rainfall and catchment conditions indicates the flooding is likely.

National Crisis Coordination Centre: The Australian Government Crisis Coordination Centre has been designed to connect relevant Australian Government, State and Territory agencies to centralise Australian Government actions during complex national crises, to develop a single, timely and consistent picture or understanding of a crisis, its implications and the national capacity to respond.

National Flood Warning Arrangements: The National Arrangements outline the general roles and responsibilities of each level of Government in providing and supporting an effective flood warning service and includes separate chapters describing the specific arrangements and agency roles that apply in each jurisdiction.

Protective behaviour: generating appropriate and timely actions and behaviours from the agencies involved and from the threatened community.

Severe Thunderstorm: A thunderstorm is characterised by sudden electrical discharges, each manifested by a flash of light (lightning) and a sharp rumbling sound. Thunderstorms are associated with convective clouds (cumulonimbus) and are usually accompanied by precipitation. Thunderstorms are often short-lived and impact on only a small area. Severe thunderstorms may last for an hour or more and can have a more widespread impact.

A severe thunderstorm will also have one or more of the following phenomena:

- Tornado
- Wind gust of 90 km/h (49 knots) or more
- Hailstones with diameter of 2 cm or larger
- Very heavy rain sufficient to cause flash flooding

Weather warnings: Weather warnings are messages sent out by the Bureau to warn the community of potentially hazardous or dangerous weather conditions. Such warnings include but are not limited to: road weather alerts, severe thunderstorm warnings, severe weather warnings for heavy rain, strong or gale force winds, marine wind warnings, warnings for sheep graziers and frost warnings. More information on weather terms is given in the [Bureau's glossary](#).

A.2. The components of the Total Flood Warning System

Based on the Manual 21 Australian Emergency Manual Series, Australian Government 2009 (see the Manual for more details).

Communication: disseminating warning information in a timely fashion to people and organisations likely to be affected by the flood (see Chapter 6).

Interpretation: identifying in advance the impacts of the predicted flood levels on communities at risk (see Chapter 4).

Message construction: devising the content of the message which will warn people of impending flooding (see Chapter 5).

Monitoring and prediction: detecting environmental conditions that lead to flooding, and predicting river levels during the flood (see Chapter 3),

Review: examining the various aspects of the system with a view to improving its performance (see Chapter 7).

A.3 Flood classifications

The classification of minor, moderate and major flood levels at key river height stations is based upon the effect of flooding for some distance upstream and downstream of that station. These levels are determined using the following descriptive categories of flooding, historical data or relevant local information.

The process for establishing flood class levels involves determining local flood effects, review and endorsement by relevant stakeholders and passing recommendations to the Bureau for inclusion in forecast and warning procedures. The process for establishment of flood class levels specific to each State and Territory is documented in the National Arrangements.

- Minor flooding - Causes inconvenience. Low-lying areas next to watercourses are inundated. Minor roads may be closed and low-level bridges submerged. In urban areas inundation may affect some backyards and buildings below the floor level as well as bicycle and pedestrian paths. In rural areas removal of stock and equipment may be required.
- Moderate flooding - In addition to the above, the area of inundation is more substantial. Main traffic routes may be affected. Some buildings may be affected above the floor level. Evacuation of flood affected areas may be required. In rural areas removal of stock is required.
- Major flooding - In addition to the above, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted.

Appendix B: References

1. Emergency Management Australia 2009, *Flood Warning Manual*, Series 21.
2. Bureau of Meteorology 2013, *National Flood Warning Arrangements*
3. Bureau of Meteorology 2013, *National Flood Directive* (unpublished - internal use)
4. Bureau of Meteorology 2013, *Catchment Flood Directives* (unpublished - internal use)
5. Data Sharing Agreements