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Surface Water Technical Report

Santos GLNG Gas Field Development Project

AUGUST 2014

Prepared for
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URS

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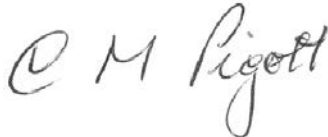


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Appendix B Surface water assessment: statistics and guideline exceedances

Appendix C List of wetlands within GFD Project area

Appendix D List of surface water licences within GFD Project area

Abbreviations

Abbreviation	Description
AEP	Annual Exceedance Probability
AHD	Australian Height Datum
ANZECC	Australian and New Zealand Environment and Conservation Council (now defunct)
APLNG	Australia Pacific Liquefied Natural Gas
ARI	Average Recurrence Interval
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
AS/NZS	Australian Standard/New Zealand Standard
ATP	Authority to prospect
BoM	Australian Government Bureau of Meteorology
BUA	Beneficial use approval
CFMP	Chemical and Fuel Management Plan
DAMP	Decommissioning and Abandonment Management Plan
DEM	Digital elevation model
DNRM	Queensland Department of Natural Resources and Mines
DNPRSR	Queensland Department of National Parks, Recreation, Sport and Racing
DO	Dissolved oxygen
DOTE	Commonwealth Department of the Environment
Draft EM Plan	Draft Environmental Management Plan
DRRS	Dawson River Release Scheme
DSDIP	Queensland Department of State Development, Infrastructure and Planning
EA	Environmental authority
EC	Electrical conductivity
EHP	Queensland Department of Environment and Heritage Protection
EHS	Environment, Health and Safety (Standards)
EHSMS	Environment, Health and Safety Management System
EIS	Environmental Impact Statement
EMR	Environmental Monitoring and Reporting
EP Act	<i>Environmental Protection Act 1994</i> (Queensland)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
EPP Water	Environmental Protection (Water) Policy 2009 (Queensland)
EV	Environmental Value
FMP	Field Management Procedure
GAB	Great Artesian Basin
GDE	Groundwater dependant ecosystems
GFD Project	Gas Field Development Project
GIS	Geographic Information System
ha	Hectare
HEV	High Ecological Value
HWMP	Healthy Waters Management Plan (QMDC 2012)
IESC	Independent Expert Scientific Committee
LNG	Liquefied Natural Gas
LoR	Limit of reporting
LRMP	Land Release Management Plan
MAR	Managed Aquifer Recharge

Abbreviations

Abbreviation	Description
MDBP	Murray-Darling Basin Plan
ML	Megalitre
MNES	Matters of National Environmental Significance
N/A	Not applicable
NATA	National Association of Testing Authorities, Australia
NTU	Nephelometric turbidity unit
NWQMS	National Water Quality Management Strategy
PL	Petroleum Lease
QCLNG	Queensland Curtis Liquefied Natural Gas
QGC	Queensland Gas Company
QMDC	Queensland Murray-Darling Committee
QWQG	Queensland Water Quality Guidelines
REMP	Receiving Environment Monitoring Program
RO	Reverse osmosis
ROP	Resource Operations Plan
RORB	Runoff and streamflow modelling software
Santos GLNG	Santos GLNG, the proponent
SEIS	Supplementary Environmental Impact Statement
SEWPaC	Former Commonwealth Department of Sustainability, Environment, Water, Population and Communities
SPP	State Planning Policy
TDS	Total dissolved solids
ToR	Terms of Reference
TEP	Transitional Environmental Program
URS	URS Australia Pty Limited
Water Act	<i>Water Act 2000</i> (Qld)
WQO	Water Quality Objective
WRMP	Water Resource Management Plan
WRP	Water Resource Plan

Executive summary

URS Australia Pty Ltd (URS) was engaged by Santos GLNG to complete an assessment of the potential impacts on the surface water receiving environment, which could potentially result from the development of the proposed Gas Field Development (GFD) Project in central and southern Queensland. The subsequent surface water technical report was designed to inform the Environmental Impact Statement (EIS) process for approval of the GFD Project. The assessment methodology was aligned with the requirements outlined in the Terms of Reference (ToR) for the GFD Project EIS, issued by the Queensland Office of the Coordinator-General in March 2013.

In order to complete the required assessment, URS reviewed water quality data obtained directly from Santos GLNG. This data was analysed by URS to obtain summary statistics (median and 95th percentile values) for key water quality parameters. These values were then compared with the relevant local and regional water quality guidelines to determine the key water quality trends within the existing surface water environment. Parameters which consistently exceeded the applicable guideline values (water quality objectives) were identified as those which may require site-specific trigger values in the future (in areas where discharges to water may occur) to establish an accurate baseline condition against which potential impacts can be assessed.

URS utilised information from secondary sources to verify findings of the surface water assessment. These included previous water quality studies commissioned and/or undertaken by Santos GLNG; surface water assessments completed for other resource projects within the Bowen and Surat basins, and peer-reviewed research denoting the characteristics of coal seam water associated with gas extraction and potential cumulative impacts arising from the industry as a whole. The Comet, Upper Dawson and Lower Dawson River sub-basin plans (as a part of the Fitzroy Basin Water Resource Plan) were used to identify existing environmental values for aquatic ecosystems and human uses for parts of the Fitzroy Basin associated with the GFD Project area. The current Condamine-Balonne Water Resource Plan (2004) does not provide environmental values for that basin. Thus, the draft environmental values developed by the Queensland Murray-Darling Committee (2012) were used as a basis for identifying environmental values for areas of the Condamine-Balonne basin within the GFD Project area. This information was supplemented by spatial analysis of water licences throughout the study area using data that was extracted from the Queensland Department of Natural Resources and Mines (DNRM) database and processed using Geographic Information Systems (GIS) software. These analyses enabled the identification of key water uses (linked to land use activities) throughout the GFD Project area which may be impacted by the proposed development.

The potential impacts to the surface water receiving environment were assessed on the basis of surface water quality, hydrology and fluvial geomorphology characterisations, using a significance assessment method. This involved a qualitative assessment of both the sensitivity of identified environmental values to impacts, and the magnitude of consequences that may arise in the event that impacts occur. Consequently, mitigation measures to reduce the risk associated with potential impacts were identified on the basis of management frameworks within Santos GLNG's existing operations, and any additional measures specific to the GFD Project. A monitoring program for both baseline and operational assessment was also included to monitor changes in environmental values throughout each phase of the GFD Project.

Introduction

1.1 Background

Santos GLNG intends to further develop its Queensland gas resources to supply natural gas to augment its existing and previously approved Gladstone Liquefied Natural Gas (GLNG) Project.

The Santos GLNG Gas Field Development Project (the GFD Project) is an extension of the approved gas field development and will involve the construction, operation, decommissioning and rehabilitation of wells and the associated supporting infrastructure needed to provide additional gas over more than 30 years.

The GFD Project seeks approval to expand the GLNG Project's gas fields from 6,887 km² to 10,676 km² to develop an additional 6,100 production wells beyond the currently authorised 2,650 wells; resulting in a maximum of up to 8,750 wells. The GFD Project will continue to progressively develop the Arcadia, Fairview, Roma and Scotia gas fields across 35 Santos GLNG petroleum tenures in the Surat and Bowen basins, and associated supporting infrastructure in these tenures and in adjacent areas. The location of the GFD Project area and primary infrastructure is shown on Figure 1-2.

This GFD Project will include the following components:

- Production wells
- Fluid injection wells, monitoring bores and potentially underground gas storage wells
- Gas and water gathering lines
- Gas and water transmission pipelines
- Gas compression and treatment facilities
- Water storage and water management facilities
- Access roads and tracks
- Accommodation facilities and associated services (e.g. sewage treatment)
- Maintenance facilities, workshops, construction support, warehousing and administration buildings
- Utilities such as water and power generation and supply (overhead and/or underground)
- Lay down, stockpile and storage areas
- Borrow pits and quarries
- Communications.

The final number, size and location of the components will be determined progressively over the life of the GFD Project and will be influenced by the location, size and quality of the gas resources identified through ongoing field development planning processes, which include consideration of land access agreements negotiated with landholders, and environmental and cultural heritage values.

Where practicable, the GFD Project will utilise existing or already approved infrastructure (e.g. accommodation camps, gas compression and water management facilities) from the GLNG Project or other separately approved developments. The GFD Project may also involve sourcing gas from third-party suppliers, as well as the sharing or co-location of gas field and associated facilities with third parties.

For the purposes of transparency this EIS shows an area off-tenure that may be used for infrastructure such as pipelines and temporary camps (supporting infrastructure area). While not assessed specifically in this EIS, any infrastructure that may be located within this area would be subject to further approval processes separate to this EIS.

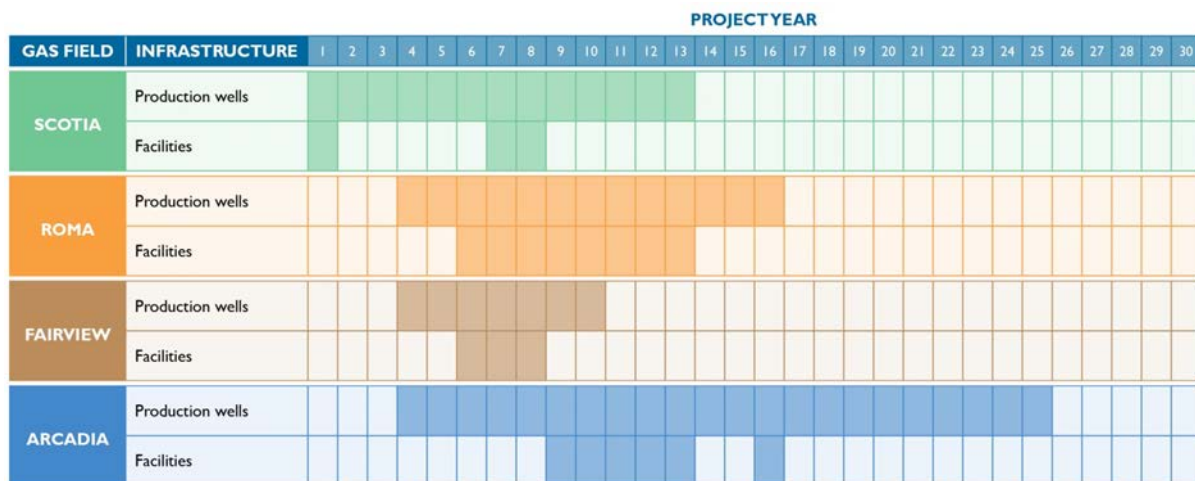
1 Introduction

Approved exploration and appraisal activities are currently underway across the GFD Project's petroleum tenures to improve understanding of the available gas resources. As the understanding of gas resources increases, investment decisions will be made about the scale, location and timing of the next stages of field development.

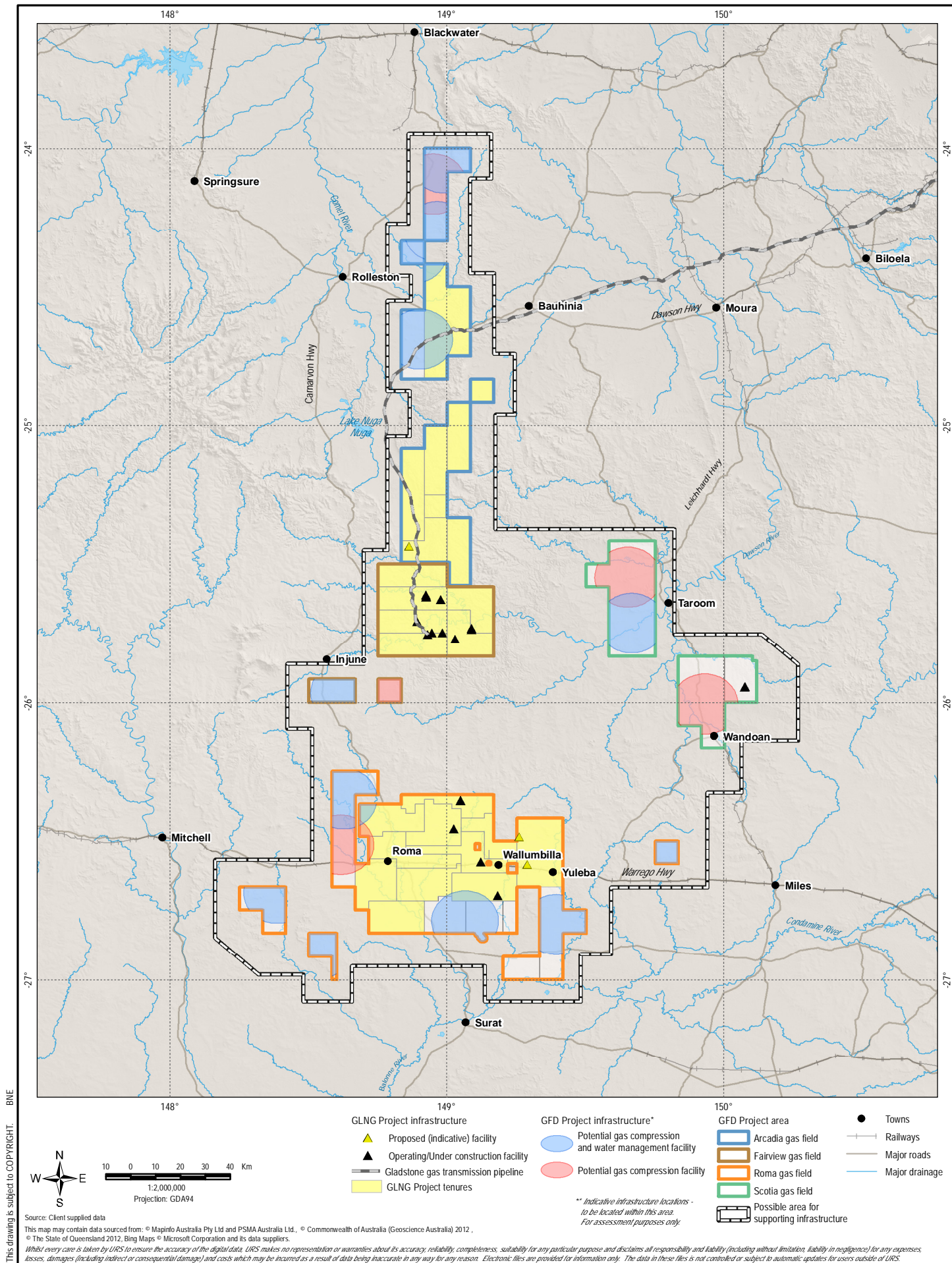
For the purposes of this EIS, a scenario based on the maximum development case was developed at the approval of the ToR. This scenario assumed that production from the wells and upgrading of the gas compression facilities in the Scotia gas field would commence in 2016, followed by the GFD Project wells in the Roma, Arcadia and Fairview gas fields in mid-2019. This schedule is indicative only and was used for the purpose of the impact assessment in this EIS.

The potential GFD Project schedule is outlined in Figure 1-1. This schedule provides an overall field development scenario for the purpose of assessment in this EIS.

Figure 1-1 Proposed GFD Project development schedule



To minimise the disturbance footprint of the GFD Project, decommissioning and rehabilitation will occur progressively throughout the life of the GFD Project as construction activities cease and exhausted gas wells are decommissioned. However, final decommissioning and rehabilitation will occur at the end of gas production in accordance with relevant approvals and regulatory requirements.



1 Introduction

1.2 GFD Project infrastructure

A list of the GFD Project infrastructure components and footprint during the operations phase is given in Table 1-1. The area of the operational footprints will be less than those required during construction. The location, size and timing of each of the GFD Project's operational elements will be confirmed as part of the ongoing field development process and presented in plans of operations.

Facilities for energy supply, water supply and telecommunications will also be incorporated within GFD Project infrastructure. Most of the supporting infrastructure will be constructed within the GFD Project's tenures, although some may also be located off-tenure in the supporting infrastructure area.

The GFD Project development may potentially lead to the following impacts with regards to values of the surface water receiving environment:

- Increased sedimentation (adverse impacts on water quality and geomorphology)
- Erosion of stream banks
- Surface water contamination (adverse impact on surface water quality; toxicity to aquatic ecosystems)
- Altered surface water flow regime (risk to overland flow paths, infrastructure, riparian vegetation, terrestrial ecosystems, baseflow from aquifers, and environmental flow regime)
- Altered geomorphic character (e.g. increased lateral instability; significant alteration of geomorphic units).

Santos GLNG has a number of measures in place to minimise these potential impacts. A risk assessment of each of the potential impacts listed above is presented in Section 9 of this report, along with a detailed summary of the management framework and mitigation measures that will be used to minimise impacts to surface water environmental values.

Table 1-1 Estimated footprints for key GFD Project infrastructure components

GFD Project component	Construction footprint	Operational footprint
Well lease	Single well: 1.5 ha	Single well: 0.3 ha
	Multi-well: 2.5 ha	Multi-well: 0.5 ha
Access tracks and roads	1.5 to 3 ha per km	0.8 to 1.5 ha per km
Gas and water gathering lines	1 to 2.5 ha per km	None (right of way maintained)
Gas and water transmission pipelines	2.5 to 5 ha per km	None (right of way maintained)
Hub gas compression facility	20 to 40 ha	10 to 15 ha
Nodal gas compression facility	2 to 8 ha	1 to 4 ha
Laydown and storage yards ¹	5 to 40 ha	None
Borrow pits	5 to 50 ha	None
Camps ²	1 to 20 ha per camp	0.5 to 10 ha per camp
Water storage	Up to 1 ha for large tank	Up to 0.5 ha for large tank
	5 to 16 ha for large dam	3 to 8 ha for large dam
Water management facility	5 to 10 ha per facility	2 to 5 ha per facility

¹Laydown and storage yards include fuel storage, workshops and maintenance areas. ²Camps include accommodation facilities, water and sewage treatment facilities, recreational, storage and laydown areas. ha: hectare. km: kilometre.

1 Introduction

1.3 Predicted quality of groundwater (including coal seam water)

The process of extracting gas within the GFD Project area will result in the generation of water from production wells (referred to as coal seam water). Water extracted from coal seams can vary both temporally and spatially. The water quality characteristics of this water will influence the water management approach taken.

The characteristic quality of groundwater in terms of total dissolved solids concentrations across the respective gas fields is presented in Table 1-2, based on the results of an assessment undertaken by Parsons Brinckerhoff (PB) on behalf of Santos GLNG. Further details regarding pH and ionic composition of groundwater within the GFD Project tenures can be found in EIS Appendix O: Groundwater Technical Report, and the Water resource management plan (WRMP).

Table 1-2 illustrates the variation in salinity values across the entire GFD Project area, and also within individual formations. For example observed TDS concentrations for groundwater within formations beneath the Roma gas field, such as Bungil, Mooga Sandstone and Gubberamunda Sandstone, vary between approximately 800 to 1,100 mg/L. In comparison, groundwater within the Bandanna Formation (GAB aquitard) underlying the Fairview gas field has a higher median value of 2,718 mg/L for TDS.

Table 1-2 Predicted quality of groundwater including coal seam water across the GFD Project area (adapted from Tables 5.6 to 5.21, Appendix O: Groundwater Technical Report, PB 2014)

Gas Field(s)	Formation	Total Dissolved Solids (mg/L) - converted		
		Minimum	Maximum	Median
Alluvial aquifers		640	1,675	1,025
Tertiary fractured basalts		1,407	5,032	N/A
Great Artesian Basin (GAB) Water bearing units				
Roma	Bungil	778	5,360	1,106
Roma	Mooga Sandstone	81	6,700	1,039
Roma	Gubberamunda Sandstone	363	1,809	801
Not defined	Springbok Sandstone (Injune Creek Group)	1,809	6,030	4,328
Scotia	Walloon Coal Measures	626	15,678	2,479
Roma				
Scotia	Hutton Sandstone	246	10,720	730
Fairview				
Roma				
Scotia	Precipice Sandstone	204	2,251	373
Fairview				
Roma				
Arcadia	Clematis Sandstone	235	838	583
Roma				
GAB Aquitards				
Roma	Wallumbilla	972	5,784	3,038
Roma	Orallo	632	1,099	817
Scotia	Eurombah (Injune Creek Group)	154	2,245	737
Scotia				
Fairview	Evergreen	161	1,427	489
Arcadia	Rewan Group	3,859	4,194	N/A
Fairview	Bandanna	96	9,514	2,718

Note: Salinity values were originally reported as electrical conductivity ($\mu\text{S}/\text{cm}$); they are represented here following conversion to total dissolved solids (TDS) concentration in mg/L as per the convention outlined in ANZECC 2000 (Equation 4.6, Section 4.3.3, p 4.3-4).

1 Introduction

1.4 Predicted volumes of coal seam water

A regional water balance model has been completed, which provided estimates of the rate at which water would be extracted from coal seams during the GFD Project, and incorporated considerations of surface water storages, management facilities and water management options. The model predicted that a potential volume of up to 219 gigalitres (GL) of coal seam water could be extracted over the lifetime of the GFD Project. The rate of extraction was forecast to peak at approximately 73 megalitres per day (ML/day) in 2022, reducing to less than 20 ML/day by 2025 and then less than 10 ML/day after 2030 (CH2MHill 2014, p6). Details regarding the predicted volumes of coal seam water for each gas field are provided in the water balance model report (CH2MHill 2014).

1.5 Management options for coal seam water

The GFD Project coal seam water management strategy will direct management of coal seam water in accordance with the relevant regulatory framework. The strategy is sufficiently flexible to accommodate changes in policy, technology and field conditions, based on a rigorous evaluation and decision-making framework as alternative technologies may be identified during the GFD Project design and implementation process.

The regulatory framework includes the Queensland *Coal seam gas water management policy 2012* (EHP, 2013). The policy sets out the following management hierarchy under the *Environmental Protection Act 1994* (Qld) for prioritising management and use of coal seam water:

- Priority 1 – coal seam water is used for a purpose that is beneficial to one or more of the following: the environment, existing or new water users, and existing or new water-dependent industries.
- Priority 2 – after feasible beneficial use options have been considered, treating and disposing coal seam water in a way that firstly avoids, and then minimises and mitigates, impacts on environmental values.

In addition, the 'making good' requirements of the *Water Act 2000* (Qld) may require operators to consider the feasibility of using coal seam water to meet obligations for provision of water to mitigate impacts that may result from a coal seam operation on bores.

The GLNG Project already has an approved plan in place for existing operations. The strategy for the GFD Project will build upon the experience and understanding of the operations to date. The strategy will be sufficiently flexible to accommodate changes in policy, technology and field conditions, based on a rigorous evaluation and decision-making framework.

The water quality and volumes extracted from coal seams will vary depending on the well location and the production plan. The overall water production characteristics can be forecast with reasonable certainty to enable effective management of the water.

The quality of coal seam water determines the potential treatment requirements for its proposed use. Not all water extracted from coal seams requires treatment before use. Due to the lifecycle impacts (particularly energy) of some treatment processes it is preferable to minimise the amount of treatment wherever possible.

Treatment of coal seam water will be undertaken to provide water of appropriate quality for the proposed use. Where a change in water quality is needed to meet the required water quality of intended uses, this will primarily be achieved through one or a combination of the following approaches:

1 Introduction

- Desalination using reverse osmosis to separate a portion the total dissolved solids and other constituents into a concentrated waste stream and produce a better quality permeate stream
- Amendment using chemical dosing to lower the sodium adsorption ratio and pH/residual alkalinity of coal seam water
- Temperature and ionic balance adjustment
- Filtration removing suspended solids (lowering the turbidity), bio-toxic elements and nutrients that can lead to algal blooms from the water
- Sterilisation to remove bacteria
- De-oxygenation
- Blending of separate water streams of differing quality to achieve a target water quality.

The appropriateness of these methods will be evaluated as information is refined regarding the expected water quality, the intended uses and their water quality requirements according to relevant approvals.

Due to the geographic extent of gas production activities Santos GLNG will adopt a range of water management options to achieve outcomes in accordance with the regulatory framework.

The coal seam water management strategy for the GFD Project has adopted the policy's management hierarchy whereby:

Priority 1: Beneficial use

Coal seam water should be used for a purpose that is beneficial to existing users including GFD Project requirements and to meet "make good" obligations, new water users, and / or existing or new water-dependant industries. Management solutions will be determined based on an evaluation framework that includes full lifecycle assessments of potential benefits and liabilities associated with each option or suite of options. The objective of the framework is to identify feasible options which maximise beneficial use and minimise environmental impacts.

Priority 2: Disposal

After feasible beneficial use options have been considered, coal seam water will be disposed of in a way that firstly avoids, and then minimises and mitigates, impacts on environmental values.

Options for managing water include utilising extracted water for make good arrangements, operational use, substitution of water allocation, depleted coal seam water injection, aquifer injection, providing water for landholder activities or other regional users, surface water release, and evaporation of water in accordance with EHP guidelines.

Brine disposal options

Santos GLNG is already undertaking successful brine management utilising deep injection into a saline formation as part of the GLNG Project. Santos GLNG has also undertaken a series of studies into other management options and will continue to evaluate a range of options. The options currently considered can be divided into the following two broad categories, which are aligned with the Coal Seam Water Management Policy (EHP 2013):

- Direct brine disposal
- Salt disposal after enhanced brine concentration.

Legislation and policy frameworks

This section describes the legislative context, relevant policies and standards at Commonwealth and State level that apply to the GFD Project.

2.1 Commonwealth legislation and policies

2.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) outlines requirements relating to the management and protection of national and international flora and fauna of environmental significance, referred to as Matters of National Environmental Significance (MNES) (Volume 1, Chapter 2, Part 3, Division 1). Subdivision FB relates to protection of water resources from coal seam gas development and large coal mining development. Gas project developments can potentially disrupt aquatic ecosystems and therefore have adverse impacts on aquatic species, water resources and Ramsar wetland sites. An action with the potential for a significant impact on MNES must be referred to the Minister for the Commonwealth Department of the Environment (DOTE) (formerly Sustainability, Environment, Water, Population and Communities (SEWPaC)) and may require approval under the EPBC Act. The nine MNES under the EPBC Act are as follows:

- World heritage properties
- National heritage places
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty these wetlands are listed)
- Nationally threatened species and communities
- Migratory species
- Commonwealth marine areas
- The Great Barrier Reef Marine Park
- Nuclear actions (including uranium mining)
- A water resource, in relation to coal seam gas development and large coal mining development.

2.1.1.1 Environment Protection and Biodiversity Conservation Amendment Act 2013

An amendment to the EPBC Act, commonly known as the 'water trigger', received assent on 21 June 2013, and incorporates changes to Division 1 Part 3 regarding the "protection of water resources from coal seam gas development and large coal mining development". These changes include restrictions to the actions of proponents of major coal seam gas and coal mining projects if it is expected that their proposed action will have or is likely to have a significant impact on a water resource. The amendment also sets out definitions of offences under these provisions, and the civil penalties that would be enforced if proponents were found to contravene the EPBC Act with regards to actions resulting in significant impacts on water resources. Santos GLNG was notified of the DOTE decision that water resources would be a controlling provision for the GFD Project on 17 October 2013, under Sections 24D and 24E of the EPBC Act.

2.1.2 Water Act 2007

The *Water Act 2007* (Cth) makes provisions for the management of the water resources of the Murray Darling Basin by the establishment of the Murray Darling Basin Authority under the *Water Amendment Act 2008*. It also makes provision for other matters of national interest in relation to water and water information, and for related purposes. The Murray Darling Basin Authority was charged with preparing

2 Legislation and policy frameworks

the *Murray Darling Basin Plan* under the *Water Act 2007* (in 2008) to provide a framework for managing the water resources of the Murray Darling Basin in an enduring and sustainable way.

Portions of the GFD Project area fall within the Condamine-Balonne River (a sub-basin of the Murray Darling River Basin) and are therefore potentially subject to the provisions of the *Murray Darling Basin Plan* (MDBP) where applicable. In terms of surface water impacts, the MDBP primarily refers to activities involving irrigation under an allocation scheme (or potential impacts to such schemes). To URS's knowledge, Santos GLNG does not intend to undertake activities of this nature. As such, it was not necessary to apply the relevant MDBP rules regarding surface water quality and quantity to the portions of the GFD Project area within the Condamine-Balonne Basin when conducting the surface water quality assessment.

2.1.3 National Water Quality Management Strategy

The *National Water Quality Management Strategy* incorporates a joint national approach with the aim of improving water quality in Australian and New Zealand waterways. It was originally endorsed by the former Agriculture and Resources Management Council of Australia and New Zealand (ARMCANZ) and the former Australian and New Zealand Environment and Conservation Council (ANZECC). It is relevant to the GFD Project in that it has facilitated the provision of regional and national guidelines for assessment of surface water quality and design of monitoring programs (such as the ANZECC 2000 guidelines). Such guidelines are discussed further in Sections 2.4 and 7.2 of this report.

2.2 Queensland legislation and policies

2.2.1 Environmental Protection Act 1994

The *Environmental Protection Act 1994* (Qld) (EP Act) aims to:

[Protect] Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (ecologically sustainable development).

The EP Act governs the management of surface water with regards to gas fields, including the management and disposal of coal seam water. The EP Act was amended in March 2013 to include requirements for site-specific applications related to coal seam gas activities (Section 126). The primary instrument by which surface water management is achieved is the *Environmental Protection (Water) Policy 2009*. The EP Act is administered by the Queensland Department of Environment and Heritage Protection (EHP).

The following regulations and policies are also relevant under the EP Act:

- *Environmental Protection (Water) Policy 2009* (refer Section 2.2.1.1)
- *Environmental Protection (Waste Management) Policy 2000*
- *Environmental Protection (Waste Management) Regulation 2000*
- *Environmental Protection Regulation 2008*.

These instruments are supported by the *Coal seam gas water management policy 2012* (discussed in Section 2.2.1.2).

2 Legislation and policy frameworks

2.2.1.1 *Environmental Protection (Water) Policy 2009*

The *Environmental Protection (Water) Policy 2009* (EPP Water) is an instrument of the EP Act. Amongst other functions EPP (Water) governs the discharge of wastewater to land, surface water, and groundwater, aims to protect environmental values (EVs) and sets water quality objectives to provide guidance to protect EVs.

2.2.1.2 *Coal Seam Gas Water Management Policy 2012*

The *Coal seam gas water management policy 2012* (Qld) was established to provide direction for the management and disposal of coal seam water, and streamline the implementation of existing coal seam water management policies under the EP Act. The Policy encourages the management of coal seam water “in a way that protects the environment and maximises its productive use as a valuable resource”. Under the Policy, coal seam water and ‘saline waste’ must be managed consistently in accordance with defined ‘prioritisation hierarchies’ and management criteria. Beneficial use is of the highest priority for managing coal seam water, followed by management and disposal options. It is preferred that saline wastes are processed to create useable products, before considering disposal options. Further information about the application of this Policy to the GFD Project is contained in the Draft EM Plan.

2.2.2 *Petroleum and Gas (Production and Safety) Act 2004*

The *Petroleum and Gas (Production and Safety) Act 2004* (Qld) provides rights to extract gas and coal seam water within the GFD Project tenures.

2.2.3 *Petroleum Act 1923*

The *Petroleum Act 1923* (Qld) was established to make provision for encouraging and regulating the mining and conveying of petroleum and natural gas and remains relevant to many of the GPD Project tenures.

2.2.4 *Water Act 2000*

The *Water Act 2000* (Qld) (Water Act) provides a framework to deliver sustainable water planning, allocation management and supply processes to provide for the improved security of water resources in Queensland. The impacts of the extraction of coal seam water from gas seams on groundwater supplies are managed under this Act. It also requires the following (in relation to gas extraction activities):

- A water licence for operations which are not activities authorised under the *Petroleum and Gas (Production and Safety) Act 2004* or *Petroleum Act 1923* that will interfere with surface water or watercourses
- A separate licence and permit for the use of associated water for purposes not associated with a Petroleum Lease.

The Water Act and its instruments are administered by the Queensland Department of Natural Resources and Mines (DNRM).

2 Legislation and policy frameworks

2.2.4.1 Water Resource Plans and Resource Operations Plans

Water Resource Plans (WRPs) and *Resource Operations Plans* (ROPs) are governed by the Water Act. They were developed to help meet the challenges of growth and climate change, and protect the water resources of Queensland. These objectives are consistent with the National Water Initiative, agreed to in 2004 on a national level. WRPs establish a framework for sharing water between human consumptive needs and environmental values. ROPs are developed in parallel with WRPs and provide a framework by which objectives from which the WRPs are implemented, including water allocations and administrative directions.

Surface water resources within the GFD Project area are primarily managed by the *Fitzroy Basin Water Resource Plan 2011* and the *Condamine-Balonne Water Resource Plan 2004*. The *Fitzroy Basin Water Resource Plan* includes EVs and water quality objectives for the Upper and Lower Dawson River and Comet River sub-basins. There are no EVs or water quality objectives for the *Condamine-Balonne Water Resource Plan 2004*. However, draft EVs for the Condamine and Balonne rivers and tributaries are included within a draft Healthy Waters Management Plan released by the Queensland Murray-Darling Committee in 2012 (for Condamine-Balonne watercourses only).

2.2.5 Fisheries Act 1994

The *Fisheries Act 1994 (Qld)* (Fisheries Act) provides for the management, use, development and protection of fisheries resources and fish habitats in Queensland. It is administered by the Queensland Department of Agriculture, Fisheries and Forestry. In the event that Santos GLNG needs to establish waterway barriers for watercourse crossings within the GFD Project area, approval must be sought under the Fisheries Act.

2.2.6 State planning policy

The State Planning Policy (SPP) is a key component of Queensland's land use planning system and provides a comprehensive set of principles which underpin Queensland's planning system to guide local governments and the state government in land use planning and development assessment. The SPP was introduced in December 2013 to replace a number of policies and provides a clear, consolidated and comprehensive view of the state's interests in land use planning and development in one place.

Detail regarding the regulatory functions of SPPs and relevant considerations for the GFD Project is provided in the statutory planning assessment contained within Appendix J: Land use, planning and tenure (URS 2013a).

2.3 Australian/New Zealand standards

2.3.1 AS/NZS 5667 (1998) Water Quality – Sampling

The *Australian/New Zealand Standard for Water Quality Sampling* is a standard prepared by Joint Technical Committee EV/8, Methods for Examination of Waters. The standard serves as a manual that provides guidance on the design of surface water sampling programs, sampling techniques and the preservation and handling of samples.

2 Legislation and policy frameworks

2.4 Water quality guidelines

Various water quality guidelines were used to assess the quality of surface waters within the GFD Project area against defined reference conditions, which enabled the quantification of water quality objectives. Applicable guidelines are briefly described below, and discussed further in Section 7.2.

2.4.1 Australian and New Zealand guidelines for fresh and marine water quality (ANZECC 2000)

The ANZECC (2000) guidelines were developed under the *National water quality management strategy*, and provide a framework for assessing water quality by comparison with guidelines derived from local reference values. Guideline values were developed and classified on the following criteria:

- Level of environmental disturbance of surface waters (e.g. highly or slightly to moderately disturbed waters)
- Freshwater or saline surface water
- Waterbody elevation i.e. upland or lowland aquatic environments
- Biogeographic region such as southeast or tropical Australia.

The guidelines also state that “the old single number guidelines [1992; incorporated into current 2000 guidelines] are regarded as *guideline trigger values* that can be modified into regional, local or site specific guidelines by taking into account factors such as the variability of the particular ecosystem or environment, soil type, rainfall and level of exposure to contaminants. Trigger values are concentrations that, if exceeded, would indicate a *potential* environmental problem, and so ‘trigger’ a management response e.g. further investigation and subsequent refinement of the guidelines according to local conditions” (Volume 1, Chapter 2, p2-10).

This report refers to both physicochemical and toxicant guideline values from ANZECC 2000; and further explanation is provided in Section 7.2

2.4.2 Queensland Water Quality Guidelines 2009

The Queensland Water Quality Guidelines (EHP 2009a) provide a framework for assessing water quality in Queensland through the setting of water quality objectives. Further explanation is provided in Section 7.2.2.

2.4.3 Monitoring and Sampling Manual 2009

The *Monitoring and Sampling Manual* (EHP 2009b) was developed by the former Queensland Department of Environment and Resource Management (DERM, now EHP) in 2009, to provide “common techniques, methods and standards for sample collection, handling, quality assurance and control, custodianship and data management, for use by the Queensland Government agencies, relevant persons and other organisations”. Surface water monitoring conducted in association with the GFD Project will be designed and implemented as directed by this manual where practicable (in addition to the sources referenced above).

2 Legislation and policy frameworks

2.5 Santos GLNG policy framework

The following sub-sections introduce the high level policies and Environment, Health and Safety Management System (EHSMS) standards employed by Santos GLNG in their general operations. This framework informs corporate responsibility and key principles across Santos GLNG operations at the corporate level. As such, they will also apply to the proposed GFD Project. Santos GLNG will continuously seek to find new ways to minimise our environmental impact across the lifecycle of our activities.

The EHSMS and accompanying Environment Hazard Standards (EHS) are designed to facilitate achievement of the commitments outlined at corporate level, and therefore provide practical guidance and procedures for operational activities. These standards have been applied to develop the management plans outlined in Section 9 for mitigation of potential impacts within the surface water environment.

Table 2-1 and Table 2-2 explain how each of the EHSMS and EHS will be applicable to management of surface water resources within the GFD project area, respectively.

Table 2-1 Summary of relevant Santos GLNG corporate policies and EHSMS

EHSMS	Description	Relevance to surface water in GFD Project area
EHSMS01	Environment, health and safety policies	Activities of Santos GLNG employees and contractors with regards to improving environment, health and safety performance.
EHSMS02	Legal and other obligations	Compliance with EA conditions; legislation; permits; industry codes; commitments and other obligations.
EHSMS03	Objectives and targets	Specific, Measurable, Achievable, Relevant, and Timely (SMART) targets set to “measure and drive continuous improvement in environment, health and safety, and process safety performance across [Santos GLNG]”
EHSMS04	Improvement plans	Outlines initiatives, actions and milestones for achieving targets set in EHSMS03.
EHSMS05	Responsibility and accountability	Assigns roles, responsibilities and accountability for the implementation, maintenance and improvement of the EHSMS.
EHSMS09	Hazard identification, risk assessment and control	Outlines processes to systematically identify environmental hazards, assess their risk, and adopt control strategies to reduce risk to as low as reasonably practicable.
EHSMS11	Operations integrity	Describes process safety management systems and tools that will be applied to prevent major hazards or catastrophic events that could lead to significant environmental harm (for example, standard operating procedures for design, construction, operation and decommissioning of facilities).

2 Legislation and policy frameworks

Table 2-2 Summary of EHS informing surface water management in the GFD Project area

Environment Hazard Standard	Description	Relevance to surface water in GFD Project area
EHS01	Land disturbance	Outlines requirements for planning and conducting operations in a way which avoids or minimises disturbances to land and allows affected areas to be restored within reasonable time frames (applicable to erosion and sediment management practices).
EHS02	Underground storage tanks and bunds	Defines requirements for secondary containment of hazardous substances; designed to minimise the potential for uncontrolled releases to the receiving environment.
EHS03	Produced water management	Defines requirements for minimising environmental impacts associated with produced water.
EHS08	Contaminated site management	Defines requirements for protection of health and the environment, where contamination has or may have occurred.
EHS10	Water resource management	Outlines requirements to ensure protection from impacts and the sustainable use of watercourses, lakes, springs, overland flows, underground water and other natural ecosystems associated with these water resources.

2.5.1 Project implementation

The constraints approach is based upon the *GFD Project environmental protocol for constraints planning and field development* (Constraints protocol). The Constraints protocol applies to all gas field related activities. The scope of the Constraints protocol is to:

- Enable Santos GLNG to comply with all relevant State and Federal statutory approvals and legislation
- Support Santos' environmental policies and the General Environmental Duty (GED) as outlined in the EP Act
- Promote the avoidance, minimisation, mitigation and management of direct and indirect adverse environmental impacts associated with land disturbances
- Minimise cumulative impacts on environmental values.

The Constraints protocol details the process that Santos GLNG will use to identify, assess and manage potential impacts to the environment during field planning and development. This process has been successfully used for the approved GLNG Project, which increases the certainty of GFD Project environmental outcomes.

The general principles of the Constraints protocol, in order of preference, are to:

- Avoid — avoid direct and indirect impacts
- Minimise — minimise potential impacts
- Mitigate — implement mitigation and management measures to minimise adverse impacts
- Remediate and rehabilitate — actively remediate and rehabilitate impacted areas
- Offset — offset residual risk in accordance with regulatory requirements.

2 Legislation and policy frameworks

Consistent with Santos GLNG's environmental management hierarchy, the Constraints protocol prioritises avoidance of environmental impact during field planning by identifying those areas that are not amenable to development. This includes areas of high environmental value as identified in regulatory frameworks and Santos GLNG's baseline surveys. For areas that are considered appropriate to develop, Santos GLNG will identify impacts to environmental values that could potentially occur due to the construction, operations and decommissioning activities of the GFD Project, and determine pre-mitigated impacts (i.e. those that would occur without mitigation).

Relevant mitigation and management measures based on the approved environmental management framework already implemented for the GLNG Project are then applied to the pre-mitigated impacts to identify the mitigated (residual) impacts. This process increases certainty about potential impacts by identifying those areas that are not amenable to development, and for those areas where development could occur, how development should proceed.

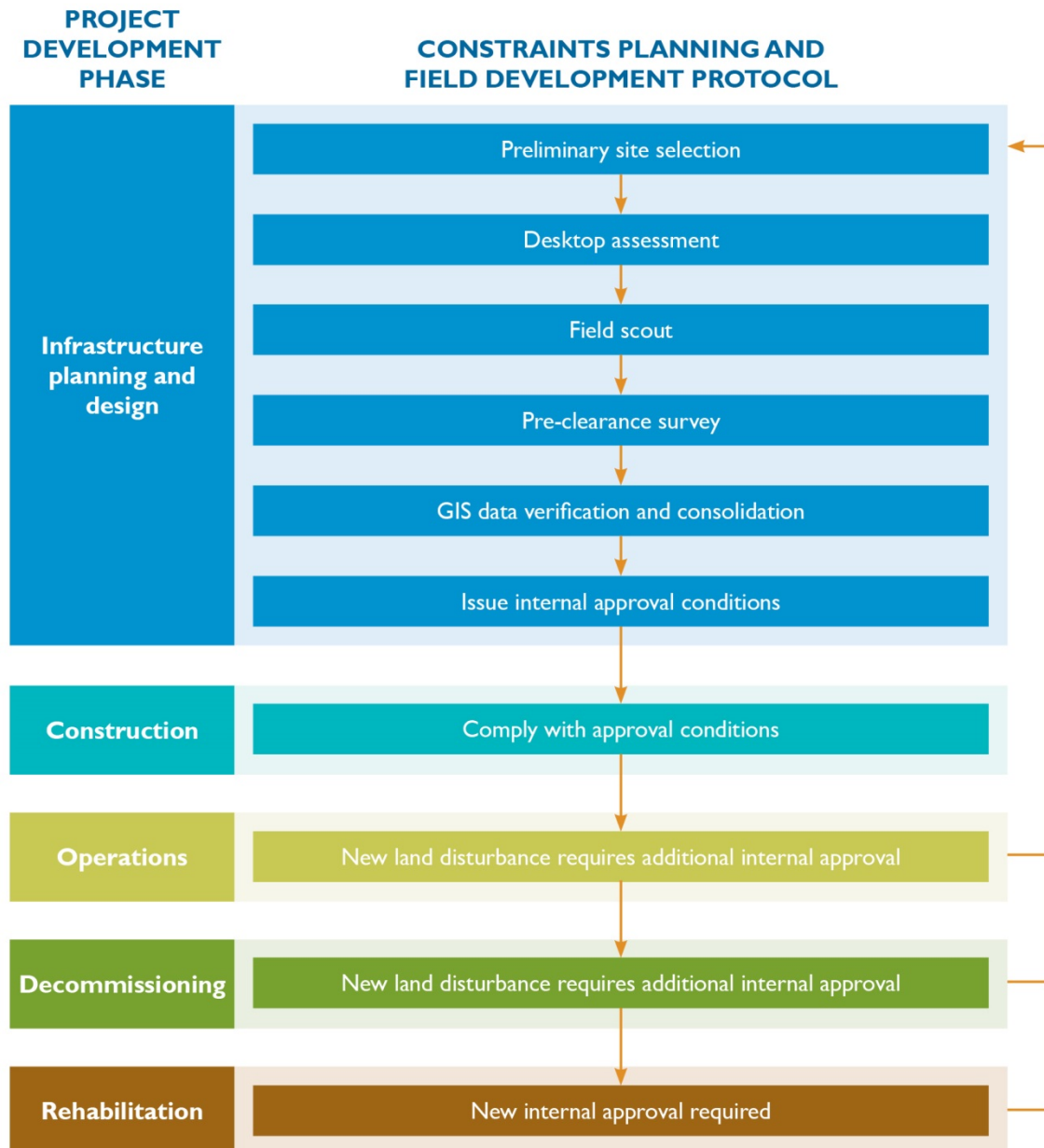
The post-EIS field development process is a continuation of the field planning process and will be ongoing throughout the life of the GFD Project. The field development process will inform the GFD Project's design, together with a range of other factors including technical feasibility, cost and risk as required by standards applicable to the design, construction, operations, decommissioning and rehabilitation of gas developments. This information will be used to support the subsequent approvals process such as environmental approval application and the plan of operations.

The tasks involved in the field development process are summarised in Figure 2-1.

Practical implementation of this process with regards to mitigation of potential impacts on surface water environmental values is discussed in further detail in Section 9.

2 Legislation and policy frameworks

Figure 2-1 Field development process



Assessment methodology

3.1 Scope of assessment

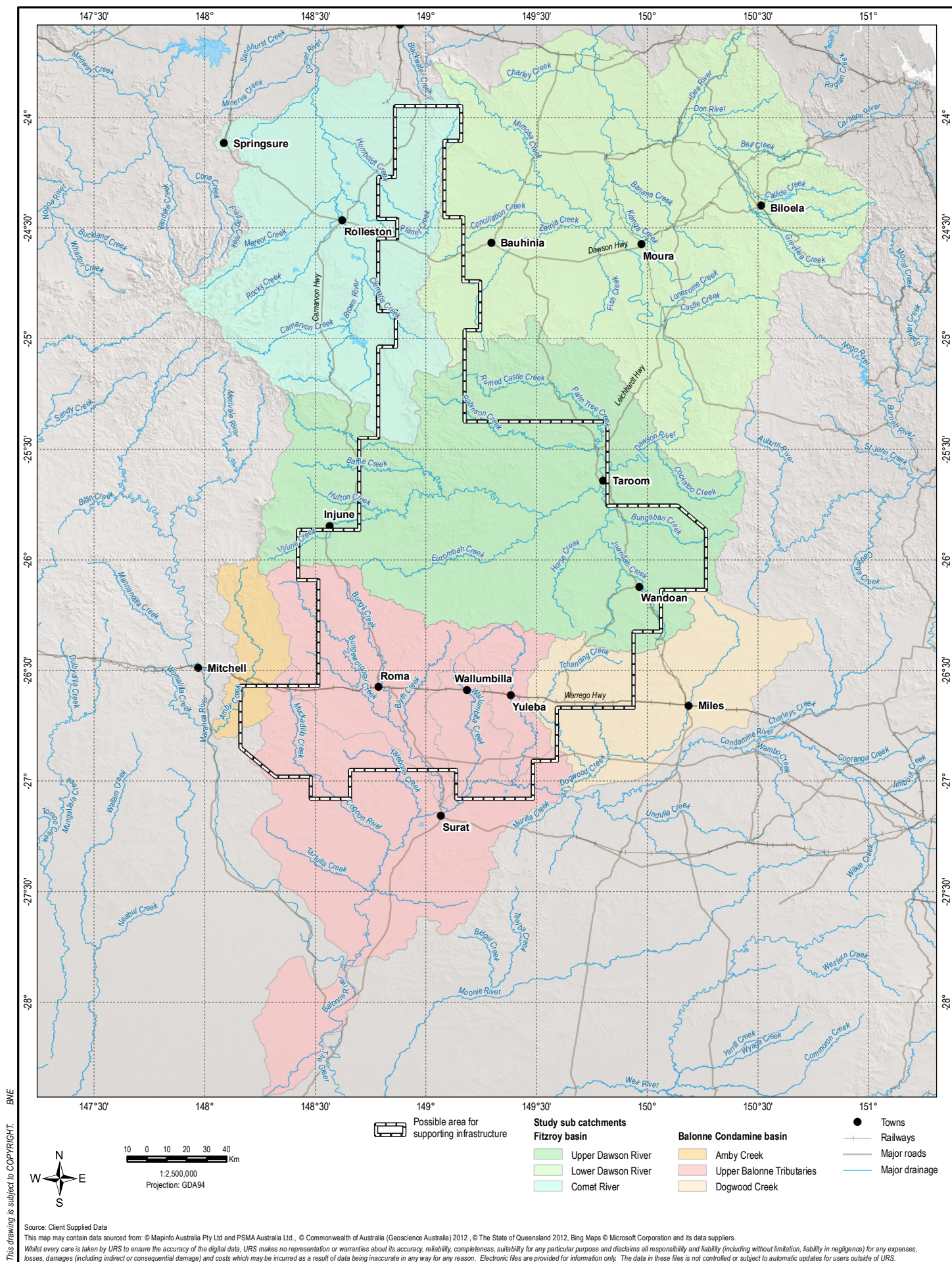
The purpose of this technical report is to inform the EIS for the GFD Project; as such, the scope of the assessment was designed to fulfil the requirements of the ToR. The ToR is inherently designed to cover the requirements of the relevant federal and state legislation detailed in Section 2. This report includes a detailed assessment of the surface water receiving environment in terms of environmental values and water resources (water quality; hydrology and geomorphology) and analyses the sensitivity of these aspects to potential impacts that may arise from the development of the GFD Project. It also provides a summary of mitigation measures and management frameworks that may be used to reduce the risks associated with the identified potential impacts on the surface water environment.

3.2 Characterisation of the study area

The study area covers an area of approximately 30,000 km² within central and southern Queensland, including almost 10,676 km² of tenures associated with the proposed GFD Project. It comprises the southern portion of the Fitzroy River Basin, and the northern portion of the Condamine-Balonne River Basin (Figure 3-1). Due to the large study area, as well as the relative environmental homogeneity across these extensive basins, the contextual setting for analysis of the existing environment was constrained to six major sub-catchments:

- Fitzroy River Basin
 - Comet River
 - Lower Dawson River
 - Upper Dawson River.
- Condamine-Balonne River Basin
 - Dogwood Creek
 - Upper Balonne River Tributaries
 - Amby Creek (tributary of Maranoa River).

The sub-catchments were delineated on the basis of the catchments depicted in the relevant WRP Maps (Fitzroy Basin WRP 2011 and Condamine and Balonne WRP 2004), to enable straightforward identification of EVs on a sub-catchment scale. It is noted that a small section of the GFD Project area is not included in the study sub-catchments; this is a small portion of the Maranoa River catchment, adjacent to Amby Creek. It was determined that the size of the area (in proportion with the wider Maranoa River catchment) did not warrant delineating a separate sub-catchment for the purposes of this study. Water quality can be inferred from observations at Amby Creek. Major watercourses were identified within each of the six sub-catchments, based on previous technical studies, EIS submissions, and geographic information system (GIS) analysis. These are summarised in Table 3-1 below. These watercourses are also referenced in Section 7, in relation to the surface water monitoring program. A list of watercourses (up to third order streams) within each sub-catchment is included as Appendix B.



3 Assessment methodology

Table 3-1 Key watercourses identified within study sub-catchments

Basin	Study sub-catchment	Key watercourse(s)
Fitzroy	Comet River	Springsure Creek
		Humboldt Creek
		Planet Creek
		Meteor Creek
		Clematis Creek
		Brown River
	Lower Dawson River	Lower Dawson main channel
	Upper Dawson River	Upper Dawson main channel (Headwaters to junction with Hutton Creek)
		Upper Dawson main channel (Hutton Creek to Taroom)
		Hutton Creek
		Juandah and Bungaban Creeks ¹
		Robinson Creek
Condamine-Balonne	Dogwood Creek	Tchanning Creek
		Dulacca Creek
		Paddy Creek
	Upper Balonne River Tributaries	Upper Balonne main channel
		Yuleba Creek
		Wallumbilla Creek
		Blyth Creek
		Bungil Creek
	Amby Creek	Eurella Creek
		Washpool Creek

¹Bungaban Creek is a tributary of Juandah Creek. It has been listed specifically within this table for clarity, as the two watercourses are often discussed separately in the literature.

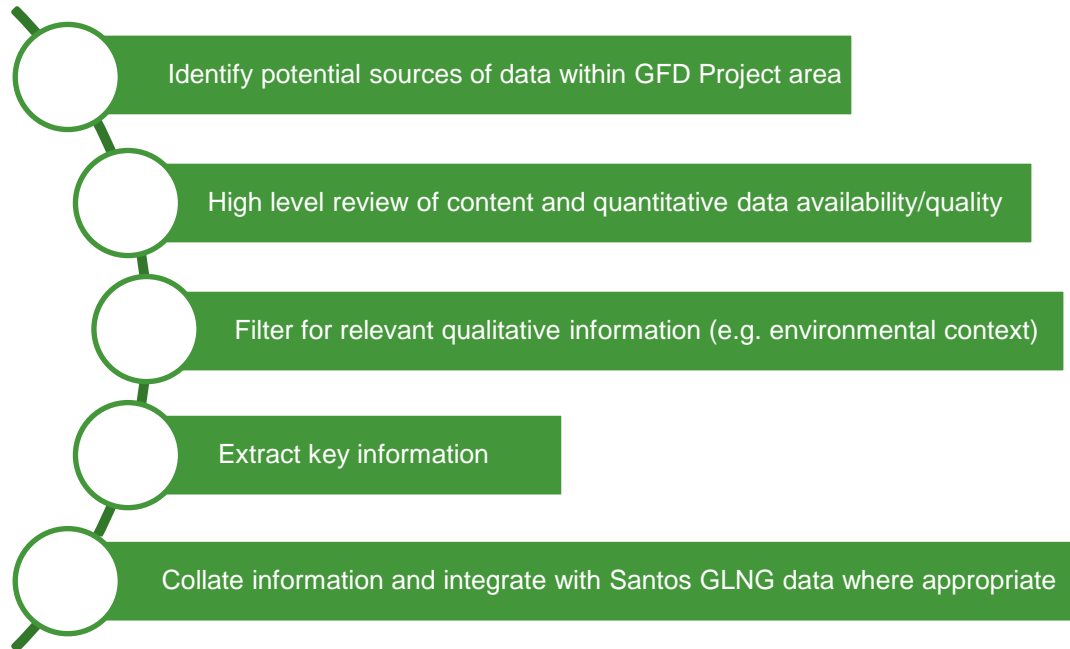
3.3 Description of the existing environmental values

3.3.1 Methodology

URS undertook a literature review of previous studies undertaken by Santos GLNG, publicly available EIS documents and technical reports produced by other resource operators within and directly downstream of the GFD Project area, as well as general peer-reviewed documents. The purpose of the exercise was to identify potential sources of data relevant to the GFD Project area, and gain insight into the context within which the surface water assessment would be undertaken. This information was then used to assist in the definition of environmental values for the GFD Project area. Figure 3-2 illustrates the deductive process that was applied to identify the most relevant sources of information. Table 3-2 contains a list of documents consulted as part of the review, and details their relevance for the GFD Project.

3 Assessment methodology

Figure 3-2 Literature review screening and selection process



3 Assessment methodology

Table 3-2 Relevant documents identified in literature review

Type	Author(s)	Year	Document description	Applicable area/watercourses within GFD Project area
External EIS	APLNG	2010	APLNG Gas Pipeline EIS: Volume 3, Chapter 11 (Water resources) and Chapter 9 (Aquatic Ecology)	Dogwood Creek; Dawson River; Juandah Creek; Kroombit Creek; Bungaban Creek, and Cockatoo Creek
Technical; External EIS	Arrow Energy	2012	Arrow Bowen Gas Project EIS: Appendix N (Surface Water Technical Report)	Fitzroy Basin (watercourses downstream of GFD Project area)
Technical; External EIS	Arrow Energy	2011	Arrow Surat Gas Project: Chapter 20 (Surface Water); Appendix H (Fluvial Geomorphology); Appendix I (Water Quality), and Appendix J (Aquatic Ecology).	Condamine River; Dawson River
External EIS	Bandanna Energy	2013	Springsure Creek Coal Mine: Chapter 8 (Surface Water)	Comet River; Springsure Creek; Station Creek; Two Mile Creek; tributary of Orion Creek
Technical; EIS	FRC Environmental	2009	Santos Coal Seam Gas Fields Aquatic Ecology Impact Assessment (Appendix to GLNG EIS 2009)	Carnarvon Creek; Tchanning Creek; Wallumbilla Creek; Yalebone Creek; Comet River; Consuelo Creek; Bungaban Creek; Upper Balonne River; Upper Dawson River
EIS	Hancock GVK	2010	Alpha Coal Project EIS Appendix G: Cumulative Impacts	General context
External EIS	QCLNG	2009	Gas Pipeline and Gas Fields EIS: Chapter 9 (Surface Water) Condamine-Balonne	South of GFD Project area
Statutory	Santos GLNG and EHP	2013	Referral of Proposed Action (EPBC) Santos GLNG Gas Field Development Project	General context
External EIS	Stanmore Coal	2012	The Range Project: Chapter 13 (Surface Water) and Appendix 13: Surface Water Quality Impact Assessment	Dogwood Creek; Juandah Creek; Downfall Creek; Weringa Creek; Roche Creek; Ten Mile Creek
Technical; EIS	URS	2010	GLNG SEIS - D3 Coal Seam Gas Fields - Associated Water Management Strategy	General context
Technical; EIS	URS	2009	GLNG EIS Appendix O2 (Surface Water – Pipeline); Associated Water Discharge Study	Dawson River, Hutton Creek, Baffle Creek, Juandah Creek, Eurombah Creek, Commissioner Creek, Broken Creek
EIS	URS	2009	GLNG EIS - Section 6.5 Coal Seam Gas Fields Environmental Values and Management of Impacts (Surface Water)	General context

3 Assessment methodology

Type	Author(s)	Year	Document description	Applicable area/watercourses within GFD Project area
EIS	URS	2009	GLNG EIS – Section 7.5 Coal Seam Gas Pipeline Environmental Values and Management of Impacts (Surface Water)	General context
SEIS	URS	2009	GLNG SEIS Part 3J: Cumulative Impact Assessment	General context
Technical; EIS	URS	2009	GLNG EIS: Appendix E – Environmental Values and Associated Water Quality	Bungil Creek; Yuleba Creek; Wallumbilla Creek; Upper Baffle Creek; Upper Hutton Creek; Upper Dawson River; Carnarvon Creek; Comet-Brown River; Arcadia Creek; Meteor Creek; Planet Creek; Basin Creek
Technical	URS	2013	Lake Nuga Nuga Catchment Water Quality: Memorandum of Data Analyses	Moolayember Creek; Arcadia Creek; Brown River (Comet River catchment)
Technical	Worley Parsons	2012	Draft Gap Analysis Report 141112 Santos GLNG Gas Field Development Project	Comet River; Hutton Creek; Baffle Creek; Dawson River
Technical, External EIS	Xstrata Glencore	2008	Wandoan Coal Project EIS: MLA Areas and Surrounds – Volume 1, Aquatic Ecology Technical Report	Spring Creek; Frank Creek; Juandah Creek; Bungaban Creek; Woleebee Creek

3 Assessment methodology

URS also reviewed a number of external publicly available EIS documents for various resource projects, in addition to those listed in Table 3-2. These documents are listed in Table 3-3; they relate to projects located either within the GFD Project area specifically, or in close proximity, however due to limited access to information they were not utilised within this study. The documents are listed for completeness, and to illustrate the extent of the literature search completed for the purpose of informing the cumulative impacts assessment contained in Section 9.4 of this report.

Table 3-3 Resource projects included in literature search

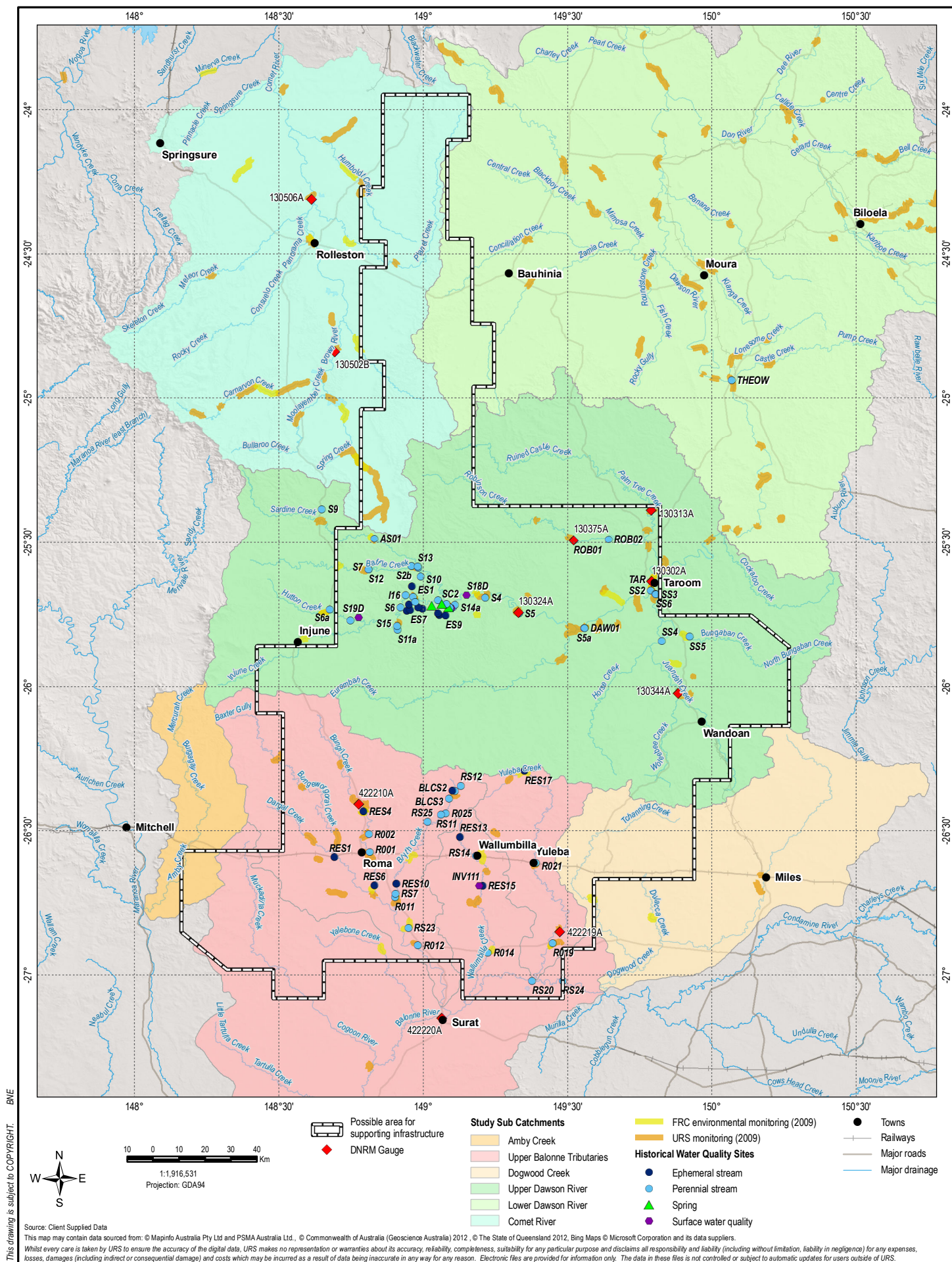
Proponent	Project description	Status (as of July 2013)
Bandanna Energy	Arcturus Coal Mine Project	EIS not publicly available; project currently on hold
Bandanna Energy	Dingo West Coal Mine	No documentation found
Blackwater Coal Pty Limited	Minyang Coal Project	EIS publicly notified but not yet assessed by DOTE
Cockatoo Coal Pty Limited	North Surat Collingwood Coal	EIS not yet finalised
Cockatoo Coal Pty Limited	North Surat Taroom Coal Project	Terms of Reference available; EIS not publicly available
Metro Coal	Bundi Coal Project	EIS not publicly available
Metro Coal	Norwood Coal Project	EIS commenced but not finalised
Origin Energy Power Limited	Spring Gully Power Station	EIS not yet assessed by DOTE; documentation only available in public libraries as hard copy
Surat Coal Pty Limited	Woori Coal Project	EIS withdrawn
Taroom Coal Pty Limited	Elimatta Project	EIS not yet assessed by DOTE; not publicly available
Xstrata Glencore	Rolleston Expansion Project	EIS not publicly available

3.3.2 Analysis of Santos GLNG surface water monitoring data

Historic surface water monitoring data for the existing Santos GLNG Arcadia, Fairview, Roma and Scotia gas fields (up to April 2013) was provided to URS for analysis. The data was generally sourced from regular monitoring programs throughout the four existing gas fields. A summary of this data is provided in Section 7.3.1, and monitoring locations are shown in Figure 3-3. An assessment of surface water quality for the GFD Project area against local and national guidelines is presented in Section 7.3.2, with tables containing summary statistics provided in Appendix B.

3.4 Impact assessment and mitigation

Impacts were assessed on the basis of the characterisation of the existing surface water receiving environment detailed in this report. Both environmental sensitivity and potential magnitude of impacts were considered in the assessment, as well as, where applicable, current Santos GLNG management and impact mitigation strategies. Potential impacts to the surface water receiving environment arising from the proposed GFD Project are discussed in Section 9.2, whereas measures for the mitigation of the identified environmental impacts are listed in Section 9.3.



Environmental values

4.1 Environmental Protection (Water) Policy 2009

Schedule 1 of the EPP Water defines EVs for the surface water environment in Queensland via a series of WRPs (including the Queensland Map Series, which illustrate the spatial distribution of a standard series of environmental values using pictograms). EVs and water quality objectives are defined on a sub-basin scale. Currently, within the GFD Project area only the Fitzroy Basin has defined EVs under the EPP Water (for Comet River, Upper Dawson River and Lower Dawson River).

There are no defined EVs or water quality objectives for the Condamine-Balonne Basin under the Condamine and Balonne WRP 2004. However, draft EVs for the Condamine and Balonne Rivers and their tributaries are recommended within the Healthy Waters Management Plan (HWMP) produced by the Queensland Murray-Darling Committee (QMDC) in 2012. The QMDC stated that the draft EVs featured in the HWMP will be utilised as a basis for development of WQOs for the Condamine-Balonne Basin in future (2012).

4.2 Existing environmental values

The objective of this section is to assess the state of the existing surface water environment, and to establish whether the existing EVs are appropriate within the GFD Project area on the basis of that assessment. EVs identified for the surface water environment within the GFD Project area are summarised in Table 4-1 (Fitzroy Basin EVs) and Table 4-2 (Condamine-Balonne Basin EVs); EVs are detailed further in Sections 4.2.1 and 4.2.3. The hydrology, surface water quality and fluvial geomorphology assessments contained within this report also serve to identify further EVs specific to the GFD Project area- these are summarised in Section 8.

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Table 4-1 Existing EVs for surface waters within the GFD Project area (Fitzroy Basin, as defined in Schedule 1 of the EPP Water)

Environmental Value	Comet River			Upper Dawson River					Lower Dawson River					
	Main channel	Western tributaries	Eastern tributaries	Main channel (below Hutton Creek)	Western upland tributaries	Southern tributaries	Northern upland tributaries	Central tributaries	Northern upland tributaries	Main channel – unregulated reaches	Main channel – regulated reaches	Southern upland tributaries	Eastern Tributaries	Western tributaries
Aquatic ecosystems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Irrigation	✓	✓	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✓	✓
Farm	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stock water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Aquaculture	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓	✗
Human consumer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Primary recreation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Secondary recreation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Visual recreation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Drinking water	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
Industrial use	✓	✓	✓	✓	✗	✓	✗	✗	✗	✓	✓	✗	✓	✗
Cultural and spiritual values	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓

✓ = Environmental Value applicable to surface water resources within the GFD Project area.

✗ = Environmental Value not applicable to surface water resources within the GFD Project area.

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Table 4-2 Existing EVs for surface waters within the GFD Project area (Condamine-Balonne Basin; as defined by QMDC 2012, Figure 3, p12)

Environmental values	Condamine River			Balonne River		
	Dogwood Creek	Lower Condamine River	Yuleba Creek	Bungil and Murilla Creeks	Lower Maranoa	Balonne River
Aquatic ecosystems	High	High	High	High	High	High
Irrigating crops	High	High	High	High	High	High
Agriculture (farm use)	High	High	High	High	High	High
Stock watering	High	High	High	High	High	High
Aquaculture	Low	Low	Low	Low	Low	Low
Human consumption	High	High	High	High	High	High
Primary recreation	High	High	High	High	High	High
Secondary recreation	Low	High	High	High	High	High
Visual appreciation	High	High	High	High	High	High
Raw drinking water	High	High	High	High	High	High
Industrial use	Low	Low	Low	Low	Low	Low
Cultural and spiritual values	High	High	High	High	High	High

Note: EVs for the Condamine-Balonne River Basin are listed in QMDC 2012 as either low or high priority. This distinction is not made for EVs within the Fitzroy Basin (Table 4-1).

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4.2.1 Matters of National Environmental Significance (MNES)

Section 2.1.1 above describes the relevance of MNES in the context of the GFD Project. The assessment of water resources and related environmental values contained within this surface water technical report serves to identify potential impacts on water resources, listed as MNES under the EPBC Act (Volume 1, Chapter 2, Part 3, Division 1) in June 2013. Other MNES identified within the project area, such as EPBC-listed ecological and spring communities, are discussed in the MNES assessment report (Aurecon Australia Pty Ltd 2014).

4.2.2 Aquatic ecosystem environmental values

The values listed in Table 4-1 for each study sub-catchment within the GFD Project area are discussed in detail below. The distribution of scheduled high ecological value (HEV) areas and wetlands throughout the GFD Project area is illustrated in Figure 4-1, whereas a complete list of wetlands identified within the GFD Project area is contained within C.

For the purpose of the water quality assessment described in Section 7, the surface water environment is assessed as being 'slightly to moderately disturbed' using the criteria outlined in the ANZECC (2000) guidelines.

4.2.2.1 Comet River

The GFD Project area covers the eastern portion of the Comet River catchment, from the headwaters of Humboldt Creek in the north to the headwaters of Clematis Creek and Spring Creek in the south. Key natural features include the Blackdown Tablelands (less than 20 km north of the furthest extent of the proposed supporting infrastructure area for the GFD Project), and Lake Nuga Nuga in the southern portion of the catchment. Lake Nuga Nuga is located approximately 25 km upstream of the GFD Project area, on Moolayember Creek. Comet River flows into the Brown River immediately downstream of the lake outlet.

High ecological value areas

HEV areas identified within the portions of the Comet River catchment and located inside the GFD Project area using the Queensland (EHP) GIS database included:

- Shotover State Forest (HEVa2127)
- Humboldt National Park (HEVm2126)
- Western portion of Expedition State Forest (HEVa2171)
- Expedition National Park (HEVm2141)
- Nuga Nuga National Park (HEVm2124).

Wetlands

A total of 127 wetland areas (encompassing approximately 10,557 ha) have been identified within the Comet River catchment of the GFD Project area, using the Queensland Wetland Classification Method. Whilst the wetlands are predominantly classified as lacustrine, they are also listed as being artificial/modified (features such as dams or irrigation channels). Some sub-coastal floodplain wetlands consisting of grass, sedges and herbs (and occasionally Melaleuca and Eucalypt species), classified as palustrine wetlands, are also present (approximately 13% of identified features). The

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largest areas of wetland appear to be within Shotover State Forest in the north and Expedition National Park in the south. There are no nationally or internationally significant wetlands scheduled within this sub-catchment.

4.2.2.2 Lower Dawson River

High ecological value areas

HEV areas identified within the portions of the Lower Dawson River catchment and located inside the GFD Project area using the Queensland (EHP) GIS database included:

- Blackdown Tableland National Park (HEVm2061)
- Western portion of Expedition State Forest (HEVa2171)
- Palmgrove National Park (HEVm2172) (Scientific Reserve)
- Mount Nicholson State Forest (HEVm2171).

Wetlands

A total of 68 wetland areas (encompassing approximately 7,582 ha) have been identified within the Lower Dawson River catchment of the GFD Project area, using the Queensland Wetland Classification Method. The wetlands which are concentrated in the Shotover State Forest and in association with Planet Creek are predominantly riverine. Approximately 15% of the wetland area consists of artificial or modified wetlands (e.g., farm dams, irrigation channels). Only five wetland features were listed as being Melaleuca and Eucalypt tree swamps. The remainder of wetlands are generally grass/herb swamps. There are no nationally or internationally significant wetlands scheduled within this sub-catchment.

4.2.2.3 Upper Dawson River

High ecological value areas

HEV areas identified within the portions of the Upper Dawson River catchment and located inside the GFD Project area using the Queensland (EHP) GIS database included:

- | | |
|---|---------------------------------------|
| • Presho Forest Reserve (HEVa2147) | • Barakula State Forest (HEVa2159) |
| • Presho State Forest (HEVa2146) | • Mundell State Forest (HEVa2160) |
| • Belington Hut State forest (HEVa2145) | • Cherwondah State Forest (HEVa2158) |
| • Stephenton State Forest (HEVa2144) | • Gurulmundi State Forest (HEVa2157) |
| • Beilba State Forest (HEVa2142) | • Juandah State Forest (HEVa2156) |
| • Forrest State Forest; Doonkuna State Forest (HEVa2141) | • Hinchley State Forest (HEVa2155) |
| • Lake Murphy Conservation Park (HEVa2149) – close to ROB02 monitoring site | • Dinoun State Forest (HEVa2152) |
| • Carraba Conservation Park (HEVm2142) | • Mount Organ State Forest (HEVa2154) |
| • Cooaga State Forest (HEVa2159) | • Emu State Forest (HEVa2151) |
| | • Combabula State Forest (HEVa2153) |
| | • Woodduck State Forest (HEVa2150). |

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Wetlands

A total of 670 wetland areas (encompassing approximately 79,150 ha) were identified in association with the GFD Project area within the Upper Dawson River catchment, using the Queensland Wetland Classification Method. The wetlands are predominantly riverine or floodplain swamps with grass, sedge and herb vegetation. Around 30% of the wetlands, classified as lacustrine wetlands, are artificial or modified (e.g. farm dams, irrigation channels). Less than 10% of the identified wetlands consist of swamps containing *Melaleuca* and *Eucalypt* tree species. The largest area of wetland appears to be concentrated within the Beilba State Forest (centred on Hutton Creek). Lake Murphy and part of the Palm Tree and Robinson Creeks wetland complex located in the Lake Murphy Conservation Park (GFD Project Tenure ATP803) are listed as nationally important (Environment Australia, 2001). This area is also mapped as having high ecological value (referrable) wetlands in the Great Barrier Reef catchments – Lake Murphy Conservation Area. These wetlands contain species and regional ecosystems (REs) of conservation significance under both the EPBC Act and the NC Act.

A report prepared by Alluvium (2014) for the Fitzroy Basin Association highlighted the key characteristics and environmental values associated with the wetland systems of Palm Tree and Robinson Creeks. The complex covers approximately 50,223 ha and includes around 154 wetlands; 134 of which are associated with Palm Tree Creek, while the remaining 20 are associated with Robinson Creek. These wetlands are considered to be semi-permanent, and their areal extent and depth changes in response to rainfall. Alluvium (2014) identified the following ecosystem services that are provided by the Palm Tree and Robinson Creeks wetland systems:

- Regionally unique wetland complex, which is not well represented in other areas of the Fitzroy River Basin
- Diverse and abundant native wetland flora; particularly a low population of serious invasive weeds, and with a biodiversity status designated as 'Of concern' (DEHP 2013c, cited in Alluvium, p13). The wetland flora also provides habitat and food for aquatic macroinvertebrates; fish; turtles, and waterbirds
- Habitat for threatened species, including the nationally vulnerable squatter pigeon; and the turquoise parrot; cotton pygmy-geese; black-necked stork, and freckled duck which are all designated as threatened species in Queensland (Briggs 2013, cited in Alluvium 2014, p. v)
- Refuge habitat, especially during period when adjacent regions are in drought
- Water resource for stock from surrounding pastoral land
- Recreation and amenity values; particularly for swimming, bird watching, picnics, and boating.

4.2.2.4 Dogwood Creek

High ecological value areas

HEV areas have not yet been scheduled for the Condamine-Balonne river basin by EHP; therefore they are not shown in Figure 4-1

Based on GIS analysis, Gurulmundi State Forest, located within the northern portion of Dogwood Creek, and Yuleba State Forest located in the east, both partially fall within the GFD Project area.

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Wetlands

A total of 83 wetland areas (encompassing around 4,924 ha) have been identified within the GFD Project area as part of Dogwood Creek catchment, using the Queensland Wetland Classification Method. The wetlands are approximately 70% artificial or modified (lacustrine), with the remainder being predominantly either riverine or grass swamps. There are three wetlands classified as being Melaleuca and Eucalypt tree swamps. The largest area of wetland appears to be concentrated along the tributary of Tchaning Creek, which flows out of the Gurulmundi State Forest. There are no nationally or internationally significant wetlands scheduled within this sub-catchment.

4.2.2.5 Upper Balonne River tributaries

High ecological value areas

HEV areas have not yet been scheduled for the Condamine-Balonne river basin by EHP, and therefore are not shown in Figure 4-1.

The following State Forest areas were identified within the GFD Project area in the Upper Balonne River Tributaries catchment, based on GIS analysis:

- Gubberamunda State Forest, Brucedale State Forest and Yalebone State Forest are located within the Bungil Creek sub-catchment
- Trinidad State Forest is associated with Yalebone Creek, which traverses the southern boundary of the GFD Project area
- Wallabella State Forest is located within the upper reaches of Wallumbilla Creek, while Tinowon State Forest is within the lower reaches towards the Balonne River
- Combabula State Forest is located within the headwaters of Yuleba Creek
- Ingelbogie State Forest is located within the middle reaches of Yuleba Creek (near Santos GLNG monitoring location R021, discussed in Section 7.3.2); Yuleba State Forest is further downstream towards the Balonne River.

Wetlands

A total of 476 wetland areas (encompassing around 43,187 ha) have been identified within the GFD Project area across the Upper Balonne Tributaries catchment, using the Queensland Wetland Classification Method. The wetlands are approximately 50% artificial or modified; 20% riverine, and 15% Melaleuca and Eucalypt tree swamps (palustrine wetlands). The remainder of wetland features are generally grass/herb swamps, also classified as palustrine. The largest area of wetland within the GFD Project area appears to be concentrated along the Balonne River near Yuleba Creek, Bungil Creek, within the Gubberamunda State Forest, and between Bungil Creek and Bungeworgerai Creek. There are no nationally or internationally significant wetlands scheduled within this sub-catchment.

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4.2.2.6 Amby Creek

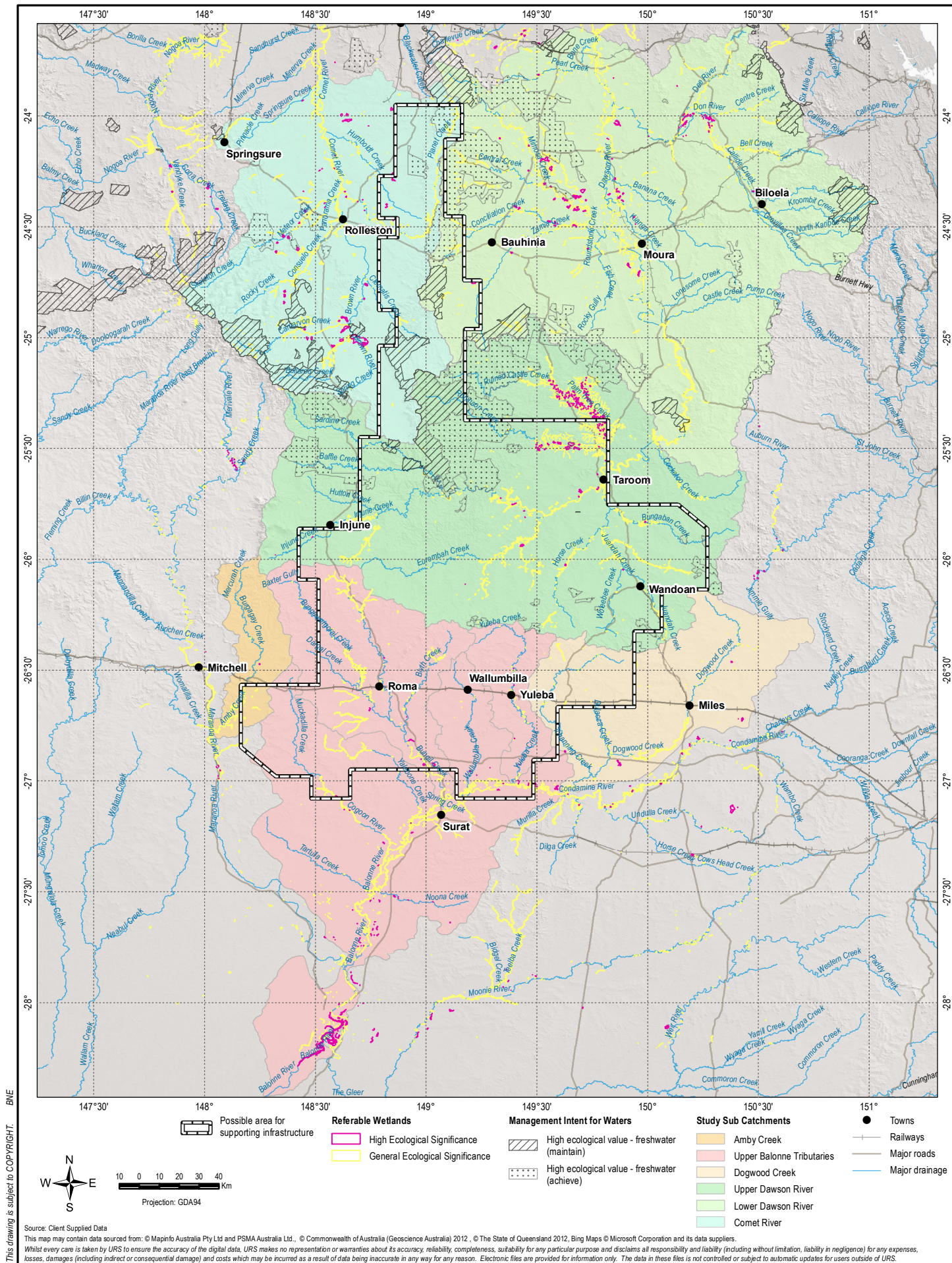
High ecological value areas

HEV areas have not yet been scheduled for the Condamine-Balonne river basin by EHP; therefore they are not shown in Figure 4-1.

Based on GIS analysis, no significant features within the GFD Project area were identified. However, Waroonga State Forest and Taboonbay State Forest are located within the central portion of Amby Creek catchment, immediately upstream of the GFD Project area. Burgagay Creek (an upstream tributary) runs through both forest areas.

Wetlands

A total of 21 wetland features (encompassing around 375 ha) were identified within Amby Creek catchment covered by the GFD Project area, using the Queensland Wetland Classification Method. Over 90% of these areas are riverine wetlands associated with the main channel of Amby Creek, while the remainder are defined as artificial or modified features such as farm dams or irrigation channels.



4 Environmental values

4.2.3 Human environmental values

Human EVs for water use throughout the catchment, such as for agricultural, domestic supply and resource extraction activities, were identified at a high level in Table 4-1. Further detailed information regarding individual licences for particular land use activities was inferred using analysis of water licences data provided by DNRM.

4.2.3.1 Processing of DNRM water licence data in GIS

URS requested a search of the DNRM Water Management System for publicly available data relating to surface water licences throughout each of the defined study sub-catchments of the GFD Project area. A 50 km 'buffer zone' was also included to capture surface water users immediately downstream of the GFD Project. Data was supplied in a Microsoft Excel spreadsheet, which was processed with automated programming scripts and manual searches/operations to filter the data into a format that can be used in GIS. Licences associated with multiple parcels were divided so that each individual parcel had allocation details; with multiple licences in some cases. The Excel data was then spatially joined to the GIS geometry to match datasets such as resource tenure and land cover.

Some limitations of the dataset included the absence of names of water users, and in some cases, allocated volumes for water licenses due to privacy restrictions. However, where water is used for resource extraction, company names associated with water entitlements were available. Where the location/attached value parcels had descriptive qualities that were incomprehensible or could not be matched with GIS spatial data, these values were omitted from the search. Therefore, due to the limitations arising from the quality of the data received, the mapping of water licences associated with these results should be considered as indicative.

4.2.3.2 Key human uses of surface water resources

The land use activities for which licences have been designated throughout the GFD Project area are illustrated in Figure 4-2, whereas a spatial analysis of allocation volumes for each land parcel is presented in Figure 4-3. A complete list of licences identified within the 50 km buffer surrounding the GFD Project area, and their associated surface water sub-catchment, is presented in Appendix D.

The predominant land use activities for which surface water licences are assigned, and the percentage of licences assigned to town water supply, are summarised by study sub-catchment in Table 4-3.

Table 4-3 Predominant human uses for surface water throughout the GFD Project area

Study sub-catchment	Predominant uses of surface water	Approximate % allocated to town water supply
Comet River	Livestock; impound water	2.6
Lower Dawson River	Livestock; domestic supply; water harvesting	7.0
Upper Dawson River	Livestock; domestic supply	0.3
Upper Balonne River Tributaries	Livestock; domestic supply	2.0
Amby Creek	Livestock	3.0
Dogwood Creek	Livestock; domestic supply	0.6

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Surface water licences associated with petroleum leases (PLs) or authorities to prospect (ATPs) were also assessed by sub-catchment.

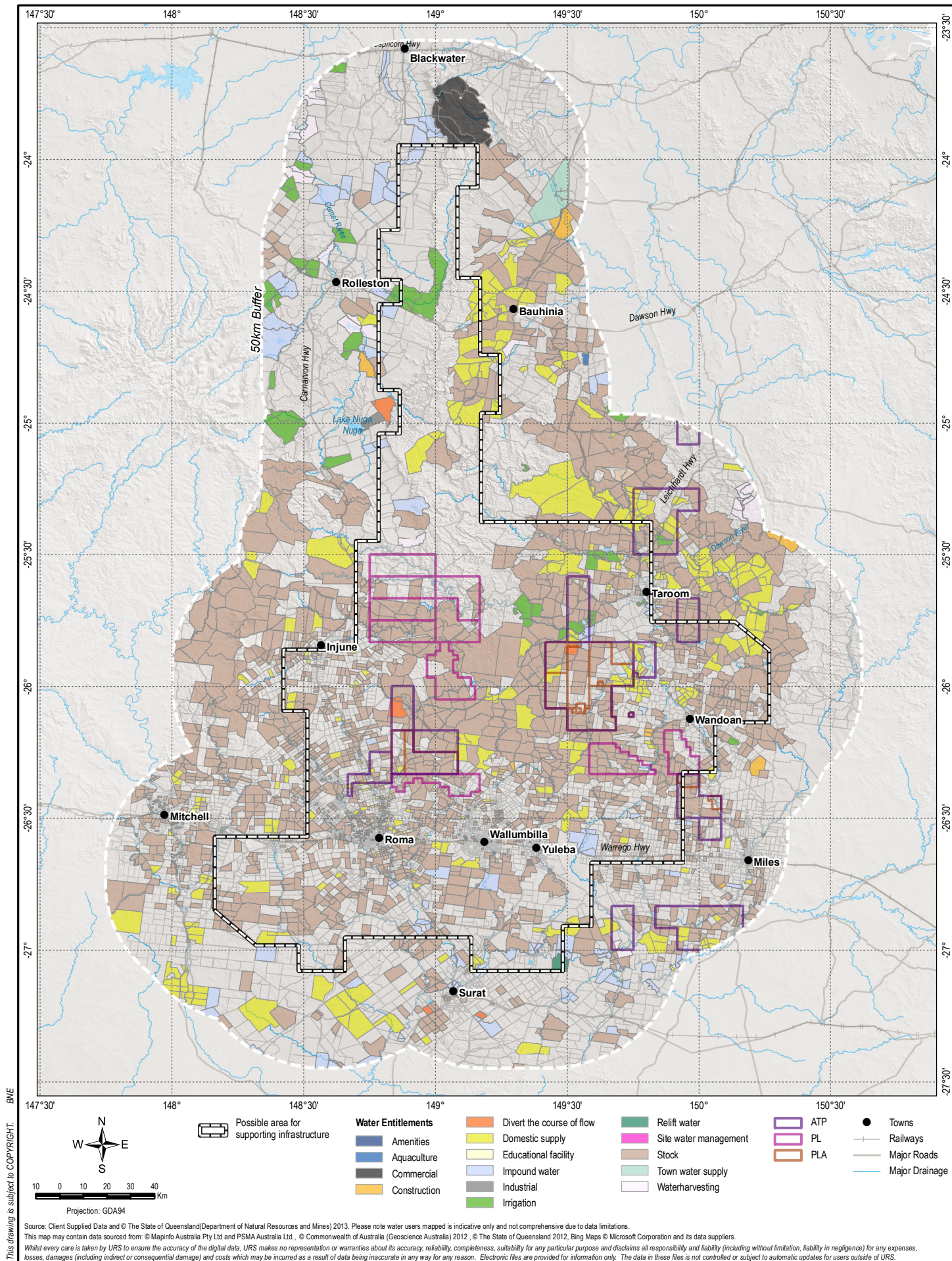
The principal holders for the licences associated with ATP petroleum leases are listed below:

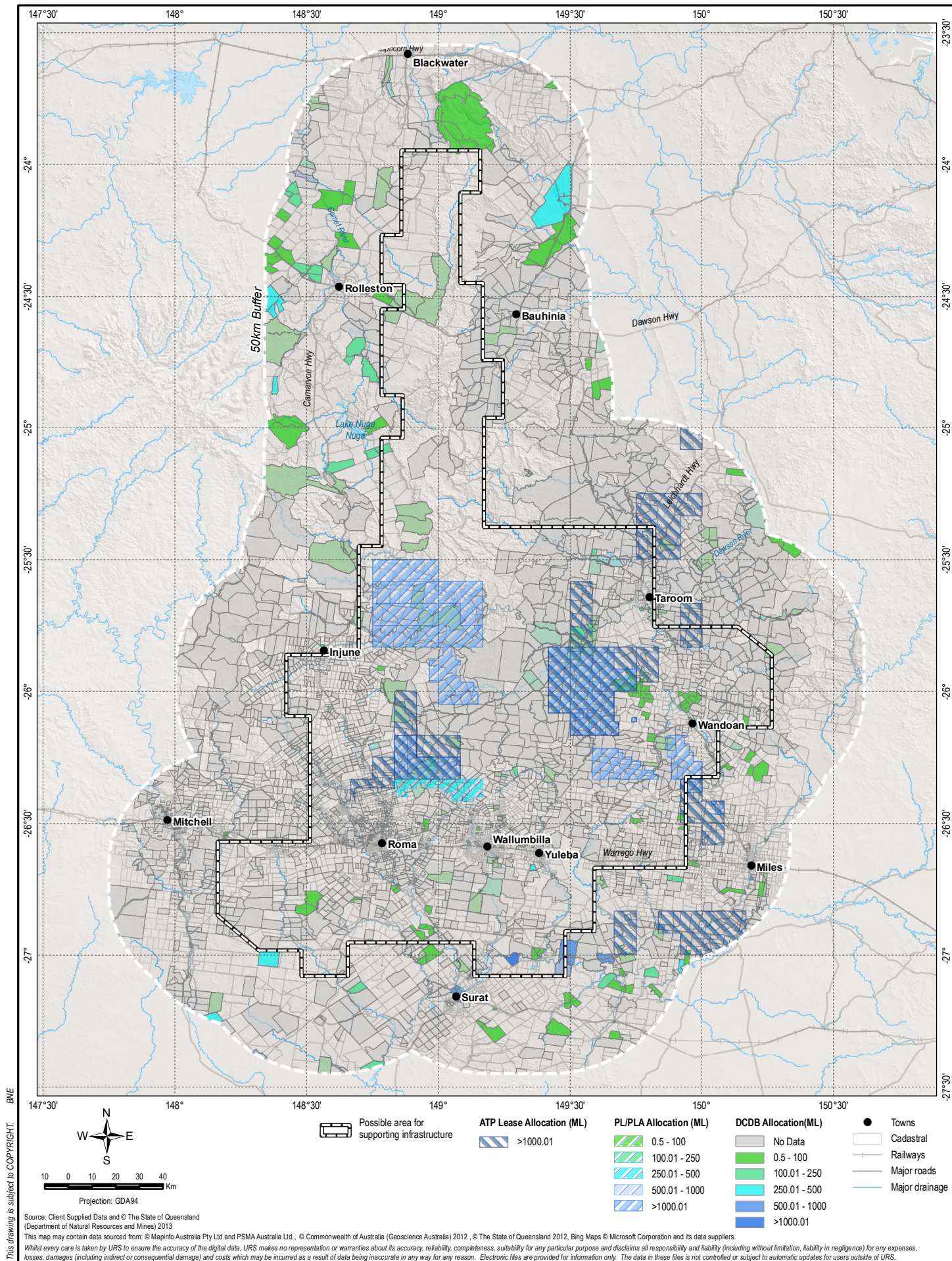
- BG International (Aus) Pty Limited (Lower Dawson River; Upper Dawson River and Dogwood Creek)
- BNG (Surat) Pty Limited (Upper Dawson River and Upper Balonne River Tributaries)
- QGC Pty Limited (Dogwood Creek).

The principal holders for the licences associated with PLs are as follows:

- Australia Pacific LNG Pty Limited (licences are for irrigation purposes)
- BG International (Aus) Pty Limited
- BNG International (Aus) Pty Limited
- BNG (Surat) Pty Limited
- QGC Pty Limited
- Santos TOGA Pty Limited (licences are for irrigation purposes)
- Roma Petroleum Pty Limited
- Pure Energy Resources Pty Limited
- Santos QNT Pty Limited (licences are for irrigation purposes).

Details regarding the volume, source and purpose of licences from PLs are included in Appendix D.





Hydrology

5.1 Location and catchment context

As described in Section 3, the GFD Project area covers 10,676 km² and is located in the Surat and Bowen basins of central and southern Queensland. The central and northern extents of the GFD Project area lie in the upper Fitzroy Basin while the southern extents lie within the Balonne River catchment (refer to Figure 3-1, Section 3.1).

The Fitzroy River Basin is the second largest externally drained basin in Australia and the largest on the eastern coast. At almost 150,000 km², it contains several significant tributaries, including the Nogoa, Comet, Mackenzie and Dawson rivers. The basin eventually discharges into the Coral Sea east of Rockhampton, which is located at the southern end of the Great Barrier Reef.

The Condamine-Balonne Basin covers a similar area of just over 150,000 km² and represents around 14.4% of the larger Murray Darling Basin area.

5.2 Climate overview

5.2.1 Context

The study area is subjected to a subtropical climatic regime and typically experiences warm to hot summers and mild to cool winters. Rainfall is seasonally distributed with a distinct wet season occurring during the summer months of December through February and an extended dry season during the months of April through September. Evaporation rates are generally high and in excess of rainfall throughout the year. Mean maximum monthly temperatures typically range from 33°C in summer to 20°C in winter.

Climatic variability is relatively limited across the study area with no significant differences in rainfall, evaporation or temperature identified from the selected weather station data. However examination of the available monthly statistics for selected weather stations across the study area shows that significant variability exists in both mean annual and mean monthly total rainfall depths. It is known that this variability is sufficient to produce both droughts and floods as a result of both prolonged below and above average rainfall.

5.2.1.1 Data sources

The climate data presented in Sections 5.2.1 to 5.2.2 have been obtained from the Bureau of Meteorology (BoM). No additional data processing has been conducted except to present average values across the study area where applicable. This assessment of climate was completed to determine climatic influence on hydrology within the GFD Project area; climate stations were selected on the basis of their proximity to major watercourses. A more detailed analysis of climate characteristics, climate change considerations, and potential impacts on a wider scale is contained within Appendix I: Natural hazards and climate change (URS 2013b).

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5.2.2 Rainfall

A total of seven BoM weather stations were selected across the study area. The selected stations (refer Table 5-1) were filtered from the BoM database on the basis of:

- Status — only currently open stations were considered
- Length of record — only those with a data record in excess of 75 years were considered
- Proximity to study area and catchment location — only those stations within or less than 10 km from the study area and within the studied catchments were considered.

Table 5-1 Selected weather stations recording rainfall

Site number	Site name	Latitude (decimal degrees)	Longitude (decimal degrees)	Start of record	Length of record (years)
43043	Yuleba Garden St	-26.613	149.388	1884	129
35242	Bungaban TM	-25.899	150.130	1890	123
35135	Hornet Bank Homestead	-25.758	149.407	1911	102
35077	Warrinilla	-24.921	148.601	1884	129
35007	Bauhinia Downs Store	-24.571	149.292	1890	123
35063	Somerby	-24.211	148.740	1924	89
43026	Normandy	-26.769	148.356	1928	85

Figure 5-1 shows total annual rainfall for each of the selected weather stations and it can be seen that the mean annual total ranges from 560 millimetres (mm) at Normandy to 715 mm at Warrinilla. The extent of annual rainfall variability is significant suggesting that the study area is likely to be affected by prolonged periods of both above average (floods) and below average (droughts) rainfall.

The 95th percentile annual totals (representing an annual exceedance probability (AEP) of 0.05 or approximately a 1 in 20 wet year) range from 899 to 1,270 mm, which represents approximately 160% of the mean annual total.

The 5th percentile annual totals (representing an AEP of 0.95 or approximately a 1 in 20 dry year) range from 305 to 373 mm and represents approximately 50% of the mean annual total.

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Figure 5-1 Total annual rainfall variability for selected study area weather stations

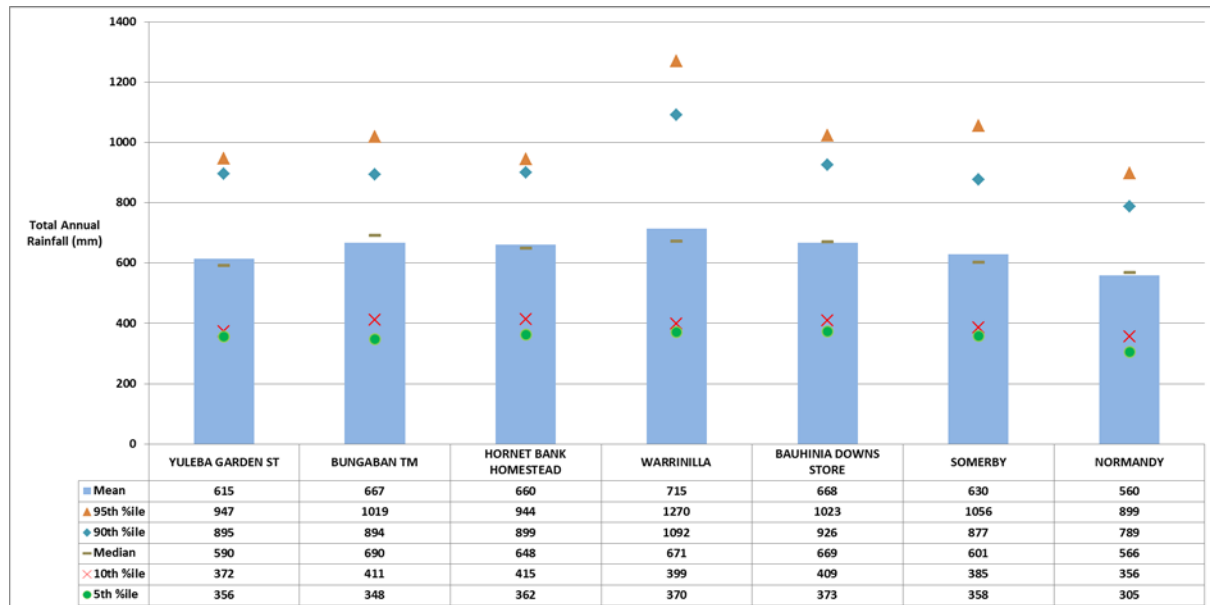


Figure 5-2 shows mean monthly totals for each station. It can be seen that there is a distinct seasonal distribution with rainfall monthly totals highest over the summer months of December, January and February. The average maximum monthly total across all stations of 83 mm occurs in both December and January. There appear to be no significant trends in the degree of variability across the study area.

Figure 5-3 shows the average monthly rainfall totals for all rainfall stations across the study area. The figure shows a significant degree of variability in monthly rainfall totals across the study area:

- For March through September the 5th percentile (representing an AEP of 0.95 or approximately a 1 in 20 dry month) mean monthly total is 0 mm
- For the wet season months of December through February the 95th percentile (representing an AEP of 0.05 or approximately a 1 in 20 wet month) range from 227 mm to 242 mm which is 2.5 times the average of 89 to 93 mm for the same period
- While the monthly rainfall totals show the distinct seasonal distribution also shown in Figure 5-2, potential exists for high winter rainfall during the months of June through August. This was illustrated by the 95th percentile results, which were similar to the wet season (December through February) average totals.

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Figure 5-2 Mean monthly rainfall for selected study area weather stations

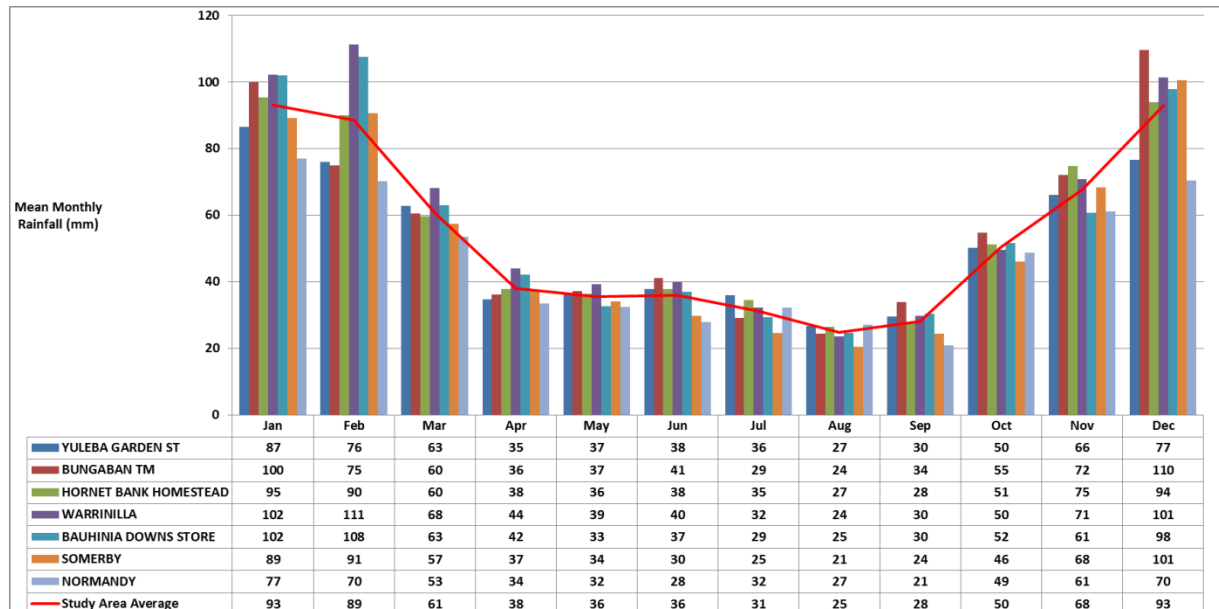
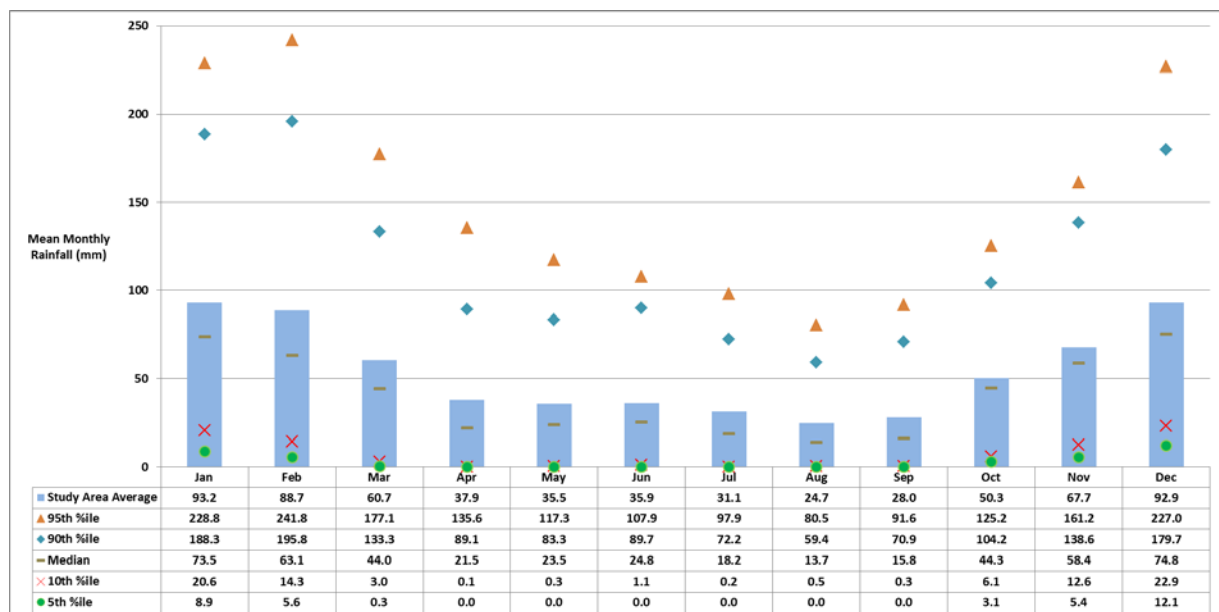


Figure 5-3 Mean monthly rainfall variability for study area weather stations



5.2.3 Evaporation

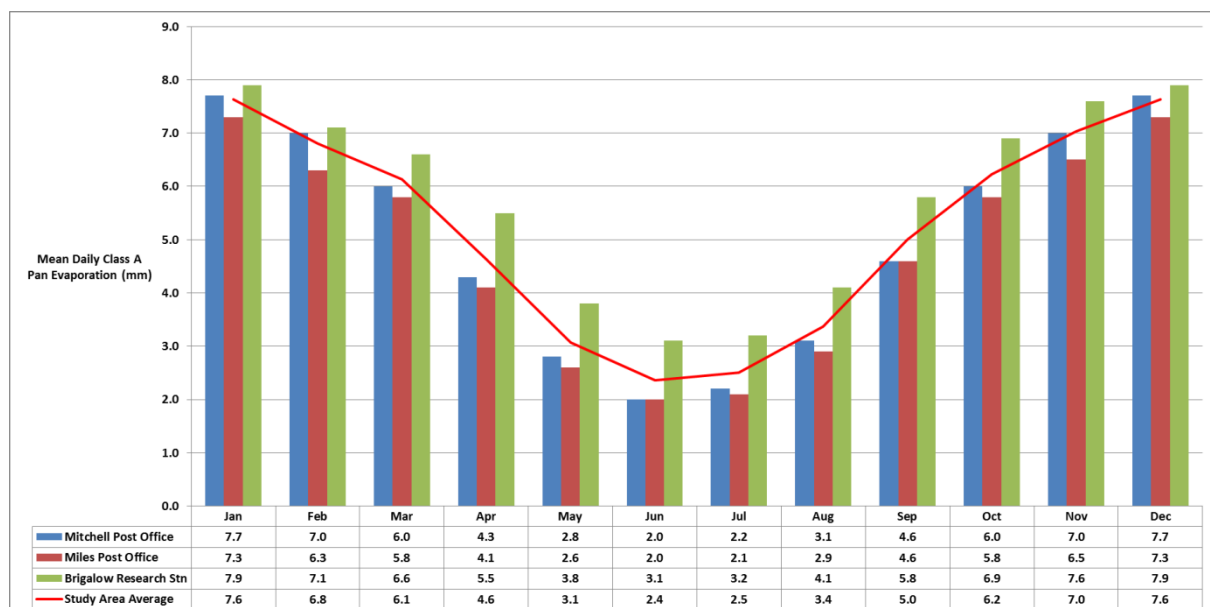
The number of BoM weather stations that record daily evaporation is limited compared to those recording rainfall. A total of three stations were selected as shown on Figure 5-4 and in Table 5-2. Figure 5-4 shows the mean daily class A evaporation. It can be seen that the evaporation rates show the same seasonal distribution as rainfall with mean daily rates highest in the summer months of December through February and lowest through the months of May through July.

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Table 5-2 Selected weather stations recording evaporation

Site name	Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Start of record	Length of record (years)
Mitchell Post Office	043020	-26.489	147.978	1968	40.5
Miles Post Office	042023	-26.658	150.184	1969	31.2
Brigalow Research Station	035149	-24.835	149.800	1968	41.3

Figure 5-4 Mean daily pan evaporation rates for selected weather stations



5.2.4 Temperature

A total of three BoM weather stations recording mean monthly maximum temperature were selected as shown in Figure 5-5 and Table 5-3. The degree of variation in mean monthly maximum temperature across the study area is relatively limited as shown in Figure 5-5, with the coolest mean monthly maximum of approximately 20°C occurring in June and July. Mean monthly maximums averaged across the study area for the summer months (December through February) are approximately 32°C to 34°C with January the hottest month.

Table 5-3 Selected weather stations recording temperature

Site name	Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Start of record	Length of record (years)
Taroom Post Office	035070	-25.641	149.796	1952	61
Injune Post Office	043015	-25.843	148.567	1667	46
Roma Airport	043091	-26.547	148.772	1992	21

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Figure 5-5 Mean monthly maximum temperatures for selected weather stations



5.3 Stream flows

5.3.1 Watercourse classification

A preliminary classification of hydrologic flow regimes for key watercourses in the study area was undertaken using a qualitative assessment methodology (based on Kennard et al. (2010)). While Kennard et al. developed an assessment methodology with classifications for 12 types of hydrologic regime, for the purpose of this study it was considered that the classifications shown in Table 5-4 allow for an appropriate level of distinction.

Table 5-4 Classification of watercourse flow regime

Watercourse classification	Definition
Permanent ¹	Stream discharge persists during both high rainfall (typically summer wet season) and low rainfall (typically winter dry season) periods. During drought years some cease to flow periods may occur however non-flowing, connected pools will persist throughout the waterway channel.
Semi-permanent ²	These watercourses experience high discharges during heavy rainfall periods (i.e. summer wet season) however are typically reduced to a series of disconnected, non-flowing series of pools during the dry season.
Ephemeral ³	These watercourses will typically only experience surface water flow during or immediately after heavy or sustained rainfall events (i.e. summer wet season). Following periods of flow surface water will persist in the form of non-flowing, disconnected pools separated by dry/exposed stream bed. Surface water (flowing or non-flowing) is only present for a small part of the hydrological cycle.

¹ Broadly analogous to Kennard et al. (2010) class 3 (*Stable Summer baseflow*)

² Broadly analogous to Kennard et al. (2010) class 7 (*unpredictable intermittent*)

³ Broadly analogous to Kennard et al. (2010) classes 11 (*Unpredictable summer highly intermittent*) and 12 (*Variable summer extremely intermittent*).

5 Hydrology

5.3.2 Context

Stream discharges in the study area typically show the same distinct seasonal distribution as rainfall with the majority of flow occurring during the summer wet season months of December through March. Stream flows are predominately ephemeral, highly episodic and with discharges typically generated only as a result of significant runoff events. Recession is generally rapid once rainfall has ceased.

Prolonged periods of baseflow-dominated discharge are uncommon in the study area except where spring-fed such as near the Dawson River gauges at Taroom (130302A) and Utopia Downs (130324A) (refer to Figure 5-3 for gauge locations). Flow regimes for the largest catchments in the study area, while semi-permanent, are still subjected to prolonged periods of zero flow during the dry winter months or during periods of drought.

5.3.3 Data sources

DNRM maintain a Water Monitoring Data Portal for stream flow data with datasets typically including rainfall, stream flow and water quality data for numerous gauging stations across Queensland. A number of sites were assessed in order to gain an understanding of the hydrologic regime within the study area. Sites were selected on the basis of proximity to the study area and were generally within the study area or less than 50 km (upstream and downstream) away. Data was not collected for the Lower Dawson River or Amby Creek catchments due to the comparatively small portion of each catchment that lay within the GFD Project area.

Details of the stream gauging stations selected are shown in Table 5-5, including the relevant river basin and catchment represented by each gauging station. The following points should be considered when viewing the data:

- The length of record for each gauge is variable
- Summary statistics are presented for available data for each gauge
- The data has not been subjected to additional analysis (assessment of station rating curves, filtering of available data based on quality assessment etc.) except where practicable to produce the summary statistics.

5 Hydrology

Table 5-5 Selected DNRM stream flow gauging stations

Basin	Sub-basin	Gauge name	Gauge number	Latitude (decimal degrees)	Longitude (decimal degrees)	Catchment area (km ²)	Start of record	Length of record (years)
Fitzroy	Comet River	Brown River at Lake Brown	130502B	-24.842	148.694	3,027	1984	29
		Comet River at The Lake	130506A	-24.313	148.613	10,188	1972	41
	Upper Dawson	Robinson Creek at Broadmere	130375A	-25.494	149.521	1,597	2006	7
		Dawson River at Taroom	130302A	-25.637	149.790	15,846	1911	102
		Juandah Creek at Windamere	130344A	-26.025	149.883	1,678	1974	39
		Dawson River at Utopia Downs	130324A	-25.745	149.330	6,039	1966	47
		Palm Tree Creek at La Palma	130313A	-25.390	149.790	2,660	1956	57
Condamine-Balonne	Upper Balonne River Tributaries	Balonne River at Surat	422220A	-27.150	149.064	47,251	2004	9
		Yuleba Creek at Forestry Station	422219A	-26.850	149.473	1,475	1972	41
		Bungil Creek at Tabers	422210A	-26.409	148.777	710	1966	47
	Condamine River	Dogwood Creek at Gilweir	422202B	-26.712	150.179	3,010	1949	64
		Condamine River at Cotswold	422325A	-27.086	149.785	28,930	1966	47

5 Hydrology

5.3.4 Fitzroy Basin

A total of seven gauging stations within the Fitzroy Basin are located within or close to the study area and provide stream flow data for the Comet River, Upper Dawson and Lower Dawson catchments.

5.3.4.1 Comet River

Brown River at Lake Brown (130502B)

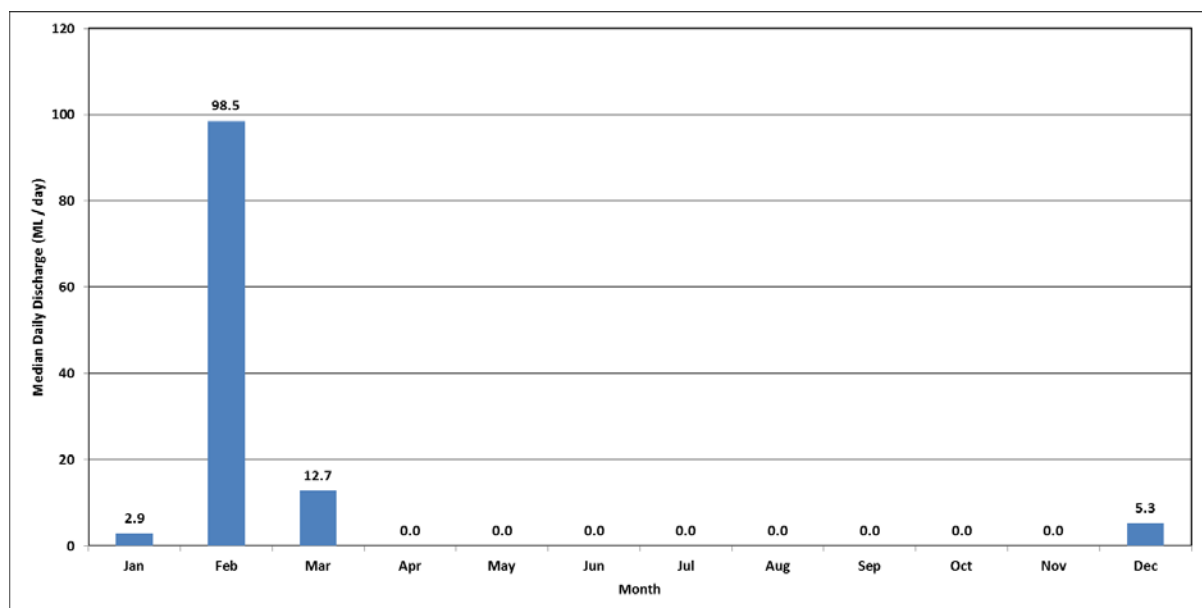
Median daily discharge for gauge 130502B (Brown River at Lake Brown) is shown in Figure 5-6 and Figure 5-7 shows a cumulative frequency plot for the average daily recorded flow. From Figure 5-6 it can be seen that for the greater part of the year median daily flows are typically zero with flows only present during the wet season months of December through March. The steep nature of the curve in Figure 5-7 indicates that flows are likely to be subjected to a rapid recession once rainfall has ceased. The figure also indicates that:

- Flows are only present at the gauge for 29% of the time
- Five percent of recorded daily discharges exceed 550 megalitres per day (ML/day).

It is also noted that gauge 130502B is located approximately 25 km downstream from Lake Nuga Nuga. The lake is formed through sand deposition from Moolayember Creek that effectively blocks the valley of the Brown River resulting in a downstream discharge only when these natural levees are overtopped.

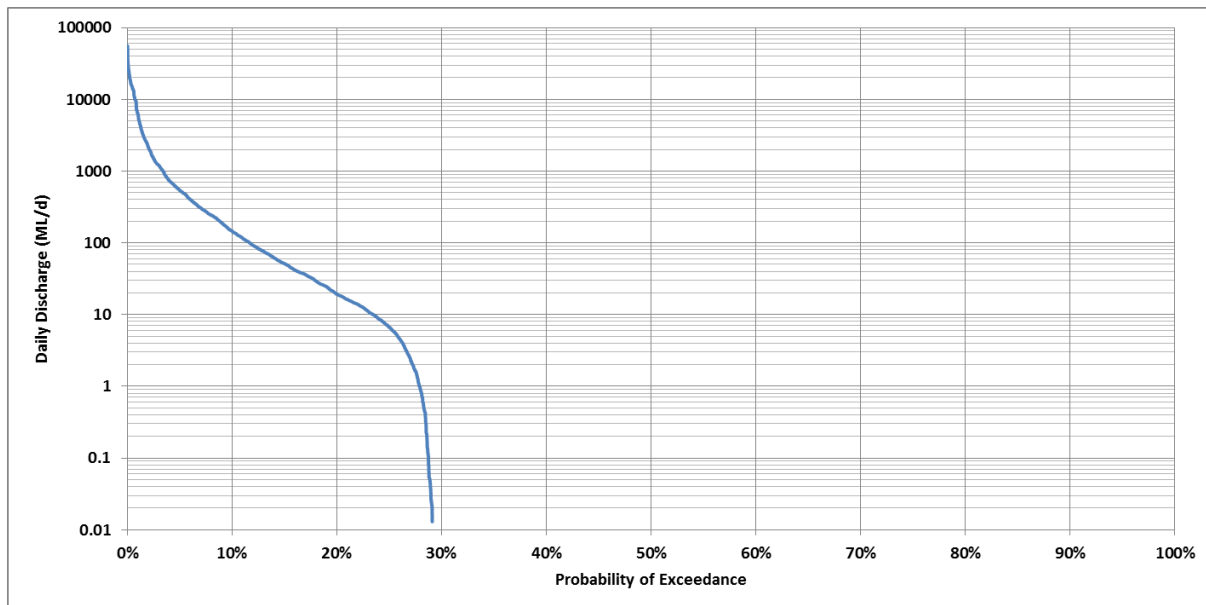
Based on the data presented in Figure 5-6 and Figure 5-7 all watercourses above gauge 130502B are judged to be ephemeral, likely to flow only during and immediately after significant runoff events and exhibit rapid recession.

Figure 5-6 Median daily discharge for gauge 130502B (Brown River at Lake Brown)



5 Hydrology

Figure 5-7 Cumulative exceedance probability plot for recorded daily discharge at gauge 130502B (Brown River at Brown Lake)



Comet River at the Lake (130506A)

Median daily discharge for gauge 130506A (Comet River at the Lake) is shown in Figure 5-8 and Figure 5-9 shows a cumulative frequency plot for the average daily recorded flow. From Figure 5-8 it can be seen that median daily flows show a distinct seasonal distribution with little or no flow occurring during the winter dry season. The peak median daily flow of 573 ML/day occurs in February. From Figure 5-9 it is evident that:

- For a significant period of time no flows are present at the gauge such that the probability that flow will exceed zero is only 51%
- Baseflows exhibit a relatively quick recession
- Five percent of daily discharges are more than 2,500 ML/day.

Based on the data presented in Figure 5-8 and Figure 5-9 all watercourses above gauge 130506A are judged to be ephemeral and likely to flow only during and for a short period after significant runoff events.

5 Hydrology

Figure 5-8 Median daily discharge for gauge 130506A (Comet River at the Lake)

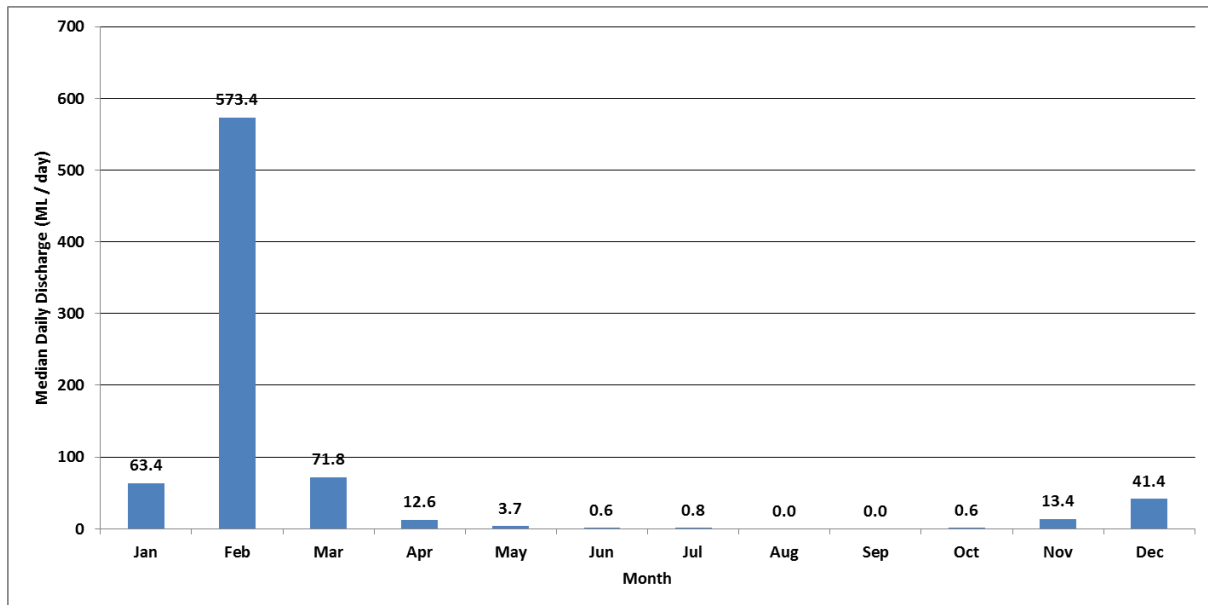
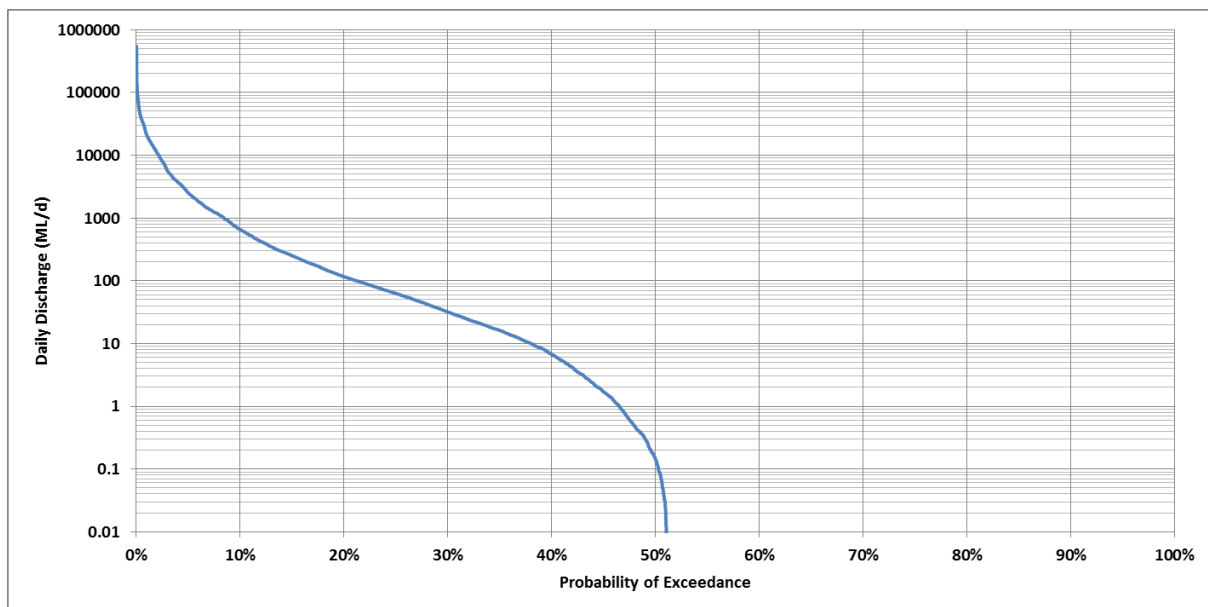


Figure 5-9 Cumulative exceedance probability plot for recorded daily discharge at gauge 130506A (Comet River at the Lake)



5 Hydrology

5.3.4.2 Upper Dawson River

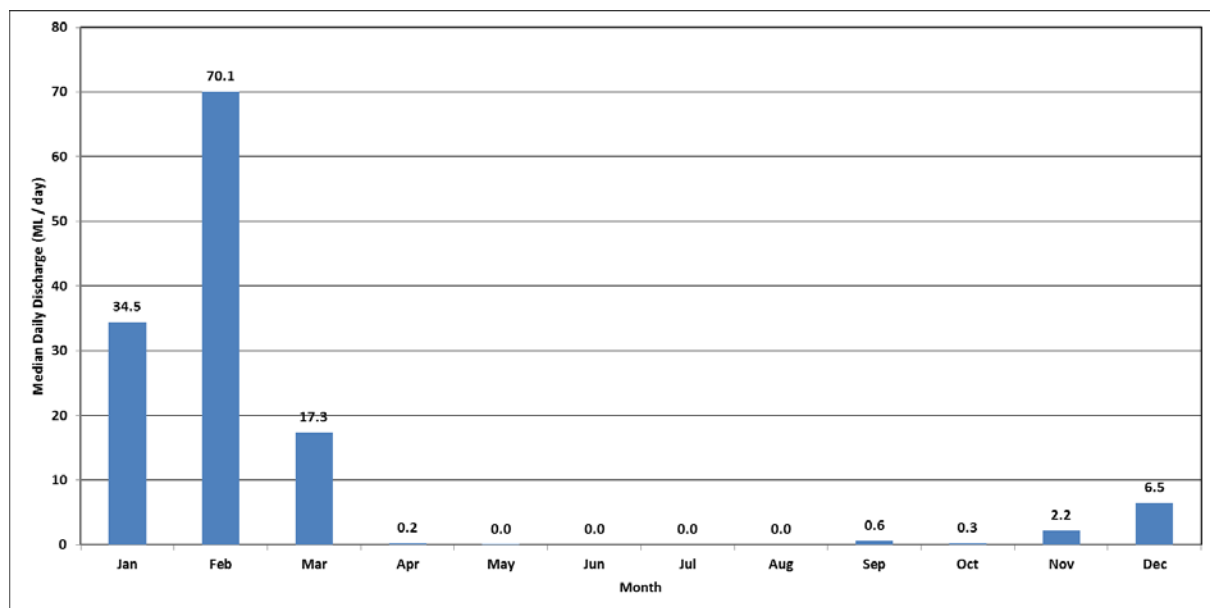
Robinson Creek at Broadmere (130375A)

Median daily discharge for gauge 130375A (Robinson Creek at Broadmere) is shown in Figure 5-10 and Figure 5-11 shows the cumulative frequency plot for the average daily recorded flow. From Figure 5-10 it can be seen that median daily flows show a distinct season distribution with little or no flow occurring during the winter dry season. The peak median daily flow of 70 ML/day occurs in February. From Figure 5-11 it can be seen that:

- For a significant period of time no flows are present at the gauge such that the probability that flow will exceed zero is only 45%
- Five percent of daily discharges exceed 300 ML/day.

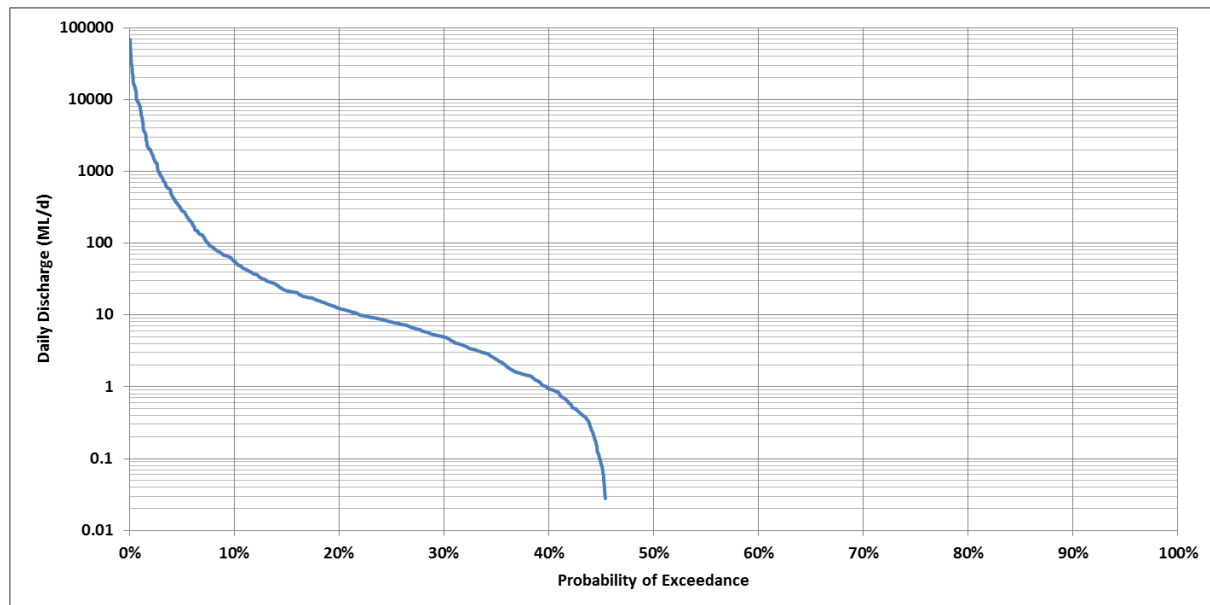
Based on the data presented in Figure 5-10 and Figure 5-11, watercourses above gauge 130375A would be ephemeral and likely to flow only during and immediately after significant runoff events.

Figure 5-10 Median daily discharge for gauge 130375A (Robinson Creek at Broadmere)



5 Hydrology

Figure 5-11 Cumulative exceedance probability plot for recorded daily discharge at Gauge 130375A (Robinson Creek at Broadmere)



Dawson River at Taroom (130302A)

Median daily discharge for gauge 130202A (Dawson River at Taroom) is shown in Figure 5-12 and Figure 5-13 shows a cumulative frequency plot for the average daily recorded flow. From Figure 5-12 it can be seen that there is a distinct seasonal distribution to flows with:

- Peak discharges occurring during the months of December through March
- A relatively consistent baseflow through the months of April through October.

Both the Dawson River and Hutton Creek Springs contribute to baseflow in the Dawson River at this location. From Figure 5-13 it can clearly be seen that baseflow conditions are present for a significant proportion the time as exhibited by the relatively 'flat' profile of the curve and relatively small percentage of cease to flows conditions (approximately 8%). Examination of the recorded flow data indicates that these zero flow occurrences are relatively infrequent with the last significant cease to flow condition being recorded in 1993. From Figure 5-13 it can also be seen that:

- Forty-five percent of recorded daily flows are in a relatively narrow range of 10 to 100 ML/day
- Five percent of daily discharges exceed approximately 2,800 ML/day.

Based on the data presented in Figure 5-12 and Figure 5-13 streamflows at gauge 130302A are predominately perennial with a clearly defined baseflow component accounting for the majority of streamflow throughout most of the year.

5 Hydrology

Figure 5-12 Median daily discharge for gauge 130302A (Dawson River at Taroom)

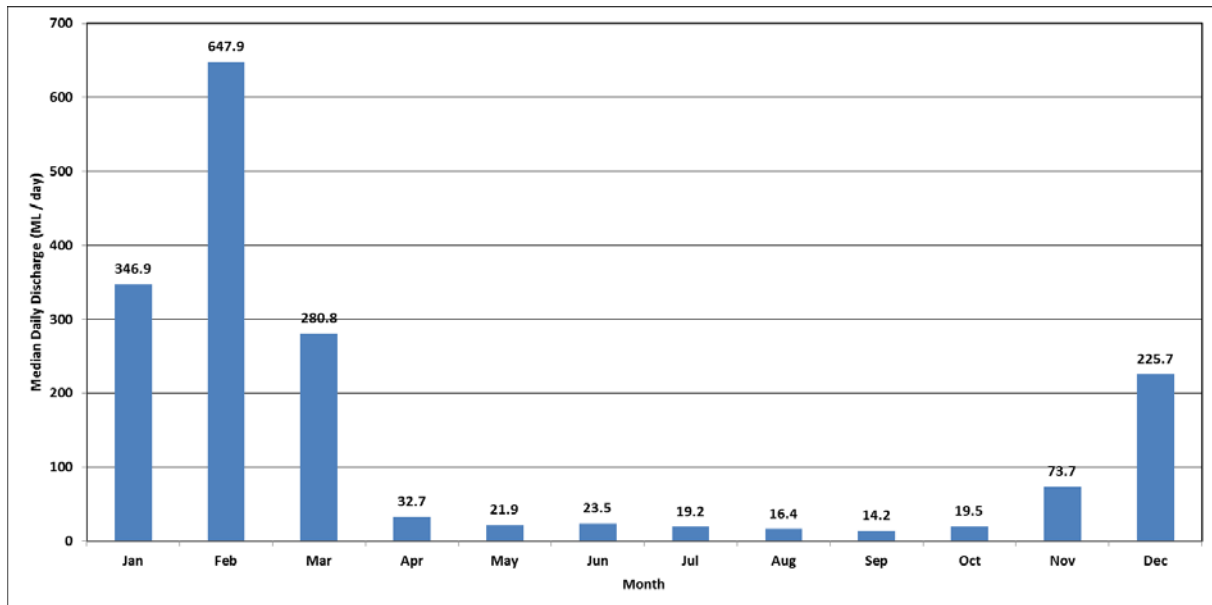
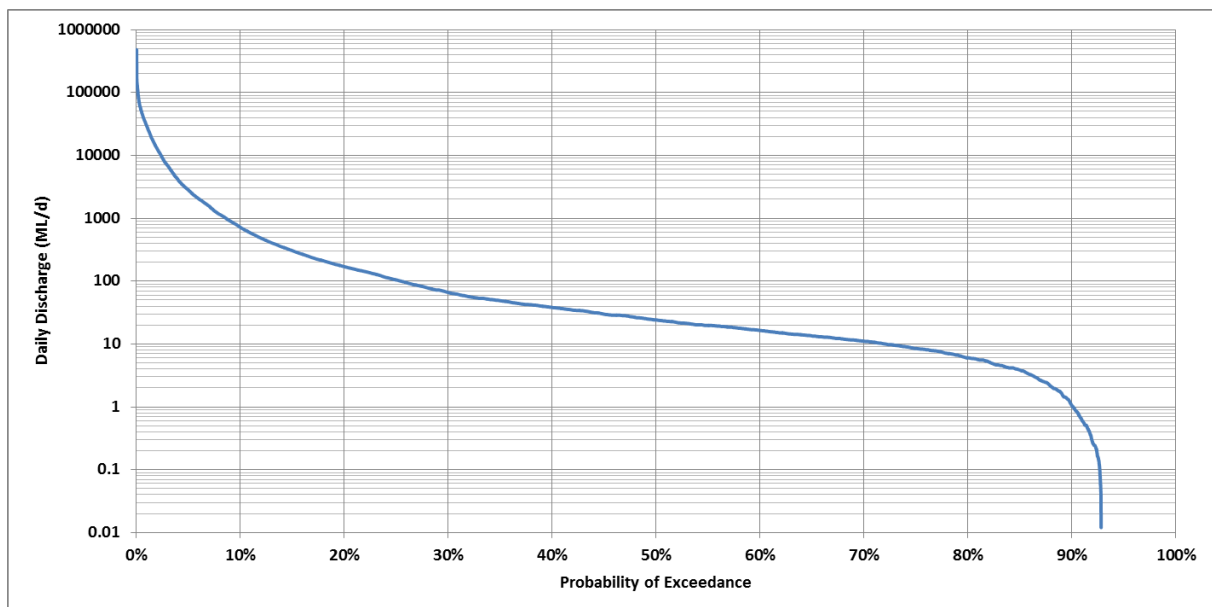


Figure 5-13 Cumulative exceedance probability plot for recorded daily discharge at gauge 130302A (Dawson River at Taroom)



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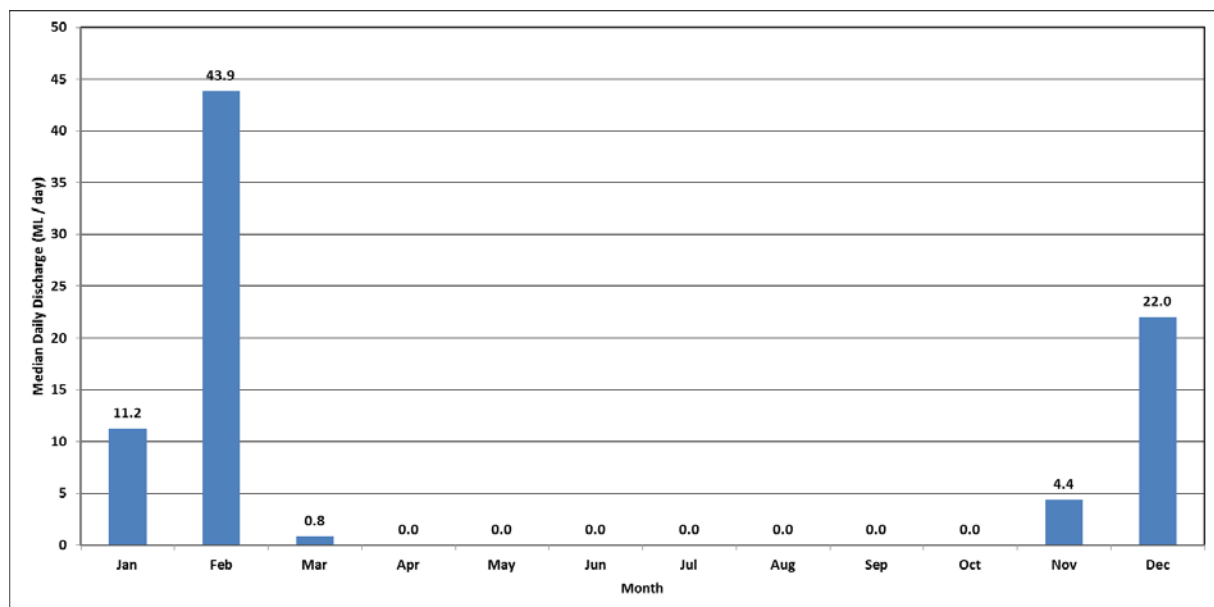
Juandah Creek at Windamere (130344A)

Median daily discharge for gauge 130344A (Juandah Creek at Windamere) is shown in Figure 5-14 with Figure 5-15 showing the cumulative frequency plot for the average daily recorded flow. It can be seen that flows are distinctly seasonally distributed with median daily flows of zero from April through October (refer Figure 5-14). The peak median daily flow of 44 ML/day occurs in February. From Figure 5-15 it can be seen that:

- The probability that flows at the gauge will exceed zero is only 22%
- Five percent of daily discharges exceed 140 ML/day.

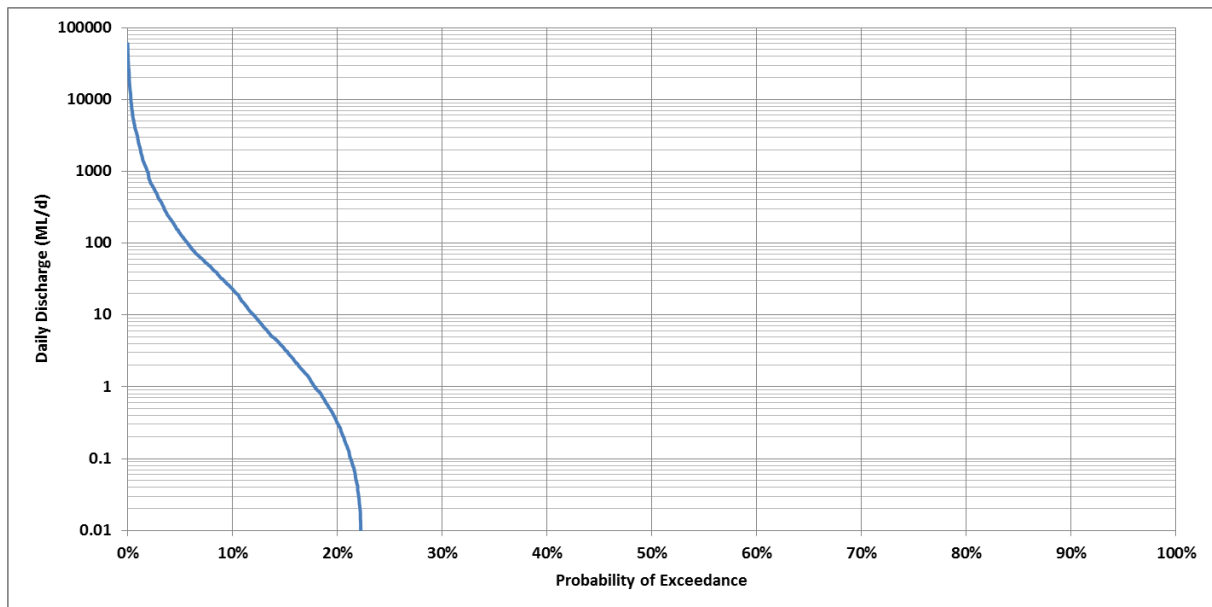
Based on the data presented in Figure 5-14 and Figure 5-15 watercourses above gauge 130344A would be ephemeral and likely to flow only during and immediately after significant runoff events.

Figure 5-14 Median daily discharge for gauge 130344A (Juandah Creek at Windamere)



5 Hydrology

Figure 5-15 Cumulative exceedance probability plot for recorded daily discharge at gauge 130344A (Juandah Creek at Windamere)



Dawson River at Utopia Downs (130324A)

Median daily discharge for gauge 130324A (Dawson River at Utopia Downs) is shown in Figure 5-16 and Figure 5-17 shows a cumulative frequency plot for the average daily recorded flow. Figure 5-16 shows that streamflows at the gauge location are largely comprised of:

- A relatively consistent baseflow through the months of April through November
- A period of higher flows from December through March.

From Figure 5-17 it can be seen that baseflow conditions dominate streamflow at the gauge location as indicated by the 'flat' gradient of the line. Cease to flow conditions have been recorded but only represent approximately 4% of days. It can also be seen that:

- Five percent of all daily discharges exceed 550 ML/day
- Approximately 65% of recorded daily discharges are in the range of 10 ML/day to 100 ML/day.

The presence of this baseflow is due to the influence of both the Hutton Creek and Dawson River spring complexes, which discharge downstream of the confluence with Hutton Creek. Based on the data presented in Figure 5-16 and Figure 5-17 streamflows at gauge 130302A are strongly perennial. Daily discharges sustained predominantly by baseflow for the majority of the year with only a relatively small additional runoff contribution during the wetter months of December through March.

5 Hydrology

Figure 5-16 Median daily discharge for gauge 130324A (Dawson River at Utopia Downs)

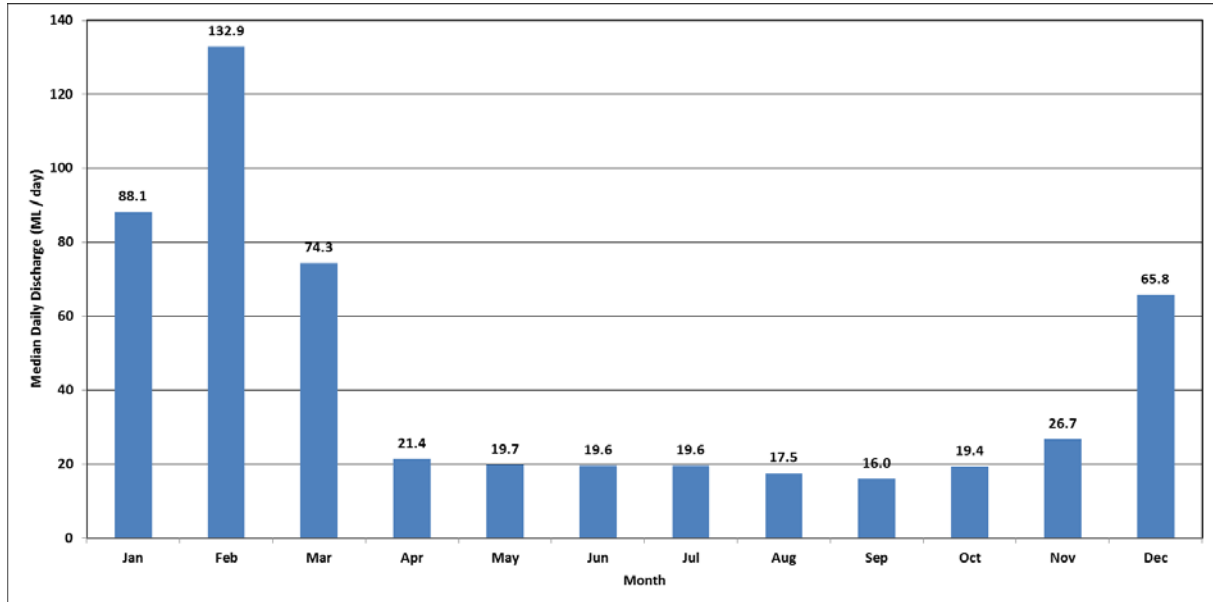
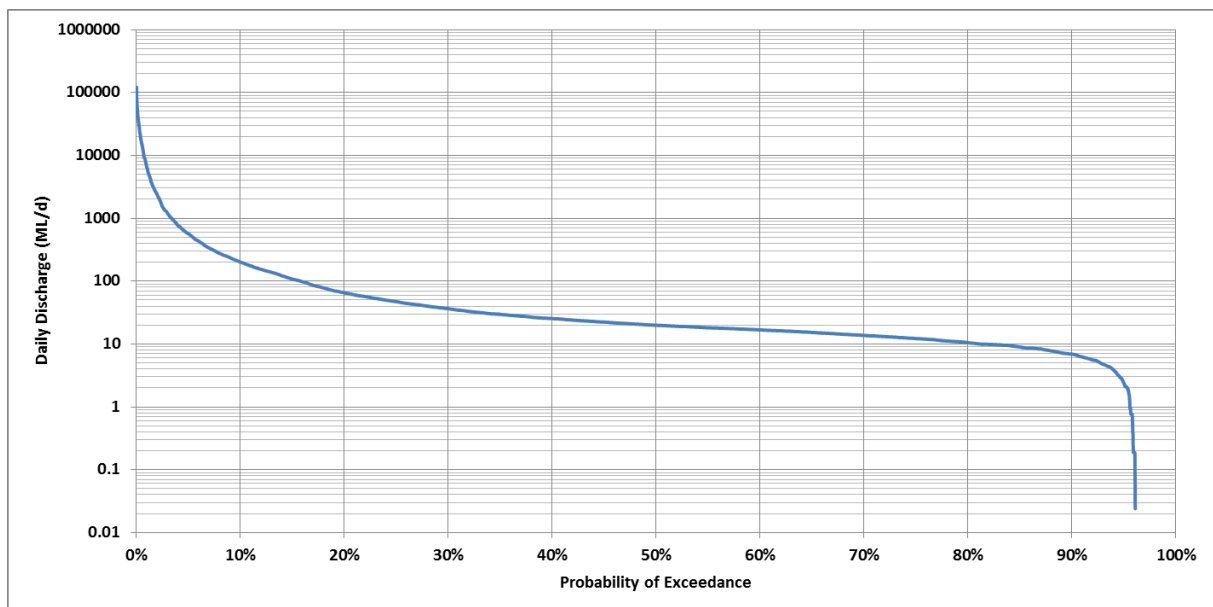


Figure 5-17 Cumulative exceedance probability plot for recorded daily discharge at gauge 130324A (Dawson River at Utopia Downs)



5 Hydrology

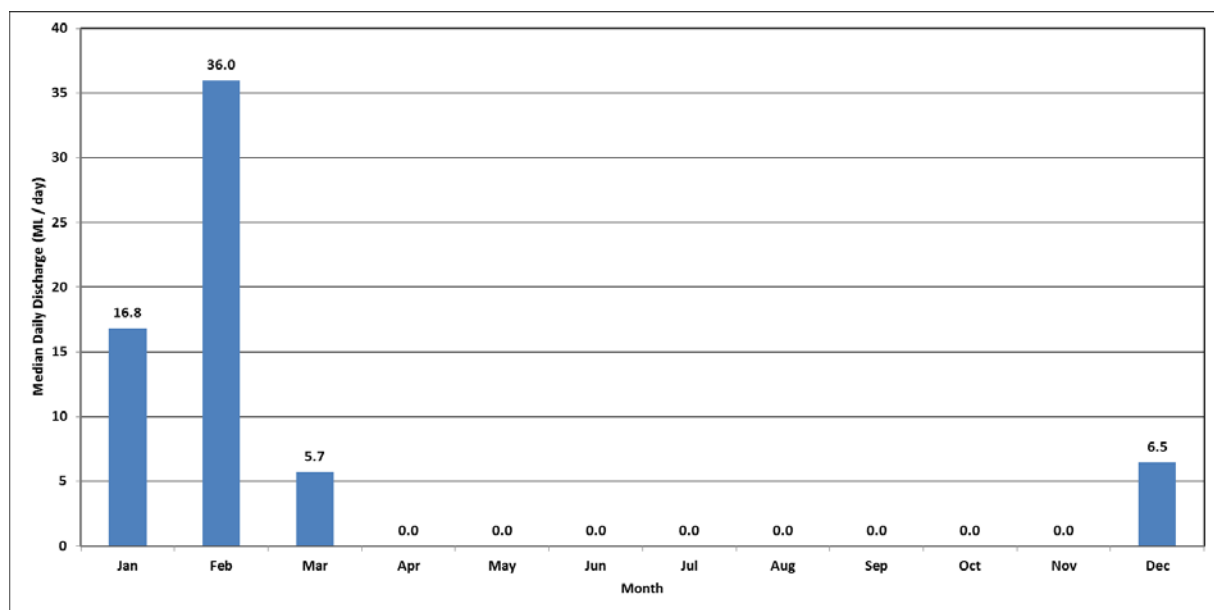
Palm Tree Creek at La Palma (130313A)

Median daily discharge for gauge 130313A (Palm Tree Creek at La Palma) is shown in Figure 5-18. It can be seen that flows show a distinct seasonal distribution with flows only present in December through March and the peak daily discharge of 36 ML/day occurring in February. The cumulative frequency plot for the average daily recorded flow (Figure 5-19) shows that cease to flow conditions are present at the gauge for the majority of days with the probability of flows occurring around 32% and that:

- Flows at this gauge are likely to be subjected to a relatively quick recession
- Five percent of daily discharges exceed 180 ML/day.

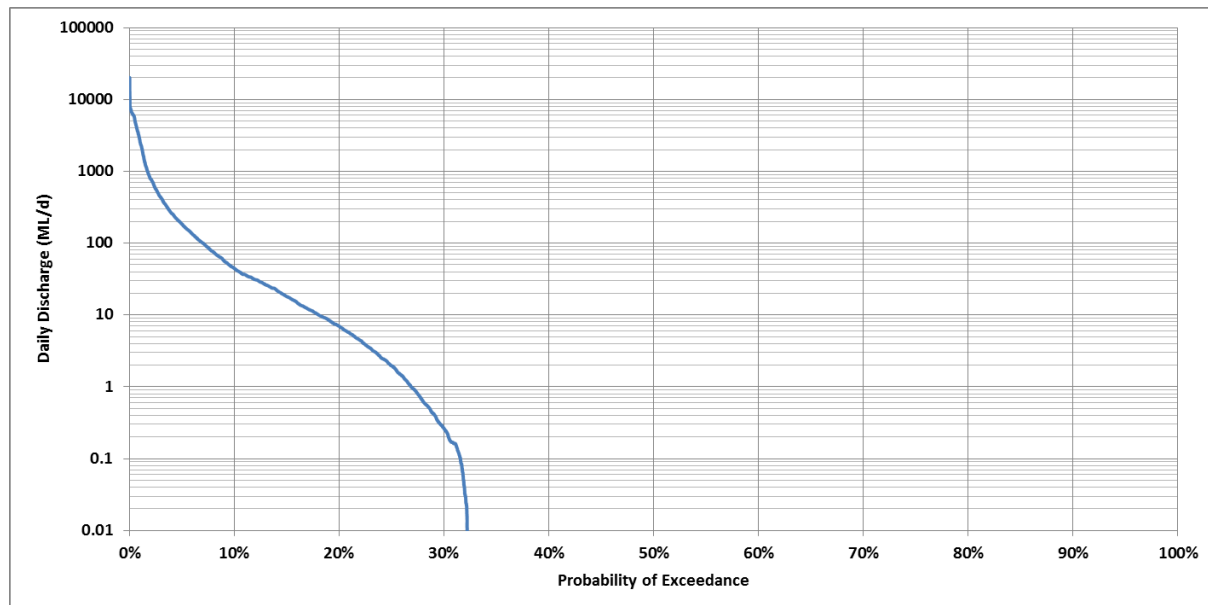
Based on the data presented in Figure 5-18 and Figure 5-19 watercourses above gauge 130344A are ephemeral and likely to flow only during and immediately after significant runoff events. Prolonged periods of zero flow are also likely during the drier winter months.

Figure 5-18 Median daily discharge for gauge 130313A (Palm Tree Creek at La Palma)



5 Hydrology

Figure 5-19 Cumulative exceedance probability plot for recorded daily discharge at gauge 130313A (Palm Tree Creek at La Palma)



5.3.5 Condamine-Balonne River

Five DNRM stream gauges provide stream flow and rainfall data for tributaries of the Condamine and Balonne rivers, which intersect the study area.

5.3.5.1 Upper Balonne River tributaries

Balonne River at Surat (422220A)

Median daily discharge for gauge 422220A (Balonne River at Surat) is shown in Figure 5-20. Flows show a distinctive seasonal distribution with the months of December through February having the highest median daily discharges. Gauge 422220A has the largest reporting catchment area (47,251 km²) of those examined and this is reflected in a peak daily discharge of 3,272 ML/day, which occurs in February. While median daily discharges above zero are present for remaining months, Figure 5-21 shows that zero flow conditions are still encountered approximately 40% of the time and that:

- Five percent of daily discharges exceed 16,000 ML/day
- Prolonged flow recessions are likely to follow significant discharge events.

On the basis of the data presented in Figure 5-20 and Figure 5-21 flows at gauge 422220A are likely to be semi-permanent. Due to the size of its reporting catchment the location is subject to a large range of flow events with the recent 2010/11 wet season having a significant influence on the short period of record (nine years) for this gauge. Prolonged flow recessions are likely to sustain flows well into the winter dry season particularly following significant wet season events.

5 Hydrology

Figure 5-20 Median daily discharge for gauge 422220A (Balonne River at Surat)

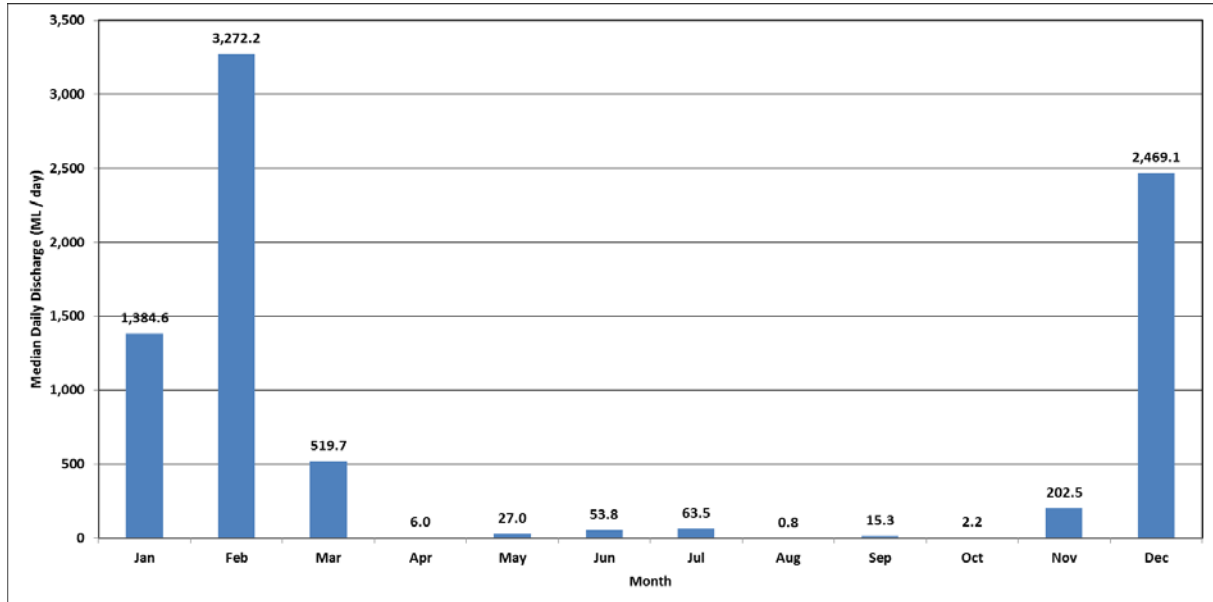
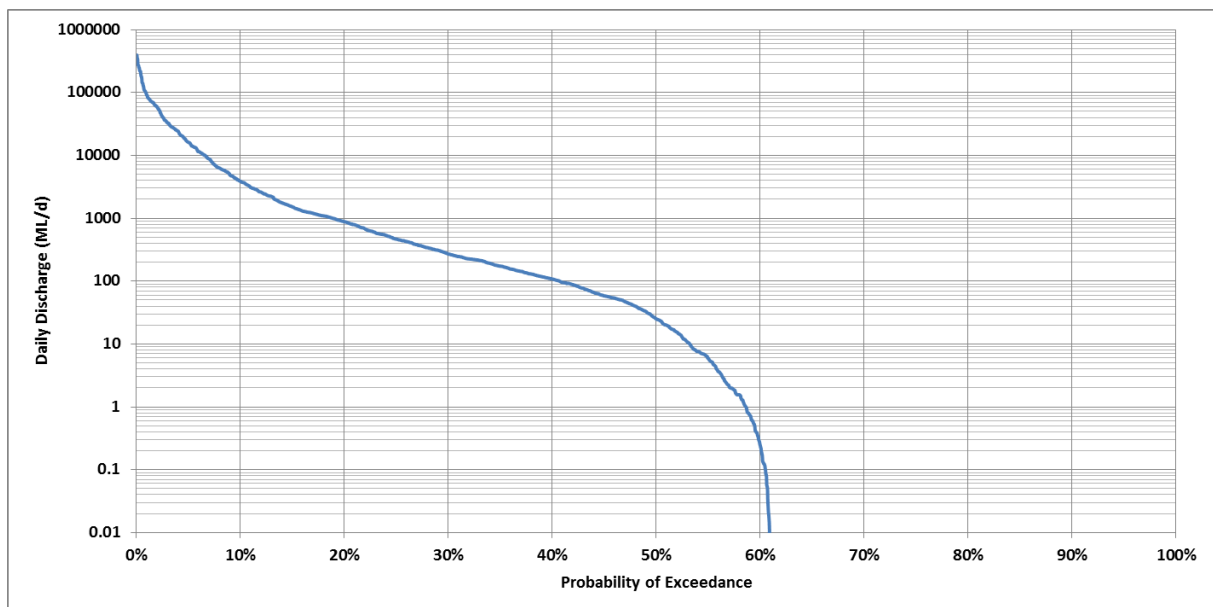


Figure 5-21 Cumulative exceedance probability plot for recorded daily discharge at gauge 422220A (Balonne River at Surat)



5 Hydrology

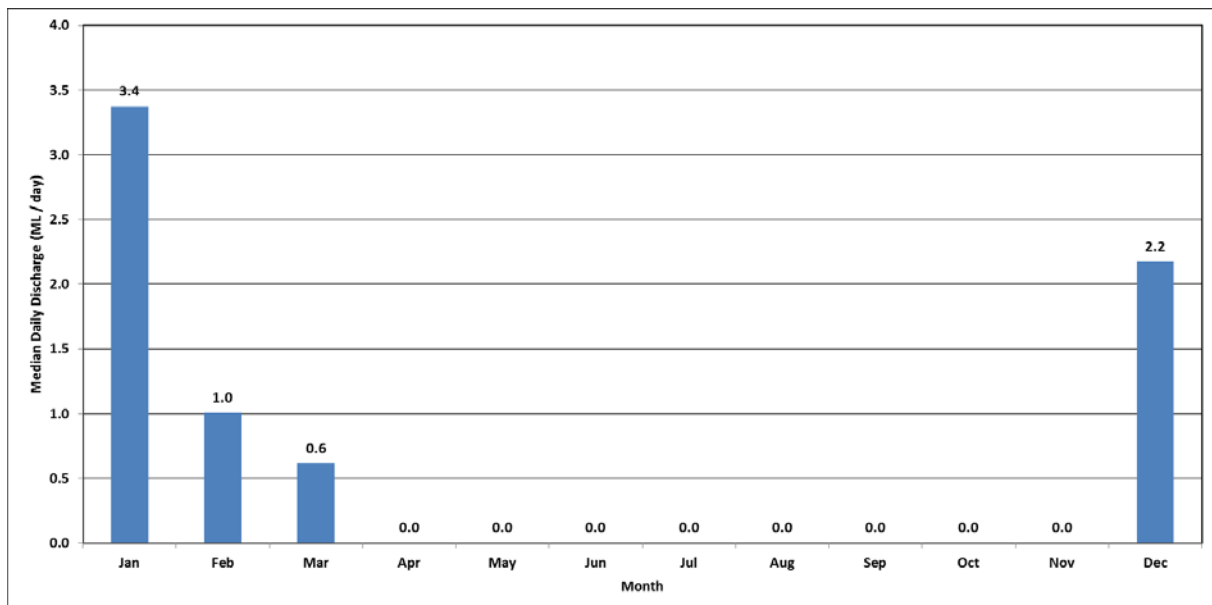
Yuleba Creek at Forestry Station (422219A)

Figure 5-22 shows median daily discharge for gauge 422219A (Yuleba Creek at Forestry station) and Figure 5-23 shows a cumulative frequency plot for the average daily recorded flow. From Figure 5-22 it can be seen that flows show a distinct seasonal distribution with only the wet season months of December through March recording median discharges above zero. The peak median daily flow of 3.4 ML/day occurs in February. From Figure 5-23 it can be seen that:

- The probability that flows at the gauge will exceed zero is only 28%
- Five percent of daily discharges exceed 110 ML/day.

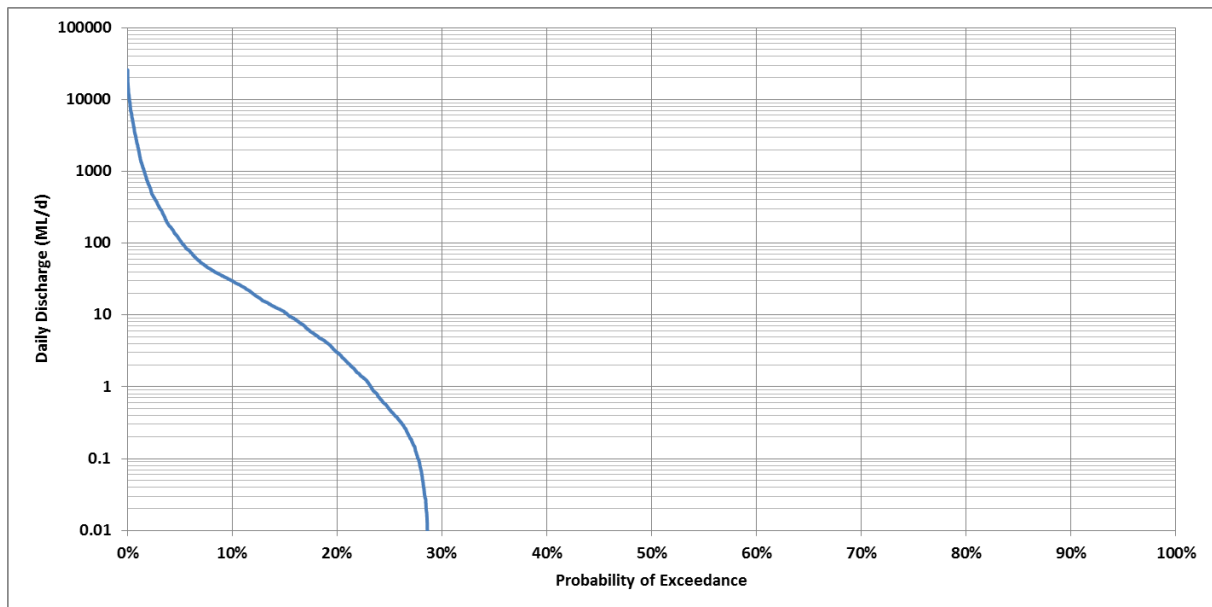
Based on the data presented in Figure 5-22 and Figure 5-23 watercourses above gauge 422219A are likely to be ephemeral and flow only during and immediately after significant runoff events. Prolonged periods of zero flow conditions are likely during the winter dry season.

Figure 5-22 Median daily discharge for gauge 422219A (Yuleba Creek at Forestry Station)



5 Hydrology

Figure 5-23 Cumulative exceedance probability plot for recorded daily discharge at gauge 422219A (Yuleba Creek at Forestry Station)



Bungil Creek at Tabers (422210A)

From Figure 5-24 it can be seen that median daily discharge for gauge 422210A (Bungil Creek at Tabers) shows a highly seasonal distribution with flows only present during the wet season months of December through March. The peak daily discharge of 23 ML/day occurs in February. For the remaining months of April through November median daily discharge is zero.

Figure 5-25 shows a cumulative exceedance probability plot for daily discharge at the gauge shows that:

- The probability that flows at the gauge will exceed zero is only 21%
- Five percent of daily discharges exceed 45 ML/day.

Based on the data presented in Figure 5-24 and Figure 5-25 watercourses above gauge 422210A are likely to be ephemeral and flow only during and immediately after significant runoff events. Prolonged periods of zero flow conditions are likely during the winter dry season.

5 Hydrology

Figure 5-24 Median daily discharge for gauge 422210A (Bungil Creek at Tabers)

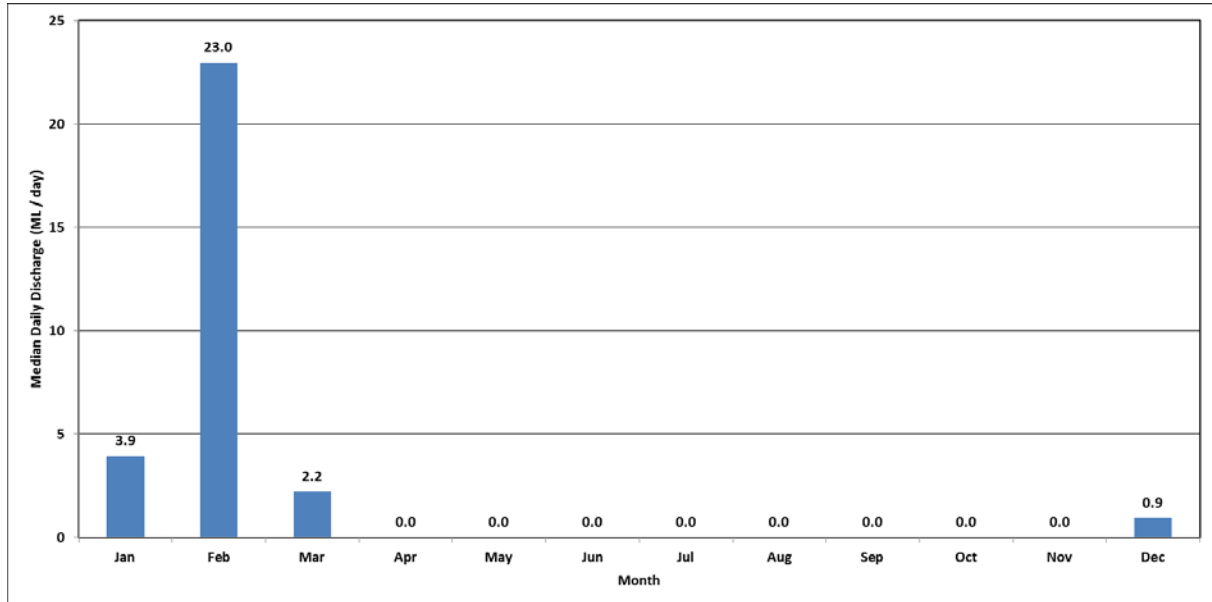
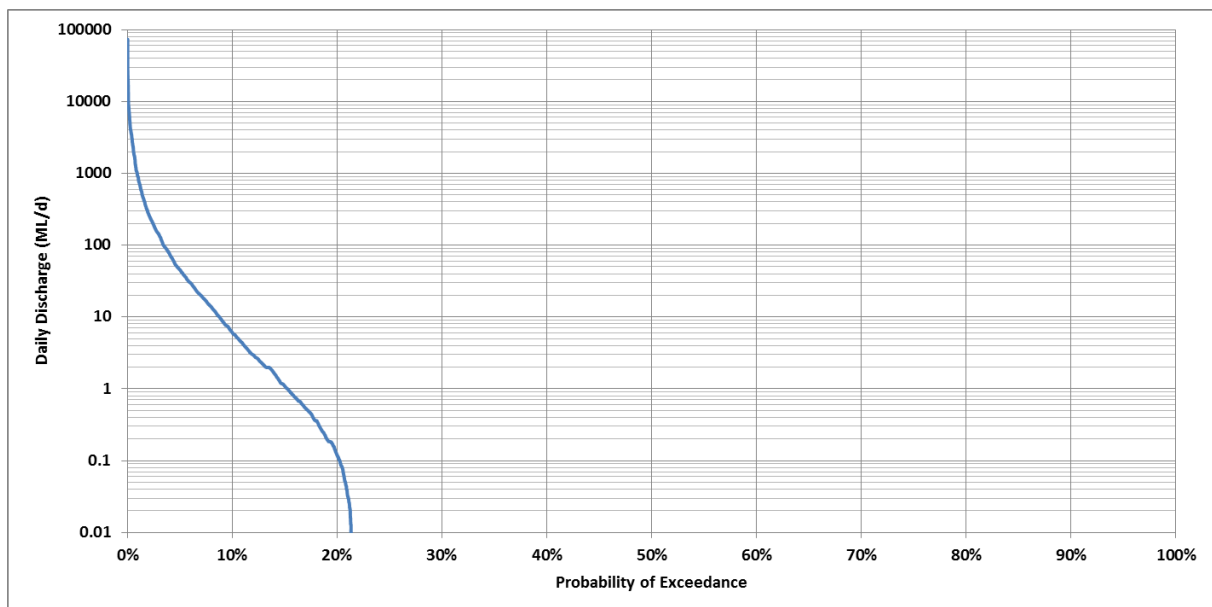


Figure 5-25 Cumulative exceedance probability plot for recorded daily discharge at gauge 422210A (Bungil Creek at Tabers)



5 Hydrology

5.3.5.2 Condamine River

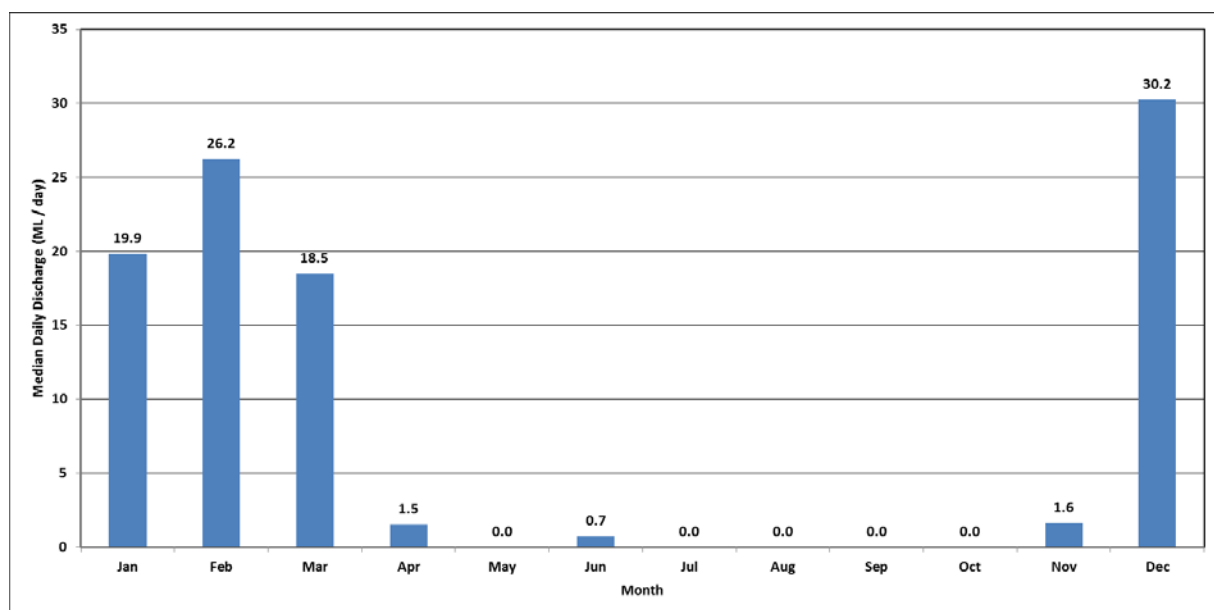
Dogwood Creek at Gilweir (422202B)

Median daily discharge for gauge 422202B (Dogwood Creek at Gilweir) is shown in Figure 5-26. Flows are seasonally distributed with the significant majority of discharges occurring from December through March with the peak daily discharge of 26.2 ML/d occurring in December. From July through October the median daily discharge is zero. The cumulative frequency plot for the average daily recorded flow (Figure 5-27) shows that zero flow conditions are dominant at the gauge such that the probability of flows exceeding zero is 43%. Additionally:

- Flow recessions at this gauge are likely to be maintained for a short to moderate period of time
- Five percent of daily discharges exceed 400 ML/day.

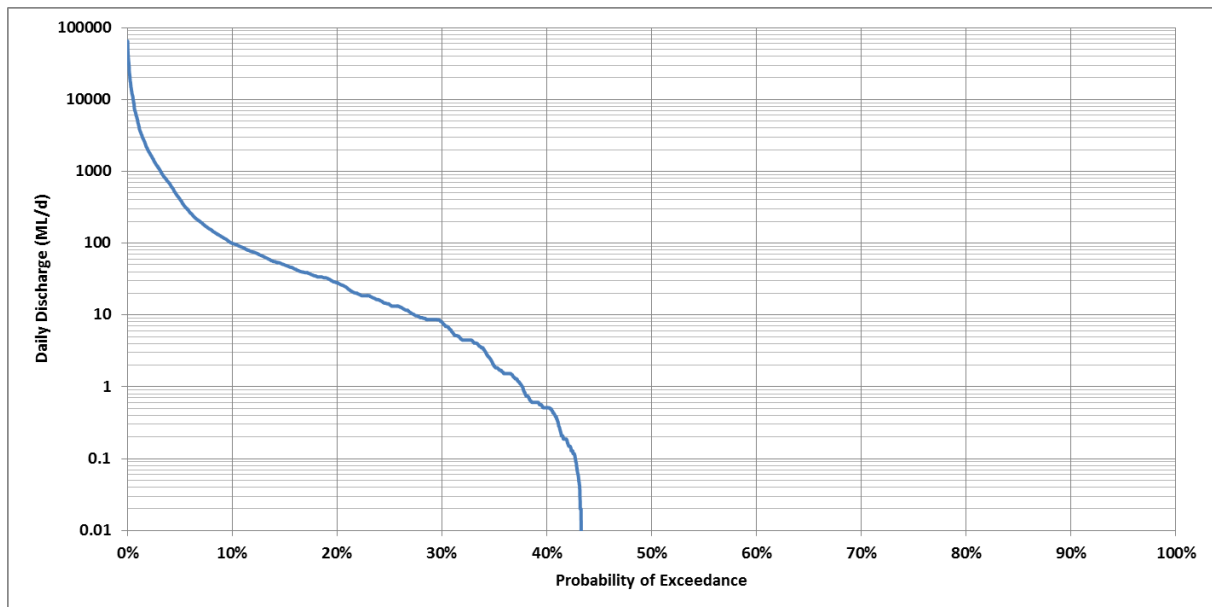
The data presented in Figure 5-26 and Figure 5-27 indicates that watercourses above gauge 422202B are likely to be ephemeral and flow predominately during and after significant runoff events. Prolonged periods of zero flow are also likely during the drier winter months.

Figure 5-26 Median daily discharge for gauge 422202B (Dogwood Creek at Gilweir)



5 Hydrology

Figure 5-27 Cumulative exceedance probability plot for recorded daily discharge at gauge 422202B (Dogwood Creek at Gilweir)



5.3.5.3 Condamine River at Cotswold (422325A)

Median daily discharge for gauge 422325A (Condamine River at Cotswold) is shown in Figure 5-28. Peak daily discharges occur during the months of December through March with a peak median daily discharge of 889.6 ML/day occurring in February. Discharges are also present during the winter dry season albeit at significantly reduced rates.

Figure 5-29 shows that the probability of flows exceeding zero is 63% and that:

- Five percent of daily discharges exceed 5,720 ML/day
- Flow recessions are likely to be relatively prolonged following significant discharge events.

On the basis of the data presented in Figure 5-28 and Figure 5-29 flows at gauge 422325A are likely to be semi-permanent. Due to the size of its reporting catchment (28,930 km²) the gauge is subject to a large range of flow events. Prolonged flow recession is likely to sustain flow well into the winter dry season particularly following significant wet season events.

5 Hydrology

Figure 5-28 Median daily discharge for gauge 422325A (Condamine River at Cotswold)

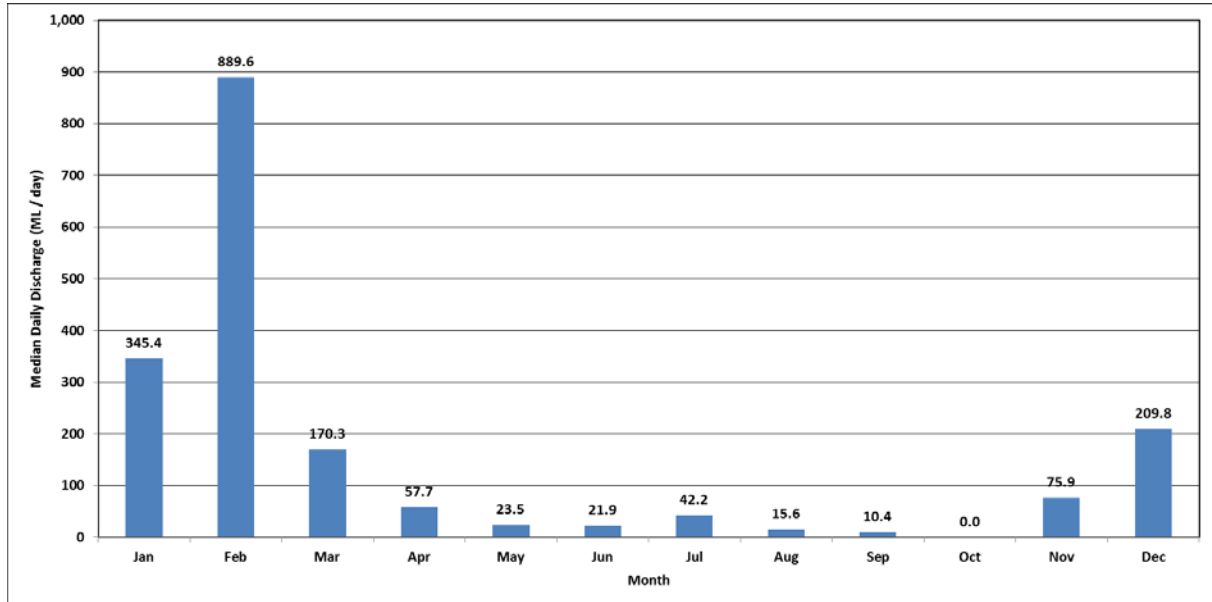
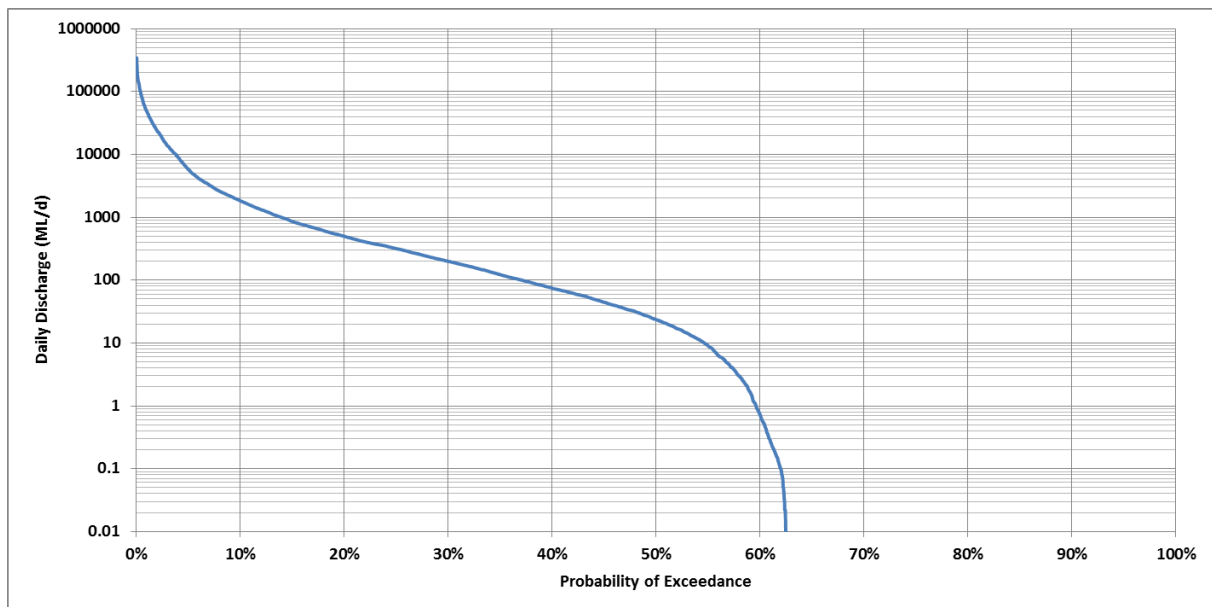


Figure 5-29 Cumulative exceedance probability plot for recorded daily discharge at gauge 422325A (Condamine River at Cotswold)



5 Hydrology

5.4 Flood mapping and constraints planning

Flood risk mapping was undertaken for specific watercourses in 2010, as part of the Santos GLNG Project approvals process. Flood modelling was originally undertaken within the GFD Project area in 2010 using HEC-RAS hydraulic model, flood frequency analysis, and rational method calculations. The watercourses included in the original study are within the GFD Project area. Flood modelling was undertaken for watercourses associated with proposed upstream development areas at the time. Table 5-6 provides a list of the three sites for which modelling was completed, along with associated watercourses.

Table 5-6 Flood modelling locations (based on information provided by EnGenY to Santos GLNG in 2010)

Santos GLNG development hub(s)	Site number	Watercourse
F-HCS-05 and F-NCS-05-01	Site-1	Baffle Creek (tributary of Dawson River)
F-HCS-04, F-NCS-04-01 and Campsite-1	Site-2	Dawson River, near confluence with Hutton Creek
R-HCS-02, R-NCS-02-01 and Campsite-2	Site-3	Blyth Creek (tributary of Bungil Creek)

The modelling completed in 2010 was undertaken according to the following assumptions:

- 90 metre Digital Elevation Model (DEM) was used to delineate catchments, sub-catchments
- Flood levels were generated for 50 and 100 year Annual Recurrence Interval (ARI) events
- Included watercourses within five (5) kilometre radius of proposed development areas (GLNG Project)
- Flood frequency analysis used to verify rational method calculations for catchments with areas of greater than 2.5 km² (as per Queensland Urban Drainage Manual 2007).

Parsons Brinckerhoff (consultants) also undertook additional flood modelling within the GFD Project area in 2012, for a 1:100 ARI (1%) event in the following major watercourses:

- Blyth Creek and Bungil Creek (PL10)
- Bungaban Creek (PL176)
- Bungeworgerai and Dargal Creeks (ATP708P)
- Bungil Creek (ATP708P)
- Dawson River (upstream of Taroom; ATP803P)
- Eurombah Creek (ATP655P)
- Humboldt Creek (ATP745P)
- Juandah Creek (ATP868P)
- Muckadilla Creek (ATP665P)
- Robinson Creek (ATP803P)
- Wallumbilla Creek (PL11)
- Yuleba Creek (ATP631P).

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The 2012 modelling incorporated results from HEC-RAS (hydraulics), RORB (runoff, streamflow and flood hydrographs), and 12D (flood depths represented on maps). The flood extents generated as an output of this modelling process are depicted in Figure 5-30. An inset example has been included to illustrate the level of detail visible for depth and lateral extent of flooding at a local scale (in a 1 in 100 ARI event).

In addition to this historic flood modelling, Santos GLNG has developed the Constraints protocol. This document has been developed to enable Santos GLNG to systematically identify, assess, avoid and minimise potential impacts to environmentally sensitive areas. The Constraints protocol or similar planning document will be applied as part of the GFD Project implementation.

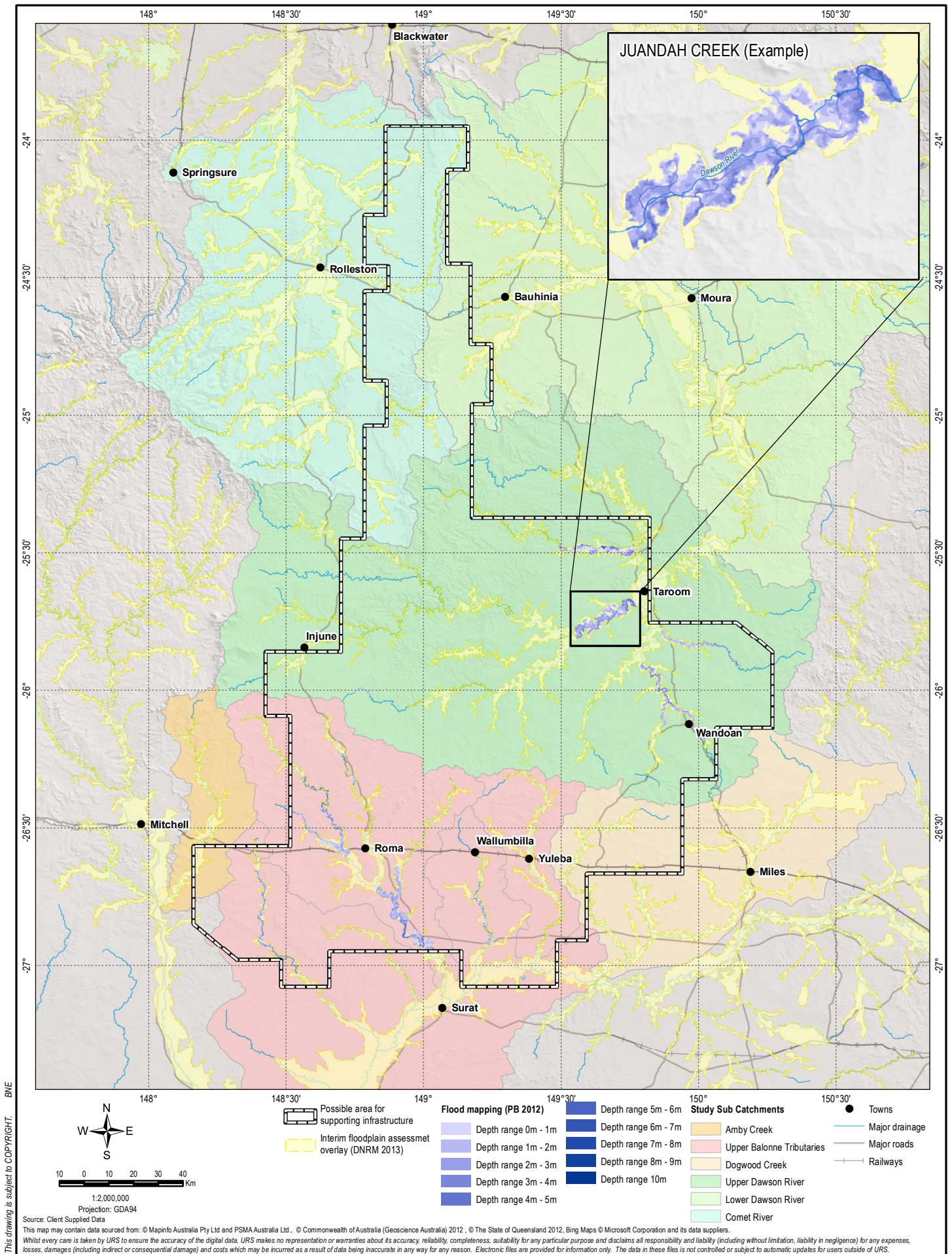
As outlined in the Constraints protocol, prior to final siting of camps or permanent infrastructure (that are not pipelines or roads), flood levels for the 50 and/or 100 year ARI (average recurrence interval) event will be investigated along waterways within a 5 km radius of proposed hub and campsite areas. This is a similar procedure to that demonstrated by the GLNG Project in 2010, where modelling of 1:50 and 1:100 ARI events was undertaken for the three (3) sites listed in Table 5-6. This information has allowed Santos GLNG to determine appropriate locations for hub and camp developments for the GLNG Project so they are not impacted by 50 or 100 year ARI flood events.

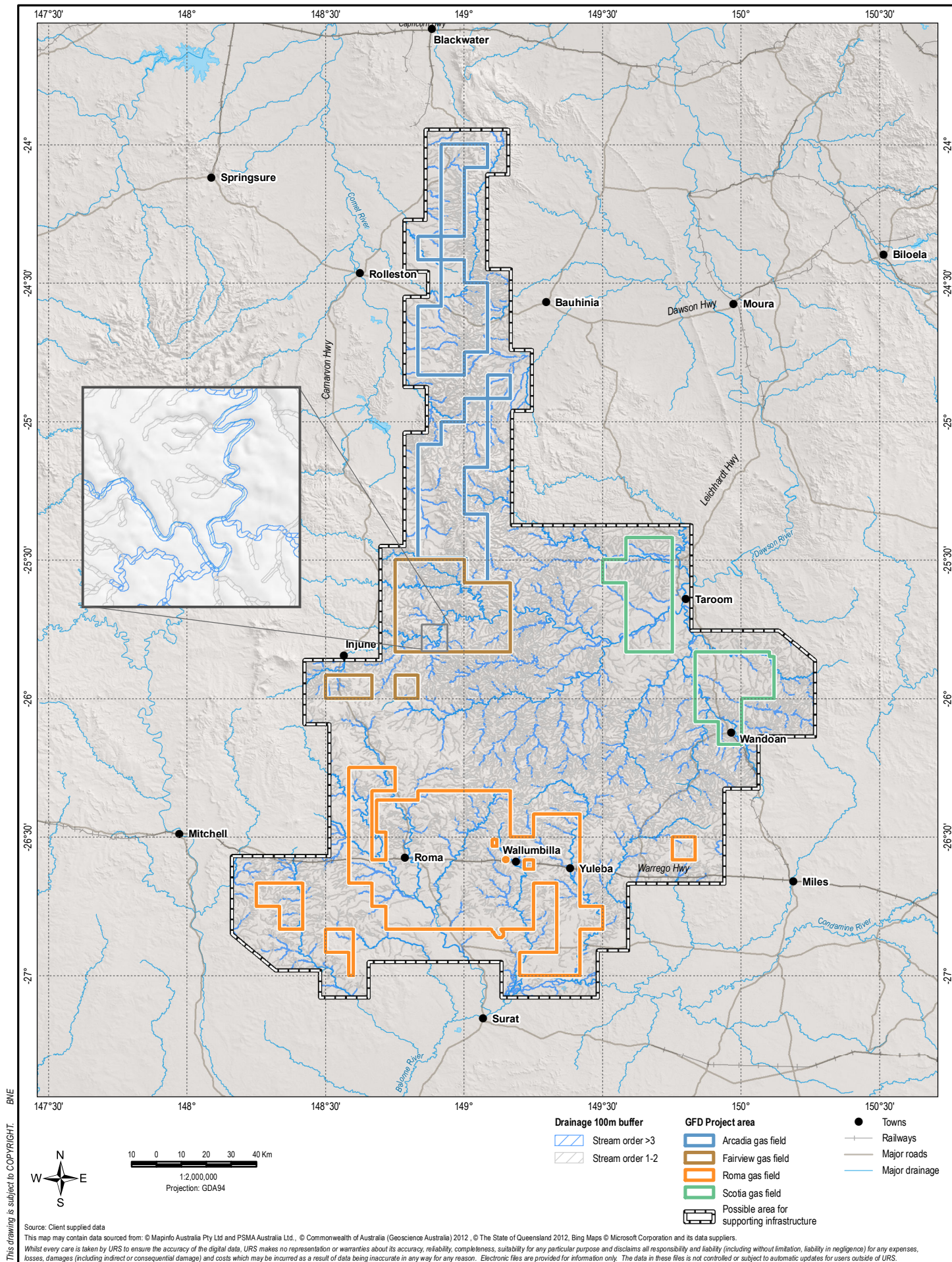
In accordance with the Constraints protocol, wetlands of high ecological significance and wetlands of national importance are classified as no-go areas, and no GFD Project activity will be undertaken within 200 m of these areas. Similarly, a buffer of 100 m from the 'high bank' of surface water bodies and watercourses within the GFD Project area has been set as a high constraint area. Figure 5-31 illustrates the 100 m buffer. Only low impact petroleum activities and linear infrastructure are permitted within this high constraint area.

The legal definition of a watercourse within the *Water Act 2000* (Qld) is as follows (Part 2, s5):

1. *A watercourse is a river, creek or other stream, including a stream in the form of an anabranch or a tributary, in which water flows permanently or intermittently, regardless of the frequency of flow events –*
 - a) *In a natural channel, whether artificially modified or not; or*
 - b) *In an artificial channel that has changed the course of the stream.*
2. *A watercourse includes any of the following located in it –*
 - a) *In-stream island;*
 - b) *Benches*
 - c) *Bars.*
3. *However a watercourse does not include a drainage feature.*

In addition to this basic definition, watercourses within the GFD Project area were classified according to flow regime using criteria developed by Kennard et al. 2010 (refer to Section 5.3.1); this information was required for a more detailed assessment of hydrology within the GFD Project area. The 100 m buffer was developed with consideration of these criteria, and was delineated using a GIS watercourse layer from EHP (for 1:100,000 watercourses).





5 Hydrology

The Constraints protocol classifies the 100 m buffer of surface water bodies and watercourses within the GFD Project area as a high constraint area. Within this area, low impact petroleum activities and linear infrastructure will be allowed only with site-specific mitigation measures including pre-clearance surveys, stakeholder consultation, site-specific controls and potential offsets. Low impact petroleum activities are limited to exploration, survey or monitoring activities that do not require clearing of native vegetation, earthworks or excavation work that will cause significant disruption to the soil profile or permanent damage to vegetation that cannot be easily rehabilitated. Linear infrastructure includes (but is not limited to) gas and water gathering lines, low and high pressure gas and water transmission pipelines, power lines, communication, roads and access tracks.

The siting of camps or permanent infrastructure (that are not pipelines or roads) is subject to flood impact assessments for the 1:50 and/or 1:100 ARI floods. As the location and nature of infrastructure associated with the GFD Project area becomes known, additional flood mapping for the 50 and/or 100 year ARI events will be conducted as required and this information will be included in the Santos GLNG GIS field development constraint layers.

Further detail regarding the different types of constraint areas applied within the GFD Project area is provided in Section 9.2.

Fluvial geomorphology assessment

6.1 Introduction

Fluvial geomorphology describes the form of the landscape within the GFD Project area in relation to watercourses, and identifies key processes that have taken place historically, and in the present landscape, to develop that form. The assessment of fluvial geomorphology covers the same sub-catchments as described for hydrology in Section 5. They are also directly relevant to the sub-catchments detailed further below in Section 7.

6.1.1 Environmental values

EVs related to the geomorphology of watercourses in the study area are detailed in Section 4.

6.2 Methodology

The existing fluvial geomorphological environment and EVs of key watercourses in the study area have been described through desktop review of relevant data sources as described in Sections 3.3.1 and 3.3.2 and examination of both GIS data and aerial imagery to provide a high level qualitative description of the major geomorphological features of each of the study area sub-catchments.

6.3 Fluvial geomorphology within the study area

6.3.1 Overview

Watercourses across the study area show a wide variety of geomorphic character and flow regime from the steep, high energy, relatively stable headwater streams of the upper Comet and Upper Dawson to the laterally mobile, low energy watercourses located on the broad alluvial plains of the Balonne River. Watercourses are typically ephemeral or semi-permanent with the spring-fed Dawson River below Hutton Creek being the only perennial watercourse in the study area. Most watercourses in the study area also show, to a greater or lesser extent, signs of anthropogenic impact resulting from land use activities such as clearing for grazing and cropping, stock access and removal of riparian vegetation.

6.3.2 Fitzroy Basin

6.3.2.1 Comet River

The Comet River catchment is located in the northeast of the study area and is bounded by the Expedition and Shotover Ranges to the southeast, the Carnarvon Range to the south and by the Buckland Tableland to the west (Henderson, 2000). Approximately 3,900 km² of the catchment is within the study area, which represents 12% of the total study area. Land use typically consists of grazing on the higher ground and cropping on the lower alluvial plains. The catchment consists of an extensive network of watercourses that are largely ephemeral (Section 5.3.4.1) and typically only flow during and immediately after significant rainfall events.

6 Fluvial geomorphology assessment

Major tributaries of the Comet River within the study area are:

- Humbolt Creek, which flows northeast from the western side of the Shotover Range before joining the Comet River approximately 45 km north of Rolleston
- Planet Creek, which initially flows south along the eastern side of the Shotover Range before turning west and joining the Comet River south of Rolleston
- Clematis Creek, which flows northwest from the Expedition Ranges before joining the Brown River to become the Comet River approximately 30 km north of Rolleston
- Arcadia Creek, which flows north from the Expedition Ranges before joining with Spring Creek to become the Brown River approximately 85 km south of Rolleston.

Henderson (2000) notes the eastern tributaries sub-catchment of the Comet River to be in a moderate to poor overall condition, with widespread signs of erosion at most sites surveyed. The primary cause of bank instability was considered to be the presence of stock within the riparian zone (78% of sites) with runoff also a factor at 51% of sites. Bank stability issues at 25% of sites examined was attributed to vegetation clearing. More recently, the Comet River was allocated a score of 'C' (fair, with "a mix of good and poor levels of water quality and biological health indicators") as part of the *2010/2011 Fitzroy Basin Report Card* (Fitzroy Partnership for River Health Assessment, 2013).

Upland watercourses (>300 m elevation)

Upland watercourses of the Comet River sub-catchment within the study area typically show a dendritic drainage pattern with steep headwater streams located within deeply incised, valley-confined settings. Catchments and riparian zones are typically uncleared and the bedrock confined channels are relatively stable with limited ability for lateral migration.

Humboldt, Planet and Clematis Creeks are typically located within broader, partially confined, sinuous valleys and consist of a single channel. The bedrock-controlled floodplains show increasing downstream connectivity before they drop rapidly into the Arcadia Valley fan and the Comet River floodplain. Channels are predominately stable with sediment accumulation typically found as side or point bars.

Arcadia Creek is located within an extensively cleared, broad, scarp-sided valley. The creek typically consists of a single channel and shows a medium level of sinuosity as it crosses gently sloping fans containing sandy-surfaced soils and areas of medium to heavy clays (URS 2009).

Lowland watercourses (<300 m elevation)

After dropping down the steep escarpments of the Shotover and Expedition Ranges and into Arcadia Valley the major tributaries of the Comet River cross the gently rolling fans of Arcadia Valley and the broad alluvial plains of the Brown River. Within this laterally unconfined valley setting watercourses begin to show a higher degree of sinuosity and lateral instability. Henderson (2000) notes that many of these watercourses show significant impact from disturbances such as clearing and grazing resulting in bank erosion and high sediment loads.

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6.3.2.2 Upper Dawson River

The upper Dawson catchment is located in the centre of the study area and is bounded by the Lynd and Expedition Ranges to the west and the Great Dividing Range to the south and southwest. Approximately 14,600 km² of the catchment is within the study area, which represents approximately 46% of the total study area. The catchment contains an extensive but largely ephemeral or intermittent stream network. Major streams in the area are the Dawson River, Hutton Creek, Baffle Creek, Juandah Creek and Eurombah Creek. Land use typically consists of grazing on cleared or thinned pastures.

Telfer (1995) found that the condition of watercourses over the entire Dawson River catchment was subject to considerable variability but that most streams were in a moderate condition. The worst conditions were found in the Western Tributaries (e.g. Boyd, Pine and Broken Creeks) and Southern tributaries (Eurombah and Juandah Creeks). Good to very good ratings were recorded in the Upper Dawson (Dawson River Channel above Taroom). Bank stability was largely found to be good with the exception of the Western Tributaries, which were noted as displaying unstable banks at 50% of sites assessed. Erosion was found to be the dominant process acting in 94% of subsections. The presence of stock and clearing of vegetation were identified as the major factors contributing to both bank and bed instability. More recently, the Upper Dawson River was allocated a score of 'B' (good, with "most water quality and biological health indicators [meeting] desired levels" as part of the *2010/2011 Fitzroy Basin Report Card* (Fitzroy Partnership for River Health Assessment, 2013).

Upland watercourses (>300 m elevation)

Much of Upper Dawson River sub-catchment is over 300 m in elevation with key headwater streams draining a range of landscape features. Major tributaries include:

- Baffle and Hutton Creeks
- Robinson Creek
- Juandah Creek.

Upper headwater catchments show a typical dendritic drainage pattern often flowing across extensively cleared and highly dissected plateaus to drop steeply down into main channels located within partially confined to confined valley settings which at times become gorges.

Upstream of Taroom the Dawson is a highly sinuous, single channel that is typically bedrock to coarse bedload confined with occasional coarse textured discontinuous flood plains. Occasionally passing through wider valleys the bedrock controlled partially discontinuous floodplain increases in width with the main channel being typically confined on the outside of meander bends by the valley margin. Some lateral instability is evident with occasional channel cut offs present.

Lowland watercourses (<300 m elevation)

Downstream of Dawson's Bend, from the confluence of Hutton Creek to Yebna Crossing, the Dawson River begins to exhibit relatively constant flows as it obtains inflow from groundwater springs throughout the year. As discussed in Section 5.3 this is the only perennial watercourse in the study area. From here the Dawson River enters a much broader, extensively cleared alluvial plain. The main channel becomes more laterally active with frequent channel cut offs and anabranching noted.

6 Fluvial geomorphology assessment

6.3.2.3 Lower Dawson River

The Lower Dawson catchment is located to the northeast of the study area and is bounded by the Shotover Ranges to the east. Approximately 1,200 km² of the catchment is within the study area, which represents approximately 4% of the total study area. Major watercourses in the study area are Conciliation and Zamia Creeks. Conciliation Creek flows east from Expedition State Forest with Zamia Creek flowing in a north easterly direction from Palmgrove National Park.

Telfer (1995) found that approximately half (52%) of reaches assessed within the North Upland Tributaries (including Zamia and Conciliation Creeks) were in a moderate condition with 83% of sites recorded as moderately to highly disturbed. Grazing activity was identified as the major factor contributing to disturbance at 87% of sites. Bank stability was typically stable to moderately stable (82% of sites) although sites exhibited some erosive processes. More recently, the Lower Dawson River was allocated a score of 'C' (fair, with "a mix of good and poor levels of water quality and biological health indicators" as part of the *2010/2011 Fitzroy Basin Report Card* (Fitzroy Partnership for River Health Assessment, 2013).

The steep headwater streams of Conciliation and Zamia Creeks show a dendritic drainage pattern and are located within deeply incised, valley-confined settings. Catchments and riparian zones are typically uncleared and the bedrock confined channels are relatively stable with limited ability for lateral migration. Channels also appear to be carrying significant coarse sand and gravel load that is gradually reworked downstream during the infrequent high flow events.

As both creeks cross the lower, relatively flat fans and plains around Bauhinia they begin to show a higher degree of sinuosity and lateral instability with the extensively cleared, broad floodplain showing frequent anabranching and remnant channels.

6.3.3 Condamine-Balonne Basin

The Condamine-Balonne basin covers an area of over 150,000 km² and represents around 14% of the Murray Darling Basin area. The Condamine River flows in a westerly direction from the Great Dividing Range near Warwick until the confluence with Dogwood Creek from where it becomes the Balonne River approximately 50 km northeast of Surat. Major tributaries in the study area include:

- Amby Creek, a tributary of the Maranoa River
- Dogwood Creek, a tributary of the Condamine River
- Balonne River Upland Tributaries.

The basin is characterised by a relatively flat topography and predominately consists of wide and flat alluvial floodplains. The region is one of the most intensively farmed landscapes in eastern Australia, supporting grazing and dryland cropping with over half of surface water diverted for agricultural uses including irrigated cropping.

6.3.3.1 Amby Creek

The headwater tributaries of Amby Creek flow south from the Great Dividing Range near Mount Bindango, where Amby Creek is formed by the confluence of Gibson and Taboonbay Creeks. It then flows south for approximately 65 km north before joining the Maranoa River about 30 km south of Mitchell. Approximately 250 km² of the catchment is within the study area, which represents 1% of the total study area. Catchment elevation ranges from over 600 m down to approximately 300 m at the confluence with the Maranoa River.

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Van Manen (2001) reports that 55% of stream lengths in the lower Maranoa sub-catchment (which includes the Amby Creek catchment) were found to be in poor condition, 41% moderate and 4% in a good condition. Banks were described as mostly stable; however, a number of factors including uncontrolled stock access, runoff and stream flow were most commonly identified as factors affecting bank stability.

The bedrock or coarse bedload dominated headwater streams of the Amby Creek catchment typically show a dendritic drainage pattern and drop steeply into relatively broad, extensively cleared valleys. Within these partially confined valleys the major tributaries of Mercurah Creek and Long Gully show a moderate level of sinuosity and generally increasing lateral stability.

The mid to lower reaches of the Amby Creek sub-catchment are relatively flat and extensively cleared, predominately for grazing and cropping. The creek is located within a laterally unconfined valley setting on a broad floodplain and shows a medium level of sinuosity. The unstable channel is laterally active with the floodplain showing numerous remnant channels, multiple active channels and some channel cut-offs.

6.3.3.2 Dogwood Creek

Dogwood Creek initially flows in a south easterly direction from its origin approximately 30 km east of Wandoan. As it flows through the Barakula State Forest it flows in an approximately southwest direction, passing through Miles before its confluence with the Condamine River to form the Balonne River. Approximately 1,500 km² of the catchment is within the study area, which represents approximately 5% of the total study area.

Van Manen (2001) reports that 23% of stream lengths in the Condamine River sub-catchment (downstream of Chinchilla - which includes Dogwood Creek catchment) were found to be in poor condition, 55% moderate and 22% in a good condition. Bank condition was described as mostly very stable or stable (35% and 50% respectively), however, a number of factors including uncontrolled stock access, runoff and stream flow were most commonly identified as factors affecting bank stability.

As discussed in Section 5.3.5 stream flow in Dogwood Creek is highly ephemeral with long periods of zero flow where the creek dries up completely or is reduced to a series of disconnected waterholes. Upstream of Miles the catchment of Dogwood Creek is predominantly well forested as it passes through Barakula State Forest. The partially confined valley setting and gently undulating topography give rise to an irregularly meandering, single channel which shows some lateral instability evidenced by both remnant channels and cut-off loops. The coarse bedload to bedrock dominated channel is also characterised by a significant coarse sand and gravel load that is gradually reworked downstream during the infrequent high flow events.

Downstream of Miles to the confluence with the Condamine River the gently meandering Dogwood Creek lies on a broad alluvial plain within a broad unconfined valley setting. The catchment is extensively cleared for both cropping and cattle grazing however the main channel typically shows a well-developed open forest riparian zone. The channel is moderately laterally active with some remnant channels and cut-off bends present and shows moderate to high levels of aggradation in some areas.

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6.3.3.3 Balonne River Upland Tributaries

Key watercourses in the Balonne River Upland Tributaries sub-catchment include Bungil, Yuleba, Bungeworgorai and Wallumbilla Creeks. Approximately 10,000 km² of the catchment is within the study area which represents approximately 32% of the total study area. The catchment has been extensively cleared and/or thinned, predominately for cattle grazing. The wide alluvial floodplains of the Condamine/Balonne rivers typically show a greater extent of broadacre cropping.

Van Manen (2001) reports that 36% of stream lengths surveyed in the Balonne River Upland Tributaries catchment were found to be in a poor condition 57% were in a moderate condition and only 7% in a good condition. Bank condition was described as mostly very stable or stable (36% and 22% respectively) however a number of factors including uncontrolled stock access, runoff and the clearing of riparian vegetation were most commonly identified as factors affecting bank stability. Stream bed stability was found to be generally good with 26% and 53% of sites having stable to very stable stream beds respectively. Both erosive and aggregative processes were noted and agricultural practices were identified as the main factor affecting stability at 82% of sites assessed.

The headwater streams of the Balonne River Upland Tributaries sub-catchment typically flow in a southerly direction from the Great Diving Range to the north. Elevations across the sub-catchment are typically less than 300 m with the exception of the headwater streams of Bungeworgorai Creek and as a result stream gradients are typically low. Watercourses are typically located within unconfined valley settings, are planform controlled, highly sinuous and with an irregular meandering form.

The laterally unconfined, medium energy channels show some incision and, particularity in the case of Bungeworgorai Creek, significant erosional instability in the form of frequent gullying and undercutting as a result of the complete removal of riparian vegetation from stream banks. Channels are typically bedload dominated with occasional rock bars and frequent sand and gravel beds interspaced with deeper pools. The infrequent, high energy flood events can be rapid drivers of channel adjustment as well as proving the means for the gradual downstream migration of bedload material. Floodplains are typically well developed and highlight the degree of channel lateral instability with numerous remnant channels, cut-offs and oxbows.

Mid to lower catchment watercourse channels are located on broad alluvial floodplains within an unconfined valley setting. Channel meandering is more regular and shows a high degree of lateral instability. Channels show an increasing propensity to anabranch and the floodplain shows a large number of channel cut-offs and remnant channels.

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7.1 Analysis of existing water quality data

7.1.1 Methodology

As described in Section 3.3.2, historic surface water data for key watercourses throughout the GFD Project area was provided by Santos GLNG in electronic form for the purpose of this assessment. Data for the Upper Dawson, Lower Dawson and Upper Balonne Tributaries study catchments were analysed by sub-catchment. Analyses included the calculation of summary statistics (median and 95th percentile values of the data available for each sub-catchment), and comparison of those values against the existing water quality objectives (defined in Section 7.2 below).

Key trends in surface water quality were identified for each sub-catchment as a result of these analyses, which are detailed below. These trends were also validated by undertaking a qualitative comparison with observations from previous technical studies (listed in Section 3.3.1, and referenced below where applicable).

DNRM stream gauges were identified within the GFD Project area (refer to Figure 3-3) and although data was available for limited water quality parameters such as temperature, pH and electrical conductivity (EC) they were not used to develop percentile values for water quality indicators within the GFD Project surface water receiving environment. However, DNRM stream gauge data was used to derive a relationship between stream flow and water quality using EC as a water quality marker. The results of this analysis, including a list of gauges from which data were obtained, are detailed in Section 7.3.3.

7.1.2 Data processing

Raw data provided by Santos GLNG was processed and grouped according to the gas field in which monitoring was undertaken (Arcadia, Fairview, Roma, or Scotia). The water parameters that were measured as part of the Santos GLNG monitoring program varied significantly between monitoring locations, according to the data requirements at the time of sampling. The data was rationalised to allow assessment against the applicable water quality objectives of the relevant local and regional water quality guidelines. The parameters assessed included the following:

Physicochemical parameters

- Dissolved oxygen (field test) (mg/L)
- Dissolved oxygen (lab test) (mg/L)
- EC at 25°C (lab test) (µS/cm)
- EC (field test) (µS/cm)
- Langelier index
- pH (lab test) (pH units)
- pH (field test) (pH units)
- Suspended solids (mg/L)
- Total dissolved solids at 180°C (mg/L)
- Temperature (field test) (°C)
- Turbidity (field test) (Nephelometric turbidity unit (NTU))
- Turbidity (lab test) (NTU)
- Bicarbonate alkalinity as calcium carbonate (CaCO₃) (mg/L)
- Carbonate alkalinity as CaCO₃ (mg/L)

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- Hydroxide (mg/L)
- Hydroxide alkalinity as CaCO_3 (mg/L)
- Residual alkali (meq/L)
- Total alkalinity as CaCO_3 (mg/L)
- Bicarbonate as HCO_3^- (mg/L)
- Bromide (mg/L)
- Carbonate as CO_3^{2-} (mg/L).

Note that where both field and laboratory results were available for physicochemical parameters (i.e. pH, EC, dissolved oxygen, temperature and turbidity) the field results were used for analysis against water quality objectives. Factors such as holding times and degradation of samples arising from the time it takes to transport samples for laboratory analysis generally render laboratory results less accurate than field (in-situ) results.

Major ions and anions

- Chloride (mg/L)
- Fluoride (mg/L)
- Iodide (mg/L)
- Sulphate as SO_4^{2-} (mg/L)
- Calcium (mg/L)
- Magnesium (mg/L)
- Potassium (mg/L)
- Sodium (mg/L)
- Calcium hardness as CaCO_3 (mg/L)
- Magnesium hardness as CaCO_3 (mg/L)
- Total hardness as CaCO_3 (mg/L)
- Ionic balance (%)
- Total anions (meq/L)
- Total cations (meq/L)
- Silica (dissolved) (mg/L)
- Sodium adsorption ratio
- Total Cyanide (mg/L).

Nutrients and microbiological parameters

- Chlorophyll α ($\mu\text{g/L}$)
- Escherichia coli (cfu/100mL)
- Dissolved organic carbon (mg/L)
- Total organic carbon (mg/L)
- Ammonia as nitrogen (N) ($\mu\text{g/L}$)
- Nitrate as N ($\mu\text{g/L}$)
- Nitrite + nitrate as N ($\mu\text{g/L}$)
- Nitrite as N ($\mu\text{g/L}$)
- Reactive Phosphorus as P ($\mu\text{g/L}$)
- Total kjeldahl nitrogen as N ($\mu\text{g/L}$)
- Total nitrogen as N ($\mu\text{g/L}$)
- Total phosphorus (P) as P ($\mu\text{g/L}$).

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Total metals (toxicants)

- Aluminium (mg/L)
- Arsenic (µg/L)
- Barium (µg/L)
- Beryllium (µg/L)
- Boron (µg/L)
- Cadmium (µg/L)
- Chromium (µg/L)
- Cobalt (µg/L)
- Copper (µg/L)
- Iron (µg/L)
- Lead (µg/L)
- Lithium (µg/L)
- Manganese (µg/L)
- Mercury (µg/L)
- Molybdenum (µg/L)
- Nickel (µg/L)
- Selenium (µg/L)
- Silver (µg/L)
- Strontium (µg/L)
- Tin (µg/L)
- Uranium (µg/L)
- Vanadium (µg/L)
- Zinc (µg/L).

The dataset was also manipulated to reduce the bias of laboratory results reported at or below the limit of reporting (LoR). For example, results for a parameter with a LoR of 0.5 mg/L were reported by the laboratory as “<0.5 mg/L”, which means that for parameters that are consistently reported below the LoR, this method of reporting can introduce bias to statistical analyses. URS therefore applied the generally accepted method of halving the LoR for affected results prior to analysis. For example, the result reported as “<0.5 mg/L” would have been changed to read “0.25 mg/L”.

Once the data was processed it was imported into a Microsoft Access database, then extracted by monitoring location and grouped according to the study sub-catchments. This step was required to separate data initially grouped according to location within a particular gas field. Median and 95th percentile values were calculated using the data available for each study sub-catchment, then compared with the applicable water quality objectives.

7.2 Water quality objectives

Water quality objectives (WQOs) are defined under the Water Act and EPP Water for the purpose of protecting the identified EVs for a particular receiving environment. Local guideline values may be defined within the relevant WRP at a sub-basin level, while regional guideline values can be applied under the Queensland Water Quality Guidelines (QWQG) (2009). Where specific regional values are not available, default values are defined at a national level under the *National Water Quality Management Strategy* (NWQMS). The NWQMS WQOs are usually derived from the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC/ARMCANZ 2000); referred to

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in this report as the ANZECC Guidelines. The applicable WQOs for watercourses within the GFD Project area are outlined below.

7.2.1 Local WQOs

WQOs are available for the Upper Dawson River and Lower Dawson River sub-catchments under the *Fitzroy River Basin Water Resource Plan* (2011). WQOs are also defined for the Comet River, with the water quality assessment being undertaken using observations from previous relevant studies.

The relevant WRP sources for each sub-catchment are as follows:

- Upper Dawson River sub-basin (WQ1308); Fitzroy WRP (2011)
- Lower Dawson River sub-basin (WQ1309); Fitzroy WRP (2011).

There are currently no defined local WQOs available for the Condamine-Balonne River Basin.

The WQOs used for comparison of existing water quality within the GFD Project area are listed in Table 7-1. As stated in Section 4.2.1, the surface waters within the GFD Project area are considered to be of 'slightly to moderately disturbed' condition, and the appropriate guideline values are applied as such.

Table 7-1 Relevant local WQOs for watercourses within the GFD Project area

Parameter	Units	Guideline value (Upper Dawson)	Guideline value (Lower Dawson)
Ammonia	µg/L	20	20
Oxidised nitrogen (nitrate + nitrite as N)	µg/L	60	60
Total nitrogen	µg/L	620	500
Filterable reactive phosphorus	µg/L	20	20
Total phosphorus	µg/L	70	50
Chlorophyll α	µg/L	5	5
Dissolved oxygen (optimal range)*	mg/L	7 - 9	7 - 9
Turbidity	NTU	50	50
Suspended solids	mg/L	30	10
pH (optimal range)	pH units	6.5 - 8.5	6.5 - 8.5
EC (baseflow conditions)	µS/cm	370	340
Sulphate	mg/L	5	N/A

Notes: * Dissolved oxygen guideline has been converted using a standard conversion table; optimal range for both Upper and Lower Dawson River sub-catchments as expressed in the Fitzroy WRP (2011) is 85% – 110% saturation. N/A: guideline value not available

7.2.2 Sub-regional WQOs

Local WQOs take precedence over sub-regional guidelines for physicochemical parameters in the Upper and Lower Dawson River sub-catchments. Sub-regional WQOs are generally applied from the QWQG (EHP 2009a) where sufficient local values are not available. The QWQG (2009) provide sub-regional guideline values for salinity (electrical conductivity) only, within the Condamine-Balonne River Basin sub-catchments. These values are summarised in Table 7-2. There are no provisions within the Murray Darling Basin Plan which apply to the protection of aquatic ecosystems within the portions of

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the Condamine-Balonne River Basin that are located within GFD Project area. Regional ANZECC (2000) guideline values are therefore applied as a default for toxicants (as per Section 1.2.4 (b) of the QWQG, 2009).

Table 7-2 Relevant sub-regional WQOs for watercourses within the GFD Project area

Referenced Catchment (QWQG 2009)	Applicable sub-catchment(s) within GFD Project area	Sub-regional WQO for electrical conductivity ($\mu\text{S}/\text{cm}$)*
Condamine-Macintyre	Dogwood Creek	500
Maranoa-Balonne-Border Rivers	Upper Balonne River:	325
	— Main channel	
	— Yuleba Creek	
	— Wallumbilla Creek	
	— Bungil Creek	
	— Blyth Creek	

*75th percentile value listed in Table G.1, Appendix G, QWQG 2009. This WQO is applicable as a preliminary sub-regional guideline value only.

7.2.3 Regional WQOs

ANZECC (2000) guideline values for upland freshwater systems in southeast Australia are applicable to the watercourses within the GFD Project area at a regional level; they are referred to as the 'regional WQOs' throughout this report. Upland freshwater streams are defined as those streams at elevations greater than 150 m Australian Height Datum (AHD) (Section 3.3 of ANZECC 2000). The regional WQOs for physicochemical parameters are only applicable within the Condamine-Balonne River Basin and Comet River study sub-catchments. For other sub-catchments, local WQOs apply (see Section 7.2.1 above).

Given that no local or sub-regional WQOs for toxicants exist, the regional WQOs for toxicants apply to study sub-catchments within the GFD Project area. These are derived from Table 3.4.1 within the ANZECC 2000 guidelines (trigger values for toxicants at 95% aquatic ecosystem protection level).

Regional WQOs for both physicochemical parameters and toxicants are outlined in Table 7-3 where applicable.

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Table 7-3 Relevant regional WQOs for watercourses within the GFD Project area

Parameter	Units	Guideline value for upland freshwater streams in southeast Australia	Guideline value for 95% aquatic ecosystem protection (Toxicants)
Physicochemical parameters and nutrients			
Oxidised nitrogen (nitrate + nitrite as N)	µg/L	15	N/A
Total Nitrogen	µg/L	250	
Filterable reactive phosphorus	µg/L	15	
Total phosphorus	µg/L	20	
Dissolved oxygen (optimal range)*	mg/L	7 - 9	
Turbidity	NTU	25	
pH (optimal range)	pH units	6.5 - 7.5	
Salinity (EC)**	µS/cm	350	
Toxicants			
Ammonia as N	µg/L	N/A	900
Nitrate as N	µg/L		700
Total cyanide	µg/L		7
Aluminium (total) (pH >6.5)	mg/L		55
Arsenic (total)	µg/L		13
Boron (total)	µg/L		370
Cadmium (total)	µg/L		0.2
Chromium (total)	µg/L		1
Copper (total)	µg/L		1.4
Lead (total)	µg/L		3.4
Manganese (total)	µg/L		1900
Mercury (total)	µg/L		0.6
Nickel (total)	µg/L		11
Selenium (total)	µg/L		11
Silver (total)	µg/L		0.05
Zinc (total)	µg/L		8

Note: * Dissolved oxygen guideline values have been converted using a standard conversion table; optimal range for southeast Australia and Tropical Australia are expressed in ANZECC (2000) as 90% to 110% saturation and 90% to 120% saturation respectively. N/A: Guideline value not available

** Salinity guideline is not applicable for Condamine-Balonne River basin sub-catchments as sub-regional WQO is applied instead (refer to Table 7-2).

7.2.4 Summary of applicable WQOs

The WQOs applicable across catchment; local; sub-regional and regional scales for physicochemical parameters and toxicants are summarised in Table 7-4.

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Table 7-4 Summary of applicable WQOs for the GFD Project area

Study sub-catchment	Applicable WQOs for physicochemical parameters and nutrients			Applicable WQOs for toxicants
	Local WQOs	Sub-regional WQOs*	Regional WQOs – southeast Australia	Regional WQOs
Upper Balonne – main channel	✗	✓	✓	✓
Upper Balonne – Yuleba Creek	✗	✓	✓	✓
Upper Balonne – Wallumbilla Creek	✗	✓	✓	✓
Upper Balonne – Blyth Creek	✗	✓	✓	✓
Upper Balonne – Bungil Creek	✗	✓	✓	✓
Dogwood Creek**	✗	✓	✓	✓
Upper Dawson – main channel (Headwaters to junction with Hutton Creek)	✓	✗	✗	✓
Upper Dawson – main channel (Hutton Creek to Taroom)	✓	✗	✗	✓
Hutton Creek	✓	✗	✗	✓
Juandah and Bungaban Creeks	✓	✗	✗	✓
Robinson Creek	✓	✗	✗	✓
Lower Dawson – main channel	✓	✗	✗	✓

✓ = WQO applicable to the GFD Project area.

✗ = WQO not applicable to the GFD Project area.

*Sub-regional WQOs are applicable only for electrical conductivity in the Upper Balonne River and Dogwood Creek sub-catchments. They are derived from the QWQG (2009).

**Surface water quality data for Dogwood Creek were derived from third party sources (QCLNG 2009, and APLNG 2010). These sources compared their data with guideline values that varied slightly to the WQOs identified in Section 7.2.3 of this assessment.

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7.3.1 Summary of data

A summary of the Santos GLNG surface water monitoring locations within the GFD Project area is provided in Table 7-5 below, including information on their location within each study sub-catchment, relevant watercourses, and importantly the period of record and sample frequency. The latter are key indicators of the size and temporal distribution of the dataset applied to each study sub-catchment.

The data analysis was conducted by URS on data provided directly by Santos GLNG, and it was assumed that data had been previously subjected to appropriate quality assurance/quality control procedures both during sample collection (in terms of sampling protocols) and initial data analysis, and therefore suitable for interpretive use.

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Table 7-5 Santos GLNG monitoring locations by study sub-catchment

Catchment	Sub-catchment	Watercourse	Gas field	Site ID	Location type (from Santos GLNG)	GIS coordinates		Period of record	Sample frequency <i>n</i>
						Latitude	Longitude		
Upper Dawson River	Upper Dawson – main channel (Headwaters to junction with Hutton Creek)	Dawson River	Arcadia	AS01	Perennial stream	-25.48722	148.83083	20/4/2010 - 5/12/2012	22
		Dawson River	Fairview	S9	Perennial stream	-25.38450	148.64880	9/5/2006 - 17/11/2011	16
		Dawson River	Fairview	S10	Perennial stream	-25.61900	148.99100	6/10/2006 - 17/11/2011	25
		Dawson River	Fairview	S13	Perennial stream	-25.58400	148.98100	10/9/2003 - 12/8/2012	157
	Upper Dawson – main channel (Hutton Creek to Taroomb)	Dawson River	Scotia	DAW01	Perennial stream	-25.79776	149.55930	19/7/2012 - 31/10/2012	2
		Dawson River	Fairview	S1	Perennial stream	-25.72464	149.10405	11/9/2003 - 18/11/2011	23
		Dawson River	Fairview	S2	Perennial stream	-25.72900	149.09400	28/8/2009 - 16/3/2013	228
		Dawson River	Fairview	S3	Perennial stream	-25.72570	149.09200	23/4/2004 - 18/11/2011	20
		Dawson River	Fairview	S4	Perennial stream	-25.69233	149.21476	8/9/2003 - 19/3/2013	66
		Dawson River	Fairview	S5	Perennial stream	-25.74630	149.33140	25/5/2005 - 14/11/2011	15
		Dawson River	Fairview	S5a	Perennial stream	-25.79760	149.55770	29/5/2011	1
		Dawson River	Fairview	S14a	Perennial stream	-25.71667	149.11000	23/4/2004 - 22/5/2008	9
		Dawson River	Fairview	S18D	Surface water quality	-25.68308	149.15050	27/5/2012 - 5/6/2012	2
		Dawson River	Fairview	S18U	Surface water quality	-25.72869	149.09848	27/5/2012 - 5/6/2012	3
		Dawson River	Fairview	SC1	Spring	-25.72507	149.08765	3/11/2009 - 3/10/2012	17
		Juandah Creek/Dawson River junction	Fairview	SS2	Perennial stream	-25.66767	149.78749	20/9/2011 - 20/9/2011	1
		Dawson River	Fairview	TAR	Perennial stream	-25.63750	149.79010	11/11/2010 - 31/10/2012	5
	Baffle Creek	Baffle Creek	Fairview	S2a	Perennial stream	-25.58333	148.96000	9/9/2003	1

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Catchment	Sub-catchment	Watercourse	Gas field	Site ID	Location type (from Santos GLNG)	GIS coordinates		Period of record	Sample frequency <i>n</i>
						Latitude	Longitude		
Hutton Creek	Hutton Creek	Baffle Creek	Fairview	S2b	Perennial stream	-25.58333	148.96000	9/9/2003	1
		Baffle Creek	Fairview	S7	Perennial stream	-25.59440	148.81060	9/9/2003 - 16/11/2011	23
		Baffle Creek	Fairview	S8	Perennial stream	-25.58899	148.98215	10/9/2003 - 17/3/2013	215
		Baffle Creek	Fairview	S12	Perennial stream	-25.59397	148.81060	4/11/2009 - 17/3/2013	133
		Hutton Creek	Fairview	SW536	Spring	-25.71470	149.06513	12/5/2011	1
		Hutton Creek	Fairview	ES4	Ephemeral stream	-25.72605	148.98333	1/3/2013	1
		Hutton Creek	Fairview	I14	Perennial stream	-25.68991	148.96558	3/3/2009	1
		Hutton Creek	Fairview	I16	Perennial stream	-25.68400	148.93968	2/8/2007 - 3/3/2009	3
		Hutton Creek	Fairview	S6	Perennial stream	-25.72570	148.92100	19/4/2004 - 15/11/2011	21
		Hutton Creek	Fairview	S6a	Perennial stream	-25.73333	148.67667	10/9/2003	1
		Hutton Creek	Fairview	S11	Perennial stream	-25.77100	148.74800	5/10/2006 - 25/2/2013	35
		Hutton Creek	Fairview	S11a	Perennial stream	-25.80300	148.91070	11/9/2003 - 15/11/2011	15
		Hutton Creek	Fairview	S14	Perennial stream	-25.71372	149.07982	3/8/2007 - 1/8/2010	7
		Hutton Creek	Fairview	S15	Perennial stream	-25.78930	148.90955	28/11/2009 - 25/3/2013	398
		Hutton Creek	Fairview	S16	Perennial stream	-25.70687	148.97216	3/3/2009 - 28/3/2013	263
		Hutton Creek	Fairview	S17	Perennial stream	-25.70167	149.05092	27/12/2009 - 27/3/2013	205
		Fairview	Fairview	S19D	Surface water quality	-25.76135	148.77732	28/8/2012	1
		Fairview	Fairview	S19U	Surface water quality	-25.76133	148.77675	4/1/2010	1
		Hutton Creek	Fairview	SC3	Spring	-25.71961	149.02898	3/11/2009 - 22/2/2013	16
		Hutton Creek	Fairview	SC2	Spring	-25.71470	149.06513	3/11/2009 - 3/10/2012	21
Juandah and Bungaban Creeks	Juandah Creek	Juandah Creek	Scotia	SS3	Perennial stream	-25.67973	149.80450	24/10/2011 - 18/4/2012	8
		Juandah Creek	Scotia	SS4	Perennial stream	-25.84193	149.82595	24/10/2011 - 14/3/2012	8

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Catchment	Sub-catchment	Watercourse	Gas field	Site ID	Location type (from Santos GLNG)	GIS coordinates		Period of record	Sample frequency <i>n</i>
						Latitude	Longitude		
	Robinson Creek	Bungaban Creek	Scotia	SS5	Perennial stream	-25.82708	149.92210	24/10/2011 - 16/11/2011	4
		Juandah Creek	Scotia	SS6	Perennial stream	-25.68026	149.80511	18/7/2012	1
		Robinson Creek	Scotia	ROB01	Perennial stream	-25.49386	149.52100	18/7/2012 - 31/10/2012	2
		Robinson Creek	Scotia	ROB02	Perennial stream	-25.48985	149.64140	18/7/2012 - 1/11/2012	2
Lower Dawson River	Lower Dawson – main channel	Dawson River	Fairview	THEOW	Ephemeral stream	-24.93788	150.06728	11/11/2010 - 30/11/2010	4
Upper Balonne River tributaries	Upper Balonne – main channel	Balonne River	Roma	RS20	Perennial stream	-27.01900	149.37640	20/5/2010 - 7/4/2013	20
		Balonne River	Roma	RS24	Perennial stream	-27.01958	149.48298	8/7/2010 - 7/4/2013	23
	Upper Balonne – Yuleba Creek	Yuleba Creek	Roma	R019	Perennial stream	-26.88820	149.44810	20/5/2010 - 7/4/2013	31
		Yuleba Creek	Roma	R021	Perennial stream	-26.61110	149.38960	20/5/2010 - 7/4/2013	29
		Yuleba Creek	Roma	RES17	Ephemeral stream	-26.29230	149.35040	19/5/2010	1
	Upper Balonne – Wallumbilla Creek	Wallumbilla Creek	Roma	R014	Perennial stream	-26.92120	149.22410	18/5/2010 - 5/2/2013	18
		Wallumbilla Creek	Roma	RES15	Ephemeral stream	-26.69040	149.20550	20/5/2010	1
		Wallumbilla Creek	Roma	RES13	Ephemeral stream	-26.52120	149.12710	19/5/2010 - 5/7/2012	12
		Wallumbilla Creek	Roma	RS14	Perennial stream	-26.58580	149.18230	2/11/2010 - 10/3/2013	2
	Upper Balonne – Blyth Creek	Blyth Creek	Roma	BLCS1	Perennial stream	-26.36192	149.10934	14/11/2011 - 8/5/2012	23
		Blyth Creek	Roma	BLCS2	Perennial stream	-26.35953	149.10116	11/12/2011 - 2/2/2012	5
		Blyth Creek	Roma	BLCS3	Perennial stream	-26.38736	149.08925	19/12/2011 - 7/3/2012	17
		Blyth Creek	Roma	R011	Perennial stream	-26.72941	148.90181	28/4/2011 - 5/5/2012	10
		Blyth Creek	Roma	R025	Perennial stream	-26.43890	149.07755	28/4/2011 - 11/3/2012	7

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Catchment	Sub-catchment	Watercourse	Gas field	Site ID	Location type (from Santos GLNG)	GIS coordinates		Period of record	Sample frequency <i>n</i>
						Latitude	Longitude		
		Blyth Creek	Roma	RES10	Ephemeral stream	-26.68250	148.90640	18/5/2010 - 1/9/2012	19
		Blyth Creek	Roma	RS7	Perennial stream	-26.71820	148.90350	18/5/2010	1
		Blyth Creek	Roma	RS11	Perennial stream	-26.44400	149.06220	19/5/2010 - 12/4/2012	11
		Appletree Creek	Roma	RS12	Perennial stream	-26.34390	149.12970	19/5/2010 - 5/10/2011	5
		Blyth Creek	Roma	RS25	Perennial stream	-26.46839	149.01429	2/11/2010 - 7/4/2013	5
	Upper Balonne – Bungil Creek	Bony Creek	Roma	RS23	Perennial stream	-26.83560	148.94860	18/5/2010 - 2/3/2013	14
		Bungil Creek	Roma	R001	Perennial stream	-26.57370	148.81440	17/5/2010 - 8/4/2013	23
		Bungil Creek	Roma	R002	Perennial stream	-26.51086	148.81182	11/4/2011 - 24/9/2012	18
		Bungil Creek	Roma	R012	Perennial stream	-26.89610	148.98140	18/5/2010 - 5/6/2012	21
		Bungeworgerai Creek	Roma	RES1	Ephemeral stream	-26.59050	148.69310	20/5/2010	1
		Bungil Creek	Roma	RES4	Ephemeral stream	-26.43200	148.79270	17/5/2010	1
		Bungil Creek	Roma	RES6	Ephemeral stream	-26.68880	148.83070	18/5/2010	1

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7.3.2 Analysis against WQOs

As previously detailed, the existing quality of the surface water receiving environment within the GFD Project area was assessed by comparing quantitative data with applicable WQOs. The results of this assessment are discussed by sub-catchment in the following sections. Reference is made to the summary statistics for each sub-catchment; these are provided in Appendix B. In general water quality was assessed against guideline values using the median and 95th percentile result, unless otherwise noted. Refer to Table 7-1, Table 7-2 and Table 7-3 above for the relevant guideline values applied in the assessment.

7.3.2.1 Comet River

The GFD Project area overlies the far eastern portion of the Comet River, and includes the headwaters of Humboldt Creek, Planet Creek, Clematis Creek and Arcadia Creek.

Primary water quality data was not available for the Comet River sub-catchment, however secondary observations of background surface water quality were gleaned using information gathered during the literature review for this assessment. The key surface water quality trends highlighted in relevant literature were as follows:

- High turbidity (greater than 50 NTU, ranging up to 1,070 NTU; Bandanna Energy 2013⁴). Turbidity increases in Comet River downstream of Rolleston from a median value of 150 NTU to approximately 800 NTU, potentially due to high degree of riparian de-vegetation and erosion from grazing activities and erosive soils (URS, 2009). Consuelo Creek exhibited a median value for turbidity that was below the local guideline value of 50 NTU (URS, 2009).
- Significant variation in EC throughout the catchment (between 100 to 919 $\mu\text{S}/\text{cm}$). Median EC values calculated from historic data indicated consistent exceedance of the local guideline value of 375 $\mu\text{S}/\text{cm}$ in baseflow conditions, as exemplified by Carnarvon Creek (434 $\mu\text{S}/\text{cm}$); Meteor Creek (615 $\mu\text{S}/\text{cm}$) and Planet Creek (690 $\mu\text{S}/\text{cm}$). EC was generally lower than the guideline value in Comet River (for example, median EC value of 240 $\mu\text{S}/\text{cm}$ downstream of Rolleston; URS 2009)⁵. Variation in EC between high flow and low flow conditions is illustrated by a plot of available DNRM gauge data (Figure 7-1 and Figure 7-2, Section 7.3.3 below).
- Alkaline pH (for example, 8.2 pH units on average in Arcadia Creek, and generally above 7 pH units; URS, 2009).
- High levels of filterable reactive phosphorus and total phosphorus, exceeding local guideline values for Comet River sub-basin (Bandanna Energy, 2013).
- Heavy metals occurring in high concentrations above ANZECC 2000 trigger levels including chromium, copper, nickel, lead, and zinc (Bandanna Energy, 2013).

⁴ Monitoring undertaken at Springsure Creek, Station Creek, Two Mile Creek, and a tributary of Orion Creek between 2011 and 2013.

⁵ Scoping study for discharges to Lake Nuga Nuga; included analysis of water quality in Arcadia Creek, Moolayember Creek, and Brown River.

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7.3.2.2 Upper Dawson River - main channel (headwaters to junction with Hutton Creek)

This sub-catchment comprises the main channel of the Dawson River, from the headwaters and Sardine Creek, down to the junction with Hutton Creek near Injune. There are four Santos GLNG monitoring locations within the sub-catchment, and it traverses the existing Arcadia and Fairview gas fields. Site AS01 is the furthest upstream location (within Arcadia gas field), while S13 is the furthest downstream (upstream of the Baffle Creek junction). Site S9 is located on Sardine Creek, which becomes Dawson River before AS01.

The existing water quality characteristics within this sub-catchment are described below.

Physicochemical parameters

Water quality exceeds local guideline values for the following, based on the 95th percentile of available data:

- Dissolved oxygen
- EC
- pH
- Suspended solids
- Turbidity.

The 95th percentile for dissolved oxygen is higher than the optimal range of between 7 mg/L to 9 mg/L, at 11.1 mg/L. However the median result is only 6.8 mg/L (below the optimal range). This suggests a significant variation in the range of results presented. Elevated dissolved oxygen can be attributed to factors such as temperature, elevation, rapid aeration and photosynthesis. Previous studies by URS (2009) found that dissolved oxygen in the Dawson River and its tributaries was generally lower than the typical range of 6 mg/L to 10 mg/L for surface water, but varied if monitoring was undertaken at locations with deep or shallow pools.

The median and 95th percentile values for pH of 7.6 and 8.8, respectively, indicate that the receiving waters within this sub-catchment tend to be slightly to moderately alkaline most of the time. This observation is consistent with previous monitoring undertaken by URS (2009), where waters in the upper Dawson River were typically found to be neutral to slightly alkaline.

The 95th percentile value for turbidity is over 20 times the local guideline value, at 1,040 NTU. In contrast, the median value for turbidity was 48 NTU, which is within the local guideline value. These results indicate a variably turbid surface water environment most probably reflecting increases in turbidity associated with streamflow events. The URS (2009) study attributed high turbidity in the catchment to erosive soils and slopes, exacerbated by de-vegetation in agricultural areas.

Nutrients and microbiological parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile of available data:

- Chlorophyll α (median, 95th percentile)
- Oxidised nitrogen (nitrite + nitrate as N) (median, 95th percentile)
- Reactive phosphorus as P (95th percentile)
- Total nitrogen as N (median, 95th percentile)
- Total phosphorus as P (95th percentile)

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- Sulphate as SO_4^{2-} (95th percentile).

The median and 95th percentile values for chlorophyll α are higher than the local guideline value, consistent with observations reported in previous studies (ELP, 2012⁶; URS, 2009). Nutrients such as nitrogen, phosphorus and sulphate are also found at levels greater than their relevant trigger values, indicating that this sub-catchment is adversely affected by eutrophication, with potentially harmful conditions for aquatic ecosystems.

Toxicants

The median and 95th percentile values for ammonia are 50 $\mu\text{g/L}$ and 150 $\mu\text{g/L}$, respectively (listed as a toxicant in Table 8.3.7, Section 8.3 of ANZECC 2000, but subject to local guideline values in this instance), levels that are in exceedance of the local guideline value by over two to seven times. Given the trend towards a higher pH (7.6-8.8 pH units) within this sub-catchment, it is probable that ammonia has an increased toxicity within this aquatic ecosystem. The toxicity of ammonia is known to increase in more alkaline waters (ANZECC 2000). Further analysis indicated that ammonia exceeded the recommended trigger value for toxicity in freshwater systems for a pH of 8.8 (240 $\mu\text{g/L}$) at site S13 on two occasions (560 $\mu\text{g/L}$ on 11 September 2010, and 280 $\mu\text{g/L}$ on 1 December 2010).

Water quality exceeds regional guideline values for the following, based on the median and 95th percentile values of available data:

- Ammonia as N (median and 95th percentile)
- Chromium (95th percentile)
- Copper (median and 95th percentile)
- Lead (95th percentile)
- Zinc (95th percentile).

The 95th percentile value for total chromium is 6.7 $\mu\text{g/L}$ (compared with a guideline value of 1 $\mu\text{g/L}$, while that for total zinc is 27.1 $\mu\text{g/L}$ (compared with a guideline value of 8 $\mu\text{g/L}$), indicating that both toxicants are found above the regional guideline values within the Dawson River main channel (to Taroom). Importantly, the median values for total chromium and total zinc are within the guideline values, indicating wide fluctuations of these metals in the surface water environment. URS (2009) commented that the elevated levels of zinc found with the Upper Dawson would not contribute significantly to adverse water quality issues, as the physicochemical conditions within the catchment allow zinc to remain bound by suspended sediments, and therefore not bioavailable.

7.3.2.3 Upper Dawson River - main channel (Hutton Creek to Taroom)

This sub-catchment includes the mid to lower segments of the Upper Dawson River main channel, flowing from the junction with Hutton Creek in the west, to Taroom in the east. The Dawson River flows through the Glebe Weir approximately 30 km downstream of Taroom (linear distance). This weir marks the boundary between the Upper and Lower Dawson sub-catchments within the Fitzroy Basin according to the EPP Water (2009) WRP map (WQ1308 – Upper Dawson River sub-basin).

There are 13 Santos GLNG monitoring locations within this sub-catchment, located on the main channel of the Dawson River. Site S3 is the furthest upstream, immediately below the junction with

⁶ Stanmore Coal EIS; monitored upper reaches of Dawson River, Juandah Creek (Upper Dawson); Dogwood Creek, Roche Creek (Condamine-Balonne) in 2011, incorporated data from DNRm gauges 130344A (Juandah Creek; 1985-2005) and 422202B (1964-2006)

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Hutton Creek. Site TAR is the furthest downstream, approximately one kilometre west of the small township of Taroom. The dataset contains water quality results from Glasby Spring (SC1), which was monitored on 17 occasions between November 2009 and October 2012. Site SC1 is located approximately 400 m southwest of the Dawson River, near an unnamed tributary. It is highly probable that Glasby Spring feeds the baseflow of Dawson River at this location.

The dataset is also dominated by a high volume of samples (228 data points) collected on frequent occasions via an auto-sampler positioned downstream of Hutton Creek, between August 2009 and March 2013.

Physicochemical parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- Dissolved oxygen (95th percentile)
- EC (95th percentile)
- Turbidity (median and 95th percentile).

While the median levels of dissolved oxygen is within the optimal range of between 7 mg/L and 9 mg/L the 95th percentile value of 10.1 mg/L is above the local guideline. The median and 95th percentile values for turbidity is 3 to 13 times greater, respectively, than the local guideline value of 50 NTU.

Nutrients and microbiological parameters

The median and 95th percentile values for the following water quality parameters exceed the local guideline values:

- Chlorophyll α (median and 95th percentile)
- Oxidised nitrogen (nitrite + nitrate as N) (95th percentile)
- Reactive phosphorus as P (95th percentile)
- Total nitrogen as N (95th percentile)
- Total phosphorus as P (95th percentile).

The 95th percentile values for the nutrients listed are significantly elevated above the relevant local guideline values; the nutrient enriched waters within the Dawson River main channel are consistent with the high concentration of chlorophyll α , which again, is in agreement with observations made in previous studies (ELP, 2012; URS, 2009). With a median and 95th percentile value of 12 $\mu\text{g/L}$ and 25 $\mu\text{g/L}$, respectively, chlorophyll α , is present at concentrations over 2 and 5 times greater than the local guideline value of 5 $\mu\text{g/L}$.

Toxicants

The median and 95th percentile value for ammonia is 40 $\mu\text{g/L}$ and 140 $\mu\text{g/L}$, respectively, which is two to seven times the local guideline value of 20 $\mu\text{g/L}$. The elevated concentrations of ammonia within this sub-catchment indicate a similar trend to that observed in the upstream sub-catchment (Dawson River main channel, between the headwaters and the junction with Hutton Creek; see Section 7.3.2.2 above).

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Water quality exceeds regional guideline values for the following, based on the 95th percentile of available data:

- Ammonia (median and 95th percentile)
- Chromium (95th percentile)
- Copper (95th percentile)
- Lead (95th percentile)
- Zinc (95th percentile).

The 95th percentile value for total chromium within this sub-catchment is 6.2 µg/L, which is over six times greater than the regional guideline value (1 µg/L). Total zinc is elevated at over three times the regional guideline value of 8 µg/L, with a 95th percentile concentration of 27.1 µg/L. These results are very similar to those observed in the sub-catchment upstream, along the Dawson River main channel (Section 7.3.2.2).

7.3.2.4 Upper Dawson River – Baffle Creek

The Baffle Creek sub-catchment covers a major tributary of the Upper Dawson River, upstream of Hutton Creek. In the Upper Dawson sub-basin WRP it is classified as a 'western upland tributary' (WQ1308, Basin 130, EPP Water 2009 Central Queensland Map Series). There are five Santos GLNG monitoring locations situated within this sub-catchment, and they are situated in two distinct groups. The sites furthest upstream are S12 and S7 (within 50 m of each other, according to GIS coordinates). Sites S8, S2a and S2b are located approximately 15 km downstream of S12 and S7, towards the junction with Upper Dawson River. These three sites are within two kilometres of each other.

The majority of the data originated from sites S8 (215 data points over 10 years) and S12 (133 data points over four years); samples were collected via an auto-sampler at both locations. Sites S2a and S2b appeared to have been sampled for the purpose of monitoring a direct discharge from the Fairview gas field. Monitoring was undertaken on one date only (9 September 2003) at both locations; site S2a was 5 m upstream of the discharge, while site S2b was located 50 m downstream.

Physicochemical parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- Dissolved oxygen (95th percentile)
- EC (95th percentile)
- pH (95th percentile)
- Suspended solids (median and 95th percentile)
- Turbidity (median and 95th percentile).

While the median value for dissolved oxygen is within the local guidelines, the 95th percentile is significantly elevated above the optimal range of between 7 mg/L and 9 mg/L. The median (120 NTU) and 95th percentile (506 NTU) values for turbidity are over two to 10 times greater than the local guideline value of 50 NTU. This is consistent with the extremely high concentration of suspended solids (median 118 mg/L; 95th percentile 1,023 mg/L), compared with a local guideline value of only 30 mg/L. EC is also variably elevated above the local guideline, with a median and 95th percentile value of 188 and 1,500 µS/cm, respectively (compared to a guideline value of 370 µS/cm for baseflow

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conditions). These findings are consistent with previous studies by URS (2009), which found that EC in Baffle Creek ranged between 110 $\mu\text{S}/\text{cm}$ to 1,800 $\mu\text{S}/\text{cm}$.

Nutrients and microbiological parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile of available data:

- Chlorophyll α (median and 95th percentile)
- Oxidised nitrogen (nitrite + nitrate as N) (median and 95th percentile)
- Reactive phosphorus as P (95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (95th percentile).

Most median values, and 95th percentile values of nutrients are elevated above the relevant local guideline values; oxidised nitrogen and total nitrogen were extremely so, with greater concentrations than those observed within other sub-catchments of the Upper Dawson River sub-basin. The 95th percentile value of oxidised nitrogen is elevated at 1,016 $\mu\text{g}/\text{L}$ (compared with a local guideline value of 60 $\mu\text{g}/\text{L}$) and similarly, the median and 95th percentile value for total nitrogen are also high at concentrations of 1,000 $\mu\text{g}/\text{L}$ and 7,060 $\mu\text{g}/\text{L}$, respectively (compared with a local guideline value of 620 $\mu\text{g}/\text{L}$). This high level of nutrient enrichment, combined with elevated levels of chlorophyll α , is consistent with the high levels of ammonia recorded (see below) and indicates nutrient balance issues within the sub-catchment.

Toxicants

Water quality exceeds regional guideline values for the following, based on the median and 95th percentile of available data:

- Ammonia (median and 95th percentile)
- Chromium (median and 95th percentile)
- Copper (median and 95th percentile)
- Lead (95th percentile)
- Zinc (95th percentile).

The median and 95th percentile values for ammonia (50 $\mu\text{g}/\text{L}$ and 380 $\mu\text{g}/\text{L}$, respectively) exceed the local guideline value of 20 $\mu\text{g}/\text{L}$ within Baffle Creek. The 95th percentile value also exceeds the recommended trigger for toxicity in freshwater systems with a pH of 8.8 (240 $\mu\text{g}/\text{L}$). On closer examination, it was noted that extremely high exceedances of ammonia had occurred on a number of occasions at site S12, and these elevated results would have skewed the 95th percentile value for the entire dataset. Table 7-6 examines the three highest values recorded and observed for automatic samples obtained within a four day period in February 2012.

Table 7-6 Toxicity for elevated ammonia in Baffle Creek, February 2012

Site	Sample date/time	Ammonia as N ($\mu\text{g}/\text{L}$)	pH (pH units)	Recommended trigger value*	Exceedance (% of trigger for toxicity)
S12	4/2/2012 12:00	4,640	6.69	2,380	195
S12	5/2/2012 12:19	6,040	7.05	2,090	289
S12	7/2/2012 00:16	3,550	7.31	1,880	189

*For toxicity of ammonia in freshwaters, for specified pH value (ANZECC, 2000; Table 8.7.3)

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The median and 95th percentile values for total chromium are 2.0 µg/L and 7.6 µg/L respectively, which are two to seven times greater than the regional guideline value of 1 µg/L. Given that elevated levels of total chromium are also observed in the Upper Dawson River main channel sub-catchments (discussed in sections 7.3.2.1 and 7.3.2.2), it could be argued that Baffle Creek contributes a natural source of chromium to the Dawson River. Zinc and lead are variably elevated with 95th percentile values of 32 µg/L and 7.4 µg/L, respectively. Similarly, copper concentrations are higher than those observed in the Upper Dawson River main channel (median and 95th percentile values of 3 µg/L and 5.7 µg/L, compared with a regional guideline value of 1.4 µg/L).

7.3.2.5 Upper Dawson River - Hutton Creek

Hutton Creek is a major tributary of the Upper Dawson River and also flows through the existing Fairview gas field within the GFD Project area. In the Upper Dawson sub-basin WRP it is classified as a 'western upland tributary' (WQ1308, Basin 130, EPP Water 2009 Central Queensland Map Series). There are 16 Santos GLNG monitoring locations situated within this sub-catchment, including three spring locations (SC2, SC3, and SW536). The baseflow within Hutton Creek is spring-fed (URS 2013c). Over 85% of the 990 data points were sourced from monitoring undertaken at S15 (40%); S16 (27%) and S17 (21%) between 2009 and 2013. Monitoring locations are evenly distributed throughout the Hutton Creek sub-catchment, with sites roughly spaced less than 15 km apart. Site 6a is the furthest upstream location, while S14 is furthest downstream (less than 500 m from the junction with Upper Dawson River).

Physicochemical parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- Dissolved oxygen (median and 95th percentile)
- EC (median and 95th percentile)
- Suspended solids (median and 95th percentile)
- Turbidity (median and 95th percentile).

Dissolved oxygen concentrations indicate a variably oxygenated receiving environment within Hutton Creek, with a median and 95th percentile value of 6.0 mg/L and 9.9 mg/L, respectively (compare with the optimal range of 7 mg/L to 9 mg/L). Suspended solids are also elevated, with median and 95th percentile values of 232 mg/L and 1,053 mg/L, respectively, compared with a local guideline value of 30 mg/L. This is consistent with the high turbidity conditions observed in previous studies; URS (2009) noted a median concentration of 233 µS/cm for EC in the lower reaches of Hutton Creek (near known springs), with a maximum value of 1,294 µS/cm. Baseflow from the Hutton springs complex is known to have low turbidity; it is expected that high turbidity conditions are predominantly influenced by high flow events. The median and 95th percentile values for EC calculated for this assessment (408 µS/cm and 1,053 µS/cm, respectively) are therefore consistent with historic observations.

Nutrients and microbiological parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- Chlorophyll α (median and 95th percentile)

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- Oxidised nitrogen (nitrite + nitrate as N) (median and 95th percentile)
- Reactive phosphorus as P (median and 95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (95th percentile)
- Sulphate as SO₄²⁻ (95th percentile).

Chlorophyll α is elevated, with a median and 95th percentile value of 15 $\mu\text{g/L}$ and 33 $\mu\text{g/L}$ (compared with a local guideline value of 5 $\mu\text{g/L}$); this is the highest concentration of chlorophyll α out of sub-catchments within the Upper Dawson sub-basin.

The median and 95th percentile values for total nitrogen (1,000 $\mu\text{g/L}$ and 2,785 $\mu\text{g/L}$), as well as those for reactive phosphorus (90 $\mu\text{g/L}$ and 300 $\mu\text{g/L}$) exceed the local guideline values of 620 $\mu\text{g/L}$ and 20 $\mu\text{g/L}$, respectively. Similarly, the median (70 $\mu\text{g/L}$) and 95th percentile values (414 $\mu\text{g/L}$) of oxidised nitrogen are also in exceedance of the local trigger value of 60 $\mu\text{g/L}$. Total phosphorus exceeds the local guideline value of 70 $\mu\text{g/L}$ by over 5 times, with a 95th percentile value of 355 $\mu\text{g/L}$. Elevated concentrations of total phosphorus are consistent with historical observations by URS (2009), which highlighted a maximum value of 230 $\mu\text{g/L}$ in the lower reaches of Hutton Creek.

Toxicants

The median and 95th percentile values of 50 $\mu\text{g/L}$ and 196.5 $\mu\text{g/L}$ for ammonia are two to 10 times greater than the local guideline value of 20 $\mu\text{g/L}$. However, given that the pH of the sub-catchment is generally around 8.3 pH units, the applicable ANZECC 2000 trigger value for toxicity (560 $\mu\text{g/L}$) is not exceeded.

Water quality exceeds regional guideline values for the following, based on the median and 95th percentile of available data:

- Ammonia (median and 95th percentile)
- Chromium (95th percentile)
- Copper (median and 95th percentile)
- Zinc (95th percentile).

The 95th percentile value for chromium is 3.8 $\mu\text{g/L}$; although still in exceedance of the local guideline value (1 $\mu\text{g/L}$) this value is lower than that observed upstream in Baffle Creek and the Upper Dawson River main channel. The median and 95th percentile values for copper are above the regional guideline value (1.4 $\mu\text{g/L}$), while the 95th percentile value for zinc (21.4 $\mu\text{g/L}$) is over two times the regional guideline value of 8 $\mu\text{g/L}$.

7.3.2.6 Upper Dawson River - Juandah and Bungaban Creeks

This sub-catchment is located within the lower portion of the Upper Dawson River sub-basin and includes portions of the existing Santos GLNG Scotia gas field. In the Upper Dawson sub-basin WRP Juandah Creek is classified as a 'southern tributary' (WQ1308, Basin 130, EPP Water 2009 Central Queensland Map Series). Bungaban Creek flows into Juandah Creek approximately 13 km upstream of the junction between Juandah Creek and Dawson River. There are four monitoring locations within this sub-catchment; three on Juandah Creek (SS3, SS4 and SS6) and SS5 on Bungaban Creek. SS3 and SS6 are located within 100 m of one another. Monitoring within this sub-catchment was infrequent compared with other tributaries of the Upper Dawson River; a total of 21 samples were collected between October 2011 and July 2012. The four samples collected at site SS5 were obtained within a

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one month period (24 October 2011 to 16 November 2011) to monitor discharge from the Scotia gas plant as part of a Transitional Environmental Program (TEP). This provided a limited 'snapshot' of background water quality conditions within the sub-catchment, and observations regarding water quality trends should be considered in that context.

Physicochemical parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- EC (95th percentile)
- Suspended solids (median and 95th percentile)
- Turbidity (median and 95th percentile).

The 95th percentile value for EC is elevated (1,848 $\mu\text{S}/\text{cm}$ compared with a local guideline value of 370 $\mu\text{S}/\text{cm}$ for baseflow conditions). The median and 95th percentile concentration of suspended solids exceeds the relevant local guidelines by six to 10 times (207 and 350 mg/L compared with a local guideline value of 30 mg/L); however this concentration is still lower than that observed in the main channel of the Upper Dawson River, between Hutton Creek and Taroom. The 95th percentile value of 655 NTU for turbidity is significantly lower than observations made by FRC Environmental at Bungaban Creek in 2008 (maximum turbidity of 1,537 NTU) (FRC Environmental, 2009⁷).

Nutrients and microbiological parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- Oxidised nitrogen (nitrite + nitrate as N) (95th percentile)
- Reactive phosphorus as P (median and 95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (median and 95th percentile)
- Sulphate as SO_4^{2-} (median and 95th percentile).

Chlorophyll α was not measured at any of the monitoring locations. All nutrients are elevated as indicated by levels of total nitrogen and total phosphorus that both exceed the local guideline values significantly. The median and 95th percentile value for total nitrogen is 1,500 $\mu\text{g}/\text{L}$ and 1,720 $\mu\text{g}/\text{L}$ (over 2 times the local guideline value of 620 $\mu\text{g}/\text{L}$) while the median and 95th percentile concentration of total phosphorus is the highest within the entire Upper Dawson River sub-basin, at 620 $\mu\text{g}/\text{L}$ and 696 $\mu\text{g}/\text{L}$, respectively (almost 10 times the local guideline value of 70 $\mu\text{g}/\text{L}$). Sulphate is also at the highest concentration observed within the Upper Dawson River sub-basin, with a median and 95th percentile value of 7 mg/L and 25 mg/L, respectively (compared with a local guideline value of 5 mg/L).

The combination of elevated phosphorus and sulphate may indicate adverse effects from agricultural land use, such as intensive use of 'super phosphate' or other phosphatic fertilisers throughout the sub-catchment for cropping.

⁷ Bungaban Creek, monitored by FRC Environmental on 1 October 2008

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Toxicants

The median and 95th percentile value for ammonia is 80 µg/L and 96 µg/L, respectively, four to five times higher than the local guideline value of 20 µg/L. This is consistent with the observed high levels of other nutrients including phosphates and sulphates, in this sub-catchment.

Water quality exceeds regional guideline values for the following, based on the 95th percentile of available data:

- Ammonia (median, 95th percentile)
- Chromium (median, 95th percentile)
- Copper (median, 95th percentile)
- Lead (median, 95th percentile)
- Zinc (median, 95th percentile).

The median and 95th percentile values for chromium and lead are similar to those observed in other sub-catchments within the Upper Dawson River sub-basin. However, values for both copper and zinc are significantly higher than the concentrations observed in other Upper Dawson River sub-catchment. The median and 95th percentile values for copper are 7.0 µg/L and 10.4 µg/L, respectively (compared with the local guideline value of 1.4 µg/L) whilst the median and 95th percentile values for zinc are 34 µg/L and 49 µg/L, respectively (compared with a local guideline value of 8 µg/L).

7.3.2.7 Upper Dawson River - Robinson Creek

Robinson Creek is a tributary from the northern portion of the Upper Dawson River; it is classified as a 'northern upland tributary' in the Upper Dawson sub-basin WRP (WQ1308, Basin 130, EPP Water 2009 Central Queensland Map Series). The sub-catchment has two Santos GLNG monitoring locations (ROB01 and ROB02). ROB02 is the furthest downstream, situated approximately 13 km (linear distance) from the junction with the Upper Dawson River, within the Lake Murphy Conservation Park. Site ROB01 is located a further 12 km upstream of ROB02 on Robinson Creek. Four data points were available for this sub-catchment as monitoring was undertaken only on two occasions at both sites (18 July 2012, and between 31 October and 1 November 2012). The limited data provides a provisional 'snapshot' of background water quality conditions within the sub-catchment, and observations regarding water quality trends should be considered in that context.

Physicochemical parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- Dissolved oxygen (95th percentile)
- EC (median and 95th percentile)
- Turbidity (95th percentile).

The 95th percentile value for dissolved oxygen is 10.1 mg/L, above the local guideline optimal range of between 7 mg/L and 9 mg/L. EC is 1,727 µS/cm (95th percentile); this value is within a similar range to that observed upstream within the Juandah and Bungaban Creek sub-catchment. However, turbidity within Robinson Creek is much lower than in Juandah and Bungaban Creeks, with a 95th percentile value of 56 NTU compared with 655 NTU upstream.

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Nutrients and microbiological parameters

Water quality exceeds local guideline values for the following, based on the median and 95th percentile values of available data:

- Oxidised nitrogen (nitrite + nitrate as N) (95th percentile)
- Total phosphorus as P (95th percentile)
- Sulphate as SO_4^{2-} (95th percentile).

Chlorophyll α was not measured at either of the monitoring locations in this sub-catchment. The 95th percentile value for total phosphorus is 80 $\mu\text{g/L}$; only marginally above the local guideline value of 70 $\mu\text{g/L}$. Nitrogenous compounds and sulphate are present at comparatively low concentrations, when considered against the results from other sub-catchments within the Upper Dawson River sub-basin.

Toxicants

The median and the 95th percentile value for ammonia are 45 $\mu\text{g/L}$ and 85.5 $\mu\text{g/L}$, respectively, 2 to 4 times higher than the local guideline value of 20 $\mu\text{g/L}$. However, this is the lowest concentration of ammonia for the Upper Dawson River sub-catchments (based on 95th percentile values). This is potentially a function of the monitoring locations being situated within a conservation area, and therefore with reduced risk of contamination from agricultural activities which are generally a source of ammonia (for example, waste excreted from cattle).

Copper is the only heavy metal for which regional guideline values were exceeded, based on the 95th percentile of available data (1.9 $\mu\text{g/L}$, compared with the regional guideline value of 1.4 $\mu\text{g/L}$).

7.3.2.8 Lower Dawson River – main channel

The upstream ‘boundary’ of the Lower Dawson River is marked by Glebe Weir, according to the Lower Dawson River sub-basin WRP (WQ1309, Basin 130, EPP Water 2009 Central Queensland Map Series). The main channel includes reaches which are regulated under the Water Act; however, these do not flow within the GFD Project area. A very small section of the southwest portion of the Lower Dawson River sub-basin falls within the GFD Project area, and it does not include any reaches of the main channel of Dawson River. However, it does include the headwaters of Zamia Creek and Conciliation Creek, south of the Expedition State Forest. Both these tributaries are considered ‘southern upland tributaries’ under the Lower Dawson River sub-basin WRP.

The Santos GLNG monitoring program featured a single monitoring location within the Lower Dawson River (site THEOW); this site is not located within the GFD Project area. It would not be subject to potential impacts arising from the GFD Project, as it is situated at least 83 km east of the GFD Project proposed infrastructure area. As such, it was not subjected to assessment against local and regional guideline values.

7.3.2.9 Upper Balonne River - main channel

The Balonne River is effectively the downstream portion of the Condamine River, beginning immediately downstream of the junction between Condamine River and Dogwood Creek. This sub-catchment includes the portion of the main channel of the Balonne River, which flows through the GFD Project area. This is defined as the segment between the upstream boundary of the Balonne River catchment (downstream of Dogwood Creek) and the junction with Wallumbilla Creek. There are two Santos GLNG monitoring locations on the Balonne River, within this sub-catchment; RS20 and RS24.

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Site RS24 is located directly on the boundary of the GFD Project area, approximately 16 km downstream of the junction between Condamine River and Dogwood Creek, whereas site RS20 is approximately 12 km further downstream, below the junction with Yuleba Creek. A total of 43 data points were available, from samples collected between May 2010 and April 2013. Data was evenly distributed between both sites.

Physicochemical parameters

Water quality exceeds the regional guideline values for the following, based on the median and 95th percentile of available data:

- Dissolved oxygen (median and 95th percentile)
- pH (median and 95th percentile)
- Turbidity (median and 95th percentile).

It appears that two results skewed the 95th percentile for dissolved oxygen (field), both of which were recorded for samples taken on 15 March 2012 at sites RS20 (109 mg/L recorded) and RS24 (110 mg/L). Monitoring undertaken in 2009 indicated that dissolved oxygen levels were generally outside the optimal range (based on regional ANZECC guidelines) for most tributaries of the Upper Balonne River⁸. This confirms the general trend indicated by the median result of 9.3 mg/L.

pH levels were slightly alkaline, with median and 95th percentiles above the higher 'optimal' guideline value for pH of 7.8 (7.8 and 8.2 pH units respectively). These conditions were reflective of the general trend throughout the catchment.

The median value for EC (327 $\mu\text{S}/\text{cm}$) was slightly higher than the sub-regional guideline value of 325 $\mu\text{S}/\text{cm}$ ⁹. However, the 95th percentile value from the available data (508 $\mu\text{S}/\text{cm}$) indicated that EC in the main channel of the Balonne River was much lower than that observed in the tributaries, and turbidity was much higher (95th percentile value of 760 NTU). These trends are most likely attributable to greater stream flow within the main channel compared to tributaries with smaller channel capacity.

Nutrients and microbiological parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Oxidised nitrogen (nitrite + nitrate as N) (median and 95th percentile)
- Reactive phosphorus as P (median and 95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (median and 95th percentile).

Oxidised nitrogen was extremely high in the main channel of the Balonne River, with a 95th percentile of 2,183 $\mu\text{g}/\text{L}$ (compared to the regional guideline of 15 $\mu\text{g}/\text{L}$). Results for total nitrogen and total phosphorus were consistent with the general observation that the main channel of the Balonne River represents a highly nutrient enriched environment.

⁸ FRC Environmental undertook monitoring on tributaries of Balonne River between 23 to 27 September 2008; see Figure 3-3 for general locations

⁹ Sub-regional guidelines for electrical conductivity (QWQG 2009) are applicable within the Upper Balonne River and Dogwood Creek sub-catchments only, in the absence of local guidelines under the EPP Water. All other parameters are compared with default regional (ANZECC 2000) guideline values for these sub-catchments.

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Toxicants

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Chromium (median and 95th percentile)
- Copper (median and 95th percentile)
- Lead (95th percentile)
- Nickel (95th percentile).

The median and 95th percentile values for ammonia (9 µg/L and 28 µg/L) do not exceed the regional guideline value of 900 µg/L. The main channel had the highest concentration of nickel in the catchment, with a 95th percentile value of 19 µg/L (compared to the regional guideline value of 11 µg/L). Chromium was also observed at the highest concentrations, compared with other sub-catchments (95th percentile value of 18.1 µg/L).

7.3.2.10 Upper Balonne River - Yuleba Creek

For the purposes of this assessment Yuleba Creek is the uppermost study sub-catchment within the Upper Balonne River Tributaries catchment. It flows south into the Balonne River approximately 24 km from the upstream catchment boundary near the junction of Dogwood Creek and Condamine River. There are three Santos GLNG monitoring locations within this sub-catchment; R019 (furthest downstream, approximately 16 km from Balonne River junction), R021 (approximately 32 km upstream of R019 in the middle reaches of Yuleba Creek), and RES17 (furthest upstream location, on Cattle Creek). The majority of samples were collected at R019 and R021 between May 2010 and April 2013 (31 data points and 29 data points respectively). A single sample was collected at RES17 on 19 May 2010.

Physicochemical parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile of available data:

- Dissolved oxygen (median and 95th percentile)
- pH (median and 95th percentile)
- Turbidity (median and 95th percentile).

The 95th percentile value for dissolved oxygen is 9.9 mg/L (compared with the regional guideline optimal range of 7 mg/L to 9 mg/L) however the median value is only 6 mg/L, which indicates a high degree of variability between samples. Further data would be required to establish a clear trend for dissolved oxygen in this sub-catchment.

EC is elevated above the sub-regional guideline of 325 µS/cm; with a median value of 463 µS/cm. pH is slightly elevated above the upper limit of the regional guideline value (7.5 pH units), with median and 95th percentile pH values of 7.6 and 7.9.

Nutrients and microbiological parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Oxidised nitrogen (nitrite + nitrate as N) (median and 95th percentile)

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- Reactive phosphorus as P (95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (median and 95th percentile).

The Yuleba Creek sub-catchment exhibits a high 95th percentile value for oxidised nitrogen compared to other tributaries of the Upper Balonne River (excepting the main channel), at 860 µg/L; over 50 times higher than the regional guideline value of 15 µg/L. Total phosphorus concentrations were the highest in the catchment; measured at concentrations over 40 times the regional guideline value of 20 µg/L (95th percentile value of 855 µg/L). Similar to other sub-catchments within the GFD Project area, elevated levels of nutrients are probably reflective of agricultural activities within the sub-catchment.

Toxicants

The median and 95th percentile values for ammonia (50 and 132 µg/L) do not exceed the regional guideline value of 900 µg/L.

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Chromium (median and 95th percentile)
- Copper (median and 95th percentile)
- Lead (95th percentile)
- Nickel (95th percentile)
- Zinc (95th percentile).

The 95th percentile guideline value for nickel is elevated compared with other tributaries; at 16 µg/L compared with a regional guideline value of 11 µg/L. Copper, lead, and zinc are also present at concentrations higher than other study sub-catchments within the wider Upper Balonne River.

7.3.2.11 Upper Balonne River - Wallumbilla Creek

Wallumbilla Creek is a major tributary that flows south to join the Balonne River approximately 54 km from the upstream catchment boundary. There are four Santos GLNG monitoring locations within this sub-catchment, which is part of the surface water receiving environment for the existing Santos GLNG Roma gas field. The sites include R014 (furthest downstream, approximately 22 km from the Balonne River junction); RES15 (situated on an ephemeral section of Wallumbilla Creek approximately 26 km upstream of R014, straight line distance); RS14 (at Wallumbilla township); and RES13 (furthest upstream location, approximately 10 km northwest of Wallumbilla township).

There were 33 data points available in total, from samples collected between May 2010 and February 2013. The majority of the data was collected from R014 and RES13 (18 data points and 12 data points respectively). RES15 was sampled once on 20 May 2010, and RS14 twice (2 November 2010 and 10 March 2013). It is assumed that RES15 became too difficult to monitor due to the ephemeral nature of Wallumbilla Creek at that location. The water quality trends described below are considered in the context of poor data distribution as described.

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Physicochemical parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Dissolved oxygen (median and 95th percentile)
- pH (median and 95th percentile)
- Turbidity (median and 95th percentile).

The median and 95th percentile value for pH (7.6 pH and 8.0 pH units, respectively) exceeds the regional guideline upper limit of 7.5 pH units. However, historic water quality assessments stated that pH within the Wallumbilla catchment tended to be below 'national guideline values' (FRC Environmental, 2009¹⁰). As shown on Figure 3-3, the sites monitored by FRC Environmental were in similar locations to those established by Santos GLNG. This apparent inconsistency is probably reflective of the naturally variable receiving environment, thereby indicating that the baseline condition of Wallumbilla Creek will only be adequately characterised by the acquisition of further water quality data. Assessment of surface water data also indicate Wallumbilla Creek to be highly turbid with median and 95th percentile values of 135 and 378 NTU, respectively, which is above the guideline value of 25 NTU.

EC appears to be comparatively low within Wallumbilla Creek; the median of 200 $\mu\text{S}/\text{cm}$ is below the sub-regional guideline value of 325 $\mu\text{S}/\text{cm}$. This level of EC is closer to that observed in the main channel of the Balonne River (median of 327 $\mu\text{S}/\text{cm}$) than those observed in the other Upper Balonne River Tributaries (median values between 463 and 1,083 $\mu\text{S}/\text{cm}$).

Nutrients and microbiological parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Oxidised nitrogen (nitrite + nitrate as N) (median and 95th percentile)
- Reactive phosphorus as P (95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (median and 95th percentile).

Assessment of water quality data indicates that Wallumbilla Creek contains elevated nutrient levels. Median and 95th percentile values for total nitrogen, oxidised nitrogen and total phosphorus are significantly above their respective guideline values. The 95th percentile value for reactive phosphorus within Wallumbilla Creek is 480 $\mu\text{g}/\text{L}$, while the median value is 7.5 $\mu\text{g}/\text{L}$. On closer examination of the raw data, it was observed that two samples had elevated results for reactive phosphorus within the period between 22 and 23 September 2010. On this occasion, a sample taken from site RES13 had a concentration of 8,000 $\mu\text{g}/\text{L}$ for reactive phosphorus (23/9/2010). Another sample taken from site R014, approximately 37 km downstream of RES13, had a concentration of 6,000 $\mu\text{g}/\text{L}$ (22/9/2010). This apparently isolated event had a significant influence on the 95th percentile for reactive phosphorus within the sub-catchment.

Total nitrogen and oxidised nitrogen are elevated above their assigned regional guideline values (95th percentile values of 2,040 $\mu\text{g}/\text{L}$ and 510 $\mu\text{g}/\text{L}$ respectively); however, these values are consistent with

¹⁰ FRC Environmental obtained a sample from Wallumbilla Creek on 24 September 2008. pH value was 6.69 at Site 4, and 6.24 at Site 10.

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levels measured in other tributaries of the Balonne River (excluding the main channel and Yuleba Creek, as described in Sections 7.3.2.9 and 7.3.2.10).

Toxicants

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Chromium (median and 95th percentile)
- Copper (median and 95th percentile)
- Lead (95th percentile)
- Zinc (median and 95th percentile).

The 95th percentile value for ammonia (330 µg/L) does not exceed the regional guideline value of 900 µg/L. Chromium, copper and zinc are elevated above their respective regional guideline values, however their abundance within the surface water environment of Wallumbilla Creek is of a similar extent to that observed in Bungil Creek (the adjacent downstream tributary on Balonne River) as described in Section 7.3.2.12 below. The 95th percentile value for lead in Wallumbilla Creek is 4 µg/L, which is lower than that observed within the other Upper Balonne River Tributaries. The 95th percentile values for the Upper Balonne River Tributaries range between 6 µg/L and 8.6 µg/L (compared with the regional guideline value of 3.4 µg/L).

7.3.2.12 Upper Balonne River - Bungil Creek

Bungil Creek flows south through the regional centre of Roma to join the Balonne River. There are seven Santos GLNG monitoring locations within this sub-catchment. The furthest downstream location is R012, approximately 30 km (linear distance) upstream of the junction with Balonne River. RES1 is located on Bungeworgerai Creek (Dargal Creek junction), a tributary that intersects Bungil Creek immediately downstream of RES6. Site R001 is only three kilometres east of Roma. The furthest upstream location on Bungil Creek is RES4, over 80 km north of Balonne River.

A total of 79 data points were available for analysis within this sub-catchment, the majority of which originated from sites R001, R002, R012 and RS23. Sites RES4, RES6, and RES1 were sampled on a single occasion, during a one-off monitoring event undertaken in May 2010.

Physicochemical parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Dissolved oxygen (95th percentile)
- pH (median and 95th percentile)
- Turbidity (median and 95th percentile).

The parameters listed are elevated above the regional guideline values (and the sub-regional guideline value applicable for electrical conductivity); however, they are consistent with values measured for the wider catchment, based on a comparison with the other tributaries of the Upper Balonne River. For example, median and 95th percentile values of EC within Bungil Creek are 1,083 and 1,696 µS/cm, respectively, while the measurements obtained from other tributaries suggest that

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EC generally ranges between 145 $\mu\text{S}/\text{cm}$ to 2,455 $\mu\text{S}/\text{cm}$. The URS (2009) study found a median value of 238 $\mu\text{S}/\text{cm}$ for EC in Bungil Creek, with a maximum of 1,647 $\mu\text{S}/\text{cm}$ ¹¹.

The 95th percentile value for dissolved oxygen is higher than the regional guideline value and is inconsistent with historic water quality observations which stated that dissolved oxygen values were “generally lower than the typical range of 6 -10 mg/L” in the Condamine-Balonne Basin as a whole (QLD EPA, 1999, cited in URS, 2009; p28). The 95th percentile value from Santos GLNG data within Bungil Creek is 11.3 mg/L.

Nutrients and microbiological parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Oxidised nitrogen (nitrite + nitrate as N) (median and 95th percentile)
- Reactive phosphorus as P (median and 95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (median and 95th percentile).

All nutrients are elevated within Bungil Creek, similar to most other sub-catchments throughout the GFD Project area, with reactive phosphorus being particularly high with a 95th percentile value of 528 $\mu\text{g}/\text{L}$ (compared to the regional guideline value of 15 $\mu\text{g}/\text{L}$). Given that the median value for reactive phosphorus within Bungil Creek is only 20 $\mu\text{g}/\text{L}$ and that there were no significant outliers, indicates a high degree of reactive phosphorus concentration variability across the samples analysed. The elevated concentrations of nutrients assessed in this study is consistent with the findings of previous monitoring undertaken within the Bungil Creek sub-catchment (URS, 2009).

Toxicants

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Chromium (95th percentile)
- Copper (median and 95th percentile)
- Lead (95th percentile)
- Zinc (95th percentile).

The 95th percentile value for ammonia (130 $\mu\text{g}/\text{L}$) does not exceed the regional guideline value of 900 $\mu\text{g}/\text{L}$. The 95th percentile value for zinc (30.4 $\mu\text{g}/\text{L}$) exceeds the regional guideline value of 8 $\mu\text{g}/\text{L}$ by almost four times; however, the median value is equal to the guideline value. This disparity is potentially a function of variability between monitoring locations within the sub-catchment. Whilst copper has previously been measured at a maximum concentration of 70 $\mu\text{g}/\text{L}$ at the “DNRW at Tabers” location within Bungil Creek (URS, 2009; p30), the maximum value calculated from the available Santos GLNG data for this assessment is significantly lower at 25 $\mu\text{g}/\text{L}$.

In general, heavy metals exceeding the regional guideline values were measured at concentrations similar to those observed in other tributaries of the Upper Balonne River, which indicates that

¹¹ URS 2009 Appendix E – Table 5-1, page 25, Bungil Creek and Tributaries; EC values based on data from “DNRW site at Tabers”, which fluctuated between 65 - 1,890 $\mu\text{S}/\text{cm}$.

7 Existing water quality

chromium, copper, lead and zinc are commonly present in elevated concentrations across the wider sub-basin.

7.3.2.13 Upper Balonne River - Blyth Creek

Blyth Creek flows southeast to join Bungil Creek; a major tributary of the Balonne River. There are 10 Santos GLNG monitoring locations within this sub-catchment, located on Blyth Creek with the exception of RS12, which is located on Appletree Creek. Site R012 is the furthest downstream location, approximately six kilometres upstream of the junction with Bungil Creek. Sites BLCS1, BLCS2 and BLCS3 are clustered together in the upper reaches of the sub-catchment. It is understood that monitoring was undertaken at those three locations as part of an irrigation scheme at Mount Hope. Site RS12 is the furthest upstream location, on Appletree Creek.

A total of 103 data points were available for analysis within this sub-catchment from samples collected between May 2010 and April 2013. The data was fairly evenly distributed across the locations, with the exception of RS7 which was only monitored on one occasion (18 May 2010). Sites RS11, RES10, R011, BLCS3 and BLCS1 had the highest sampling frequencies.

Physicochemical parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Dissolved oxygen (95th percentile)
- pH (median and 95th percentile)
- Turbidity (median and 95th percentile).

The median value for EC (500 $\mu\text{S}/\text{cm}$) was in exceedance of the sub-regional guideline value (325 $\mu\text{S}/\text{cm}$). These waters are also highly turbid with median (182 NTU) and 95th percentile (3,733 NTU) turbidity values significantly higher than the regional guideline value of 25 NTU. The pH of Blythe Creek tends to be alkaline, with median and 95th percentile values of 8.0 pH and 8.6 pH.

Nutrients and microbiological parameters

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Oxidised nitrogen (nitrite + nitrate as N) (median and 95th percentile)
- Reactive phosphorus as P (median and 95th percentile)
- Total nitrogen as N (median and 95th percentile)
- Total phosphorus as P (median and 95th percentile).

Assessment of the water quality data indicates that the waters of this sub-catchment are rich in nutrients. Total nitrogen is elevated, with median and 95th percentile values of 850 $\mu\text{g}/\text{L}$ and 4,655 $\mu\text{g}/\text{L}$ (compared to the regional guideline value of 250 $\mu\text{g}/\text{L}$). The median (90 $\mu\text{g}/\text{L}$) and 95th percentile (420 $\mu\text{g}/\text{L}$) levels of phosphorus are also elevated with concentrations nine to 40 times greater than the regional guideline value of 10 $\mu\text{g}/\text{L}$.

7 Existing water quality

Toxicants

Water quality exceeds regional guideline values for the following parameters, based on the median and 95th percentile values of available data:

- Chromium (95th percentile)
- Copper (median and 95th percentile)
- Lead (95th percentile)
- Zinc (95th percentile).

The 95th percentile value for ammonia (312 µg/L) does not exceed the regional guideline value of 900 µg/L. The 95th percentile value for total chromium is particularly elevated compared with other sub-catchments of the Upper Balonne River, where a concentration of 13 µg/L is recorded compared to a regional guideline value of 1 µg/L. Heavy metals are elevated in general-total zinc is over five times the regional guideline value (95th percentile of 41.6 µg/L compared with a guideline value of 8 µg/L). Although there is no regional guideline value for total iron and total strontium, they are also elevated with 95th percentile values at 17.4 mg/L and 3.9 mg/L respectively. It is assumed that the elevated concentration of heavy metals is potentially due to a high concentration of suspended solids (4,640 mg/L), which are known to adsorb metals in freshwater.

7.3.2.14 Dogwood Creek

Santos GLNG does not currently have monitoring locations within the Dogwood Creek study sub-catchment, however, after a review of secondary sources it was found that the surface water assessment completed for the QCLNG EIS process (2009¹²) characterised limited aspects of water quality from a single grab sample at site SW02 on Dogwood Creek. Site SW02 was located approximately 30 km southeast of the GFD Project area, and roughly the same distance (straight line) downstream of the town of Miles. The results obtained by QCLNG are summarised in Table 7-7 with those values exceeding the guideline values stated within the source document highlighted in bold text. The sub-regional guideline for EC was not considered in the QCLNG (2009) assessment. The recorded value shown for EC in Table 7-7 was well below the sub-regional guideline value of 500 µS/cm.¹³

¹² Site SW02 was the only site monitored for water quality in Dogwood Creek; located at Lat -26.90944, Long 149.98785 and sampled once on 18 November 2008.

¹³ Sub-regional guidelines for electrical conductivity (QWQG 2009) are applicable within the Upper Balonne River and Dogwood Creek sub-catchments only, in the absence of local guidelines under the EPP Water. All other parameters are compared with default regional (ANZECC 2000) guideline values for these sub-catchments.

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Table 7-7 Surface water quality results obtained at Dogwood Creek (Site SW02, 18/11/2008; data source: QCLNG 2009)

Parameter	Recorded value**	ANZECC guideline for aquatic ecosystems applied
pH	7.08 pH units	6.5 – 8.0 pH units
EC	115 µS/cm	500 µS/cm***
Total suspended solids	450 mg/L	40 mg/L*
Total nitrogen	1300 µg/L	500 µg/L
Oxidised nitrogen (reported as 'total nitrogen as NOx')	800 µg/L	40 µg/L
Total phosphorus	280 µg/L	Not stated
Total phosphorus - filtered	140 µg/L	50 µg/L

*ANZECC guideline value for primary industries applied.

**Bold values denote an exceedance against ANZECC guidelines.

***For the EC guideline value the QWQG sub-regional guideline for the Condamine-Macintyre has been used.

Additional results for Dogwood Creek were reported for a different location (R1) by APLNG in an assessment of surface water quality for the APLNG Gas Transmission Pipeline in 2010. GIS coordinates were not stated in the surface water technical report- however according to Figure 2-2 (APLNG 2010) Site R1 appeared to be located less than 25 km upstream of Miles, on Dogwood Creek. The results obtained by APLNG are summarised in Table 7-8 with those values exceeding the guideline values stated within the source document highlighted in bold text. Again, it appeared that EC values for both samples collected were below the sub-regional guideline value of 500 µS/cm.

Table 7-8 Surface water quality results obtained at Dogwood Creek (Site R1, sampled on 26/6/2009 and 8/9/2009; data source: APLNG 2010)

Parameter	Dry season sample 1 (26/6/2009)*	Dry season sample 2 (8/9/2009)*	ANZECC guideline for aquatic ecosystems applied
pH	7.48 pH units	5.33 pH units	6.5 - 7.5 pH units
EC	179 µS/cm	213 µS/cm	500 µS/cm**
Total suspended solids	186 mg/L	112 mg/L	Not stated
Total nitrogen	160 µg/L	640 µg/L	<250 µg/L
Oxidised nitrogen (reported as 'total nitrogen as NOx')	60 µg/L	< 10 µg/L	<15 µg/L
Total phosphorus	< 10 µg/L	670 µg/L	<20 µg/L
Filterable reactive phosphorus	< 10 µg/L	< 10 µg/L	<15 µg/L

*Bold values denote an exceedance against ANZECC guidelines.

**For the EC guideline value the QWQG sub-regional guideline for the Condamine-Macintyre has been used.

According to the results presented in Table 7-7 and Table 7-8, pH tended to be circum-neutral to slightly acidic in Dogwood Creek, while nitrogenous compounds and phosphorus were potentially elevated. It is noted that the sampling locations described were not within the GFD Project area, and results were limited to those obtained from three separate sampling events within a two-year period (and by different sources). This considered, further monitoring within the portion of Dogwood Creek flowing through the GFD Project area is required to provide a more accurate characterisation of existing surface water quality and assessment against applicable regional guideline values.

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7.3.2.15 Amby Creek

Santos GLNG does not currently have monitoring locations within the Amby Creek study sub-catchment area. On the basis of the literature review undertaken by URS for this assessment, there does not appear to be data available regarding water quality in Amby Creek, including the portions of the sub-catchment within the GFD Project area. Stewart Creek, Eureka Creek and/or Washpool Creek would best represent the baseline conditions of the surface water receiving environment within this sub-catchment.

7.3.3 Relationship between water quality and stream flow

Data from selected DNRM stream gauges was assessed to illustrate the relationship between hydrological regime (including periods of high and low flow/baseflow) and changes in surface water quality within the study sub-catchments. EC was selected as the ideal physicochemical parameter for the analyses, as it is the most common parameter to be measured by DNRM stream gauges, which would thereby provide the largest collection of data with which to analyse stream flow and surface water quality relationships (discharge, measured in ML/day).

Four gauges were identified as being appropriate, on the basis of data availability and location within the GFD Project area (refer to Figure 3-3, Section 3.3.2). They are listed as follows:

- Gauge 130506A — Comet River at The Lake (Comet River study sub-catchment)
- Gauge 130502B — Brown River at Lake Brown (Comet River study sub-catchment)
- Gauge 130302A — Dawson River at Taroom (Upper Dawson River study sub-catchment)
- Gauge 130324A — Dawson River at Utopia Downs (Upper Dawson River study sub-catchment).

All available data (i.e. dates where both discharge and EC measurements were available) for each gauge were included in the analyses.

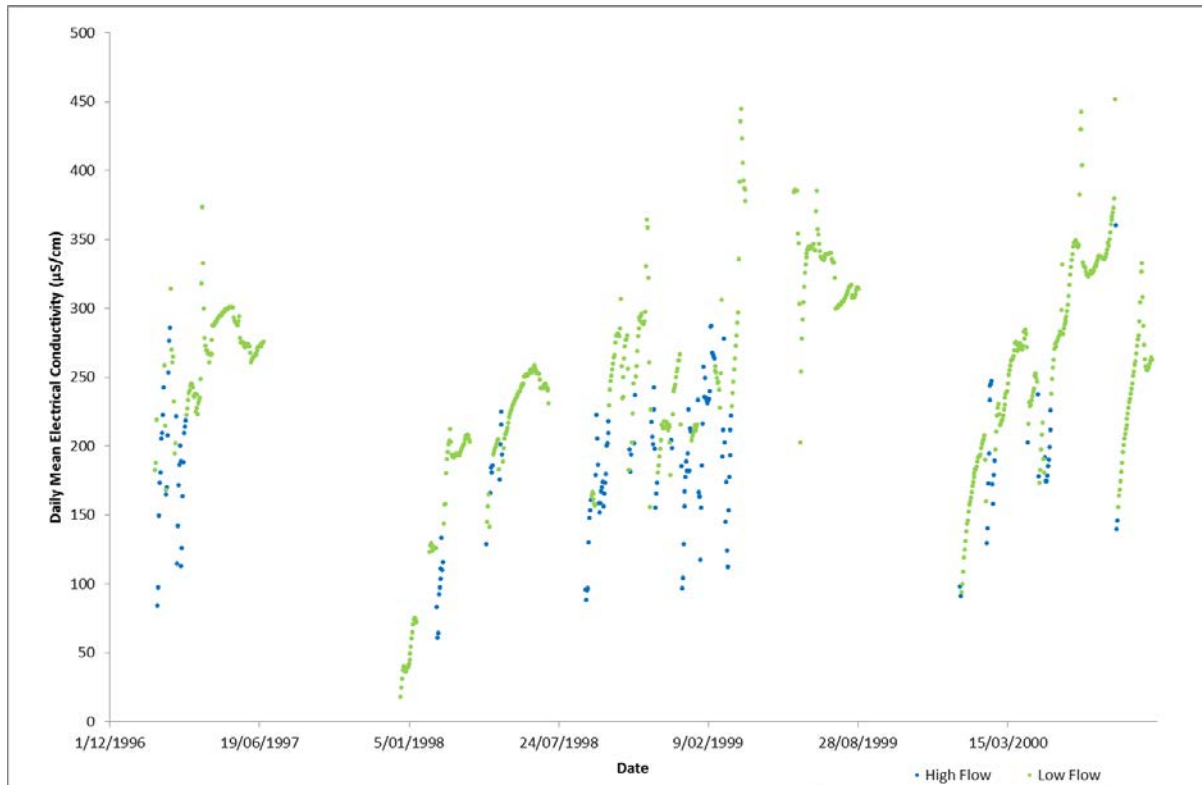
The figures below plot mean daily EC values ($\mu\text{S}/\text{cm}$) during high and low flow conditions at each gauge location, within each respective data record. 'High flow' conditions were determined by calculating the 80th percentile value of mean daily discharges (ML/day) within each available datasets. Days where the mean discharge exceeded the 80th percentile value were designated as having 'high flow' stream condition, while days where the mean discharge fell below the 80th percentile value were designated as having 'low flow' stream condition. The mean EC measurements for each day were then plotted on a scatter graph, in either the high or low flow series.

7.3.3.1 Comet River study sub-catchment

The dataset for gauge 130506A on Comet River was limited to two distinct periods; between 1996 and 2000, and 2010 to 2013. It is assumed that the gauge was not in operation between 2001 and 2009. Figure 7-1 and Figure 7-2 illustrate the trend for mean EC throughout both periods, in relation to high and low flow conditions.

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Figure 7-1 Mean daily EC ($\mu\text{S}/\text{cm}$) under high and low flow conditions at DNRM stream gauge 130506A (Comet River at The Lake) 1996–2000



The 80th percentile value for stream discharge from Comet River between 1996–2000 and 2010–2013 is 309 ML/day.

Despite the missing data for two wet seasons (notably between July 1997 to January 1998, and September 1999 to February 2000), the data shows a clear trend of higher EC values (approximately 150 $\mu\text{S}/\text{cm}$ to 360 $\mu\text{S}/\text{cm}$) for low flow events, and reduced EC (approximately 50 $\mu\text{S}/\text{cm}$ to 280 $\mu\text{S}/\text{cm}$) during high flow events.

Compared with the trends depicted in Figure 7-1, the period between 2010 and 2013 includes several significant wet periods during which EC is between approximately 100 $\mu\text{S}/\text{cm}$ and 580 $\mu\text{S}/\text{cm}$ under high flow conditions (Figure 7-2). During low flow conditions EC is generally between 470 $\mu\text{S}/\text{cm}$ and 675 $\mu\text{S}/\text{cm}$.

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Figure 7-2 Mean daily EC ($\mu\text{S}/\text{cm}$) under high and low flow conditions at DNRM stream gauge 130506A (Comet River at The Lake) 2010–2013

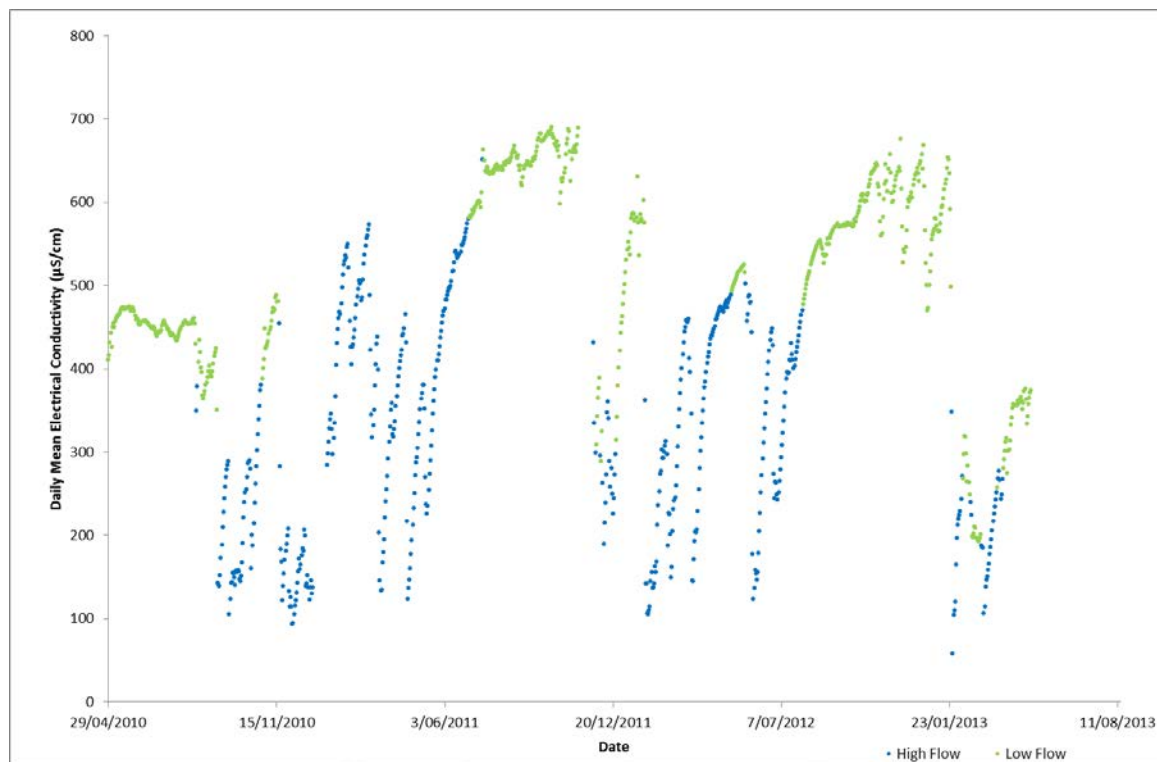
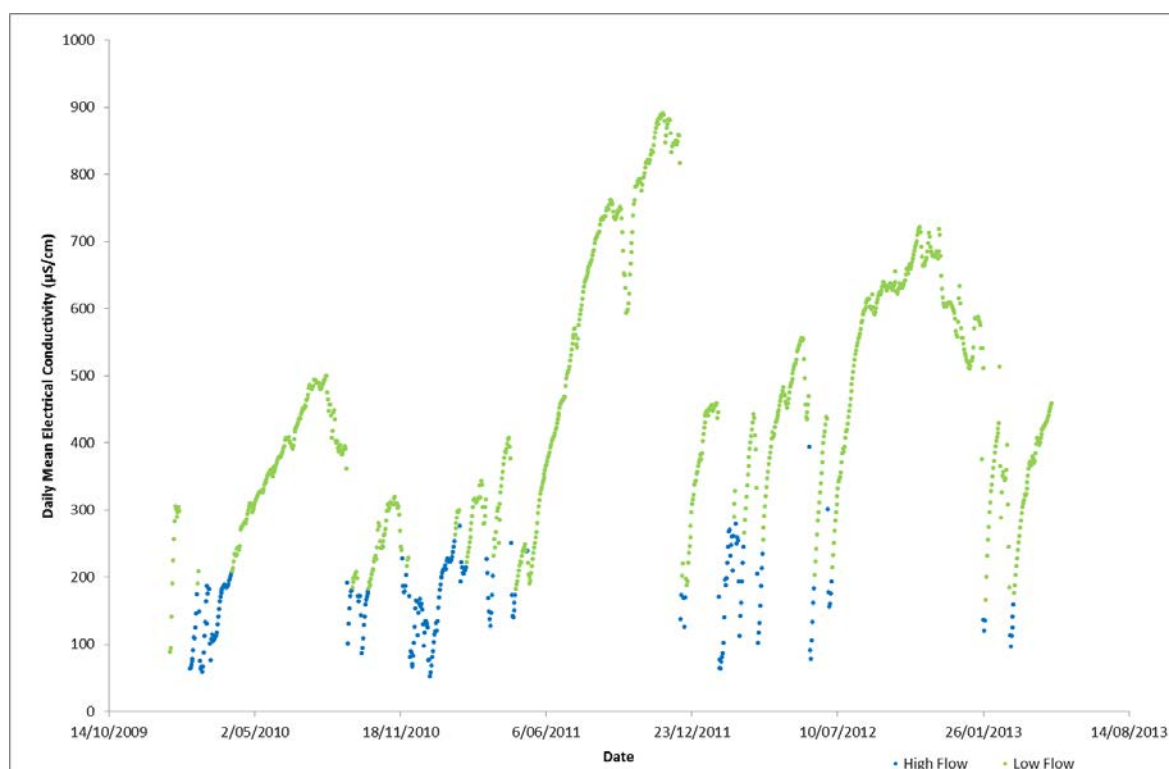


Figure 7-3 Mean daily EC ($\mu\text{S}/\text{cm}$) under high and low flow conditions at DNRM stream gauge 130502B (Brown River at Brown Lake) 2009–2013



7 Existing water quality

The 80th percentile value for stream discharge from Brown River between 2009 and 2013 is higher than that calculated for Comet River, at 489 ML/day (compared with 309 ML/day for Comet River). This disparity in discharge volume is potentially due to differences in period of record; the Comet River dataset (DNRM gauge 130506A) includes the period between 1996 to 2000, which is widely known to have included significant drought years, while the Brown River dataset (DNRM gauge 130502B) is limited to the period between 2009 and 2013, which was dominated by more extreme wet seasons. Figure 7-3 clearly demonstrates the variation in EC between different flow conditions.

EC values during high flow conditions in the Brown River were generally between 50 $\mu\text{S}/\text{cm}$ and 240 $\mu\text{S}/\text{cm}$ between 2009 and 2013, with one outlier at 392 $\mu\text{S}/\text{cm}$. EC values for low flow conditions during the same period range from 190 $\mu\text{S}/\text{cm}$ to 883 $\mu\text{S}/\text{cm}$. The range for low flow conditions appears to be higher than that observed downstream in the Comet River between 2010 and 2013.

7.3.3.2 Upper Dawson River study sub-catchment

The two DNRM gauges within the Upper Dawson River study sub-catchment had far more comprehensive datasets available than those for Comet River. This enabled the identification of clearer trends, particularly for low flow conditions.

Figure 7-4 illustrates the EC values for high and low conditions on the Dawson River at Taroom, between 1993 and 2013. The 80th percentile value of stream discharge during this period is 208 ML/day. In drier periods (generally between 1993 to 2009, with the exception of stand-alone wet years such as the well documented 1997–1998 wet season), EC values for low flow conditions range between 120 $\mu\text{S}/\text{cm}$ to 510 $\mu\text{S}/\text{cm}$. Conversely, EC values for low flow conditions in wetter periods (2009 to 2013) are distributed over a much wider range; between 69 $\mu\text{S}/\text{cm}$ to 887 $\mu\text{S}/\text{cm}$.

Data for the Dawson River at Utopia Downs (1996 to 2013; Figure 7-5) shows a similar trend to that at Taroom (Figure 7-4) where EC values are generally higher during low flow conditions than during high flow. Two notable exceptions occurred during high flow conditions in February 2008 where EC reached 1,883 $\mu\text{S}/\text{cm}$ (2 February 2008) and 2,324 $\mu\text{S}/\text{cm}$ (3 February 2008). Figure 7-6 presents the data for gauge 130302A with the outliers from February 2008 removed, thereby demonstrating more clearly the relationship between stream flow and surface water EC levels.

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Figure 7-4 Mean daily EC ($\mu\text{S}/\text{cm}$) under high and low flow conditions at DNRM stream gauge 130302A (Dawson River at Taroom) 1993–2013

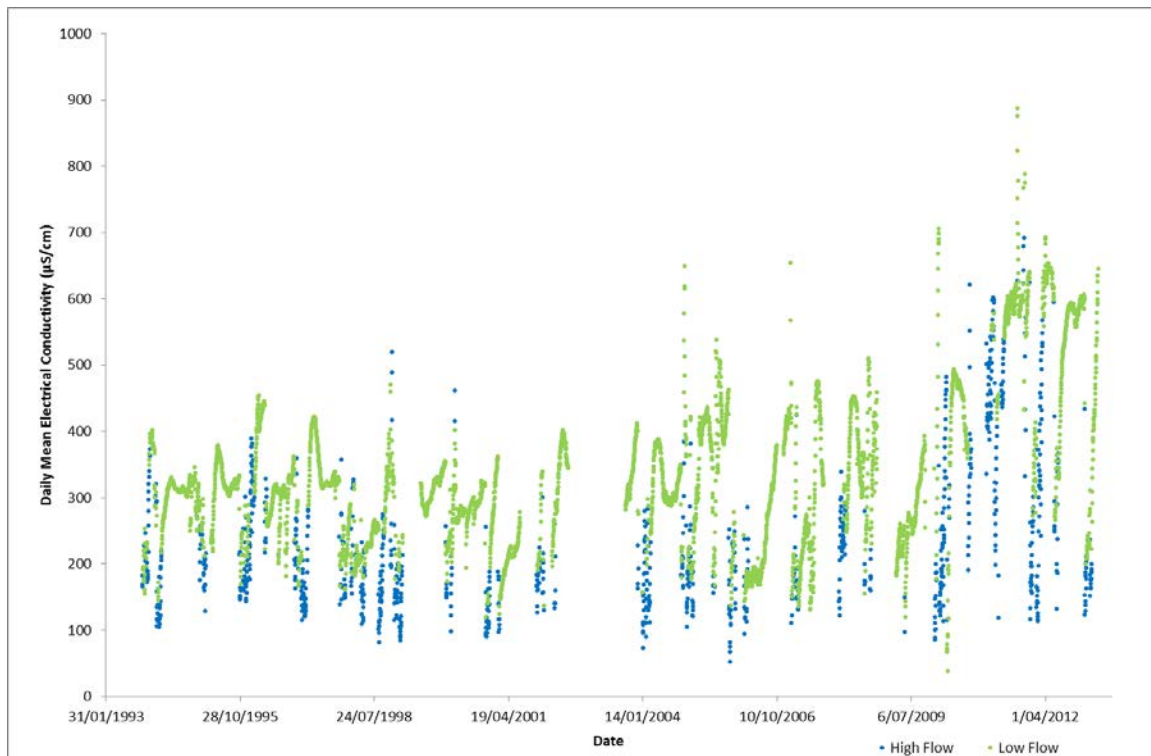
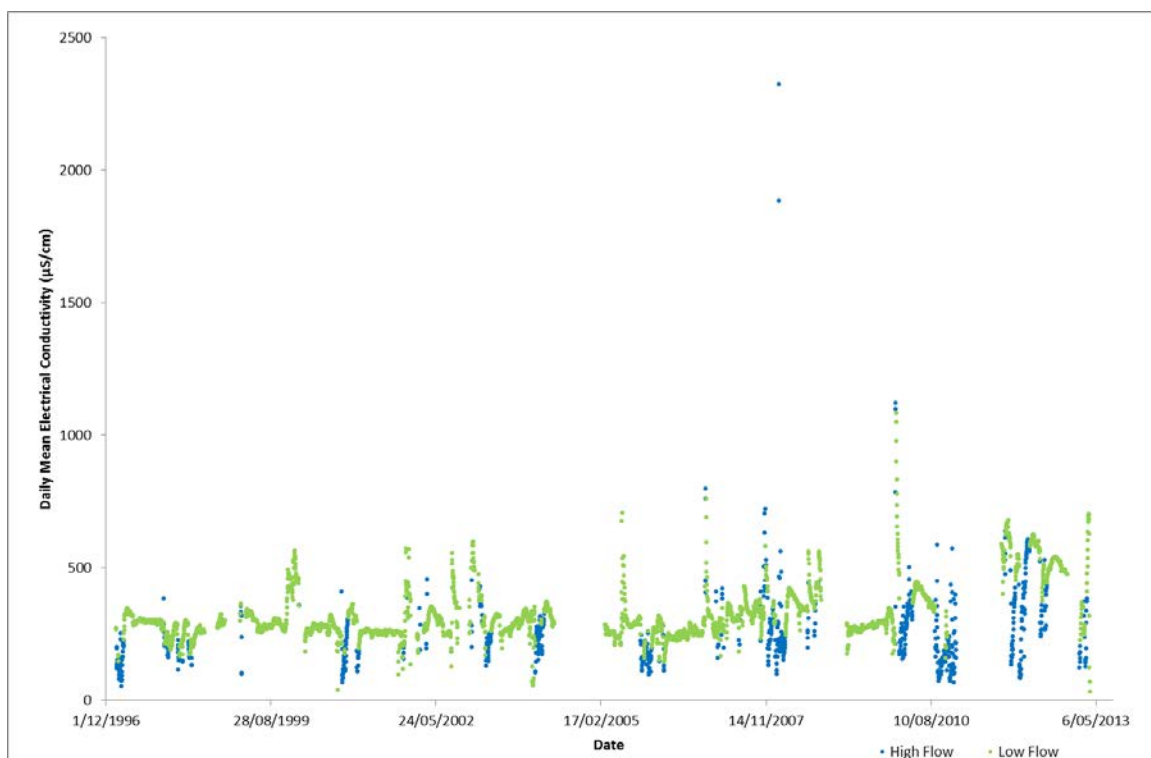
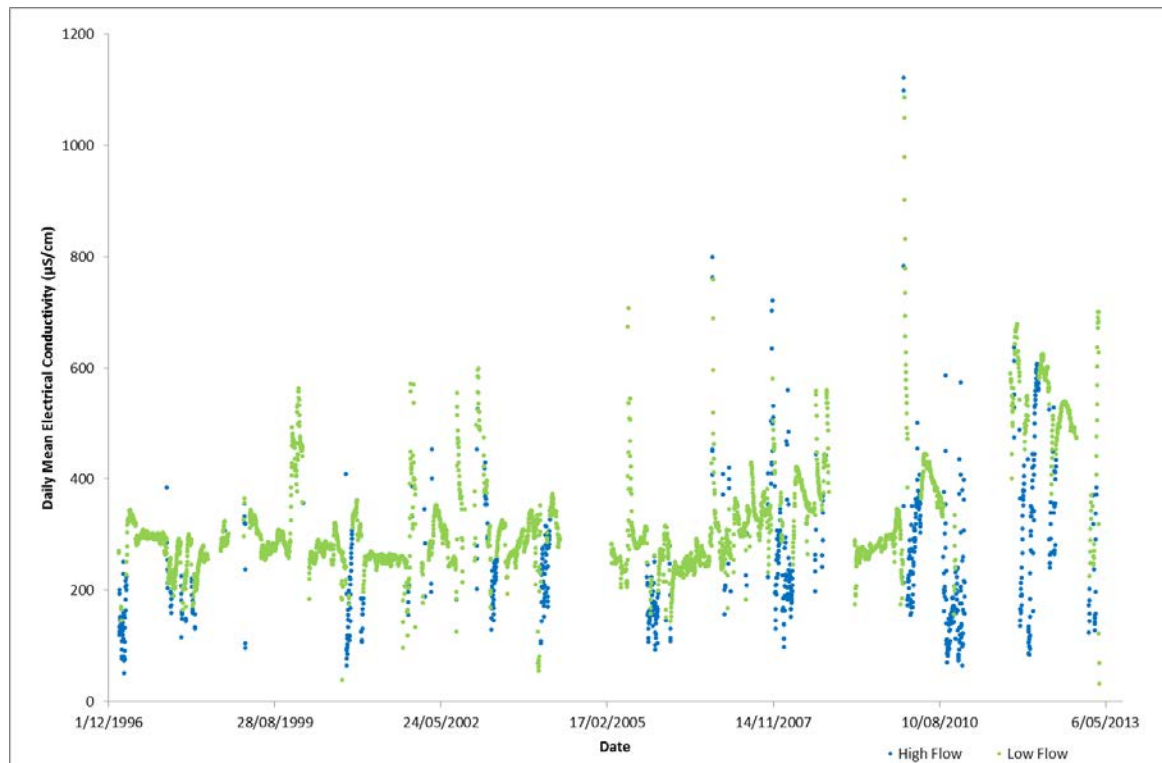


Figure 7-5 Mean daily EC ($\mu\text{S}/\text{cm}$) under high and low flow conditions at DNRM stream gauge 130324A (Dawson River at Utopia Downs) 1996–2013



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Figure 7-6 Mean daily EC ($\mu\text{S}/\text{cm}$) under high and low flow conditions at DNRM stream gauge 130324A (Dawson River at Utopia Downs) 1996–2013 (February 2008 outliers removed)



Summary of existing environment and water quality objectives

8.1 Summary of the existing environment

A summary of the findings of the surface water hydrology, water quality, and fluvial geomorphology assessments and delineation of key EVs for the GFD Project area is presented below. The identified EVs and sensitivities of the environment to anthropogenic impacts form the basis for the impact assessment contained in Section 9.

8.1.1 Environmental values

8.1.1.1 EVs identified for surface waters

The EVs listed in Table 4-1 and Table 4-2 (Section 4) are applicable to the surface water sub-catchments delineated throughout the GFD Project area. HEVs and wetlands specified in Section 4 were considered to be sensitive to anthropogenic impacts occurring within the GFD Project area. Lake Murphy and part of the Palm Tree and Robinson Creeks wetland complex located in the Lake Murphy Conservation Park (GFD Project Tenure ATP803) are listed as nationally important (Environment Australia, 2001). This area is mapped as having high ecological value (referrable) wetlands in the Great Barrier Reef catchments – Lake Murphy Conservation Area. These wetlands contain species and regional ecosystems (REs) of conservation significance under both the EPBC Act and the NC Act.

8.1.1.2 Existing human uses of surface water

An extensive assessment of existing human uses of surface water resources throughout the GFD Project area was undertaken, the results of which are summarised in Section 4.2.2. The water uses identified in Table 4-3 (Section 4.2.2) are considered to be sensitive to anthropogenic impacts within the respective sub-catchments. In general, with reference to Table 4-3, the following water uses are considered to be the most sensitive within the GFD Project area:

- Livestock water
- Impound water
- Domestic supply
- Water harvesting
- Industrial use/inputs (for example, allocations associated with petroleum leases)
- Town water supply (to a lesser degree).

8.1.1.3 Surface water quality

An analysis of existing data provided by Santos GLNG and sourced from other secondary sources (such as previous studies undertaken within the GFD Project area) enabled the physicochemical characterisation of existing water quality throughout the GFD Project area. The results of the data analyses were compared with applicable local and regional guideline values to determine the water quality objectives for the GFD Project.

Local guideline values were derived from the Upper Dawson and Lower Dawson sub-basin water quality objectives (for the respective catchments within the GFD Project area), and the ANZECC regional guidelines for southeast Australia (for the Upper Balonne River Tributaries). These values were able to be applied consistently and were appropriate for the study sub-catchments assessed. A number of key water quality trends were identified, both in regards to consistent exceedances of

8 Summary of existing environment and water quality objectives

guideline values, and also as an indication of parameters which would potentially be most sensitive to anthropological inputs to the receiving environment as a result of the proposed development activities associated with the GFD Project. These trends are detailed as follows:

- pH tended to be alkaline throughout the Comet and Upper Dawson River sub-catchments, neutral in the Upper Balonne River Tributaries, and slightly acidic in Dogwood Creek
- Dissolved oxygen was elevated in most sub-catchments; trends appeared to be more clearly defined in tributaries than in main channels of the Dawson and Balonne rivers, possibly due to the influence of data variation
- EC was highly variable but generally higher than the local guideline values within the Upper Dawson River sub-catchments, and elevated compared to sub-regional guidelines within the Upper Balonne River Tributaries. EC values reported by QCLNG (2009) and APLNG (2010) were lower than the applicable sub-regional guideline value within Dogwood Creek. A clear relationship between low flow conditions and elevated EC was established.
- Chromium, copper, lead and zinc were elevated above applicable guideline values for the majority of sub-catchments. Exceptions included the Upper Balonne River main channel, where heavy metals were below their respective guideline values, and Robinson Creek in the Upper Dawson River, where only copper exceeded the regional guideline value
- Ammonia was particularly elevated throughout the Upper Dawson River. While ammonia in the Upper Balonne tributaries did not exceed its guideline value, it should not be interpreted as these waters being of better quality than those of the Upper Dawson, as the guideline value for ammonia for the Upper Balonne River (900 µg/L) is much higher than that of for the Upper Dawson River (20 µg/L)
- Nutrient enrichment (indicated by elevated total nitrogen, oxidised nitrogen, reactive and total phosphorus) was evident across the majority of sub-catchments. The following were key trends in relation to nutrient concentrations across the GFD Project area:
 - Comet River was noted as having historically elevated levels of phosphorus
 - Total nitrogen and total phosphorus were the highest in the Juandah and Bungaban Creek sub-catchment of the Upper Dawson River
 - Phosphorus was significantly elevated in Wallumbilla Creek sub-catchment, and with potentially greater short term impacts than long-term trends
 - Oxidised nitrogen was found in high concentrations in the Upper Balonne River main channel and Yuleba Creek, compared with other sub-catchments of the Condamine-Balonne River Basin.
- In most cases there appeared to be a strong relationship between elevated turbidity, total suspended solids, and concentrations of nutrients and heavy metals known to bind easily to particulate matter, such as chromium and zinc.

Based on these findings, it was determined that the existing local guidelines for water quality within the Upper Dawson River were appropriate for that sub-catchment. However, site-specific guidelines may need to be re-assessed for heavy metals such as chromium, copper, lead, zinc, and in some cases nickel.

Similarly, site-specific guidelines may be required for the Upper Balonne River catchment in once an accurate baseline condition for this catchment has been established through more extensive field monitoring.

8 Summary of existing environment and water quality objectives

8.1.1.4 Hydrology

Rainfall and resultant streamflow in the study area is characterised by a distinct seasonal and highly variable nature. Analysis of the relevant stream gauge data has shown that most watercourses within the study area are typically ephemeral in nature, only flowing during or immediately after significant rainfall events, and subjected to relatively rapid flow recessions. Peak stream discharges usually occur during the wet season months of December through February when rainfall is highest, although the Dawson River downstream of the confluence with Hutton Creek shows a relatively consistent level of baseflow year round as a result of inflow from the Dawson River Springs. The high level of variability in both annual and monthly rainfall totals for the weather stations across the study area indicates a high likelihood of both floods and droughts. The risk of flooding will be assessed on a local basis where needed, using the flood modelling and constraints planning processes explained in Section 5.4.

8.1.1.5 Fluvial geomorphology

The study area covers 30,000 km² across the Fitzroy and Condamine-Balonne basins. Watercourses within this large area exhibit a wide range of fluvial geomorphologic characteristics and also typically show a moderate to high level of impact from the effects of land clearance for grazing and cropping, stock access and removal of riparian vegetation.

Watercourses in the headwater catchments of the Comet River, Upper Balonne tributaries and Upper and Lower Dawson River sub-catchments are typically located in steep, confined to partially-confined valleys which at times become gorges (e.g. Dawson River). The stable, single channels are often highly sinuous, laterally confined and bedrock to coarse bedload dominated. The bedrock controlled, discontinuous floodplains become increasingly connected downstream. The function of these headwater catchments as a material source has been exacerbated through changes in land use such as land clearance and stock access, which has greatly increased the vulnerability of stream banks to erosion during high energy flood which facilitate the downstream movement of large volumes of sediment.

As watercourses in the study area transition from the steep headwater catchments to the lower energy mid-catchments (e.g. Dawson River east of the Expedition Ranges and the upper tributaries of the Comet River as they enter the Arcadia Valley fan) they typically become located in partially confined to unconfined valleys. Channels also become suspended load dominated and show more lateral instability with anabranching, meander cut-offs and remnant channels as well as more frequent sediment deposits. Watercourses also show a higher level of impact from land use activities such as vegetation clearance for grazing and cropping which has led to significant bank and bed instability (e.g. Bungeworgorai Creek) particularly during flood events when rapid channel adjustments are common.

The lower reaches of sub-catchment watercourses in the study area (e.g. lower Comet and Balonne rivers) are characterised by flat, low relief terrain. Watercourses are located on broad alluvial floodplains and show a high degree of lateral instability with multiple active channels, high sinuosity, frequent meander cut-offs, anabranching and remnant channels.

8 Summary of existing environment and water quality objectives

Based on the fluvial geomorphology assessment, watercourses in the GFD Project area have the following EVs:

- The typically ephemeral and episodic nature of the flow regime of watercourses in the study area has resulted in the development of a range of flora and fauna dependant on the seasonality of flows. Changes to the flow regime (such as discharge of water to an ephemeral stream during the dry season) may alter the ecological balance of specific dependant species
- The unstable nature of some water courses within the study area particularly resulting from clearance of riparian vegetation and stock access leaves them more vulnerable to changes in streamflow hydraulics. In-stream works such as road crossings, water discharges, bridges etc. could have the potential to increase channel instability if not correctly designed or located inappropriately
- Watercourses in the study area can be subject to periodic, high energy flood events that may cause rapid adjustments to channel morphology.

Impact assessment and mitigation measures

9.1 Impact assessment methodology

The potential impacts on the surface water environment from the GFD Project have been assessed on the basis of the findings detailed in Section 8. A significance assessment methodology was employed, whereby the following aspects were considered:

- Relevant EVs (as summarised in Section 8), and their perceived sensitivity and/or vulnerability to development activities
- The magnitude of impacts that may occur as a result of GFD Project activities, based on the sensitivity of EVs
- The significance of potential impacts as a function of sensitivity and magnitude
- Appropriate mitigation measures (as commitments to mitigation from Santos GLNG) that could be employed to reduce the significance of impacts
- Residual significance of impacts, following effective use of mitigation measures.

The criteria for quantifying the sensitivity of EVs to potential impacts are outlined in Table 9-1, while criteria for assessment of the magnitude of potential impacts are included in Table 9-2.

Table 9-1 Criteria for sensitivity assessment

Sensitivity	Description
High	<ul style="list-style-type: none"> • The EV is listed on a recognised or statutory state, national or international register as being of conservation significance. • The EV is intact and retains its intrinsic value. • The EV is unique to the environment in which it occurs. It is isolated to the affected system/area which is poorly represented in the region, territory, country or the world. • It has not been exposed to threatening processes, or they have not had a noticeable impact on the integrity of the EV. Project activities would have an adverse effect on the value.
Moderate	<ul style="list-style-type: none"> • The EV is recorded as being important at a regional level, and may have been nominated for listing on recognised or statutory registers. • The EV is in a moderate to good condition despite it being exposed to threatening processes. It retains many of its intrinsic characteristics and structural elements. • It is relatively well represented in the systems/areas in which it occurs but its abundance and distribution are limited by threatening processes. • Threatening processes have reduced its resilience to change. Consequently, changes resulting from GFD Project activities may lead to impact on the prescribed value. • Replacement of unavoidable losses is possible due to its abundance and distribution.
Low	<ul style="list-style-type: none"> • The EV is not listed on any recognised or statutory register. It might be recognised locally by relevant suitably qualified experts or organisations e.g., historical societies. • It is in a poor to moderate condition as a result of threatening processes which have impacted on its intrinsic value. • It is not unique or rare and numerous representative examples exist throughout the system / area. • It is abundant and widely distributed throughout the host systems / areas. • There is no detectable response to change or change does not result in further impact on the environmental value. • The abundance and wide distribution of the environmental value ensures replacement of unavoidable losses is achievable.

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Table 9-2 Criteria for magnitude assessment

Magnitude	Description
High	An impact that is widespread, long lasting and results in substantial and possibly irreversible change to the environmental value. Avoidance through appropriate design responses or the implementation of site-specific environmental management controls are required to address the impact.
Moderate	An impact that extends beyond the area of disturbance to the surrounding area but is contained within the region where the GFD Project is being developed. The impacts are short term and result in changes that can be ameliorated with specific environmental management controls.
Low	A localised impact that is temporary or short term and either results in marginal changes to environmental condition (which could be difficult to quantify) or could be effectively mitigated through standard environmental management controls.

Qualitative classifications from both the significance and magnitude assessment criteria were applied to each potential impact, and used to assess the level of significance for that impact according to the matrix illustrated in Table 9-3.

Table 9-3 Significance matrix

Magnitude of impact	Sensitivity of environmental value		
	High	Moderate	Low
High	Major	High	Moderate
Moderate	High	Moderate	Low
Low	Moderate	Low	Negligible

Classifications for significance of an impact were defined as follows:

- **Major** significance of impact — arises when an impact will potentially cause irreversible or widespread harm to an EV that is irreplaceable because of its uniqueness or rarity. Avoidance through appropriate design responses is the only effective mitigation
- **High** significance of impact — occurs when the proposed activities are likely to exacerbate threatening processes affecting the intrinsic characteristics and structural elements of the EV. While replacement of unavoidable losses is possible, avoidance through appropriate design responses is preferred to preserve its intactness or conservation status
- **Moderate** significance of impact — although reasonably resilient to change, the EV would be further impacted due to the scale of the impact or its susceptibility to further change. The abundance of the environmental value ensures it is adequately represented in the region, and that replacement, if required, is achievable
- **Low** significance of impact — occurs where an environmental value is of local importance and temporary and transient changes will not adversely affect its viability provided standard environmental management controls are implemented
- **Negligible** significance of impact — impact on the environmental value will not result in any noticeable change in its intrinsic value and hence the proposed activities will have negligible effect on its viability. This typically occurs where the activities occur in industrial or highly disturbed areas.

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A summary of the impacts identified, relevant mitigation measures, and assessment of their effectiveness in reducing the significance and magnitude of impacts is provided in Table 9-5, Table 9-6, and Table 9-7 respectively.

9.2 Potential impacts on surface water

The GFD Project activities listed in Section 1.2 have the potential to impact on the surface water EVs identified in Section 4. These potential impacts are listed in Table 9-5. Impacts are listed for each phase of the GFD Project (construction, operations, and decommissioning). A high level review of management frameworks applied to existing Santos GLNG operations was conducted to determine suitable mitigation measures that would also apply to the similar infrastructure and activities being developed for the GFD Project. It should be noted that specific detail relating to the location and form of the infrastructure associated with the GFD Project has not yet been confirmed and therefore the assessment presented in this section is generic to the GFD Project area and not site specific.

It is noted that the Post-EIS (constraints) planning process previously described in Section 2.5.1 will also play a significant role in the mitigation of potential impacts to surface water environmental values within the GFD Project. Table 9-4 provides an outline of the level of constraint associated prohibited activities that will be applied to protect surface water environmental values.

Potential (pre-mitigated) impacts such as those outlined in Table 9-5 in Section 9.3 below will be determined after the application of the avoidance measures set out in Table 9-4.

Table 9-4 Surface water-related constraints (current at June 2014)

Level of constraint	Constraint type	Permitted Activities
No-go area	Category A environmentally sensitive areas including national parks, conservation parks and forest reserves (Nature Conservation Act 1992). EPBC Act-listed spring vents and complexes, including primary 200 m buffer. Wetlands of national importance, including 200 m buffer. Wetlands of high ecological significance or high conservation value as detailed in the Map of Referrable Wetlands dataset (Qld).	No petroleum activities are permitted.
Surface development exclusion area	Primary 200 m buffer for Category A environmentally sensitive areas. Declared catchment areas as per <i>Water Act 2000</i> (Qld) (Category C environmentally sensitive area). Ramsar sites listed as wetlands of international importance (Category B environmentally sensitive area).	Only low impact petroleum activities ¹ are permitted.
High constraint area	Watercourses, including 100 m buffer. Wetland defined as 'general ecologically significant wetland' or 'wetland of other environmental value'. Spring vents and complexes (not protected under EPBC Act), including primary 200 m buffer.	Low impact petroleum activities ¹ and linear infrastructure ² are permitted.

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Level of constraint	Constraint type	Permitted Activities
Moderate constraint area	Secondary 100 m buffer for Category A environmentally sensitive areas. Secondary 100 m buffer for EPBC Act spring vents and complexes. MNES including habitats, threatened ecological communities and flora species. Endangered regional ecosystems including primary 200 m buffer.	Low impact petroleum activities ¹ , linear infrastructure ² and limited petroleum activities ³ are permitted.
Low constraint area	No concern at present regional ecosystems. Existing Santos GLNG infrastructure. Existing road, rail, pipeline and other infrastructure. Remaining areas once other constraints have been applied.	All petroleum activities ⁴ are permitted.

¹Low impact petroleum activities means petroleum activities which do not result in the clearing of native vegetation, earthworks or excavation work that cause either, a significant disruption to the soil profile or permanent damage to vegetation that cannot be easily rehabilitated immediately after the activity is completed. Examples of such activities include (but are not necessarily limited to) chipholes, coreholes, geophysical surveys, seismic surveys, soil surveys, topographic surveys, cadastral surveys, ecological surveys, installation of environmental monitoring equipment (including surface water).

² Linear infrastructure means linear infrastructure including (but not limited to) gas and water gathering lines, low and high pressure gas and water pipelines, powerlines, communication, roads and access tracks (associated with limited petroleum activities and petroleum activities).

³ Limited petroleum activities means any low impact petroleum activity and single well sites (includes observation, pilot, injection and production wells) and associated infrastructure (water pumps and generators, sumps, flare pits or dams) located on the well site, multi-well sites and associated infrastructure (water pumps and generators, sumps, flare pits, dams or tanks) located on the well sites, construction of new access tracks that are required as part of the construction or servicing a petroleum activity, upgrading or maintenance of existing roads or tracks, power and communication lines, gas gathering lines from a well site to the initial compression facility, water gathering lines from a well site to the initial water storage or dam, and camps within well site that may involve sewage treatment works that are a no release works.

⁴ Petroleum activities include low impact petroleum activities or limited petroleum activities and all other GFD Project activities including major facilities such as permanent accommodation camps, gas treatment facilities, air strips, water facilities including dams, water storage infrastructure, water treatment and amendment facilities, gas hubs, and nodal compressors.

9.3 Management framework

Mitigation measures for reducing the significance of potential impacts on EVs were identified on the basis of existing management frameworks utilised by Santos GLNG, which reflect best practice methods within the industry as a whole. Relevant management plans and corresponding measures for mitigation of potential impacts are outlined in Table 9-6. An assessment of the significance and magnitude of the potential impacts to EVs associated with GFD Project activities was conducted in accordance with the process outlined in Section 9.1 above. Table 9-7 provides an analysis of how the perceived risks may be reduced through the implementation of mitigation measures outlined in Table 9-6 throughout the life of the GFD Project.

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Table 9-5 GFD Project activities and potential impacts

Potential impact	Construction phase activity	Operations phase activity	Decommissioning phase activity	Applicable management plans (refer to Table 9-6)
Increased sedimentation (adverse impacts on water quality and geomorphology)	<ul style="list-style-type: none"> Vehicle wash down Soil compaction Construction (soil disturbance) Construction of watercourse crossings 	<ul style="list-style-type: none"> Release to surface waters Permanent structures Minor earthworks 	<ul style="list-style-type: none"> Demolition activities and earthworks Lack of water supply (soil compaction; lack of dust suppression) Sediment control infrastructure Incomplete rehabilitation of disturbed areas 	<ul style="list-style-type: none"> Constraints protocol Water resource management plan Draft environmental Management plan Erosion and sediment control Management Plan Land release Management plan Decommissioning and abandonment plan Chemical and fuel management plan
Erosion of stream banks	<ul style="list-style-type: none"> Disturbance of riparian habitat Construction of watercourse crossings 	<ul style="list-style-type: none"> Permanent structures and minor earthworks Stream crossings and diversions 	<ul style="list-style-type: none"> Sediment control infrastructure Incomplete rehabilitation 	
Surface water impacts (adverse impact on surface water quality; toxicity to aquatic ecosystems)	<ul style="list-style-type: none"> Refuelling vehicles Overtaken vehicle resulting in release of fuel/chemicals Vehicle washdown Litter Leakage or spill of hydrotest water Uncontrolled release of drilling and completion fluids Uncontrolled release of treated sewage effluent (from STPs at construction camps) 	<ul style="list-style-type: none"> Treated sewage discharges Controlled/uncontrolled discharges of processed coal seam water, water for hydro-testing or brine to surface water Operations wastes (e.g. litter) Uncontrolled release of treated sewage effluent (from STPs at accommodation and operational facilities) Land disposal of brine products, crystallised salts (see explanation for decommissioning phase) 	<ul style="list-style-type: none"> Temporary refuelling facilities, chemical storage facilities and vehicle washdown areas Land disposal of brine products, crystallised salts (could potentially result in impacts to surface water quality associated with runoff if storage area is not sufficiently contained) 	

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Altered surface water flow regime (risk to overland flow paths, infrastructure, riparian vegetation, terrestrial ecosystems, baseflow from aquifers, and environmental flow regime)	<ul style="list-style-type: none"> Watercourse diversion (for example, re-direction of overland flow paths/gullies); construction of crossings 	<ul style="list-style-type: none"> Watercourse diversion (e.g. re-direction of overland flow paths, gullies) Failure of water storage facilities, embankments, pipelines, bunds Release to surface waters (both controlled and uncontrolled) Depressurisation of aquifers due to gas extraction 	-
Altered geomorphic character (e.g. increased lateral instability; significant alteration of geomorphic units)	<ul style="list-style-type: none"> Watercourse diversion, construction of crossings (in-stream works) 	<ul style="list-style-type: none"> Watercourses crossings, diversions and permanent structures in channel 	<ul style="list-style-type: none"> Incomplete rehabilitation of disturbed areas

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Table 9-6 Existing management framework and impact mitigation measures

Management Plan	EIS Commitment/Function	Mitigation measures
<i>GFD Project Environmental protocol for constraints planning and field development</i> (the Constraints protocol)	<p>The Constraints protocol applies to all gas field related activities. The scope of the Constraints protocol is to:</p> <ul style="list-style-type: none"> • Enable Santos GLNG to comply with all relevant State and Federal statutory approvals and legislation • Support Santos GLNG's environmental policies and the General Environmental Duty (GED) as outlined in the EP Act • Promote the avoidance, minimisation, mitigation and management of direct and indirect adverse environmental impacts associated with land disturbances • Minimise cumulative impacts on environmental values. <p>The Constraints protocol provides a framework to guide placement of infrastructure and adopts the following management principles:</p> <ul style="list-style-type: none"> • Avoidance — avoiding direct and indirect impacts • Minimisation — minimise potential impacts • Mitigation — implement mitigation and management measures • Remediation and rehabilitation — actively remediate and rehabilitate impacted areas • Offset — offset residual adverse impacts in accordance with regulatory requirements. <p>The Constraints protocol enables the systematic identification and assessment of environmental values and the application of development constraints to effectively avoid and / or manage environmental impacts.</p>	<p>The Constraints protocol includes mitigation measures such as:</p> <ul style="list-style-type: none"> • Allowing only low impact petroleum activities and linear infrastructure within high constraint areas such as watercourses (including a 100 m buffer), wetlands defined as 'general ecologically significant wetland' or 'wetland of other environmental value' and spring vents and complexes not protected under the EPBC Act (including primary 200 m buffer). Further detail regarding buffer zones is provided in Section 5.1.1 of the Protocol. • Detailed internal approval process completed in alignment with pre-disturbance requirements (outlined in Section 6.1 of the Protocol, and summarised in Section 2.5.1 of this report) • Flood assessments of the 1:50 and 1:100 Average Recurrence Interval (ARI) will be undertaken prior to final siting of camps or permanent infrastructure (that are not pipelines or roads) (Section 5.2.7 of the Protocol).

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Management Plan	EIS Commitment/Function	Mitigation measures
<i>Water resource management plan (WRMP)</i>	The WRMP has been developed to proactively detail how Santos GLNG manages and monitors potential adverse impacts to water resources, recently defined as a matter of national environmental significance.	<p>The WRMP includes mitigation measures such as:</p> <ul style="list-style-type: none"> Ensuring that the quality of coal seam water generated via GFD Project activities is 'fit for purpose' and complies with relevant regulatory water quality requirements (such as from the applicable EA or BUA) (Section 3.4.3 of the WRMP) Management of brine or and/or solid salts produced via desalination in accordance with the <i>Coal Seam Water Management Policy</i> (EHP 2012) (Section 3.4.3 of the WRMP). Undertaking a Receiving Environment Monitoring Program (REMP) for approved release schemes, in accordance with relevant EA conditions. Currently the only approved release scheme is the Dawson River Release Scheme (a summary of the REMP for the DRRS is contained within Appendix G of the WRMP). Surface water monitoring as required by relevant regulatory criteria; indicative types, scope, and frequency of monitoring that may be undertaken during each phase of the GFD Project are summarised in Table 3-5 (Section 3.4.5) of the WRMP.
<i>Draft Environmental management plan (Draft EM Plan)</i>	<p>The Draft EM Plan identifies the environmental values potentially affected by the GFD Project and proposes measures to manage the risk of potential adverse impact to these environmental values. The Draft EM Plan comprises:</p> <ul style="list-style-type: none"> Environmental values potentially affected by the GFD Project Environmental management objectives and associated management measures Environmental monitoring and reporting Coal seam water management Proposed conditions. 	Coal seam water will be managed in accordance with the relevant regulatory criteria, such as those set by EAs and BUAs.
<i>Erosion and sediment control management plan (ESCMP)</i>	<p>The ESCMP identifies erosion and sedimentation risk and provides an erosion and sediment control strategy that incorporates understanding of the risk inherent to local land resource characteristics.</p> <p>The ESCMP is supported by the Erosion and Sediment Control Manual, which provides erosion, sediment and</p>	<ul style="list-style-type: none"> The relevant ESCMP requirements for drainage control (on a site-specific basis) are outlined in Section 5.2 (Construction Phase) and Section 5.3 (Operation Phase) of the ESCMP, and include mitigation measures such as: <ul style="list-style-type: none"> — Diversion of up-slope stormwater runoff around disturbed areas including stockpiles and waste storage areas — Installation of lateral catch drains or flow diversion banks to minimise rill

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Management Plan	EIS Commitment/Function	Mitigation measures
	drainage controls in line with best practice guidelines.	<p>erosion along steep continuous slopes (i.e. >10%) especially associated with linear infrastructure construction (i.e. pipelines, roads and powerlines)</p> <ul style="list-style-type: none"> — Placement of velocity control structures such as rock check dams to reduce the flow velocity in channels; — Lining of channel with scour resistant materials including erosion control matting or rock lining; — Use of energy dissipation structures at the outlets of banks, drains and chutes. — Giving priority to preventing, or at least minimising soil erosion, rather than allowing erosion to occur and trying to trap the resulting sediment. Where this is not practicable, then reasonable and practicable measures need to be taken to minimize soil erosion even if the adopted sediment control measures comply with the required management standard. — Spreading mulch or retained native vegetation over disturbed areas as soon as practicable after construction to reduce splash erosion and sheet erosion. <ul style="list-style-type: none"> — Use of erosion blankets (i.e. jute and coir matting) as an alternative to mulching in drainage channels or areas of strong winds or overland flow. — Use of sediment traps (i.e. sheet flow, kerb inlet and field inlet sediment traps) and sediment basins. — Use of 'ripping' or similar techniques on finished soil surfaces to encourage revegetation where required. — Scheduling major earthworks activities to avoid, where practicable, the higher rainfall months of November to April. — Maintaining access to erosion and sediment controls especially during the higher rainfall months of November to April. — Making spill response materials (i.e. dry absorbents) available at fuel and chemical storage areas to clean up spills and minimise potential soil and surface water contamination. <ul style="list-style-type: none"> • Section 5.4.2 of the ESCMP details monitoring of sediment basin water quality to be undertaken prior to discharges, and water quality monitoring that will be undertaken upstream and downstream from watercourse crossing work associated with construction of linear infrastructure.

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Management Plan	EIS Commitment/Function	Mitigation measures
Land release management plan (LRMP)	<p>The LRMP addresses the management of releases of water to land in Santos GLNG's gas fields, including:</p> <ul style="list-style-type: none"> Coal seam water use for irrigation, construction and operations purposes Treated sewage effluent releases to land Use of treated sewage effluent for construction and operational purposes Low point drain water releases to land Hydrostatic test water releases to land. <p>The document includes the principles, methods and controls to effectively manage and minimise the risk environmental harm being caused by release of water to land.</p>	<ul style="list-style-type: none"> Section 4.1 of the LRMP outlines the circumstances under which coal seam water may be utilised for beneficial purposes. Mitigation measures for each use of coal seam water are listed in Section 6.1 (use of coal seam water for irrigation) and 6.2 (use of coal seam water for dust suppression, construction and operational activities) respectively. The LRMP includes measures such as: <ul style="list-style-type: none"> Requirements for evaluation of quality and quantity of coal seam water used for irrigation Use of appropriate irrigation systems that are fit-for-purpose Management of water application rate to prevent run-off Frequency and intensity of use of coal seam water for dust suppression (e.g. lighter, more frequent application is preferred over less frequent, heavier applications) Engineering modifications (such as spray bars on water trucks) for even delivery of water for dust suppression or construction use Conditions under which treated sewage effluent may be released are outlined in Section 4.2 of the LRMP, and the associated mitigation measures are detailed in Section 6.3. Examples of mitigation measures for treated sewage effluent releases in the LRMP include: <ul style="list-style-type: none"> Criteria for setting up a suitable disposal site, including consideration of topography, and procedures for notifying employees and the general public Operational procedures, such as emptying wet weather storage immediately following a wet weather period to prepare for future events Conditions under which hydrostatic test water may be released are outlined in Section 4.4 of the LRMP, and the associated mitigation measures that will be implemented during site evaluation and application of hydrostatic test water as outlined in Section 6.6 of the LRMP. Examples of mitigation measures for hydrostatic test water include: <ul style="list-style-type: none"> Conditions for selection of sites for land disposal, and timing of releases Supervision of disposal to prevent erosion and run-off.
Decommissioning and abandonment management	<p>The DAMP describes the management framework in place for when petroleum activities cease. The objectives of the</p>	<ul style="list-style-type: none"> Management of wastewater during the decommissioning phase and demolition activities is detailed in Section 7.3 of the DAMP, while management measures for

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Management Plan	EIS Commitment/Function	Mitigation measures
plan (DAMP)	<p>plan are to:</p> <ul style="list-style-type: none"> Undertake decommissioning of assets in a manner that complies with regulatory requirements and minimises the risk of environmental harm Undertake decommissioning activities in a manner that meets stakeholder expectations Leave a landform that is stable and compatible with intended post-closure land use Provide for the beneficial reuse of Santos GLNG infrastructure constructed to third parties (e.g. landholders or local authorities) where an appropriate agreement has been signed by both parties and regulatory authorities are satisfied. 	<p>stormwater and sediment are outlined in Section 7.7. Measures include actions such as:</p> <ul style="list-style-type: none"> Testing of wastewater against release or use criteria within the relevant EA(s) or BUA(s) Meeting the requirements of the ESCMP to manage erosion and sedimentation.
<i>Chemical and fuel management plan (CFMP)</i>	<p>The CFMP details the appropriate storage and handling practices of chemicals and fuels. The objectives of the plan are to:</p> <ul style="list-style-type: none"> Facilitate compliance with relevant legislation, regulations and approvals Provide a framework for Santos GLNG to store and handle bulk chemicals and fuels in a way that minimises risk to the environment and human health Assess the potential risk of a chemical or fuel prior to its use <p>Identify and implement appropriate mitigation measures.</p>	<ul style="list-style-type: none"> Management and mitigation measures for bulk chemical and fuels on operational sites throughout the GFD Project are detailed in Section 5.1 of the CFMP (Table 6). A selection of relevant mitigation measures from the CFMP are as follows: Chemicals and fuels shall be stored and transferred in appropriately engineered containment systems in accordance with relevant Australian Standards. As per EHS02, 'minor' storages (as defined in the relevant Australian Standard) and temporary storages (i.e. storage in one location for less than 3 weeks) do not require engineered bunds. However the following requirements will be met or exceeded: <ul style="list-style-type: none"> Storage base is impermeable; Storage is located away from stormwater drains, pits and surface waters; Storage is undercover, wherever practicable; and Equipment is in place to allow immediate recovery of spilt materials. Bunds for storages other than minor or temporary is to be located and engineered, where applicable, in accordance with the following considerations: <ul style="list-style-type: none"> Regulatory requirements (including site or activity specific requirements in the relevant EAs); Relevant international and Australian Standards; Volume and nature of the environmentally hazardous substance; and

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Management Plan	EIS Commitment/Function	Mitigation measures
		<ul style="list-style-type: none"> — Environmental values and risks posed by the location such as significant nearby environmental values, drainage, rainfall potential and infiltration capacities. • Bunds will be recorded in the Santos Bund Register, and will be managed and operated in accordance with site procedures that may consider issues such as: <ul style="list-style-type: none"> — The collection/clean-up of releases, stormwater, or fire fighting water within bunds; and — The inspection, testing and maintenance of bund integrity. • Spill kits will be regularly checked to ensure they are restocked in a timely manner. The type of spill kits prescribed will be appropriate for the chemicals, fuels and classes of dangerous goods stored at the location. • Internal approval of the risks associated with the use, storage and handling of chemicals and fuels will be completed prior to the commencement of proposed activities associated with the GFD Project.
<i>Environmental monitoring and reporting (EMR)</i>	Surface water monitoring will be undertaken in accordance with the Environmental monitoring and reporting appendix of the Draft EM Plan and the WRMP.	<p>Surface water monitoring and reporting of results for the GFD Project will be undertaken in accordance with the EMR, which outlines monitoring and reporting procedures such as:</p> <ul style="list-style-type: none"> • Field procedures for water sampling (Section 4.1 of the EMR), for example where sampling must comply with the <i>Monitoring and Sampling Manual</i> (EHP 2009) and the <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> (ANZECC 2000). • Details regarding the scientific design of surface water sampling programs, and statistical techniques used for assessment of trends and hypotheses <p>Instructions for storage and management of electronic data associated with surface water monitoring programs.</p>

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Table 9-7 Mitigation of potential impacts using existing management framework

Potential impact	Phase	Pre-mitigated significance			Mitigation	Residual significance	
		Sensitivity	Magnitude	Significance		Magnitude	Significance
Increased sedimentation (adverse impacts on water quality and geomorphology)	Construction	Moderate	Moderate	Moderate	<ul style="list-style-type: none"> Water resource management plan Draft Environmental management plan Erosion and sediment control management plan Land release management plan Decommissioning and abandonment plan Chemical and fuel management plan 	Low	Low
	Operations		Low	Low		Low	Low
	Decommissioning		Moderate	Moderate		Low	Low
Erosion of stream banks	Construction	Moderate	Moderate	Moderate		Low	Low
	Operations		Low	Low		Low	Low
	Decommissioning		Low	Low		Low	Low
Surface water contamination (adverse impact on surface water quality)	Construction	Moderate	Moderate	Moderate		Moderate	Moderate
	Operations		Moderate	Moderate		Moderate	Moderate
	Decommissioning		Low	Low		Low	Low
Altered surface water flow regime (risk to infrastructure, riparian vegetation, terrestrial ecosystems, and environmental flow regime)	Construction	Moderate	Moderate	Moderate		Moderate	Moderate
	Operations		Low	Low		Low	Low
	Decommissioning		Low	Low		Low	Low
Altered geomorphic character (e.g. increased lateral instability; significant alteration of geomorphic units)	Construction	Moderate	Moderate	Moderate		Low	Low
	Operations		Low	Low		Low	Low
	Decommissioning		Low	Low		Low	Low

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The outcomes of mitigation depicted in Table 9-7 illustrate that the residual significance of the potential impacts identified will be reduced to either low or moderate level following implementation of the detailed mitigation measures and management frameworks. As described in Table 9-3 (Section 9.1), impacts with a low level of significance are generally localised and temporary. They require implementation of standard environmental controls. Impacts with moderate significance may result in further impact on surface water environmental values, however the environmental value is generally already abundant throughout the region so it is unlikely that the impact would result in irreversible change. Replacement could be used to offset impacts if required.

9.4 Cumulative impacts

The GFD Project construction and operations activities have the potential to impact on downstream water quality and environmental flows. Existing Santos GLNG gas extraction operations within the GFD Project area, as well as those of other gas companies such as Origin APLNG, Arrow and QGC which are also currently operating within or near the GFD Project area, have the potential to impact the surface water environment. In addition, this study has also identified a number of resource activities such as the Wandoan Coal Project (Xstrata Glencore); Range Project (Stanmore Coal) and Springsure Creek Coal Mine (Bandanna Energy) operating or proposed within or adjacent to the GFD Project area, which also have the potential to impact receiving waters of the area. The degree of cumulative impact from these projects will be dependent on the following:

- Project planning resulting in reduction of watercourse catchment areas
- Constraints planning and field development to minimise impacts on local watercourses
- Erosion and sediment control management techniques to minimise impacts caused by sediment laden surface runoff
- Coal seam water management and monitoring techniques that aim to beneficially reuse coal seam water as much as possible
- Land release management techniques
- Decommissioning and demolition techniques that allow for the progressive rehabilitation of the landscape's EVs.

While at a regional level gas extraction activities will have a certain cumulative impact on the river systems of the GFD Project area, these impacts are judged to be small, temporary and reversible. Indeed, the impacts on the surface water environment associated with the GFD Project and other existing resource projects will be smaller than the impacts from other land uses in the catchments, particularly agriculture. This is indeed confirmed by the elevated concentrations of nutrients found in surface waters of the catchments assessed as part of the EIS.

As part of this EIS the proponent has in place numerous mitigation and control strategies to responsibly manage coal seam water and to protect the surface water environment. It is expected that the other resource operators within and close to the GFD Project area have similar control and mitigation measures.

Monitoring programs

High level strategies for implementation of a monitoring program throughout the GFD Project duration have been identified. The monitoring programs outlined below will assess the effectiveness of management strategies outlined in Section 9, designed to protect the EVs identified within this report. It is noted that these programs will be revised to target specific areas of the GFD Project once infrastructure plans and operations have been finalised.

The following existing monitoring plans and guiding documents will inform the development of site-specific monitoring programs within the GFD Project area:

- *Draft Environmental management plan* (Draft EM Plan)
- *Water resource management plan* (WRMP)
- *Land release management plan* (LRMP)
- *Environmental monitoring and reporting* (EMR).

These documents may be updated once infrastructure and operations plans are finalised. In general, monitoring will involve the following:

- In-situ water sampling associated with operational activities, aligned with relevant EA (and associated REMP where applicable)
- Surface water receiving environment monitoring for beneficial use of treated coal seam water (as per general Beneficial Use Approval (BUA), EHP 2014). This includes the monitoring program for the only release scheme currently approved within the GFD Project area; the Dawson River Release Scheme (subject to the requirements of the existing EA; EPPG00928713, effective from 14 April 2014).

Further details regarding the surface water monitoring programs that may be implemented for the GFD Project (including indicative monitoring parameters, locations and frequencies) are outlined in Section 3.4.4 of the WRMP.

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Limitations

URS Australia Pty Ltd (URS) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use in relation to Santos GLNG Project and only those third parties who have been authorised in writing by URS to rely on this Report.

It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report.

It is prepared in accordance with the scope of work and for the purpose outlined in the contract dated 29 November 2012.

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Any estimates of potential costs which have been provided are presented as estimates only as at the date of the Report. Any cost estimates that have been provided may therefore vary from actual costs at the time of expenditure.

Appendix A List of key watercourses

Appendix A : List of watercourses

Study Subcatchment: Upper Dawson River
Primary Channel: Dawson River, upstream of Glebe Weir

Watercourses (DS to US)				
1st Order	2nd Order	3rd Order	4th Order	5th Order
Dawson River	Spring Gully	Boggomoss Creek	-	-
	Cockatoo Creek	Pigeon Creek	-	-
		Mayne Creek	-	-
		Pontypool Creek	-	-
		Lighthouse Gully	-	-
		Pine Creek	Kennedy Creek	-
		Sandy Creek	-	-
		Rocky Creek	-	-
		9 Mile Creek	-	-
		Redrange Creek	-	-
		Bullfrog Creek	-	-
		Fifteen Mile Creek	-	-
	Binghi Creek	-	-	-
	Bentley Creek	Bullock Gully	-	-
		Long Gully	-	-
	Scrubby Creek	-	-	-
	Double Stake Yard Gully	-	-	-
	Blackboy Creek	-	-	-
	Grass Tree creek	-	-	-
	Scotch Creek	-	-	-
	Palm Tree Creek	Cattle Creek	Prickly Creek	-
		Horse Gully	-	-
		Bluchers Gully	-	-
		Champagne Creek	-	-
		Copeland Gully	-	-
		Tualka Creek	Narowie Creek	Salisbury Gully
			Kangaroo Gully	-
			Magician Gully	Slaggy Creek
		Gwambagwine Creek	Four Mile Gully	-
			Spring Gully	-
		Dry Station Creek	-	-
		Turtle Creek	Eight Mile Creek	-
			Seven Mile Creek	-
		Sandy Creek	-	-
		Ruined Castle Creek	Chance Creek	-
			Surprise Creek	-
			Reedy Creek	Scrubby Creek
			Tommy Creek	-
			Spring Creek	-
			Bluff Gully	-
			Walangara Creek	-
	Middle Creek	-	-	-
	Kinnoul Creek	-	-	-
	Paddys Creek	-	-	-
	Bridge Creek	Ram Creek	-	-
	Eurombah Creek	-	-	-
	Scott Creek	Scotch Creek	-	-
	Pine Creek	Broken Creek	Lynds Creek	-
		Wagon Gully	-	-
		Esk Creek	-	-
	Boyd Creek	Harris Creek	-	-
		Quigleys Gully	-	-
		Briggs Creek	-	-
	Hutton Creek	<i>See Hutton Creek Sheet</i>	-	-
	Midnight Creek	-	-	-
	Hungry Creek	Breakfast Creek	-	-
	Baffle Creek	Lambing Gully	-	-
		Dismal Gully	-	-
		Johnson Gully	-	-
		Lambing Flat Creek	-	-
		Rocky Creek	-	-
		Redbank Gully	-	-
		Spring Creek	Lambing Gully	-
			Carters Gully	-
		One Mile Creek	-	-
		German Gully	-	-
	Precipice Creek	-	-	-
	Spring Gully	-	-	-
	Gratz Gully	-	-	-
	Greentree Gully	-	-	-
	Gregory Creek	-	-	-
	Sardine Creek	Cave Gully	North Branch	-
		Ironbark Gully	-	-
		Bull Gully	-	-
		Figtree Gully	-	-
	Hardy's Creek	-	-	-
	Wallaroo Creek	-	-	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Appendix A : List of watercourses

Study Sub-catchment: Upper Dawson River
Primary Channel: Robinson Creek

Watercourses (DS to US)					
1st Order	2nd Order	3rd Order	4th Order	5th Order	6th Order
Dawson River	Palm Tree Creek	Robinson Creek	Sandstone Creek	Stony Creek	Kurrajong Gully
				Horse Gully	-
			Cave Gully	-	-
			Fernbrook Creek	The Pines	-
			Long Gully	-	-
			Rocky Creek	Trumpeter Creek	Lickhole Gully
					Wyndham Creek
			Harden Creek	-	-
			Rosey Creek	Walker Creek	-
			Cabbage-Tree Creek	-	-
			Ladys Creek	-	-
			Starkvale Creek	-	-
			Andys Creek	-	-
			Surprise Creek	-	-
			Glenhaughton Creek	-	-
			Spring Creek	-	-
			Bell Creek	Bushrangers Creek	-
			Hurleys Gully	-	-
			Dry Branch Creek	Hells Gully	-
			Dam Gully	-	-
			Melancholy Creek	Jacks Creek	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Study subcatchment: Upper Dawson River
Primary Channel: Hutton Creek

Watercourses (DS to US)				
1st Order	2nd Order	3rd Order	4th Order	5th Order
Dawson River	Hutton Creek	Bullock Gully	-	-
		Christmas Creek	-	-
		Spring Creek	-	-
		Duck Creek	Expedition Creek	-
		Injune Creek	Highland Plains Creek	Horse Creek
			Bluey Creek	-
			Ah See Creek	-
			Drafting Yard Creek	Barramundi Creek
				Bull Gully
			Two Mile Creek	-
			Oaky Creek	-
			Yard Creek	-
		Duffers Creek	-	-
		Nine Mile Creek	-	-
		Wade Creek	-	-
		Chong Creek	-	-

Appendix A : List of watercourses

Study subcatchment: Upper Dawson River
Primary Channel: Eurombah Creek

Watercourses (DS to US)				
1st Order	2nd Order	3rd Order	4th Order	5th Order
Dawson River	Eurombah Creek	Four Mile Creek	-	-
		Canal Creek	-	-
		Kangaroo Creek	Three Mile Creek	-
			Spring Creek	-
		Barton Creek	Sugarloaf Creek	-
		Slatehill Creek	Kurrajong Gully	-
			Pear Gully	-
			Box Gully	-
			Seven Mile Gully	-
			Eight Mile Gully	-
			Long Gully	-
			Back Creek	Pear Gully
		Durham Creek	-	-
		Bluff Creek	-	-
		Western Creek	-	-
		Shingle Creek	-	-
		Sandy Creek	-	-
		Twelve Mile Creek	Franksvale Creek	-
		Eight Mile Creek	-	-
		Five Mile Creek	-	-
		Lagoon Creek	-	-
		Four Mile Creek	-	-
		Horse Creek	-	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Study subcatchment: Upper Dawson River
Primary Channel: Juandah Creek

Watercourses (DS to US)				
1st Order	2nd Order	3rd Order	4th Order	5th Order
Dawson River	Juandah Creek	Back Creek	-	-
		Bungaban Creek	Swamp Creek	-
			Bullock Creek	Stakeyard Creek
			Twenty Seven Mile Creek	-
			Romeo Creek	-
			Bungaban Gully	-
			Juandah Gully	-
			Bottletree Creek	-
			Sugarbag Creek	-
			North Bungaban Creek	-
	Horse Creek	Dropyard Creek	-	-
		Boundary Creek	-	-
		Spring Creek	-	-
		Duck Creek	-	-
		Nine Mile Creek	-	-
		Back Creek	Four Mile Gully	-
		Five Mile Creek	-	-
		Range Gully	-	-
		Four Mile Gully	-	-
		Bull Gully	-	-
		Nine Mile Gully	-	-
		Ten Mile Gully	-	-
		Lucky Gully	-	-
	Laggers Gully	-	-	-
	Roche Creek	Horse Gully	-	-
		Twenty Mile Creek	-	-
	Mud Creek	Log Hut Gully	-	-
		Mount Organ Creek	-	-
	Wolleebee Creek	Blackant Creek	-	-
		Wandoan Creek	Nail Can Creek	-
			Hardknock Creek	-
		Splitter Creek	-	-
		Ogle Creek	-	-
		Conloi Creek	Sheepstation Creek	-
			Bluey Creek	-
			Barry Creek	-
		Ramyard Creek	-	-
		Appletree Creek	-	-
		Myall Creek	-	-
		Hellhole Creek	-	-
	Frank Creek	Halfway Creek	-	-
	Weringa Creek	-	-	-
	Two Mile Creek	-	-	-
	Downfall Creek	-	-	-
	Six Mile Creek	-	-	-

Appendix A : List of watercourses

Study subcatchment: Comet River
Primary Channel: Comet River

Watercourses (DS to US)				
1st Order	2nd Order	3rd Order	5th Order	6th Order
Comet River	Springsure Creek	Woolshed Creek	-	-
		Oaky Creek	Little Oaky Creek	-
		Pinnacle Creek	Little Pinnacle Creek	-
	Station Creek	-	-	-
	Orion Creek	Bullock Creek	-	-
		Woolshed Creek	-	-
		Broughton Creek	-	-
	Humboldt Creek	-	-	-
	American Gully	-	-	-
	Meteor Creek	Grateful Ponds Creek	-	-
		Bootes Creek	Gibbs Gully	-
			Patons Spring	-
		Sandy Creek	-	-
		Goldmine Creek	-	-
		Boss Creek	-	-
		Swinglebar Creek	-	-
		Oaky Creek	-	-
		Skeleton Creek	Back Creek	-
			Mistake Creek	-
			Fig Tree Creek	-
	Panorama Creek	Yellow Belly Creek	Peawaddy Creek	Sandy Creek
				Verandah Creek
				Stony Creek
				Sugarloaf Creek
		Consuelo Creek	Rocky Creek	Little Gorge Creek
				Mitchells Creek
				Serocold Creek
			Taranguay Creek	-
			Cabbage Creek	-
			Sandy Creek	-
			Cattle Creek	-
			Black Alley Creek	-
	Christmas Creek	Aggravation Creek (West Branch)	Aggravation Creek (East Branch)	-
	Crescent Creek	-	-	-
	Clematis Creek	May Creek	-	-
		Tommies Creek	Blank Creek	-
			Charters Creek	-
		Bridge Creek	Membrance Creek	-
			Seventree Creek	12 Mile Creek
			-	Blackfellow Creek
			-	Cattle Creek
		Jack Creek	-	-
		Native Dog Creek	-	-
		Hurdle Creek	-	-
		Hornetbank Creek	-	-
		Bullock Creek	-	-
	Brown River	Fantail Creek	-	-
		Carnarvon Creek	Charcoal Creek	-
			Woods Creek	Morella Gully
			-	Woods Gully
			-	Lobs Gully
			Home Creek	-
			Oaky Creek	-
		Moolayember Creek (Lake Nuga Nuga)	Corella Creek	-
			Morella Creek	Glenlinden Creek
			Bullaroo Creek	Picnic Creek
		Spring Creek	-	-
		Arcadia Creek	Ironbark Creek	New Creek
			Station Creek	-
			Basin Creek	-
			Bullyfrog Creek	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Appendix A : List of watercourses

Study subcatchment: Upper Balonne River Tributaries
Primary Channel: Bungil Creek

Watercourses (DS to US)					
1st Order	2nd Order	3rd Order	4th Order	5th Order	6th Order
Balonne River	Bungil Creek	Beranga Creek	-	-	-
		Waterhole Creek	-	-	-
		Paradise Creek	-	-	-
		Bony Creek	Chinaman Creek	-	-
		Blyth Creek	Warooby Creek	-	-
			Three Mile Creek	-	-
			Myall Creek	-	-
			Sleepy Creek	-	-
			Ferguson Creek	-	-
			Twelve Mile Creek	-	-
			Campbell Creek	-	-
			Coxon Creek	Appletree Creek	-
		Dingo Creek	-	-	-
			-	-	-
		Hope Creek	Lagoon Creek	-	-
			Camp Creek	Chinaman Creek	-
		Chinchinbilla Creek	Middle Creek	-	-
			-	-	-
		Cattle Creek	-	-	-
		Bungeworgerai Creek	Dargal Creek	Splitlers Creek	-
				Muckabay Creek	Ross Creek
				The Dam Creek	-
				Clerk Creek	Rosedale Creek
					Sawpit Creek
				Clark Creek	-
			Halfway Creek	-	-
			Sandy Creek	-	-
			Smith Creek	Chinaman Branch Creek	-
			Four Mile Creek	-	-
			Horse Shoe Lagoon	-	-
			Stewart Creek	Apple Tree Gully	-
				Frosty Creek	-
				Sleepy Creek	-
			Spring Creek	-	-
			Boundary Gully	-	-
			Waterhole Gully	-	-
			Alicker Creek	-	-
			Eastern Creek	-	-
			Flagstone Creek	-	-
			Alcurah Creek	Baxter Gully	-
		Damper Creek	-	-	-
		Dead Horse Creek	-	-	-
		Chinaman Creek	-	-	-
		Macartey Gully	-	-	-
		Shenton Gully	-	-	-
		Macks Gully	-	-	-
		Mooga Mooga Creek	-	-	-
		Reilly Gully	-	-	-
		Sandy Creek	-	-	-
		Eumamurrin Creek	-	-	-
		Hurdle Creek	-	-	-
		Seven Mile Creek	Three Mile Creek	-	-
		Two Mile Creek	-	-	-
		Middle Creek	-	-	-
		Downfall Creek	-	-	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Appendix A : List of watercourses

Study subcatchment: Upper Balonne River Tributaries

Primary Channel: Yuleba Creek

Watercourses (DS to US)			
1st Order	2nd Order	3rd Order	4th Order
Balonne River	Yuleba Creek	Uncle Tom Creek	-
		Blackfellow Creek	-
		Boyce Creek	-
		Clayhole Creek	-
		Mary Ann Creek	Four Mile Creek Little Mary Ann Creek
		Rocky Creek	-
		Kangaroo Creek	Carroll Creek Georges Gully
		Sandy Creek	-
		Humpy Creek	-
		Myall Creek	-
		Horse Gully	-
		Annaby Creek	-
		Black Gully	-
		Cottage Creek	Snake Creek Three Mile Gully
		Six Mile Creek	-
		Kihi Gully	-
		Wirginbah Creek	Myall Creek Chinaman Creek
		Sandy Creek	Macanally Creek Combabula Creek
		Ten Mile Creek	-
		Clifford Creek	-
		Dingo Creek	-
		Cattle Creek	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Appendix A : List of watercourses

Study subcatchment: Upper Balonne River Tributaries
Primary Channel: Balonne River

Watercourses (DS to US)					
1st Order	2nd Order	3rd Order	4th Order	5th Order	6th Order
Condamine River	Balonne River	Lynn Creek	-	-	-
		Warkon Lagoons	Salisbury Creek	-	-
			Hurley Creek	-	-
		Kangaroo Creek	-	-	-
		Yuleba Creek	-	-	-
		Myall Creek	Ogilvie Creek	-	-
		Griman Creek	-	-	-
		Wallumbilla Creek	Snake Creek	-	-
			Appletree Creek	-	-
			Pickanjinie Creek	Back Creek	-
				Paddy Ward Creek	Surlick Creek
				Six Mile Creek	-
			Washpool Creek	-	-
			Middle Creek	-	-
			Sawpit Creek	-	-
		Spring Creek	Bungil Creek	-	-
		Jones Creek	Horse Creek	-	-
		Middle Creek	Bottletree Creek	-	-
		Yalebone Creek	Back Creek	-	-
			Duncan Creek	-	-
			Emu Creek	-	-
		Sandy Creek	-	-	-
		Weribone Creek	-	-	-
		Cogoon River	Borah Creek	-	-
			Basketyard Creek	-	-
			Lookout Creek	-	-
			Mountain Hut Creek	-	-
			Nineteen Mile Creek	-	-
			Muckadilla Creek	Scrubby Creek	-
				Meejine Creek	-
				Seventeen Mile Creek	-
				Tannaby Creek	Murphy Creek
				Mt Inviting Creek	-
				Paddys Creek	-
				Frosty Creek	-
				Emu Creek	Ironbark Creek
				Hunter Creek	Back Creek
		Yungerman Creek	-	-	-
		Basin Creek	-	-	-
		Ballaroo Creek	-	-	-
		Tartulla Creek	Little Tartulla Creek	-	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Appendix A : List of watercourses

Study subcatchment: Dogwood Creek

Primary Channel: Dogwood Creek

Watercourses (DS to US)					
1st Order	2nd Order	3rd Order	4th Order	5th Order	6th Order
Condamine River	Dogwood Creek	Tchanning Creek	Barracks Creek	-	-
			Little Tchanning Creek	Moona Poola Creek	-
			Combidiban Creek	-	-
			Eaglehawk Creek	-	-
			Charmana Creek	-	-
			Reedy Creek	-	-
			Noonga Creek	Clark Creek	-
			Tin Hut Creek	-	-
			Bogandilla Creek	Myall Gully	-
		Moraby Creek	-	-	-
		Dulacca Creek	Lagoon Gully	-	-
			Maier Creek	Range Creek	Timber Gully
			Tea Creek	-	-
			J D Creek	-	-
			Seven Mile Creek	-	-
			Bishop Creek	-	-
			Byrne Creek	-	-
		Branch Creek	Eagle Creek	-	-
		Drillham Creek	Rocky Creek	-	-
		Tomahan Gully	-	-	-
		Columboola Creek	Cameby Creek	-	-
		Paddy Creek	-	-	-
		Eleven Mile Creek	Wallan Creek	Camisia Creek	-
				Two Mile Creek	-
				Wygi Creek	-
				Kangaroo Gully	-
			Nine Mile Creek	-	-
		Bottle Tree Creek	L Tree Creek	-	-
			Tin Hut Creek	-	-
		Punch-Bowl Creek	-	-	-
		Colamba Creek	-	-	-
		Wongongera Creek	-	-	-
		Hellhole Creek	Horse Gully	-	-
		Rocky Creek	-	-	-
		Sideling Creek	Little Sideling Creek	-	-
		Shinglehut Creek	-	-	-

Watercourses highlighted in blue are those where monitoring has been undertaken by Santos GLNG, FRC Environmental (2009) or URS (2009)

Appendix B Surface water assessment: statistics and guideline exceedances

Appendix B: Surface Water Assessment: Statistics and Local and Regional Guideline Exceedances (Lower and Upper Dawson River)

Catchment	Sub-Catchment	Units	Local guideline value (Upper Dawson WQO)	Local guideline value (Lower Dawson WQO)	Regional guideline value (ANZECC 95th percentile aquatic ecosystem protection)	Upper Dawson																Lower Dawson	
						Baffle Creek		Hutton Creek		Juandah - Bungaban Creeks		Dawson River to Injune		Dawson River to Taroomb		Robinson Creek		Dawson River Main Channel					
						Median	95 %ile	Median	95 %ile	Median	95 %ile	Median	95 %ile	Median	95 %ile	Median	95 %ile	Median	95 %ile				
Chlorophyll a	µg/L	5	5			15	23	15	32.8	-	-	11	18.65	12	25	-	-	-	-				
Chlorophyll b	µg/L					15	20	14	17	-	-	12.5	16.75	14	18.8	-	-	-	-				
Chlorophyll c	µg/L					18	26	17	19.2	-	-	16	19.1	18	23	-	-	-	-				
Escherichia coli	cfu/100mL					95	230	4	113	-	-	120	210	180	372	-	-	50	-				
Dissolved Organic Carbon	mg/L					-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total Organic Carbon	mg/L					-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Dissolved Oxygen (Field Test)	mg/L	7 - 9	7 - 9			7.1	10.9	6.0	9.9	6.1	7.8	6.8	11.1	7.2	10.1	7.9	10.1	-	-				
Dissolved Oxygen (Lab Test)	mg/L					7.6	10.8	7.4	12.1	6.1	7.3	9.2	11.9	7.7	11.2	7.5	8.3	7.0	7.1				
Electrical Conductivity @25°C (Lab Test)	µS/cm					144	355	164	849	180	227	145	653	234	597	980	1752	-	-				
Electrical Conductivity (Field Test)	µS/cm	370	340			188	1500	408	1053	358	1848	326	1471	327	577	999	1727	130	145				
Langelier Index	N/A					-1.0	-0.2	0.1	1.1	-0.7	-0.4	-0.1	0.9	-0.1	0.5	0.6	0.7	-	-				
pH (Lab Test)	pH units					7.6	8.1	7.6	8.2	7.8	8.0	7.6	8.4	7.7	8.2	8.0	8.1	-	-				
pH (Field Test)	pH units	6.5 - 8.5	6.5 - 8.5			7.6	8.8	7.5	8.3	7.5	8.1	7.6	8.8	7.4	8.1	7.6	7.7	7.5	7.5				
Suspended Solids	mg/L	30	10			118	1023	232	1410	207	350	136	1617	99	724	25	27	-	-				
Temperature (Field Test)	°C					20.8	30.8	21.9	29.8	25.0	29.9	20.6	33.1	21.4	30.0	20.1	23.2	22.4	22.6				
Turbidity (Field Test)	NTU	50	50			120	506	232	850	298	655	48	1040	140	650	31	56	685	685				
Turbidity (Lab Test)	NTU					170	1300	217	1340	320	706	235	1082	130	854	27	40	154	154				
Bicarbonate Alkalinity as CaCO3	mg/L					71.0	725.7	150.0	266.0	78.0	96.2	110.0	770.5	135.0	218.5	189.0	235.4	-	-				
Carbonate Alkalinity as CaCO3	mg/L					0.5	0.5	0.5	2.0	0.5	0.5	0.5	77.6	0.5	1.8	0.5	0.5	-	-				
Hydroxide	mg/L					0.05	0.1	0.05	0.08	-	-	0.05	0.16	0.05	0.1	-	-	-	-				
Hydroxide Alkalinity as CaCO3	mg/L					0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-				
Residual Alkal	meq/L					0.46	2.42	0.56	1.30	0.79	0.92	0.14	1.06	0.71	2.20	-1.79	-1.01	-	-				
Total Alkalinity as CaCO3	mg/L					67.0	136.9	150.0	264.7	78.0	96.2	114.0	553.6	137.0	209.0	189.0	235.4	-	-				
Bicarbonate as HCO3	mg/L					98	545	220	276	-	-	79.5	895	200	278	-	-	-	-				
Bromide	mg/L					0.06	0.06	0.13	0.13	-	-	0.05	0.05	0.10	0.20	-	-	0.04	0.05				
Carbonate as CO3	mg/L					0.4	27.9	1.4	1.8	-	-	0.6	152.9	1.2	2.4	-	-	-	-				
Chloride	mg/L					16.0	66.8	41.0	206.2	63.0	471.0	31.0	233.2	24.0	67.4	212.0	445.2	-	-				
Fluoride	mg/L					0.10	1.63	0.20	0.30	0.20	0.30	0.10	1.51	0.10	0.30	0.15	0.20	0.10	0.27				
Iodide	mg/L					0.005	0.005	0.005	0.005	-	-	0.005	0.005	0.005	0.009	-	-	0.005	0.005				
Sulfate as SO4 2-	mg/L	5				1	4.55	2	10	7	25	2	23	2	5	2.75	5.85	2.5	3				
Calcium	mg/L					9	16	27	71.2	19	69	14.5	57.35	22	36.15	69.5	103.25	9	11.7				
Magnesium	mg/L					4.8	6.79	10	21	5	23	6	21.35	8.4	13	25.5	43.9	2	2.85				
Potassium	mg/L					6	8	6	9.88	7	13	6	9.435	4	8	7	8.85	6.5	7				
Sodium	mg/L					17	382.15	44	132.8	52	244	23.5	448.1	32	97.3	78.5	167.9	16	21.25				
Calcium Hardness as CaCO3	mg/L					30	52.5	75	144	-	-	27.5	74	60	117.2	-	-	-	-				
Magnesium Hardness as CaCO3	mg/L					16	27	29	58	-	-	16	29.8	33	44.6	-	-	-	-				
Total Hardness as CaCO3	mg/L					48	77.5	110	204	-	-	46	104.35	93	157	-	-	-	-				
Ionic Balance	%					0.9	0.9	1.0	2.9	-	-	1.1	1.6	1.1	1.9	-	-	-	-				
Total Anions	meq/L					1.8	3.0	4.4	11.1	1.8	2.4	3.3	14.6	3.6	6.2	9.8	17.4	-	-				
Total Cations	meq/L					1.8	2.8	4.5	11.3	1.8	2.4	3.3	13.4	3.6	6.4	9.2	16.3	-	-				
Silica (Dissolved)	mg/L					20.9	30.1	13.6	23.6	21.0	25.8	11.8	17.1	14.7	20.3	9.3	11.4	16.9	17.5				
Sodium Adsorption Ratio	N/A					1.1	2.7	1.9	3.7	1.4	2.2	1.0	35.3	1.6	3.6	2.0	3.5	-	-				
Total Cyanide	mg/L					0.002	0.03	0.002	0.04	-	-	0.02	0.02	0.002	0.008	-	-	0.002	0.002				
Total Dissolved Solids @180°C	mg/L					223.0	597.1	232.0	578.4	296.0	372.4	230.0	610.0	210.0	396.6	578.0	1101.3	-	-				
Aluminium (Total)	µg/L			55		1.8	7.5	0.3	4.4	9.6	12.9	0.5	6.9	0.2	5.9	0.4	0.8	-	-				
Arsenic (Total)	µg/L			13		1.0	4.9	1.0	3.0	4.0	5.0	1.0	3.3	1.0	3.0	0.5	0.9	-	-				
Barium (Total)	µg/L					100.0	207.8	120.0	226.6	133.0	190.6	118.0	253.2	122.0	232.8	183.5	240.7	-	-				
Beryllium (Total)	µg/L					0.5	0.5	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.5	0.5	0.5	-	-				
Boron (Total)	µg/L			370		25	495	25	151	25	46	25	529	25	160	47.5	78.5	-	-				
Cadmium (Total)	µg/L			0.2		0.05	0.5	0.05	0.5	-	-	0.05	0.6	0.05	0.5	-	-	-	-				
Chromium (Total)	µg/L			1		2.0	7.6	0.5	3.8	5.0	6.6	1.0	6.7	0.5	6.2	0.5	0.5	-	-				
Cobalt (Total)	µg/L					1	5	0.5	3	4	6.2	1	3	1	4	1	1.9	-	-				
Copper (Total)	µg/L			1.4		3	5.7	2	5	7	10.4	2	4	1	6	0.8	1.9	-	-				
Iron (Total)	µg/L					3280	8656	830	4757.5	7380	9816	1405	6153.5	1400	8100	1275	2370.5	-	-				
Lead (Total)	µg/L			3.4		2	7.4	0.5	3	4	7.6	0.5	4	0.5	4	0.5	0.5	-	-				
Lithium (Total)	µg/L					-	-	-	-	4	7.6	2	3.25	4	4	0.75	1	-	-				
Manganese (Total)	µg/L			1900		90.0	362.2	106.5	648.1	236	318	257	1706.5	163	596.3	946.5	1111	-	-				
Mercury (Total)	µg/L			0.6		0.05	0.25	0.05	0.25	-	-	0.05	0.25	0.05	0.25	-	-	-	-				
Molybdenum (Total)	µg/L					0.5	0.73	0.5	1	-	-	0.5	0.85	0.5	0.5	-	-	-	-				
Nickel (Total)	µg/L			11		3	5	2	4	6	9	2	4	1	6	1	1	-	-				
Selenium (Total)	µg/L			11		5	5	5	5	-	-	5	5	5	5	-	-	-	-				
Silver (Total)	µg/L				0.05	0.5	0.5	0.5	0.5	-	-	0.5	0.5	0.5	0.5	-	-	-	-				
Strontium (Total)	µg/L					157.5	225.25	523	1797	260	322.6	305	822.4	406.5	673.1	923.5	1521	-	-				
Tin (Total)	µg/L					0.5	0.5	0.5	2.3	-	-	0.5	0.5	0.5	3.65	-	-	-	-				
Uranium (Total)	µg/L					0.5	0.5	0.5	0.5	-	-	0.5	0.5	0.5	0.5	-	-	-	-				
Vanadium (Total)	µg/L					5	10	5	5	20	26	5	7.75	5	6.75	5	5	-	-				
Zinc (Total)	µg/L			8		8	32	2.5	21.4	34	49	6	27.45	2.5	27.1	2.5	2.5	-	-				
Ammonia as N	µg/L	20	20			50	379.5	50	196.5	80	96	50	150	40	140	45	85.5	55	60				
Nitrate as N	µg/L	60	60			80	936.5	60	400	30	170	100	368	40	320	30	91	140	201				
Nitrite + Nitrate as N	µg/L	60	60			90	1016	70	414	30	180	100	371	40	320	30	91	140	201				
Nitrite as N	µg/L					5	140	5	40	-	-	5	12	5	20	-	-	5	5				
Reactive Phosphorus as P	µg/L	20	20			5	130	90	300	350	402	5	28	20	200	5	5	-	-				
Total Kjeldahl Nitrogen as N	µg/L					900	3740	900	2690	1400	1600	800	2740	600	2155	500	600	-	-				
Total Nitrogen as N	µg/L	620	500			1000	7060	1000	2785	1500	1720	800	3020	515	2400	550	600	-	-				
Total Phosphorus as P	µg/L	70	50			67	350	60	355	620	696	50	300	40	280	45	80	-	-				

Guideline Exceeded

Appendix B: Surface Water Assessment: Statistics and Regional Guideline Exceedances for Upper Balonne Tributaries

Catchment	Units	Sub-regional guideline value (QWOC 2009; 75th percentile value for EC)	Regional guideline value (ANZECC 95 th percentile species protection)	Upper Balonne Tributaries									
				Blyth Creek		Bungil Creek		Wallumbilla Creek		Yuleba Creek		Balonne River Main Channel	
				Median	95 %ile	Median	95 %ile	Median	95 %ile	Median	95 %ile	Median	95 %ile
Sub-Catchment			Summary Statistics										
Chlorophyll a	µg/L			-	-	-	-	-	-	-	-	-	-
Chlorophyll b	µg/L			-	-	-	-	-	-	-	-	-	-
Chlorophyll c	µg/L			-	-	-	-	-	-	-	-	-	-
Escherichia coli	cfu/100mL			180	288	100	400	200	218	217	328	-	-
Dissolved Organic Carbon	mg/L			9.0	17.9	10.0	17.0	11.0	16.1	12.0	16.0	9.5	15.1
Total Organic Carbon	mg/L			10	20	13	20.8	11	19.1	11	17.2	10	15
Dissolved Oxygen (Field Test)	mg/L		7 - 9	7.5	11.1	8.0	11.3	6.4	9.4	6.0	9.9	9.3	69.1
Dissolved Oxygen (Lab Test)	mg/L			6.5	9.9	6.8	9.3	6.4	9.4	7.3	9.4	7.9	9.9
Electrical Conductivity @25°C (Lab Test)	µS/cm			240	3071	914	1628	193	292	412	2278	402	526
Electrical Conductivity (Field Test)	µS/cm	325		500	2455	1083	1696	200	325	463	1686	327	508
Langeller Index	N/A			0.7	1.3	0.6	1.3	-0.8	0.2	-0.4	0.7	0.0	0.5
pH (Lab Test)	pH units			8.0	8.4	8.0	8.3	7.6	8.1	7.7	8.1	8.0	8.1
pH (Field Test)	pH units		6.5 - 7.5	8.0	8.6	7.7	8.2	7.6	8.0	7.6	7.9	7.8	8.2
Suspended Solids	mg/L			37	4640	29	223	34	165	81	552	57	299
Temperature (Field Test)	°C			19.1	30.2	17.0	27.4	17.2	28.7	18.5	28.6	16.5	29.1
Turbidity (Field Test)	NTU			33	396	48	441	77	497	89	652	146	760
Turbidity (Lab Test)	NTU	25		182	3723	44	357	135	378	253	1160	144	497
Bicarbonate Alkalinity as CaCO3	mg/L			187.5	355.6	226.0	360.8	72.5	99.7	106.0	269.5	104.5	128.3
Carbonate Alkalinity as CaCO3	mg/L			0.5	17.9	0.5	2.3	0.5	0.6	0.5	0.5	0.5	2.0
Hydroxide	mg/L			-	-	-	-	-	-	-	-	-	-
Hydroxide Alkalinity as CaCO3	mg/L			0.5	0.5	0.5	0.5	0.5	0.77	0.5	0.5	0.5	1.075
Residual Alkali	meq/L			0.45	1.07	0.61	1.40	0.47	0.68	0.28	0.98	0.07	0.61
Total Alkalinity as CaCO3	mg/L			191.0	361.8	226.0	360.8	72.5	99.7	106.0	269.5	106.0	128.3
Bicarbonate as HCO3	mg/L			-	-	-	-	-	-	-	-	-	-
Bromide	mg/L			-	-	-	-	-	-	-	-	-	-
Carbonate as CO3	mg/L			-	-	-	-	-	-	-	-	-	-
Chloride	mg/L			38.0	1015.2	122.0	289.2	9.0	25.1	59.5	424.5	45.0	81.8
Fluoride	mg/L			0.10	0.20	0.20	0.40	0.10	0.21	0.10	0.20	0.20	0.50
Iodide	mg/L			-	-	-	-	-	-	-	-	-	-
Sulfate as SO4 2-	mg/L			3	199.25	38	115.8	4	14.05	11	105.6	5	10
Calcium	mg/L			41	88.7	55	98	13	21.05	20	77.55	19	29
Magnesium	mg/L			12	67.9	14	24.45	4	7.15	8.5	37.8	12	18
Potassium	mg/L			8	12	7	9	7.5	8	8	12.95	5	6.05
Sodium	mg/L			52	713.2	109	236.35	15	26.2	54	265.6	34.5	48.2
Calcium Hardness as CaCO3	mg/L			-	-	-	-	-	-	-	-	-	-
Magnesium Hardness as CaCO3	mg/L			-	-	-	-	-	-	-	-	-	-
Total Hardness as CaCO3	mg/L			-	-	-	-	-	-	-	-	-	-
Ionic Balance	%			1.4	4.5	1.8	4.3	0.8	2.7	1.5	3.8	1.1	2.1
Total Anions	meq/L			5.6	40.5	9.4	17.6	1.8	2.7	4.1	21.1	4.0	5.0
Total Cations	meq/L			5.8	39.8	9.1	16.7	1.8	2.8	4.2	14.1	4.0	5.1
Silica (Dissolved)	mg/L			22.4	27.4	20.3	27.0	24.3	31.0	19.4	29.5	15.8	22.6
Sodium Adsorption Ratio	N/A			1.9	15.4	3.2	6.2	1.0	7.5	2.8	7.6	1.5	2.1
Total Cyanide	mg/L	7		-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids @180°C	mg/L			309.5	1686.0	530.0	969.2	230.0	402.3	448.0	914.4	281.5	360.9
Aluminium (Total)	mg/L	55		0.7	14.7	0.8	9.8	3.6	9.2	2.3	23.0	3.0	12.1
Arsenic (Total)	µg/L	13		1.0	3.8	2.0	4.5	2.0	6.0	2.0	5.6	1.0	3.0
Barium (Total)	µg/L			159.0	221.1	128.5	204.4	95.0	139.0	158.0	273.4	110.5	141.1
Beryllium (Total)	µg/L			0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	0.5	0.5
Boron (Total)	µg/L	370		55	248.5	80	140	25	28.5	60	150	25	90
Cadmium (Total)	µg/L	0.2		0.05	0.05	0.05	0.05	0.05	0.11	0.05	0.05	0.05	0.2
Chromium (Total)	µg/L	1		0.5	13.0	0.5	7.0	3.0	7.3	2.0	15.4	3.5	18.1
Cobalt (Total)	µg/L			1	5	2	4	2	4.2	2	8.6	2	6
Copper (Total)	µg/L	1.4		2	8	2	8	3	8	2	11	3.5	10
Iron (Total)	µg/L			820	17432	1290	13495	4700	10580	4410	23020	4280	16000
Lead (Total)	µg/L	3.4		0.5	6	0.5	6.45	2	4	2	8.6	1	4
Lithium (Total)	µg/L			6	28	4	9.75	6	12.25	8	17.5	2	4
Manganese (Total)	µg/L	1900		232.5	831.4	348.5	1590	153	661.2	432	1408	155.0	307.1
Mercury (Total)	µg/L	0.6		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Molybdenum (Total)	µg/L			1	2	0.75	2	0.5	1	0.5	0.8	0.5	0.5
Nickel (Total)	µg/L	11		2	10.7	2	7.45	4	10	4	16	6	19
Selenium (Total)	µg/L	11		5	5	5	5	5	5	5	5	5	5
Silver (Total)	µg/L	0.05		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Strontium (Total)	µg/L			730	3902	923	1572	155	235	308	1045	266	349.95
Tin (Total)	µg/L			0.5	0.5	0.5	0.5	0.5	0.88	0.5	1.5	0.5	0.5
Uranium (Total)	µg/L			0.5	2	0.5	1.75	0.5	0.63	0.5	0.5	0.5	0.5
Vanadium (Total)	µg/L			5	30	5	30	10	40	5	65	10	40
Zinc (Total)	µg/L	8		2.5	41.6	8	30.4	11	25	8	61.5	9	28
Ammonia as N	µg/L	900		40	312	40	130	30	330	50	132	20	89
Nitrate as N	µg/L	15		20	121.5	30	228	25	132	40	638	55	2151
Nitrite + Nitrate as N	µg/L	15		20	135	30	270	20	510	40	860	55	2183
Nitrite as N	µg/L			5	5	5	18	5	38.5	5	70	5	5
Reactive Phosphorus as P	µg/L	15		20	153	20	528	7.5	480.5	10	102	50	150
Total Kjeldahl Nitrogen as N	µg/L			900	4560	700	2240	1000	2000	1000	2415	800	1200
Total Nitrogen as N	µg/L	250		850	4655	800	2345	1000	2040	1100	2840	800	3010
Total Phosphorus as P	µg/L	20		90	420	180	760	190	480	180	855	215	642.5

Guideline Exceeded

Appendix C List of wetlands within GFD Project area

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Study Subcatchment: Comet River

Study Catchment	Wetland ID	Area (ha)	Classification	Habitat Code	Habitat description
Comet River	46157	81.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46272	5.14	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46169	4.15	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46180	1.37	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46184	4.50	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46189	3.90	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46197	3.74	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46103	16.44	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46205	22.50	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	46299	8.94	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46227	2.90	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46119	1.50	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46231	9.70	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46246	1.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46322	3.06	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46148	9.78	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46255	11.22	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46258	2.81	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46215	8.00	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	46125	2.56	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46102	4.56	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46217	7.66	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46190	5.69	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46256	1.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45200	3.72	Riverine	50	Riverine
Comet River	45205	14.87	Riverine	50	Riverine
Comet River	45206	6.84	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44650	980.40	Riverine	50	Riverine
Comet River	45014	20.29	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	44949	329.26	Riverine	50	Riverine
Comet River	45228	3.46	Riverine	50	Riverine
Comet River	45735	2.19	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46081	3.28	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45250	4.79	Riverine	50	Riverine
Comet River	45252	4.84	Riverine	50	Riverine
Comet River	45883	1.25	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Comet River	45017	6.04	Riverine	50	Riverine
Comet River	45261	1.13	Riverine	50	Riverine
Comet River	46086	1.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46088	4.02	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45065	4.94	Palustrine	2a	Coastal/ Sub-Coastal non-floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	45518	2.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45907	1.19	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46098	2.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45086	12.51	Palustrine	2a	Coastal/ Sub-Coastal non-floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	45303	5.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45923	27.56	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45924	2.57	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45074	1.14	Riverine	50	Riverine
Comet River	45076	22.77	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	45072	23.14	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Comet River	45077	11.46	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Comet River	45793	6.50	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45333	1.19	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45094	18.66	Palustrine	2a	Coastal/ Sub-Coastal non-floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	45813	4.81	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45133	2.13	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45821	1.56	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45822	8.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45826	2.69	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46057	2.94	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46066	2.50	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45659	4.94	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45970	117.27	Riverine	50	Riverine
Comet River	45858	1.25	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45701	1.75	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45866	2.56	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45982	1.32	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	43746	900.37	Riverine	50	Riverine
Comet River	44777	2.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45003	9.08	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44450	1.44	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Comet River	44805	29.69	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	44070	30.76	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44461	17.33	Riverine	50	Riverine
Comet River	44087	1.19	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44291	1.50	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44842	28.47	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	44850	1.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44863	13.70	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44871	1.38	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44115	5.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44497	11.50	Palustrine	2a	Coastal/ Sub-Coastal non-floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	44876	1.06	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44877	3.50	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44883	7.27	Riverine	50	Riverine
Comet River	43962	5.87	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44514	110.23	Palustrine	2a	Coastal/ Sub-Coastal non-floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	44158	3.80	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44918	10.19	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44926	13.81	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44362	1.37	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44534	4.25	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44537	34.07	Riverine	50	Riverine
Comet River	44713	1.31	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44936	2.25	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44954	2.31	Riverine	50	Riverine
Comet River	43833	1.93	Riverine	50	Riverine
Comet River	44017	1.89	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45481	5.37	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45956	165.92	Riverine	50	Riverine
Comet River	44252	63.96	Riverine	50	Riverine
Comet River	44081	6.63	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	44822	28.73	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	43809	1.31	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44576	1.06	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45242	1.42	Riverine	50	Riverine
Comet River	45752	3.13	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45764	3.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45926	4.44	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Comet River	45558	1.44	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45691	1.13	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44421	2.20	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44838	6.25	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Comet River	44951	7.07	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Comet River	44577	4.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	46090	1.69	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45088	1.25	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45108	1.31	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45690	1.50	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45463	3.25	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45862	2.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44317	4.81	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	45839	2.63	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44066	2.00	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44479	6.69	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Comet River	44864	6.69	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Study Subcatchment: Upper Dawson River

Study Catchment	Wetland ID	Classification	Habitat Code	Habitat description
Upper Dawson River	46398	Riverine	50	Riverine
Upper Dawson River	46436	Riverine	50	Riverine
Upper Dawson River	46440	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46578	Riverine	50	Riverine
Upper Dawson River	46693	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46918	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46399	Riverine	50	Riverine
Upper Dawson River	46441	Riverine	50	Riverine
Upper Dawson River	46444	Riverine	50	Riverine
Upper Dawson River	46402	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46448	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46449	Riverine	50	Riverine
Upper Dawson River	46825	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46450	Riverine	50	Riverine
Upper Dawson River	46527	Riverine	50	Riverine
Upper Dawson River	46717	Riverine	50	Riverine
Upper Dawson River	46530	Riverine	50	Riverine
Upper Dawson River	46537	Riverine	50	Riverine
Upper Dawson River	46543	Riverine	50	Riverine
Upper Dawson River	46609	Riverine	50	Riverine
Upper Dawson River	46722	Riverine	50	Riverine
Upper Dawson River	46724	Riverine	50	Riverine
Upper Dawson River	46535	Riverine	50	Riverine
Upper Dawson River	46547	Riverine	50	Riverine
Upper Dawson River	46727	Riverine	50	Riverine
Upper Dawson River	46731	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46840	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46550	Riverine	50	Riverine
Upper Dawson River	46617	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46738	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46740	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46558	Riverine	50	Riverine
Upper Dawson River	46623	Riverine	50	Riverine
Upper Dawson River	46624	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46626	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46745	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46106	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46604	Riverine	50	Riverine
Upper Dawson River	46632	Riverine	50	Riverine
Upper Dawson River	46634	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46646	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46866	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46868	Riverine	50	Riverine
Upper Dawson River	46652	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46656	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Upper Dawson River	46884	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46572	Riverine	50	Riverine
Upper Dawson River	46663	Riverine	50	Riverine
Upper Dawson River	46666	Riverine	50	Riverine
Upper Dawson River	46780	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46667	Riverine	50	Riverine
Upper Dawson River	46668	Riverine	50	Riverine
Upper Dawson River	46672	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46784	Riverine	50	Riverine
Upper Dawson River	46789	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46894	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46427	Riverine	50	Riverine
Upper Dawson River	46500	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46681	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46898	Riverine	50	Riverine
Upper Dawson River	46691	Riverine	50	Riverine
Upper Dawson River	46906	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46907	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46911	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46921	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46923	Riverine	50	Riverine
Upper Dawson River	46934	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46933	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46937	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46939	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46940	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46941	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46818	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46608	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46612	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46855	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46422	Riverine	50	Riverine
Upper Dawson River	46584	Riverine	50	Riverine
Upper Dawson River	46433	Riverine	50	Riverine
Upper Dawson River	46719	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46597	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46526	Riverine	50	Riverine
Upper Dawson River	46532	Riverine	50	Riverine
Upper Dawson River	46715	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46613	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46671	Riverine	50	Riverine
Upper Dawson River	46902	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Upper Dawson River	46942	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46627	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46496	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46569	Riverine	50	Riverine
Upper Dawson River	46930	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46943	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46338	Riverine	50	Riverine
Upper Dawson River	46342	Riverine	50	Riverine
Upper Dawson River	46381	Riverine	50	Riverine
Upper Dawson River	46437	Riverine	50	Riverine
Upper Dawson River	46438	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46413	Riverine	50	Riverine
Upper Dawson River	46439	Riverine	50	Riverine
Upper Dawson River	46509	Riverine	50	Riverine
Upper Dawson River	46510	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46511	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46513	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46590	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46591	Riverine	50	Riverine
Upper Dawson River	46692	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46694	Riverine	50	Riverine
Upper Dawson River	46695	Riverine	50	Riverine
Upper Dawson River	46696	Riverine	50	Riverine
Upper Dawson River	46684	Riverine	50	Riverine
Upper Dawson River	46697	Riverine	50	Riverine
Upper Dawson River	46699	Riverine	50	Riverine
Upper Dawson River	46700	Riverine	50	Riverine
Upper Dawson River	46621	Riverine	50	Riverine
Upper Dawson River	46701	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46615	Riverine	50	Riverine
Upper Dawson River	46702	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46812	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46813	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46814	Riverine	50	Riverine
Upper Dawson River	46815	Riverine	50	Riverine
Upper Dawson River	46817	Riverine	50	Riverine
Upper Dawson River	46819	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46805	Riverine	50	Riverine
Upper Dawson River	46820	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46821	Riverine	50	Riverine
Upper Dawson River	46914	Riverine	50	Riverine
Upper Dawson River	46916	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46917	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46919	Riverine	50	Riverine
Upper Dawson River	46269	Riverine	50	Riverine
Upper Dawson River	46343	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46344	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps

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Upper Dawson River	46345	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46347	Palustrine	2a	Coastal/ Sub-Coastal non-floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46442	Riverine	50	Riverine
Upper Dawson River	46445	Riverine	50	Riverine
Upper Dawson River	46514	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46515	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46452	Riverine	50	Riverine
Upper Dawson River	46516	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46517	Riverine	50	Riverine
Upper Dawson River	46592	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46593	Riverine	50	Riverine
Upper Dawson River	46594	Riverine	50	Riverine
Upper Dawson River	46596	Riverine	50	Riverine
Upper Dawson River	46703	Riverine	50	Riverine
Upper Dawson River	46704	Riverine	50	Riverine
Upper Dawson River	46705	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46706	Riverine	50	Riverine
Upper Dawson River	46690	Riverine	50	Riverine
Upper Dawson River	46707	Riverine	50	Riverine
Upper Dawson River	46348	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46349	Palustrine	2a	Coastal/ Sub-Coastal non-floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46350	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46351	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46447	Riverine	50	Riverine
Upper Dawson River	46520	Riverine	50	Riverine
Upper Dawson River	46522	Riverine	50	Riverine
Upper Dawson River	46523	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46524	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46525	Riverine	50	Riverine
Upper Dawson River	46598	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46600	Riverine	50	Riverine
Upper Dawson River	46601	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46602	Riverine	50	Riverine
Upper Dawson River	46709	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46710	Riverine	50	Riverine
Upper Dawson River	46711	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46712	Riverine	50	Riverine
Upper Dawson River	46713	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46714	Riverine	50	Riverine
Upper Dawson River	46826	Riverine	50	Riverine
Upper Dawson River	46828	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46355	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46356	Riverine	50	Riverine
Upper Dawson River	46360	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46361	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46403	Riverine	50	Riverine
Upper Dawson River	46454	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46455	Riverine	50	Riverine
Upper Dawson River	46456	Riverine	50	Riverine
Upper Dawson River	46528	Riverine	50	Riverine
Upper Dawson River	46533	Riverine	50	Riverine
Upper Dawson River	46603	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46605	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46606	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46607	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46716	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46718	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46829	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46363	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46364	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46365	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46366	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46367	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46368	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46457	Riverine	50	Riverine
Upper Dawson River	46458	Riverine	50	Riverine
Upper Dawson River	46459	Riverine	50	Riverine
Upper Dawson River	46460	Riverine	50	Riverine
Upper Dawson River	46536	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46538	Riverine	50	Riverine
Upper Dawson River	46539	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46541	Lacustrine	9	Coastal/ Sub-coastal non-floodplain soil lakes
Upper Dawson River	46610	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46720	Riverine	50	Riverine
Upper Dawson River	46723	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46725	Riverine	50	Riverine
Upper Dawson River	46726	Riverine	50	Riverine
Upper Dawson River	46830	Riverine	50	Riverine
Upper Dawson River	46831	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46832	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46833	Riverine	50	Riverine
Upper Dawson River	46834	Riverine	50	Riverine
Upper Dawson River	46287	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46288	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46369	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46371	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46370	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46406	Riverine	50	Riverine
Upper Dawson River	46461	Riverine	50	Riverine
Upper Dawson River	46462	Riverine	50	Riverine
Upper Dawson River	46463	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46464	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46466	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46544	Riverine	50	Riverine
Upper Dawson River	46545	Riverine	50	Riverine
Upper Dawson River	46546	Lacustrine	9	Coastal/ Sub-coastal non-floodplain soil lakes
Upper Dawson River	46611	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46728	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46729	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46730	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46838	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46839	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46841	Riverine	50	Riverine
Upper Dawson River	46843	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46289	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46292	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46372	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46373	Riverine	50	Riverine
Upper Dawson River	46374	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46375	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46467	Riverine	50	Riverine
Upper Dawson River	46468	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46472	Riverine	50	Riverine
Upper Dawson River	46474	Riverine	50	Riverine
Upper Dawson River	46471	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46475	Riverine	50	Riverine
Upper Dawson River	46551	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46618	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46732	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46733	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46734	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46735	Riverine	50	Riverine
Upper Dawson River	46736	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46844	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46846	Riverine	50	Riverine
Upper Dawson River	46847	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46849	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46850	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46291	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46293	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46376	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46377	Riverine	50	Riverine
Upper Dawson River	46378	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46477	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46478	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46556	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46557	Riverine	50	Riverine
Upper Dawson River	46625	Riverine	50	Riverine
Upper Dawson River	46628	Lacustrine	9	Coastal/ Sub-coastal non-floodplain soil lakes
Upper Dawson River	46629	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46741	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46742	Riverine	50	Riverine
Upper Dawson River	46743	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46744	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46746	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46747	Riverine	50	Riverine
Upper Dawson River	46851	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46853	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46854	Riverine	50	Riverine
Upper Dawson River	46295	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46296	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46297	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46300	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46302	Riverine	50	Riverine
Upper Dawson River	46380	Riverine	50	Riverine
Upper Dawson River	46383	Riverine	50	Riverine
Upper Dawson River	46384	Riverine	50	Riverine
Upper Dawson River	46385	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46480	Riverine	50	Riverine
Upper Dawson River	46481	Riverine	50	Riverine
Upper Dawson River	46482	Riverine	50	Riverine
Upper Dawson River	46483	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46484	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46485	Riverine	50	Riverine
Upper Dawson River	46486	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46560	Riverine	50	Riverine
Upper Dawson River	46561	Riverine	50	Riverine
Upper Dawson River	46630	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46631	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46637	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46638	Lacustrine	9	Coastal/ Sub-coastal non-floodplain soil lakes
Upper Dawson River	46640	Riverine	50	Riverine
Upper Dawson River	46748	Riverine	50	Riverine
Upper Dawson River	46749	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46750	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46751	Riverine	50	Riverine
Upper Dawson River	46754	Riverine	50	Riverine
Upper Dawson River	46755	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46857	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46858	Riverine	50	Riverine
Upper Dawson River	46859	Riverine	50	Riverine
Upper Dawson River	46860	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46861	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46303	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46305	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46387	Riverine	50	Riverine
Upper Dawson River	46389	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46487	Riverine	50	Riverine
Upper Dawson River	46562	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46563	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46564	Riverine	50	Riverine
Upper Dawson River	46642	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46643	Riverine	50	Riverine
Upper Dawson River	46644	Riverine	50	Riverine
Upper Dawson River	46645	Riverine	50	Riverine
Upper Dawson River	46647	Riverine	50	Riverine
Upper Dawson River	46756	Riverine	50	Riverine
Upper Dawson River	46757	Riverine	50	Riverine
Upper Dawson River	46758	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46752	Riverine	50	Riverine
Upper Dawson River	46760	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46761	Riverine	50	Riverine
Upper Dawson River	46762	Riverine	50	Riverine
Upper Dawson River	46862	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46863	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46864	Riverine	50	Riverine
Upper Dawson River	46865	Riverine	50	Riverine
Upper Dawson River	46307	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46309	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46310	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46312	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46390	Lacustrine	9	Coastal/ Sub-coastal non-floodplain soil lakes
Upper Dawson River	46391	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46488	Riverine	50	Riverine
Upper Dawson River	46489	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46491	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46648	Riverine	50	Riverine
Upper Dawson River	46649	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46651	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46763	Riverine	50	Riverine
Upper Dawson River	46765	Riverine	50	Riverine
Upper Dawson River	46766	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46768	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46871	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46872	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46873	Riverine	50	Riverine
Upper Dawson River	46874	Riverine	50	Riverine
Upper Dawson River	46875	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Dawson River	46876	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46313	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46314	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46394	Palustrine	3	Coastal/ Sub-Coastal non-floodplain (spring) swamps
Upper Dawson River	46414	Riverine	50	Riverine
Upper Dawson River	46567	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46655	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46657	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46660	Riverine	50	Riverine
Upper Dawson River	46661	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46769	Riverine	50	Riverine
Upper Dawson River	46770	Riverine	50	Riverine
Upper Dawson River	46771	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46772	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46773	Riverine	50	Riverine
Upper Dawson River	46774	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46877	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46878	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46879	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46880	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46883	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46317	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46318	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46320	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46395	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Dawson River	46415	Riverine	50	Riverine
Upper Dawson River	46417	Riverine	50	Riverine
Upper Dawson River	46493	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46494	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46568	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46570	Riverine	50	Riverine
Upper Dawson River	46574	Riverine	50	Riverine
Upper Dawson River	46575	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46576	Riverine	50	Riverine
Upper Dawson River	46662	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46664	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46775	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46776	Riverine	50	Riverine
Upper Dawson River	46777	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46778	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46779	Riverine	50	Riverine
Upper Dawson River	46781	Riverine	50	Riverine
Upper Dawson River	46885	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46887	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46888	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46889	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Dawson River	46321	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46323	Riverine	50	Riverine
Upper Dawson River	46396	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46420	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46423	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46424	Riverine	50	Riverine
Upper Dawson River	46498	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46499	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46573	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46577	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46580	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46669	Riverine	50	Riverine
Upper Dawson River	46673	Riverine	50	Riverine
Upper Dawson River	46674	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46675	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46677	Riverine	50	Riverine
Upper Dawson River	46678	Riverine	50	Riverine
Upper Dawson River	46679	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46782	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46783	Riverine	50	Riverine
Upper Dawson River	46785	Riverine	50	Riverine
Upper Dawson River	46786	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46787	Riverine	50	Riverine
Upper Dawson River	46788	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46891	Riverine	50	Riverine
Upper Dawson River	46892	Riverine	50	Riverine
Upper Dawson River	46893	Riverine	50	Riverine
Upper Dawson River	46895	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46896	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Dawson River	46324	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46326	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46328	Riverine	50	Riverine
Upper Dawson River	46329	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46330	Riverine	50	Riverine
Upper Dawson River	46419	Riverine	50	Riverine
Upper Dawson River	46429	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46503	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46504	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46581	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46582	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46585	Riverine	50	Riverine
Upper Dawson River	46680	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46682	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46683	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46685	Riverine	50	Riverine
Upper Dawson River	46790	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46792	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46794	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46795	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46796	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46797	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46798	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46799	Riverine	50	Riverine
Upper Dawson River	46897	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46899	Riverine	50	Riverine
Upper Dawson River	46900	Riverine	50	Riverine
Upper Dawson River	46901	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Dawson River	46903	Riverine	50	Riverine
Upper Dawson River	46431	Riverine	50	Riverine
Upper Dawson River	46432	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46434	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46505	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46506	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46507	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46587	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46686	Riverine	50	Riverine
Upper Dawson River	46687	Riverine	50	Riverine
Upper Dawson River	46688	Riverine	50	Riverine
Upper Dawson River	46801	Riverine	50	Riverine
Upper Dawson River	46802	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46803	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46804	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46807	Riverine	50	Riverine
Upper Dawson River	46809	Riverine	50	Riverine
Upper Dawson River	46810	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46904	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46908	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46909	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46910	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46963	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46964	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46959	Riverine	50	Riverine
Upper Dawson River	46960	Riverine	50	Riverine
Upper Dawson River	46961	Riverine	50	Riverine
Upper Dawson River	46962	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46925	Riverine	50	Riverine
Upper Dawson River	46926	Riverine	50	Riverine
Upper Dawson River	46927	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46965	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46935	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46966	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46967	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46968	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46969	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46928	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46929	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46931	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46932	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46970	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46936	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46938	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46945	Riverine	50	Riverine
Upper Dawson River	46947	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46948	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46952	Riverine	50	Riverine
Upper Dawson River	46953	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46954	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46949	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46957	Riverine	50	Riverine
Upper Dawson River	46958	Riverine	50	Riverine
Upper Dawson River	46955	Riverine	50	Riverine
Upper Dawson River	8762	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	9480	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	9670	Riverine	50	Riverine
Upper Dawson River	9508	Riverine	50	Riverine
Upper Dawson River	8568	Riverine	50	Riverine
Upper Dawson River	9006	Riverine	50	Riverine
Upper Dawson River	9007	Riverine	50	Riverine
Upper Dawson River	8902	Riverine	50	Riverine
Upper Dawson River	9147	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	8912	Riverine	50	Riverine
Upper Dawson River	9031	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	9156	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	9588	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	8932	Riverine	50	Riverine
Upper Dawson River	8491	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	9059	Riverine	50	Riverine
Upper Dawson River	8500	Riverine	50	Riverine
Upper Dawson River	8504	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	8518	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	8530	Riverine	50	Riverine
Upper Dawson River	8959	Riverine	50	Riverine
Upper Dawson River	8960	Riverine	50	Riverine
Upper Dawson River	8534	Riverine	50	Riverine
Upper Dawson River	8535	Riverine	50	Riverine
Upper Dawson River	8972	Riverine	50	Riverine
Upper Dawson River	9449	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46340	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46400	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46595	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46352	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46519	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46453	Riverine	50	Riverine
Upper Dawson River	46404	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46540	Riverine	50	Riverine
Upper Dawson River	46721	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46836	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46614	Riverine	50	Riverine
Upper Dawson River	46837	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46548	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46620	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46739	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46845	Riverine	50	Riverine
Upper Dawson River	46856	Riverine	50	Riverine
Upper Dawson River	46559	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46639	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46304	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46759	Riverine	50	Riverine
Upper Dawson River	46867	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46869	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46316	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46412	Riverine	50	Riverine
Upper Dawson River	46882	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46319	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46890	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46579	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46583	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46335	Riverine	50	Riverine
Upper Dawson River	46806	Riverine	50	Riverine
Upper Dawson River	46905	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46944	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46956	Riverine	50	Riverine
Upper Dawson River	9160	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46698	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46920	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46428	Riverine	50	Riverine
Upper Dawson River	46443	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46446	Riverine	50	Riverine
Upper Dawson River	46451	Riverine	50	Riverine
Upper Dawson River	46465	Riverine	50	Riverine
Upper Dawson River	46469	Riverine	50	Riverine
Upper Dawson River	46616	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46848	Riverine	50	Riverine
Upper Dawson River	46379	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46408	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46635	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46410	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46490	Riverine	50	Riverine
Upper Dawson River	46764	Riverine	50	Riverine
Upper Dawson River	46870	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46492	Riverine	50	Riverine
Upper Dawson River	46497	Riverine	50	Riverine
Upper Dawson River	46886	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46327	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46586	Riverine	50	Riverine
Upper Dawson River	46791	Riverine	50	Riverine
Upper Dawson River	46808	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	8505	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46589	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46912	Riverine	50	Riverine
Upper Dawson River	46913	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46915	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46346	Riverine	50	Riverine
Upper Dawson River	46824	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46357	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46407	Riverine	50	Riverine
Upper Dawson River	46842	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46473	Riverine	50	Riverine
Upper Dawson River	46554	Riverine	50	Riverine
Upper Dawson River	46636	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	46388	Riverine	50	Riverine
Upper Dawson River	46767	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46881	Riverine	50	Riverine
Upper Dawson River	46416	Riverine	50	Riverine
Upper Dawson River	46421	Riverine	50	Riverine
Upper Dawson River	46670	Riverine	50	Riverine
Upper Dawson River	46331	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46501	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46793	Riverine	50	Riverine
Upper Dawson River	46800	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46950	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46951	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	9019	Riverine	50	Riverine
Upper Dawson River	46508	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46816	Riverine	50	Riverine
Upper Dawson River	46822	Riverine	50	Riverine
Upper Dawson River	46823	Riverine	50	Riverine
Upper Dawson River	46518	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46599	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46827	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46405	Riverine	50	Riverine
Upper Dawson River	46835	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46470	Riverine	50	Riverine
Upper Dawson River	46552	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46619	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Dawson River	46479	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46622	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46852	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46633	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46753	Riverine	50	Riverine
Upper Dawson River	46409	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46641	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46566	Riverine	50	Riverine
Upper Dawson River	46658	Riverine	50	Riverine
Upper Dawson River	46418	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46495	Riverine	50	Riverine
Upper Dawson River	46426	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Dawson River	46430	Riverine	50	Riverine
Upper Dawson River	46588	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46689	Riverine	50	Riverine
Upper Dawson River	46811	Riverine	50	Riverine
Upper Dawson River	46922	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	46924	Riverine	50	Riverine
Upper Dawson River	46946	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	8984	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Dawson River	9009	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	8955	Riverine	50	Riverine
Upper Dawson River	8967	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	9444	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Dawson River	9446	Riverine	50	Riverine
Upper Dawson River	8974	Riverine	50	Riverine
Upper Dawson River	50789	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Study Subcatchment: Lower Dawson River

Study Catchment	Wetland ID	Classification	Habitat Code	Habitat description
Lower Dawson River	45297	Riverine	50	Riverine
Lower Dawson River	45864	Riverine	50	Riverine
Lower Dawson River	45881	Riverine	50	Riverine
Lower Dawson River	45999	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	46001	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45019	Riverine	50	Riverine
Lower Dawson River	45894	Palustrine	2c	Coastal/ Sub-coastal non-floodplain grass, sedge and herb swamps
Lower Dawson River	45920	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Lower Dawson River	45117	Riverine	50	Riverine
Lower Dawson River	45802	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Lower Dawson River	45947	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Lower Dawson River	45953	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45838	Riverine	50	Riverine
Lower Dawson River	45427	Riverine	50	Riverine
Lower Dawson River	45977	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45959	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45846	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Lower Dawson River	45921	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Lower Dawson River	45983	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45922	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45825	Riverine	50	Riverine
Lower Dawson River	45863	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45989	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Lower Dawson River	45955	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Lower Dawson River	45992	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Lower Dawson River	45987	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Study Subcatchment: Upper Balonne River Tributaries

Study Catchment	Wetland ID	Classification	Habitat Code	Habitat description
Upper Balonne Tributaries	50924	Riverine	50	Riverine
Upper Balonne Tributaries	50789	Riverine	50	Riverine
Upper Balonne Tributaries	50819	Riverine	50	Riverine
Upper Balonne Tributaries	50839	Riverine	50	Riverine
Upper Balonne Tributaries	50868	Riverine	50	Riverine
Upper Balonne Tributaries	50748	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	50749	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	50759	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	50880	Riverine	50	Riverine
Upper Balonne Tributaries	50887	Riverine	50	Riverine
Upper Balonne Tributaries	50786	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51132	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51133	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51365	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51369	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51373	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51646	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51659	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51661	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51662	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51669	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51960	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51961	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51967	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51972	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52037	Riverine	50	Riverine
Upper Balonne Tributaries	52206	Riverine	50	Riverine
Upper Balonne Tributaries	52232	Riverine	50	Riverine
Upper Balonne Tributaries	52238	Riverine	50	Riverine
Upper Balonne Tributaries	52239	Riverine	50	Riverine
Upper Balonne Tributaries	52240	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52241	Riverine	50	Riverine
Upper Balonne Tributaries	52655	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52467	Riverine	50	Riverine
Upper Balonne Tributaries	51115	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51119	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51123	Riverine	50	Riverine
Upper Balonne Tributaries	51124	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51125	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51384	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51297	Riverine	50	Riverine
Upper Balonne Tributaries	51390	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51393	Riverine	50	Riverine
Upper Balonne Tributaries	51395	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51685	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51979	Riverine	50	Riverine
Upper Balonne Tributaries	51988	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52251	Riverine	50	Riverine

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Upper Balonne Tributaries	52255	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52497	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52500	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52665	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52666	Riverine	50	Riverine
Upper Balonne Tributaries	52670	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52672	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	50935	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51145	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51397	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51401	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51396	Riverine	50	Riverine
Upper Balonne Tributaries	51411	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51412	Riverine	50	Riverine
Upper Balonne Tributaries	51686	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51687	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51701	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51703	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51993	Riverine	50	Riverine
Upper Balonne Tributaries	51997	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52001	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52272	Riverine	50	Riverine
Upper Balonne Tributaries	52274	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52679	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	50969	Riverine	50	Riverine
Upper Balonne Tributaries	51159	Riverine	50	Riverine
Upper Balonne Tributaries	51162	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51413	Riverine	50	Riverine
Upper Balonne Tributaries	51421	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51423	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51424	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51428	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51707	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51710	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51712	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52019	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52522	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	50947	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51167	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51171	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51175	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51715	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51714	Riverine	50	Riverine
Upper Balonne Tributaries	51730	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51733	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)

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Upper Balonne Tributaries	51734	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51736	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51744	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52030	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52034	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52306	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52310	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	50973	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	50976	Riverine	50	Riverine
Upper Balonne Tributaries	51450	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51453	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51467	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51747	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51758	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52040	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52329	Riverine	50	Riverine
Upper Balonne Tributaries	52334	Riverine	50	Riverine
Upper Balonne Tributaries	52543	Riverine	50	Riverine
Upper Balonne Tributaries	52722	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51203	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51204	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51209	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51474	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51481	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51765	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51775	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52056	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52061	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52541	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	50987	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51224	Riverine	50	Riverine
Upper Balonne Tributaries	51487	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51488	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51789	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51804	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52076	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52077	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52078	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52083	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52092	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52369	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	52377	Riverine	50	Riverine
Upper Balonne Tributaries	51229	Riverine	50	Riverine
Upper Balonne Tributaries	51232	Riverine	50	Riverine
Upper Balonne Tributaries	51239	Riverine	50	Riverine
Upper Balonne Tributaries	51496	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Upper Balonne Tributaries	51498	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51500	Riverine	50	Riverine
Upper Balonne Tributaries	51508	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51509	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51513	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51515	Riverine	50	Riverine
Upper Balonne Tributaries	51806	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51812	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51813	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	51815	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51817	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52097	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52392	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52568	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52420	Riverine	50	Riverine
Upper Balonne Tributaries	51243	Riverine	50	Riverine
Upper Balonne Tributaries	51251	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51255	Riverine	50	Riverine
Upper Balonne Tributaries	51518	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51525	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51529	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51532	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52111	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52112	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52114	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51052	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51269	Riverine	50	Riverine
Upper Balonne Tributaries	51270	Riverine	50	Riverine
Upper Balonne Tributaries	51272	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51541	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51542	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51548	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51845	Riverine	50	Riverine
Upper Balonne Tributaries	51847	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52121	Riverine	50	Riverine
Upper Balonne Tributaries	52122	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52590	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51044	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51275	Riverine	50	Riverine
Upper Balonne Tributaries	51278	Riverine	50	Riverine
Upper Balonne Tributaries	51285	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51288	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51289	Riverine	50	Riverine
Upper Balonne Tributaries	51567	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51867	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51870	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52136	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Upper Balonne Tributaries	52138	Riverine	50	Riverine
Upper Balonne Tributaries	52146	Riverine	50	Riverine
Upper Balonne Tributaries	52430	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52432	Riverine	50	Riverine
Upper Balonne Tributaries	52597	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52602	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52604	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51081	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51290	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51292	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51294	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51296	Riverine	50	Riverine
Upper Balonne Tributaries	51298	Riverine	50	Riverine
Upper Balonne Tributaries	51302	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51305	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51571	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51572	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51575	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51577	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51578	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	51584	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51893	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51896	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52151	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52157	Riverine	50	Riverine
Upper Balonne Tributaries	52162	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52163	Riverine	50	Riverine
Upper Balonne Tributaries	52606	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52614	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52622	Riverine	50	Riverine
Upper Balonne Tributaries	51061	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51078	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51299	Riverine	50	Riverine
Upper Balonne Tributaries	51313	Riverine	50	Riverine
Upper Balonne Tributaries	51319	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51325	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51329	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51589	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51592	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51596	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51598	Riverine	50	Riverine
Upper Balonne Tributaries	51903	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51915	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51922	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52169	Riverine	50	Riverine
Upper Balonne Tributaries	52175	Riverine	50	Riverine
Upper Balonne Tributaries	51112	Riverine	50	Riverine
Upper Balonne Tributaries	51342	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

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Upper Balonne Tributaries	51604	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51608	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51610	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51611	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51614	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51620	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51618	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51929	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51938	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51940	Riverine	50	Riverine
Upper Balonne Tributaries	52186	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	52193	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52194	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52201	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52639	Riverine	50	Riverine
Upper Balonne Tributaries	51359	Riverine	50	Riverine
Upper Balonne Tributaries	51361	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51363	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51624	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51625	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	51616	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51638	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51639	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51642	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51645	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51648	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51951	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52205	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52215	Riverine	50	Riverine
Upper Balonne Tributaries	50874	Riverine	50	Riverine
Upper Balonne Tributaries	51969	Riverine	50	Riverine
Upper Balonne Tributaries	52303	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52304	Riverine	50	Riverine
Upper Balonne Tributaries	51732	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52547	Riverine	50	Riverine
Upper Balonne Tributaries	50993	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51794	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51811	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51537	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51301	Riverine	50	Riverine
Upper Balonne Tributaries	51339	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51933	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	50815	Riverine	50	Riverine
Upper Balonne Tributaries	51667	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52224	Riverine	50	Riverine
Upper Balonne Tributaries	51122	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51998	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Upper Balonne Tributaries	51422	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51716	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52012	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51742	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51745	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52348	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51819	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52107	Riverine	50	Riverine
Upper Balonne Tributaries	51832	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	52594	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51581	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51353	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51946	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52243	Riverine	50	Riverine
Upper Balonne Tributaries	51984	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51438	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51757	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52042	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51785	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51506	Riverine	50	Riverine
Upper Balonne Tributaries	51053	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52589	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52591	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51569	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51898	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51917	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51923	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52632	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51344	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51654	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51965	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51682	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51399	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52285	Riverine	50	Riverine
Upper Balonne Tributaries	51713	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	50937	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51720	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51728	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52069	Riverine	50	Riverine
Upper Balonne Tributaries	52074	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52101	Riverine	50	Riverine
Upper Balonne Tributaries	52571	Riverine	50	Riverine
Upper Balonne Tributaries	51250	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51531	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51533	Riverine	50	Riverine

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Upper Balonne Tributaries	52402	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51283	Riverine	50	Riverine
Upper Balonne Tributaries	51323	Riverine	50	Riverine
Upper Balonne Tributaries	51615	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51617	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51091	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51634	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51949	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52220	Riverine	50	Riverine
Upper Balonne Tributaries	51378	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51656	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51959	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52487	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52490	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52491	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52481	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51673	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51677	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51681	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52248	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52495	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52499	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52667	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51403	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51410	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51697	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	51700	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52508	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52509	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52513	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51416	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51420	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51430	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51718	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51433	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51447	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51723	Palustrine	1	Coastal/ Sub-Coastal saline swamps
Upper Balonne Tributaries	51726	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52532	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52535	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52536	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52538	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51455	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps

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Upper Balonne Tributaries	51461	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51464	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51466	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52035	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52326	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52338	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52548	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52549	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52717	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51208	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51479	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52058	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52555	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52556	Riverine	50	Riverine
Upper Balonne Tributaries	52558	Riverine	50	Riverine
Upper Balonne Tributaries	51216	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51482	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51793	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52089	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52368	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52380	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52561	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52565	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51502	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51507	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51514	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51807	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51810	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	51816	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51820	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52104	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52570	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52573	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51526	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52576	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51261	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51264	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51859	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	52421	Lacustrine	6	Coastal/ Sub-coastal floodplain lakes
Upper Balonne Tributaries	51556	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51558	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51871	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51874	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps

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Upper Balonne Tributaries	51879	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52431	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51574	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52621	Riverine	50	Riverine
Upper Balonne Tributaries	52623	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51311	Riverine	50	Riverine
Upper Balonne Tributaries	51907	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52165	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52454	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51106	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51110	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51619	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51924	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51926	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52470	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52477	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52633	Riverine	50	Riverine
Upper Balonne Tributaries	52638	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51346	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51623	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51641	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52484	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52486	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52598	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	51652	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52493	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51415	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51174	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51445	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51797	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51956	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52501	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52533	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52534	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52544	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52564	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51510	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52574	Riverine	50	Riverine
Upper Balonne Tributaries	51371	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52658	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51977	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52512	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52520	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps

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Upper Balonne Tributaries	51722	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52724	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52090	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51252	Riverine	50	Riverine
Upper Balonne Tributaries	51536	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51561	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51957	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52494	Riverine	50	Riverine
Upper Balonne Tributaries	51683	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51214	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52098	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	51535	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52581	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52583	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Upper Balonne Tributaries	52605	Riverine	50	Riverine
Upper Balonne Tributaries	51327	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52626	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	52627	Riverine	50	Riverine
Upper Balonne Tributaries	51331	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Upper Balonne Tributaries	51633	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Upper Balonne Tributaries	52523	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Study Subcatchment: Amby Creek

Study Catchment	Wetland ID	Area (ha)	Classification	Habitat Code	Habitat description
Amby Creek	51658	8.59	Riverine	50	Riverine
					Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Amby Creek	51670	2.50	Lacustrine	40	
Amby Creek	51671	3.45	Riverine	50	Riverine
Amby Creek	51347	2300.32	Riverine	50	Riverine
Amby Creek	51347	2300.32	Riverine	50	Riverine
Amby Creek	51771	1.25	Riverine	50	Riverine
Amby Creek	51783	5.80	Riverine	50	Riverine
Amby Creek	51788	23.19	Riverine	50	Riverine
Amby Creek	51800	10.42	Riverine	50	Riverine
Amby Creek	51809	3.33	Riverine	50	Riverine
Amby Creek	51555	1.28	Riverine	50	Riverine
Amby Creek	51864	7.54	Riverine	50	Riverine
Amby Creek	51347	2300.32	Riverine	50	Riverine
Amby Creek	51580	17.09	Riverine	50	Riverine
Amby Creek	51580	17.09	Riverine	50	Riverine
Amby Creek	51594	5.20	Riverine	50	Riverine
Amby Creek	51347	2300.32	Riverine	50	Riverine
					Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel)
Amby Creek	51631	5.01	Lacustrine	40	
Amby Creek	51799	6.72	Riverine	50	Riverine
Amby Creek	51347	2300.32	Riverine	50	Riverine
Amby Creek	51872	66.37	Riverine	50	Riverine

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Study Subcatchment: Dogwood Creek

Study Catchment	Wetland ID	Classification	Habitat Code	Habitat description
Dogwood Creek	51380	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51382	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51649	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51660	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51385	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51388	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51400	Riverine	50	Riverine
Dogwood Creek	51405	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51690	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51692	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51695	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51427	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51429	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51705	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51717	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51434	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51439	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51446	Riverine	50	Riverine
Dogwood Creek	51448	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51721	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51729	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51735	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51737	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51749	Riverine	50	Riverine
Dogwood Creek	51751	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51752	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51755	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51469	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51471	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51475	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51480	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51769	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51773	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51778	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51219	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51222	Riverine	50	Riverine
Dogwood Creek	51483	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51795	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51802	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51501	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51511	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Dogwood Creek	51512	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51244	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51519	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51521	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51828	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51829	Riverine	50	Riverine
Dogwood Creek	51262	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Dogwood Creek	51538	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51540	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51546	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51276	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Dogwood Creek	51281	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51307	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51570	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51576	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51579	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	52152	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51330	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51333	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51334	Palustrine	4a	Coastal/ Sub-coastal floodplain tree swamps (Melaleuca and Eucalypt)
Dogwood Creek	51343	Riverine	50	Riverine
Dogwood Creek	51621	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51350	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51626	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51632	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51647	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel

Appendix C: List of wetlands identified within GFD Project area, by subcatchment

Dogwood Creek	51708	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51445	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51449	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51463	Riverine	50	Riverine
Dogwood Creek	51605	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51442	Riverine	50	Riverine
Dogwood Creek	51444	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51457	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51786	Palustrine	4c	Coastal/ Sub-coastal floodplain grass, sedge and herb swamps
Dogwood Creek	51676	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51759	Riverine	50	Riverine
Dogwood Creek	51468	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51372	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51694	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51437	Lacustrine	40	Artificial/ highly modified wetlands (dams, ring tanks, irrigation channel
Dogwood Creek	51349	Lacustrine	9	Coastal/ Sub-coastal non-floodplain soil lakes

Appendix D List of surface water licences within GFD Project area

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Amby Creek	Amby Creek	12911N	Licence to take water	Issued	30/11/2030	Domestic Supply; Stock	NULL	'60/WAL5361; 61/WAL5361'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	12911N	Licence to take water	Issued	30/11/2030	Domestic Supply; Stock	NULL	'60/WAL5361; 61/WAL5361'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	12911N	Licence to take water	Issued	30/11/2030	Domestic Supply; Stock	NULL	'60/WAL5361; 61/WAL5361'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	12911N	Licence to take water	Issued	30/11/2030	Domestic Supply; Stock	NULL	'60/WAL5361; 61/WAL5361'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58915N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NULL	'1/RP119344; 3/RP119344; 6/WAL537; 8/WAL537'	4222.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	11275N	Licence to take water	Issued	31/07/2021	Domestic Supply; Stock	NULL	'4/WAL53655'	4222.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	58915N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NULL	'1/RP119344; 3/RP119344; 6/WAL537; 8/WAL537'	4222.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	100453	Licence to take water	Issued	31/03/2021	Industrial	70	'62/DL25'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	180519	Licence to take water	Issued	31/07/2013	Stock	NULL	'152/WV442'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	181327	Licence to take water	Issued	28/02/2031	Stock	NULL	'51/WV1153'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	181327	Licence to take water	Issued	28/02/2031	Stock	NULL	'51/WV1153'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	181327	Licence to take water	Issued	28/02/2031	Stock	NULL	'51/WV1153'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	182060	Licence to take water	Issued	30/04/2032	Stock	NULL	'20/WAL53697; 55/WAL53697; 57/WAL5316; 7/RP839472'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	182060	Licence to take water	Issued	30/04/2032	Stock	NULL	'20/WAL53697; 55/WAL53697; 57/WAL5316; 7/RP839472'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	182060	Licence to take water	Issued	30/04/2032	Stock	NULL	'20/WAL53697; 55/WAL53697; 57/WAL5316; 7/RP839472'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	406417	Licence to take water	Issued	10/05/2030	Stock	NULL	'12/DL283; 13/DL283'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	406417	Licence to take water	Issued	10/05/2030	Stock	NULL	'12/DL283; 13/DL283'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	406417	Licence to take water	Issued	10/05/2030	Stock	NULL	'12/DL283; 13/DL283'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	408965	Licence to take water	Issued	31/12/2013	Stock	NULL	'202/DUB53127; 485/DUB5319'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	408966	Licence to take water	Issued	31/12/2013	Stock	NULL	'25/DUB5347; 9/WV347'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	500287	Licence to take water	Issued	31/08/2031	Stock	NULL	'19/DL270; 20/DL270'	4224.MINMI/Minni Member
Amby Creek	Amby Creek	500287	Licence to take water	Issued	31/08/2031	Stock	NULL	'19/DL270; 20/DL270'	4224.MINMI/Minni Member
Amby Creek	Amby Creek	500287	Licence to take water	Issued	31/08/2031	Stock	NULL	'19/DL270; 20/DL270'	4224.MINMI/Minni Member
Amby Creek	Amby Creek	500287	Licence to take water	Issued	31/08/2031	Stock	NULL	'19/DL270; 20/DL270'	4224.MINMI/Minni Member
Amby Creek	Amby Creek	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	02621N	Licence to take water	Issued	30/04/2033	Stock	NULL	'52/CP899223'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	02621N	Licence to take water	Issued	30/04/2033	Stock	NULL	'52/CP899223'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	02622N	Licence to take water	Issued	30/04/2033	Stock	NULL	'47/WV1229'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	02623N	Licence to take water	Issued	30/04/2033	Stock	NULL	'31/WAL53118'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	05529N	Licence to take water	Issued	31/03/2030	Stock	NULL	'112/DL271'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	05798N	Licence to take water	Issued	31/01/2031	Stock	NULL	'115/DL271'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	10968N	Licence to take water	Issued	31/01/2032	Stock	NULL	'12/WV679'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	10968N	Licence to take water	Issued	31/01/2032	Stock	NULL	'12/WV679'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	12192N	Licence to take water	Issued	31/01/2031	Stock	NULL	'117/DL271'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	12257N	Licence to take water	Issued	30/04/2033	Stock	NULL	'9/WV1230'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	12263N	Licence to take water	Issued	31/05/2021	Stock	NULL	'5/DL164'	4224.MINMI/Minni Member

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Amby Creek	Amby Creek	12263N	Licence to take water	Issued	31/05/2021	Stock	NUL	'5/DL164'	4224.MINMI/Minmi Member
Amby Creek	Amby Creek	12652N	Licence to take water	Issued	31/08/2030	Stock	NUL	'1/WAL537'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	12929N	Licence to take water	Issued	31/12/2029	Stock	NUL	'3/WV983'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	14432N	Licence to take water	Issued	29/02/2032	Stock	NUL	'157/DL204; 158/DL204'	4222.WALLU/Wallumbilla Formation
Amby Creek	Amby Creek	14432N	Licence to take water	Issued	29/02/2032	Stock	NUL	'157/DL204; 158/DL204'	4222.WALLU/Wallumbilla Formation
Amby Creek	Amby Creek	16404N	Licence to take water	Issued	31/03/2032	Stock	NUL	'268/DL268'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	17988N	Licence to take water	Issued	31/01/2032	Stock	NUL	'30/DUB5359'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	37021N	Licence to take water	Issued	31/05/2021	Stock	NUL	'11/WV335'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	37021N	Licence to take water	Issued	31/05/2021	Stock	NUL	'11/WV335'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	43354N	Licence to take water	Issued	31/05/2021	Stock	NUL	'14/WV679'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	49086N	Licence to take water	Issued	31/01/2023	Stock	NUL	'./ROAD RES.'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	49086N	Licence to take water	Issued	31/01/2023	Stock	NUL	'./ROAD RES.'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	50060N	Licence to take water	Issued	28/02/2014	Stock	NUL	'154/WV442'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	50264N	Licence to take water	Issued	31/01/2031	Stock	NUL	'15/WV680; 16/WV680'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	50264N	Licence to take water	Issued	31/01/2031	Stock	NUL	'15/WV680; 16/WV680'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	50272N	Licence to take water	Issued	30/06/2020	Stock	NUL	'8/WV1695'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	50287N	Licence to take water	Issued	31/10/2019	Stock	NUL	'7/WV816'	4224.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	50327N	Licence to take water	Issued	10/03/2030	Stock	NUL	'28/DL270'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58239N	Licence to take water	Issued	31/07/2031	Stock	NUL	'52/WV1153'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	58239N	Licence to take water	Issued	31/07/2031	Stock	NUL	'52/WV1153'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	58239N	Licence to take water	Issued	31/07/2031	Stock	NUL	'52/WV1153'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	58325N	Licence to take water	Issued	9/02/2030	Stock	NUL	'53/WV1154'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	58464N	Licence to take water	Issued	31/03/2032	Stock	NUL	'1/BDR7'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	58464N	Licence to take water	Issued	31/03/2032	Stock	NUL	'1/BDR7'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	58496N	Licence to take water	Issued	31/12/2022	Stock	NUL	'23/DL270'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	58497N	Licence to take water	Issued	31/12/2022	Stock	NUL	'18/DL270'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	58498N	Licence to take water	Issued	28/02/2031	Stock	NUL	'25/DL270'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58508N	Licence to take water	Issued	30/06/2014	Stock	NUL	'1/WV1532; 24/WV1532'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58508N	Licence to take water	Issued	30/06/2014	Stock	NUL	'1/WV1532; 24/WV1532'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58508N	Licence to take water	Issued	30/06/2014	Stock	NUL	'1/WV1532; 24/WV1532'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58527N	Licence to take water	Issued	31/05/2032	Stock	NUL	'11/DL472'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58527N	Licence to take water	Issued	31/05/2032	Stock	NUL	'11/DL472'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58527N	Licence to take water	Issued	31/05/2032	Stock	NUL	'11/DL472'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58591N	Licence to take water	Issued	28/02/2031	Stock	NUL	'219/DL499'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	58591N	Licence to take water	Issued	28/02/2031	Stock	NUL	'219/DL499'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	58673N	Licence to take water	Issued	31/03/2033	Stock	NUL	'52/WV540'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	58736N	Licence to take water	Issued	16/12/2029	Stock	NUL	'19/WV731; 22/WV731'	4224.INJUN/Injune Creek Group
Amby Creek	Amby Creek	15020N	Licence to take water	Issued	31/03/2023	Stock	NUL	'62/DL25'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NUL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NUL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	58736N	Licence to take water	Issued	16/12/2029	Stock	NUL	'19/WV731; 22/WV731'	4224.INJUN/Injune Creek Group
Amby Creek	Amby Creek	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NUL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	175960	Licence to take water	Issued	31/07/2032	Stock	NUL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	175960	Licence to take water	Issued	31/07/2032	Stock	NUL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	175960	Licence to take water	Issued	31/07/2032	Stock	NUL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	182060	Licence to take water	Issued	30/04/2032	Stock	NUL	'20/WAL53697; 55/WAL53697; 57/WAL5316; 7/RP839472'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	12843N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/RP839472'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	187594	Licence to take water	Issued	17/05/2030	Stock	NUL	'21/WV681'	4224.ORALL/Orallo Formation
Amby Creek	Amby Creek	50269N	Licence to take water	Issued	30/06/2020	Stock	NUL	'21/WV681'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	190532	Licence to take water	Issued	30/09/2013	Stock	NUL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	58916N	Licence to take water	Issued	31/03/2031	Stock	NUL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Amby Creek	Amby Creek	606520	Licence to take water	Issued	31/03/2032	Stock	NUL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	01186N	Licence to take water	Issued	31/05/2031	Stock	NUL	'5/DL329'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	10792N	Licence to take water	Issued	31/05/2031	Stock	NUL	'179/DUB5399; 181/DUB53108; 483/DUB5318; 5/DL329'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	01186N	Licence to take water	Issued	31/05/2031	Stock	NUL	'5/DL329'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	10792N	Licence to take water	Issued	31/05/2031	Stock	NUL	'179/DUB5399; 181/DUB53108; 483/DUB5318; 5/DL329'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	08167N	Licence to take water	Issued	31/08/2031	Stock	NUL	'4/BDR64'	4224.SPRIN/Springbok Sandstone Member
Amby Creek	Amby Creek	58446N	Licence to take water	Issued	31/08/2031	Stock	NUL	'4/BDR64'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	12257N	Licence to take water	Issued	30/04/2033	Stock	NUL	'9/WV1230'	4224.BUNGI/Bungil Formation

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Amby Creek	Amby Creek	14987N	Licence to take water	Issued	31/08/2030	Stock	NUL	'15/WAL5316'	4224.MINMI/Minmi Member
Amby Creek	Amby Creek	16352N	Licence to take water	Issued	31/08/2030	Stock	NUL	'15/WAL5316'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	58308N	Licence to take water	Issued	31/05/2021	Stock	NUL	'6/WAL53289'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58390N	Licence to take water	Issued	31/05/2021	Stock	NUL	'6/WAL53289'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	58474N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58926N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58474N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58926N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58474N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58926N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58474N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58926N	Licence to take water	Issued	28/02/2014	Stock	NUL	'4/WV1531'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NUL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Amby Creek	Amby Creek	58736N	Licence to take water	Issued	16/12/2029	Stock	NUL	'19/WV731; 22/WV731'	4224.INJUN/Injune Creek Group
Amby Creek	Amby Creek	14332N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	58154N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58295N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	14332N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	58154N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58295N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	16151N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58466N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58683N	Licence to take water	Issued	31/03/2014	Stock	NUL	'8/BDR90'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	16151N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58466N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58683N	Licence to take water	Issued	31/03/2014	Stock	NUL	'8/BDR90'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	16151N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58466N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58683N	Licence to take water	Issued	31/03/2014	Stock	NUL	'8/BDR90'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	16151N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58466N	Licence to take water	Issued	31/03/2023	Stock	NUL	'8/BDR90'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58683N	Licence to take water	Issued	31/03/2014	Stock	NUL	'8/BDR90'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	14332N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.GUBBE/Gubberamunda Sandstone
Amby Creek	Amby Creek	58154N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	58295N	Licence to take water	Issued	31/07/2032	Stock	NUL	'7/BDR71'	4224.HUTTO/Hutton Sandstone
Amby Creek	Amby Creek	50023N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	50024N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58389N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	58511N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.KINGU/Kingull Member
Amby Creek	Amby Creek	50023N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	50024N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58389N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	58511N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.KINGU/Kingull Member
Amby Creek	Amby Creek	50023N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.SLAND/Southlands Formation
Amby Creek	Amby Creek	50024N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.BUNGI/Bungil Formation
Amby Creek	Amby Creek	58389N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.DONCA/Doncaster Member
Amby Creek	Amby Creek	58511N	Licence to take water	Issued	31/05/2021	Stock	NUL	'23/CP882778'	4224.KINGU/Kingull Member
Amby Creek	Amby Creek	406464	Licence to take water	Issued	31/05/2013	Town Water Supply	60		4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	406464	Licence to take water	Issued	31/05/2013	Town Water Supply	60		4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	406464	Licence to take water	Issued	31/05/2013	Town Water Supply	60		4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	406464	Licence to take water	Issued	31/05/2013	Town Water Supply	60		4224.MOOGA/Mooga Sandstone
Amby Creek	Amby Creek	406464	Licence to take water	Issued	31/05/2013	Town Water Supply	60		4224.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Comet River	Goonoo	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Comet River	Goonoo	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Comet River	Goonoo	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Comet River	Goonoo	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Comet River	Goonoo	607528	Permit to Take Water	Issued	31/12/2014	Construction	250		1305.COMEA/Comet River Alluvium
Comet River	Goonoo	607528	Permit to Take Water	Issued	31/12/2014	Construction	250		1305.COMEA/Comet River Alluvium
Comet River	Goonoo	057789F	Licence to interfere by diversion-Channel	Issued	31/03/2021	Divert the Course of Flow	NULL		130.01.31.22.04.01/Gum Gully
Comet River	Goonoo	057789F	Licence to interfere by diversion-Channel	Issued	31/03/2021	Divert the Course of Flow	NULL		130.01.31.22.04.01/Gum Gully
Comet River	Goonoo	057789F	Licence to interfere by diversion-Channel	Issued	31/03/2021	Divert the Course of Flow	NULL		130.01.31.22.04.01/Gum Gully
Comet River	Goonoo	182760	Licence to take water	Issued	30/04/2015	Domestic Supply	15	'236/NPW490'	130.01.31.24/Carnarvon Creek
Comet River	Goonoo	182760	Licence to take water	Issued	30/04/2015	Domestic Supply	15	'236/NPW490'	130.01.31.24/Carnarvon Creek
Comet River	Goonoo	182760	Licence to take water	Issued	30/04/2015	Domestic Supply	15	'236/NPW490'	130.01.31.24/Carnarvon Creek
Comet River	Goonoo	604839	Licence to take water	Issued	31/07/2021	Domestic Supply; Stock	NULL	'9/SP210545'	130.01.31.00+Z/Comet River (Anabranch)
Comet River	Goonoo	67294S	Licence to take water	Issued	30/09/2029	Domestic Supply; Stock	NULL	'4736/PH1907'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	67294S	Licence to take water	Issued	30/09/2029	Domestic Supply; Stock	NULL	'4736/PH1907'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	84212F	Licence to take water	Issued	30/11/2031	Domestic Supply; Stock	NULL	'2/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	84212F	Licence to take water	Issued	30/11/2031	Domestic Supply; Stock	NULL	'2/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	45246F	Licence to take water	Issued	31/07/2030	Domestic Supply; Stock	NULL	'10/CUE46'	130.01.31.14/Planet Creek
Comet River	Goonoo	45246F	Licence to take water	Issued	31/07/2030	Domestic Supply; Stock	NULL	'10/CUE46'	130.01.31.14/Planet Creek
Comet River	Goonoo	45246F	Licence to take water	Issued	31/07/2030	Domestic Supply; Stock	NULL	'10/CUE46'	130.01.31.14/Planet Creek
Comet River	Goonoo	45246F	Licence to take water	Issued	31/07/2030	Domestic Supply; Stock	NULL	'10/CUE46'	130.01.31.14/Planet Creek
Comet River	Goonoo	45246F	Licence to take water	Issued	31/07/2030	Domestic Supply; Stock	NULL	'10/CUE46'	130.01.31.14/Planet Creek
Comet River	Goonoo	45246F	Licence to take water	Issued	31/07/2030	Domestic Supply; Stock	NULL	'10/CUE46'	130.01.31.14/Planet Creek
Comet River	Goonoo	45246F	Licence to take water	Issued	31/07/2030	Domestic Supply; Stock	NULL	'10/CUE46'	130.01.31.14/Planet Creek
Comet River	Goonoo	67294S	Licence to take water	Issued	30/09/2029	Domestic Supply; Stock	NULL	'4736/PH1907'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	67294S	Licence to take water	Issued	30/09/2029	Domestic Supply; Stock	NULL	'4736/PH1907'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	84212F	Licence to take water	Issued	30/11/2031	Domestic Supply; Stock	NULL	'2/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	30694F	Licence to take water	Issued	28/02/2021	Educational Facility	5	'57/DSN394'	1305.BASAL/Basalt
Comet River	Goonoo	01836F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	NULL		130.01.31.12.02/Shotover Creek
Comet River	Goonoo	01836F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	NULL		130.01.31.12.02/Shotover Creek
Comet River	Goonoo	04830F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2030	Impound Water	1	'5/WNA106'	130.01.31.12/Humboldt Creek
Comet River	Goonoo	04830F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2030	Impound Water	1	'5/WNA106'	130.01.31.12/Humboldt Creek
Comet River	Goonoo	04830F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2030	Impound Water	1	'5/WNA106'	130.01.31.12/Humboldt Creek
Comet River	Goonoo	04830F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2030	Impound Water	1	'5/WNA106'	130.01.31.12/Humboldt Creek
Comet River	Goonoo	12904F	Licence to interfere by impounding-Embankment or Wall	Issued	31/12/2021	Impound Water	NULL	'1/SP164061'	130.01.31.16/Albinia Creek
Comet River	Goonoo	12904F	Licence to interfere by impounding-Embankment or Wall	Issued	31/12/2021	Impound Water	NULL	'1/SP164061'	130.01.31.16/Albinia Creek
Comet River	Goonoo	12904F	Licence to interfere by impounding-Embankment or Wall	Issued	31/12/2021	Impound Water	NULL	'1/SP164061'	130.01.31.16/Albinia Creek

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Comet River	Goonoo	17276F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	NULL	'8/CUE38'	130.01.31.22.02/Deep Creek
Comet River	Goonoo	17276F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	NULL	'8/CUE38'	130.01.31.22.02/Deep Creek
Comet River	Goonoo	19017N	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2019	Impound Water	158	'3/TR31'	130.01.31.A/Anabranh Brown River
Comet River	Goonoo	19017N	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2019	Impound Water	158	'3/TR31'	130.01.31.A/Anabranh Brown River
Comet River	Goonoo	41397F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2019	Impound Water	20	'2/SP208676'	130.01.31.14.01/Racecourse Creek
Comet River	Goonoo	41397F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2019	Impound Water	20	'2/SP208676'	130.01.31.14.01/Racecourse Creek
Comet River	Goonoo	46250F	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2013	Impound Water	80	'2/DSN80'	130.01.31.14.01/Racecourse Creek
Comet River	Goonoo	W35689F	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2021	Impound Water	NULL	'11/HT526'	130.01.29/Blackwater Creek
Comet River	Goonoo	W35689F	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2021	Impound Water	NULL	'11/HT526'	130.01.29/Blackwater Creek
Comet River	Goonoo	W35689F	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2021	Impound Water	NULL	'11/HT526'	130.01.29/Blackwater Creek
Comet River	Goonoo	W35689F	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2021	Impound Water	NULL	'11/HT526'	130.01.29/Blackwater Creek
Comet River	Goonoo	W35689F	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2021	Impound Water	NULL	'11/HT526'	130.01.29/Blackwater Creek
Comet River	Goonoo	W35689F	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2021	Impound Water	NULL	'11/HT526'	130.01.29/Blackwater Creek
Comet River	Goonoo	0057788F	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2021	Impound Water	NULL		130.01.31.22.04.01/Gum Gully
Comet River	Goonoo	0057788F	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2021	Impound Water	NULL		130.01.31.22.04.01/Gum Gully
Comet River	Goonoo	0057788F	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2021	Impound Water	NULL		130.01.31.22.04.01/Gum Gully
Comet River	Goonoo	26365N	Licence to interfere by impounding-Embankment or Wall	Issued	30/09/2016	Impound Water	58	'8/TR23'	130.01.31-02.00+/Unnamed Tributary of Brown River
Comet River	Goonoo	W34609F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2021	Impound Water	NULL	'1/CP897249'	130.01.29/Blackwater Creek
Comet River	Goonoo	48345F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2013	Impound Water	20	'10/CUE46'	130.01.31.14.01/Racecourse Creek
Comet River	Goonoo	48345F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2013	Impound Water	20	'10/CUE46'	130.01.31.14.01/Racecourse Creek
Comet River	Goonoo	50834N	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2019	Impound Water	1	'6/TR20'	130.01.31-02/Brown River
Comet River	Goonoo	00192S	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Comet River	Goonoo	00192S	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	00192S	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	18414N	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2017	Impound Water	14	'5/TR18'	130.01.31-02/Brown River
Comet River	Goonoo	50817N	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2021	Impound Water	2	'5/TR18'	130.01.31-02/Brown River
Comet River	Goonoo	26365N	Licence to interfere by impounding-Embankment or Wall	Issued	30/09/2016	Impound Water	58	'8/TR23'	130.01.31-02.00+/Unnamed Tributary of Brown River
Comet River	Goonoo	52697F	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2021	Impound Water	100	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	52697F	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2021	Impound Water	100	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	52697F	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2021	Impound Water	100	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	52697F	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2021	Impound Water	100	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	52697F	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2021	Impound Water	100	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	50834N	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2019	Impound Water	1	'6/TR20'	130.01.31-02/Brown River
Comet River	Goonoo	52650F	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2015	Impound Water	15	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	52650F	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2015	Impound Water	15	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	52650F	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2015	Impound Water	15	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	00192S	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	00192S	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Comet River	Goonoo	18414N	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2017	Impound Water	14	'5/TR18'	130.01.31-02/Brown River
Comet River	Goonoo	50817N	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2021	Impound Water	2	'5/TR18'	130.01.31-02/Brown River
Comet River	Goonoo	48430F	Licence to interfere by impounding-Embankment or Wall	Under Renewal	28/02/2013	Impound Water	700	'9/DSN706'	130.01.31.00+Z/Comet River (Anabranh)
Comet River	Goonoo	40220F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	2	'8/SP107597'	130.01.31/Comet River
Comet River	Goonoo	57775F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2013	Impound Water	200	'6/RP620356'	130.01.31.00+Z/Comet River (Anabranh)
Comet River	Goonoo	57763F	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	20	'11/RP867919'	130.01.31/Comet River

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Comet River	Goonoo	188619	Licence to take water	Issued	31/05/2020	Industrial	4		130.01.31-01/Lake Nuga Nuga
Comet River	Goonoo	188619	Licence to take water	Issued	31/05/2020	Industrial	4		130.01.31-01/Lake Nuga Nuga
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	406416	Licence to take water	Issued	31/03/2020	Irrigation	150	'1/SP187944; 11/DN40132; 16/DN40142; 3/SP116480'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	577000	Licence to take water	Issued	31/10/2021	Irrigation	150	'2/CP859941'	1302.TERT/Tertiary - Undefined
Comet River	Goonoo	577000	Licence to take water	Issued	31/10/2021	Irrigation	150	'2/CP859941'	1302.TERT/Tertiary - Undefined
Comet River	Goonoo	32640F	Licence to take water	Issued	30/11/2013	Irrigation	125	'6/CUE54'	1305.BROWN/Brown River Alluvium
Comet River	Goonoo	32640F	Licence to take water	Issued	30/11/2013	Irrigation	125	'6/CUE54'	1305.BROWN/Brown River Alluvium
Comet River	Goonoo	32640F	Licence to take water	Issued	30/11/2013	Irrigation	125	'6/CUE54'	1305.BROWN/Brown River Alluvium
Comet River	Goonoo	43857F	Licence to take water	Issued	28/02/2021	Irrigation	300	'4/CUE75'	1305.CONSA/Consuelo Creek Alluvium
Comet River	Goonoo	62575F	Licence to take water	Issued	31/03/2014	Irrigation	250	'6/TR28'	1305.MOCCA/Moolayember Creek Alluvium
Comet River	Goonoo	62575F	Licence to take water	Issued	31/03/2014	Irrigation	250	'6/TR28'	1305.MOCCA/Moolayember Creek Alluvium
Comet River	Goonoo	172850	Licence to take water	Under Renewal	31/10/2012	Irrigation	450	'5/CUE50'	1305.COMEA/Comet River Alluvium
Comet River	Goonoo	172850	Licence to take water	Under Renewal	31/10/2012	Irrigation	450	'5/CUE50'	1305.COMEA/Comet River Alluvium
Comet River	Goonoo	89247F	Licence to take water	Issued	31/10/2013	Irrigation	350	'3/DSN590'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	89247F	Licence to take water	Issued	31/10/2013	Irrigation	350	'3/DSN590'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	89247F	Licence to take water	Issued	31/10/2013	Irrigation	350	'3/DSN590'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	67330F	Licence to take water	Issued	30/04/2020	Irrigation	100	'8/SP122561'	1305.PLANC/Planet Creek Alluvium
Comet River	Goonoo	67330F	Licence to take water	Issued	30/04/2020	Irrigation	100	'8/SP122561'	1305.PLANC/Planet Creek Alluvium
Comet River	Goonoo	67330F	Licence to take water	Issued	30/04/2020	Irrigation	100	'8/SP122561'	1305.PLANC/Planet Creek Alluvium
Comet River	Goonoo	67330F	Licence to take water	Issued	30/04/2020	Irrigation	100	'8/SP122561'	1305.PLANC/Planet Creek Alluvium
Comet River	Goonoo	67330F	Licence to take water	Issued	30/04/2020	Irrigation	100	'8/SP122561'	1305.PLANC/Planet Creek Alluvium
Comet River	Goonoo	48431F	Licence to take water	Under Renewal	28/02/2013	Irrigation	NULL	'9/DSN706'	130.01.31.00-Z/Comet River (Anabranch)
Comet River	Goonoo	57741WF	Licence to take water	Issued	30/04/2021	Irrigation	NULL	'6/RP620356; 9/RP620356'	130.01.31.00-Z/Comet River (Anabranch)
Comet River	Goonoo	172923	Licence to take water	Under Renewal	31/10/2012	Irrigation	210	'8/SP107597'	1305.METEO/Meteor Creek Alluvium
Comet River	Goonoo	57741WF	Licence to take water	Issued	30/04/2021	Irrigation	NULL	'6/RP620356; 9/RP620356'	130.01.31.00-Z/Comet River (Anabranch)
Comet River	Goonoo	62366F	Licence to take water	Issued	31/08/2020	Irrigation; Stock	75	'5/SP185536'	1305.BASAL/Basalt
Comet River	Goonoo	62366F	Licence to take water	Issued	31/08/2020	Irrigation; Stock	75	'5/SP185536'	1305.BASAL/Basalt
Comet River	Goonoo	603299	Licence to take water	Under Renewal	31/08/2012	Irrigation; Stock Intensive	150	'3/DSN898'	1305.BASAL/Basalt
Comet River	Goonoo	89062F	Licence to take water	Issued	30/09/2020	Irrigation; Stock Intensive	70	'3/CUE112'	1305.CARNA/Carnarvon Creek Alluvium
Comet River	Goonoo	89062F	Licence to take water	Issued	30/09/2020	Irrigation; Stock Intensive	70	'3/CUE112'	1305.CARNA/Carnarvon Creek Alluvium
Comet River	Goonoo	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	57859F	Licence to take water	Under Renewal	31/05/2012	Stock	NULL	'6/CUE36'	130.01.31.22/Clematis Creek
Comet River	Goonoo	57859F	Licence to take water	Under Renewal	31/05/2012	Stock	NULL	'6/CUE36'	130.01.31.22/Clematis Creek
Comet River	Goonoo	58071N	Licence to take water	Issued	31/12/2030	Stock	NULL	'5317/WT805970'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Comet River	Goonoo	36886F	Licence to take water	Issued	30/06/2021	Stock	NULL	'1/CP897249'	130.01.29/Blackwater Creek
Comet River	Goonoo	58071N	Licence to take water	Issued	31/12/2030	Stock	NULL	'5317/WT805970'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NUL	'3/WT325; 4/WT323'	1303.PREC/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NUL	'3/WT325; 4/WT323'	1303.PREC/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NUL	'3/WT325; 4/WT323'	1303.PREC/Precipice Sandstone
Comet River	Goonoo	58198N	Licence to take water	Issued	30/04/2032	Stock	NUL	'3/WT325; 4/WT323'	1303.PREC/Precipice Sandstone
Comet River	Goonoo	89168F	Licence to take water	Issued	30/11/2031	Stock	NUL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	89168F	Licence to take water	Issued	30/11/2031	Stock	NUL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Comet River	Goonoo	14282N	Licence to take water	Issued	31/10/2031	Stock	NUL	'236/NPW490'	4224.PREC/Precipice Sandstone
Comet River	Goonoo	14283N	Licence to take water	Issued	31/08/2031	Stock	NUL	'236/NPW490'	4224.EVERG/Evergreen Formation
Comet River	Goonoo	14282N	Licence to take water	Issued	31/10/2031	Stock	NUL	'236/NPW490'	4224.PREC/Precipice Sandstone
Comet River	Goonoo	14283N	Licence to take water	Issued	31/08/2031	Stock	NUL	'236/NPW490'	4224.EVERG/Evergreen Formation
Comet River	Goonoo	14282N	Licence to take water	Issued	31/10/2031	Stock	NUL	'236/NPW490'	4224.PREC/Precipice Sandstone
Comet River	Goonoo	14283N	Licence to take water	Issued	31/08/2031	Stock	NUL	'236/NPW490'	4224.EVERG/Evergreen Formation
Comet River	Goonoo	400637	Licence to take water	Issued	1/12/2019	Stock Intensive	48	'56/DSN808'	1305.BASAL/Basalt
Comet River	Goonoo	604037	Licence to take water	Issued	31/01/2021	Stock Intensive	50	'1/SP164068; 12/RP616044; 2/RP616045; 4/RP617701'	1305.BASAL/Basalt
Comet River	Goonoo	604037	Licence to take water	Issued	31/01/2021	Stock Intensive	50	'1/SP164068; 12/RP616044; 2/RP616045; 4/RP617701'	1305.BASAL/Basalt
Comet River	Goonoo	090228F	Licence to take water	Issued	31/03/2021	Stock Intensive	32	'17/DSN508'	1305.RANGA/Rangal Coal Measures
Comet River	Goonoo	90211F	Licence to take water	Issued	31/07/2013	Stock Intensive	18	'51/DSN520'	1305.BASAL/Basalt
Comet River	Goonoo	90211F	Licence to take water	Issued	31/07/2013	Stock Intensive	18	'51/DSN520'	1305.BASAL/Basalt
Comet River	Goonoo	177603	Licence to take water	Issued	31/12/2020	Stock Intensive	50	'2/DSN590; 3/DSN590; 6/DSN592'	1305.ALDEB/Aldebaran Sandstone
Comet River	Goonoo	177603	Licence to take water	Issued	31/12/2020	Stock Intensive	50	'2/DSN590; 3/DSN590; 6/DSN592'	1305.ALDEB/Aldebaran Sandstone
Comet River	Goonoo	177603	Licence to take water	Issued	31/12/2020	Stock Intensive	50	'2/DSN590; 3/DSN590; 6/DSN592'	1305.ALDEB/Aldebaran Sandstone
Comet River	Goonoo	603641	Licence to take water	Issued	30/09/2020	Stock; Waterharvesting	NUL	'1/SP203781'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	604840	Licence to take water	Issued	31/07/2021	Stock; Waterharvesting	NUL	'5/SP210545'	130.01.31/Comet River
Comet River	Goonoo	52643F	Licence to take water	Issued	31/07/2021	Stock; Waterharvesting	NUL	'1/DSN104'	130.01.31/Comet River
Comet River	Goonoo	50835N	Licence to take water	Issued	30/04/2020	Stock; Waterharvesting	NUL	'6/TR20'	130.01.31-02/Brown River
Comet River	Goonoo	50835N	Licence to take water	Issued	30/04/2020	Stock; Waterharvesting	NUL	'6/TR20'	130.01.31-02/Brown River
Comet River	Goonoo	52648F	Licence to take water	Issued	31/08/2015	Stock; Waterharvesting	NUL	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	52649F	Licence to take water	Issued	31/08/2015	Stock; Waterharvesting	NUL	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	52648F	Licence to take water	Issued	31/08/2015	Stock; Waterharvesting	NUL	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	52649F	Licence to take water	Issued	31/08/2015	Stock; Waterharvesting	NUL	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	52648F	Licence to take water	Issued	31/08/2015	Stock; Waterharvesting	NUL	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	52649F	Licence to take water	Issued	31/08/2015	Stock; Waterharvesting	NUL	'13/WNA75'	130.01.31.12.02/Shotover Creek
Comet River	Goonoo	89117F	Licence to take water	Issued	31/01/2014	Town Water Supply	50		1305.BASAL/Basalt
Comet River	Goonoo	89117F	Licence to take water	Issued	31/01/2014	Town Water Supply	50		1305.BASAL/Basalt
Comet River	Goonoo	184144	Licence to take water	Issued	30/08/2015	Town Water Supply	400		130.01.31/Comet River
Comet River	Goonoo	89117F	Licence to take water	Issued	31/01/2014	Town Water Supply	50		1305.BASAL/Basalt
Comet River	Goonoo	184144	Licence to take water	Issued	30/08/2015	Town Water Supply	400		130.01.31/Comet River
Comet River	Goonoo	89117F	Licence to take water	Issued	31/01/2014	Town Water Supply	50		1305.BASAL/Basalt
Comet River	Goonoo	100722	Licence to take water	Issued	30/06/2013	Waterharvesting	NUL	'8/SP210545'	130.01.31/Comet River
Comet River	Goonoo	100722	Licence to take water	Issued	30/06/2013	Waterharvesting	NUL	'8/SP210545'	130.01.31/Comet River
Comet River	Goonoo	175300	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'16/RP908510; 8/HT648'	130.01.31/Comet River
Comet River	Goonoo	175300	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'16/RP908510; 8/HT648'	130.01.31/Comet River
Comet River	Goonoo	40097F	Licence to take water	Issued	30/04/2013	Waterharvesting	NUL	'22/RP848765'	130.01.31/Comet River
Comet River	Goonoo	057825F	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'3/SP109939'	130.01.31.22/Clematis Creek
Comet River	Goonoo	38144WF	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'3/SP109939'	130.01.31.22/Clematis Creek
Comet River	Goonoo	26366N	Licence to take water	Issued	30/09/2016	Waterharvesting	NUL	'8/TR23'	130.01.31-02.00+/Unnamd Tributary of Brown River
Comet River	Goonoo	100666	Licence to take water	Issued	30/04/2013	Waterharvesting	NUL	'6/DSN899'	130.01.31/Comet River
Comet River	Goonoo	100667	Licence to take water	Issued	30/04/2013	Waterharvesting	NUL	'6/DSN899'	130.01.31/Comet River
Comet River	Goonoo	100668	Licence to take water	Issued	30/04/2013	Waterharvesting	NUL	'6/DSN899'	130.01.31/Comet River
Comet River	Goonoo	50816N	Licence to take water	Issued	30/06/2013	Waterharvesting	NUL	'5/TR18'	130.01.31-02/Brown River
Comet River	Goonoo	26366N	Licence to take water	Issued	30/09/2016	Waterharvesting	NUL	'8/TR23'	130.01.31-02.00+/Unnamd Tributary of Brown River
Comet River	Goonoo	46203F	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'7/SP106035'	130.01.31.18/Consuelo Creek
Comet River	Goonoo	52696F	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	46203F	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'7/SP106035'	130.01.31.18/Consuelo Creek
Comet River	Goonoo	52696F	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	46203F	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'7/SP106035'	130.01.31.18/Consuelo Creek
Comet River	Goonoo	52696F	Licence to take water	Issued	31/07/2020	Waterharvesting	NUL	'7/SP106035'	130.01.31.18.03/Eight Mile Creek
Comet River	Goonoo	50816N	Licence to take water	Issued	30/06/2013	Waterharvesting	NUL	'5/TR18'	130.01.31-02/Brown River
Comet River	Goonoo	48432F	Licence to take water	Under Renewal	28/02/2013	Waterharvesting	NUL	'9/DSN706'	130.01.31/Comet River
Comet River	Goonoo	57835WF	Licence to take water	Under Renewal	28/02/2013	Waterharvesting	NUL	'9/DSN706'	130.01.31/Comet River
Comet River	Goonoo	57733F	Licence to take water	Issued	31/07/2013	Waterharvesting	NUL	'6/RP620356; 9/RP620356'	130.01.31/Comet River
Comet River	Goonoo	57734F	Licence to take water	Issued	31/07/2013	Waterharvesting	NUL	'6/RP620356; 9/RP620356'	130.01.31/Comet River

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Comet River	Goonoo	57735F	Licence to take water	Issued	30/04/2021	Waterharvesting	NULL	'6/RP620356; 9/RP620356'	130.01.31/Comet River
Comet River	Goonoo	38826F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'8/SP107597'	130.01.31/Comet River
Comet River	Goonoo	38827F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'8/SP107597'	130.01.31/Comet River
Comet River	Goonoo	51491F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'8/SP107597'	130.01.31/Comet River
Comet River	Goonoo	57733F	Licence to take water	Issued	31/07/2013	Waterharvesting	NULL	'6/RP620356; 9/RP620356'	130.01.31/Comet River
Comet River	Goonoo	57734F	Licence to take water	Issued	31/07/2013	Waterharvesting	NULL	'6/RP620356; 9/RP620356'	130.01.31/Comet River
Comet River	Goonoo	57735F	Licence to take water	Issued	30/04/2021	Waterharvesting	NULL	'6/RP620356; 9/RP620356'	130.01.31/Comet River
Comet River	Goonoo	51470F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'11/RP867919'	130.01.31/Comet River
Comet River	Goonoo	51471F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'11/RP867919'	130.01.31/Comet River
Comet River	Goonoo	51472F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'11/RP867919'	130.01.31/Comet River
Comet River	Goonoo	57768F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'10/RP867919; 5/HT57'	130.01.31/Comet River
Comet River	Goonoo	57769F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'10/RP867919; 5/HT57'	130.01.31/Comet River
Comet River	Goonoo	57780F	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL	'11/RP867919'	130.01.31/Comet River
Dogwood Creek	Dogwood Creek	607033	Permit to Take Water	Issued	30/06/2014	Construction	45		4222.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	607596	Permit to Take Water	Issued	30/09/2013	Construction	5		422.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	607652	Permit to Take Water	Issued	31/07/2013	Construction	9		422.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	607716	Permit to Take Water	Issued	31/12/2013	Construction	0.5		422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	607716	Permit to Take Water	Issued	31/12/2013	Construction	0.5		422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	607033	Permit to Take Water	Issued	30/06/2014	Construction	45		4222.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	49119N	Licence to take water	Issued	31/05/2020	Domestic Supply	2.5	'21/RP897541'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	50825N	Licence to take water	Issued	30/11/2021	Domestic Supply	NULL	'7/D4954'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	50860N	Licence to take water	Issued	28/02/2021	Domestic Supply	NULL	'123/BWR282'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	50928N	Licence to take water	Issued	30/06/2017	Domestic Supply	NULL	'4/D4954'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	50929N	Licence to take water	Issued	30/06/2017	Domestic Supply	NULL	'5/D4954'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	50860N	Licence to take water	Issued	28/02/2021	Domestic Supply	NULL	'123/BWR282'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	100590	Licence to take water	Issued	30/04/2021	Domestic Supply; Stock	NULL	'1/RP136682; 1/RP153427; 2/RP136682'	422.01/Condamine River
Dogwood Creek	Dogwood Creek	100590	Licence to take water	Issued	30/04/2021	Domestic Supply; Stock	NULL	'1/RP136682; 1/RP153427; 2/RP136682'	422.01/Condamine River
Dogwood Creek	Dogwood Creek	09917N	Licence to take water	Issued	31/03/2023	Domestic Supply; Stock	NULL	'114/BWR497'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	12885N	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NULL	'11/BWR509'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	12953N	Licence to take water	Issued	30/06/2021	Domestic Supply; Stock	NULL	'201/D4951; 202/D4951'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	12953N	Licence to take water	Issued	30/06/2021	Domestic Supply; Stock	NULL	'201/D4951; 202/D4951'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	12953N	Licence to take water	Issued	30/06/2021	Domestic Supply; Stock	NULL	'201/D4951; 202/D4951'	422.01.16.05/Drilham Creek
Dogwood Creek	Dogwood Creek	14600N	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NULL	'1/BWR825'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14708N	Licence to take water	Issued	31/12/2021	Domestic Supply; Stock	NULL	'10/BWR509'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	17667N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NULL	'7/BWR674'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	17667N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NULL	'7/BWR674'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	32043N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NULL	'5/BUL3425'	4223.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	32043N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NULL	'5/BUL3425'	4223.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	33827N	Licence to take water	Issued	31/07/2019	Domestic Supply; Stock	NULL	'5/BWR218'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	48842N	Licence to take water	Issued	28/02/2020	Domestic Supply; Stock	NULL	'49/BWR498; 55/BWR762'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	48991N	Licence to take water	Issued	31/12/2021	Domestic Supply; Stock	NULL	'19/SP104608'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58134N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NULL	'1/RP55823'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58857N	Licence to take water	Under Amendment	30/09/2022	Domestic Supply; Stock	NULL	'14/BWR513'	4224.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	48842N	Licence to take water	Issued	28/02/2020	Domestic Supply; Stock	NULL	'49/BWR498; 55/BWR762'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14600N	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NULL	'1/BWR825'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58641N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58641N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58641N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	104106	Licence to interfere by impounding- Embankment or Wall	Issued	31/08/2021	Impound Water	1000	'2/RP176866'	422.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	104107	Licence to interfere by impounding- Embankment or Wall	Issued	31/08/2021	Impound Water	139	'130/BWR785'	422.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	03194N	Licence to interfere by impounding- Embankment or Wall	Issued	31/08/2018	Impound Water	NULL	'1/RP160570'	422.01.16.03/Dulacca Creek
Dogwood Creek	Dogwood Creek	14180N	Licence to interfere by impounding- Embankment or Wall	Issued	30/10/2019	Impound Water	NULL		422.01.16.10.06/Two Mile Creek
Dogwood Creek	Dogwood Creek	38744N	Licence to interfere by impounding- Embankment or Wall	Issued	30/04/2020	Impound Water	2	'27/BWR781'	422.01.16.10.01/One Mile Creek

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Dogwood Creek	Dogwood Creek	39248N	Licence to interfere by impounding- Embankment or Wall	Issued	30/10/2019	Impound Water	20	'13/BWR722'	422.01.16.10/Wallan Creek
Dogwood Creek	Dogwood Creek	40425N	Licence to interfere by impounding- Embankment or Wall	Issued	31/05/2013	Impound Water	NULL		422.01.16.01.05/Charmana Creek
Dogwood Creek	Dogwood Creek	40425N	Licence to interfere by impounding- Embankment or Wall	Issued	31/05/2013	Impound Water	NULL		422.01.16.01.05/Charmana Creek
Dogwood Creek	Dogwood Creek	40425N	Licence to interfere by impounding- Embankment or Wall	Issued	31/05/2013	Impound Water	NULL		422.01.16.01.05/Charmana Creek
Dogwood Creek	Dogwood Creek	41833N	Licence to interfere by impounding- Embankment or Wall	Issued	31/12/2029	Impound Water	100	'1/RP78451; 27/BWR133'	422.01++/Condamine River Anabranh
Dogwood Creek	Dogwood Creek	43838WN	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2020	Impound Water	200	'167/BWR476'	422.01.16.03.02/Range Creek
Dogwood Creek	Dogwood Creek	43838WN	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2020	Impound Water	200	'167/BWR476'	422.01.16.03.02/Range Creek
Dogwood Creek	Dogwood Creek	44053N	Licence to interfere by impounding- Embankment or Wall	Issued	31/03/2019	Impound Water	NULL	'19/BWR88'	422.01.16.01.00+/Unnamed Tributary of Tchaning Creek
Dogwood Creek	Dogwood Creek	44053N	Licence to interfere by impounding- Embankment or Wall	Issued	31/03/2019	Impound Water	NULL	'19/BWR88'	422.01.16.01.00+/Unnamed Tributary of Tchaning Creek
Dogwood Creek	Dogwood Creek	50875N	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2021	Impound Water	40	'14/BWR171; 16/BWR156'	422.01.16.01.09/Bogandilla Creek
Dogwood Creek	Dogwood Creek	50911N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2020	Impound Water	600	'8/WV1587'	422.01.16+/Dogwood Creek Anabranh
Dogwood Creek	Dogwood Creek	50911N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2020	Impound Water	600	'8/WV1587'	422.01.16+/Dogwood Creek Anabranh
Dogwood Creek	Dogwood Creek	50936N	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2020	Impound Water	30	'10/BWR207'	422.01.16.07/Tomahan Creek
Dogwood Creek	Dogwood Creek	50936N	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2020	Impound Water	30	'10/BWR207'	422.01.16.07/Tomahan Creek
Dogwood Creek	Dogwood Creek	51097N	Licence to interfere by impounding-Excavation	Issued	30/06/2013	Impound Water	20	'1/RP18073'	422.01.16.03.10/Back Creek
Dogwood Creek	Dogwood Creek	100589	Licence to interfere by impounding- Embankment or Wall	Issued	30/04/2013	Impound Water	10	'18/BWR98; 51/RP896380'	422.01.16.08/Columboola Creek
Dogwood Creek	Dogwood Creek	100589	Licence to interfere by impounding- Embankment or Wall	Issued	30/04/2013	Impound Water	10	'18/BWR98; 51/RP896380'	422.01.16.08/Columboola Creek
Dogwood Creek	Dogwood Creek	100589	Licence to interfere by impounding- Embankment or Wall	Issued	30/04/2013	Impound Water	10	'18/BWR98; 51/RP896380'	422.01.16.08/Columboola Creek
Dogwood Creek	Dogwood Creek	104102	Licence to interfere by impounding- Embankment or Wall	Issued	31/07/2021	Impound Water	100	'19/BWR667'	422.01.16.05/Drillham Creek
Dogwood Creek	Dogwood Creek	50862N	Licence to interfere by impounding- Embankment or Wall	Issued	7/05/2020	Impound Water	10	'11/CP898876'	422.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	50862N	Licence to interfere by impounding- Embankment or Wall	Issued	7/05/2020	Impound Water	10	'11/CP898876'	422.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	50875N	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2021	Impound Water	40	'14/BWR171; 16/BWR156'	422.01.16.01.09/Bogandilla Creek

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Dogwood Creek	Dogwood Creek	50876N	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2021	Impound Water	20	'14/BWR171'	422.01.16.01.09/Bogandilla Creek
Dogwood Creek	Dogwood Creek	50911N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2020	Impound Water	600	'8/WV1587'	422.01.16+ /Dogwood Creek Anabranh
Dogwood Creek	Dogwood Creek	02873N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2019	Impound Water	NULL	'36/BWR466'	422.01.16.04/Eagle Creek
Dogwood Creek	Dogwood Creek	02874N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2019	Impound Water	NULL	'36/BWR466'	422.01.16.00+ /Unnamed Tributary of Dogwood Creek
Dogwood Creek	Dogwood Creek	43855N	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2020	Impound Water	470	'1/RP227339'	422.01.16.00+ /Unnamed Tributary of Dogwood Creek
Dogwood Creek	Dogwood Creek	43856WN	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2020	Impound Water	20	'1/RP227339'	422.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	176676	Licence to take water	Issued	30/09/2022	Irrigation; Stock; Stock Intensive	25	'65/BWR518'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	176676	Licence to take water	Issued	30/09/2022	Irrigation; Stock; Stock Intensive	25	'65/BWR518'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	176676	Licence to take water	Issued	30/09/2022	Irrigation; Stock; Stock Intensive	25	'65/BWR518'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	173769	Licence to take water	Issued	19/03/2030	Stock	NULL	'712/SP156050'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	178782	Licence to take water	Issued	31/05/2014	Stock	NULL	'1/SP135608'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	181299	Licence to take water	Issued	29/02/2032	Stock	NULL	'22/BWR266'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	181299	Licence to take water	Issued	29/02/2032	Stock	NULL	'22/BWR266'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	187499	Licence to take water	Issued	31/03/2033	Stock	NULL	'17/BWR835'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	188080	Licence to take water	Issued	30/04/2014	Stock	NULL	'6/BUL3425'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	400808	Licence to take water	Issued	31/12/2013	Stock	NULL	'7/BWR76'	4223.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	400903	Licence to take water	Issued	30/09/2029	Stock	NULL	'2/BWR134; 29/RP806919'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	400903	Licence to take water	Issued	30/09/2029	Stock	NULL	'2/BWR134; 29/RP806919'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	401198	Licence to take water	Issued	31/01/2014	Stock	NULL	'6/RP18062; 7/RP18062'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	401198	Licence to take water	Issued	31/01/2014	Stock	NULL	'6/RP18062; 7/RP18062'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	402000	Licence to take water	Issued	31/03/2014	Stock	NULL	'2/SP180960'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	402000	Licence to take water	Issued	31/03/2014	Stock	NULL	'2/SP180960'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	404033	Licence to take water	Issued	30/06/2032	Stock	NULL	'24/BWR148'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	404037	Licence to take water	Issued	30/08/2029	Stock	NULL	'5/BWR748'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	404038	Licence to take water	Issued	30/08/2029	Stock	NULL	'183/BWR199; 55/BWR199; 60/BWR259; 62/BWR199'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	404038	Licence to take water	Issued	30/08/2029	Stock	NULL	'183/BWR199; 55/BWR199; 60/BWR259; 62/BWR199'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	404038	Licence to take water	Issued	30/08/2029	Stock	NULL	'183/BWR199; 55/BWR199; 60/BWR259; 62/BWR199'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	404038	Licence to take water	Issued	30/08/2029	Stock	NULL	'183/BWR199; 55/BWR199; 60/BWR259; 62/BWR199'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	404090	Licence to take water	Issued	30/08/2029	Stock	NULL	'32/RP869172'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	404925	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/AU150; 31/BWR206; 44/BWR206; 45/BWR206; 64/AU150'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	404925	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/AU150; 31/BWR206; 44/BWR206; 45/BWR206; 64/AU150'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	404925	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/AU150; 31/BWR206; 44/BWR206; 45/BWR206; 64/AU150'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	404925	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/AU150; 31/BWR206; 44/BWR206; 45/BWR206; 64/AU150'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	404925	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/AU150; 31/BWR206; 44/BWR206; 45/BWR206; 64/AU150'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	405280	Licence to take water	Issued	22/12/2029	Stock	NULL	'11/RP213931; 61/BWR143'	4223.WALLM/Walloon Coal Measures
Dogwood Creek	Dogwood Creek	405280	Licence to take water	Issued	22/12/2029	Stock	NULL	'11/RP213931; 61/BWR143'	4223.WALLM/Walloon Coal Measures
Dogwood Creek	Dogwood Creek	405281	Licence to take water	Issued	22/12/2029	Stock	NULL	'62/BWR741; 63/BWR138'	4222.DONCA/Doncaster Member
Dogwood Creek	Dogwood Creek	407348	Licence to take water	Issued	30/06/2014	Stock	NULL	'8/BWR76'	4223.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	500185	Licence to take water	Issued	31/07/2030	Stock	NULL	'26/BWR113'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	500185	Licence to take water	Issued	31/07/2030	Stock	NULL	'26/BWR113'	4222.BUNGI/Bungil Formation

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Dogwood Creek	Dogwood Creek	577019	Licence to take water	Issued	2/11/2029	Stock	NUL	'1/RP91055'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	578035	Licence to take water	Issued	16/12/2029	Stock	NUL	'9/BWR189'	4222.DONCA/Doncaster Member
Dogwood Creek	Dogwood Creek	578036	Licence to take water	Issued	16/12/2029	Stock	NUL	'5/RP909610'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	607184	Licence to take water	Issued	31/10/2032	Stock	NUL	'16/BWR702'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	607184	Licence to take water	Issued	31/10/2032	Stock	NUL	'16/BWR702'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	607184	Licence to take water	Issued	31/10/2032	Stock	NUL	'16/BWR702'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	607387	Licence to take water	Issued	31/12/2032	Stock	NUL	'4/RP909614'	4223.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	07070N	Licence to take water	Issued	31/10/2022	Stock	NUL	'41/BWR637'	4223.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	07786N	Licence to take water	Issued	31/03/2031	Stock	NUL	'63/SP160432'	4223.WESTB/Westbourne Formation
Dogwood Creek	Dogwood Creek	07786N	Licence to take water	Issued	31/03/2031	Stock	NUL	'63/SP160432'	4223.WESTB/Westbourne Formation
Dogwood Creek	Dogwood Creek	09199N	Licence to take water	Issued	31/03/2022	Stock	NUL	'12/BWR82'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	09934N	Licence to take water	Issued	31/12/2032	Stock	NUL	'2/BWR69'	4222.DONCA/Doncaster Member
Dogwood Creek	Dogwood Creek	10527N	Licence to take water	Issued	31/05/2031	Stock	NUL	'52/BWR489'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	10527N	Licence to take water	Issued	31/05/2031	Stock	NUL	'52/BWR489'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	10645N	Licence to take water	Issued	31/08/2030	Stock	NUL	'76/BWR727'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	10787N	Licence to take water	Issued	28/02/2023	Stock	NUL	'2/RP70974'	4223.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	10787N	Licence to take water	Issued	28/02/2023	Stock	NUL	'2/RP70974'	4223.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	10810N	Licence to take water	Issued	31/10/2031	Stock	NUL	'28/FT357'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	10850N	Licence to take water	Issued	31/05/2013	Stock	NUL	'53/BWR250; 54/BWR250'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	10850N	Licence to take water	Issued	31/05/2013	Stock	NUL	'53/BWR250; 54/BWR250'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	10946N	Licence to take water	Issued	30/06/2013	Stock	NUL	'50/BWR201'	4222.WALLU/Wallumbilla Formation
Dogwood Creek	Dogwood Creek	11001N	Licence to take water	Issued	31/01/2014	Stock	NUL	'23/SP132024; 54/BWR273; 55/BWR273'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11001N	Licence to take water	Issued	31/01/2014	Stock	NUL	'23/SP132024; 54/BWR273; 55/BWR273'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11001N	Licence to take water	Issued	31/01/2014	Stock	NUL	'23/SP132024; 54/BWR273; 55/BWR273'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11025N	Licence to take water	Issued	31/08/2031	Stock	NUL	'71/BWR488'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11025N	Licence to take water	Issued	31/08/2031	Stock	NUL	'71/BWR488'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11026N	Licence to take water	Issued	15/09/2029	Stock	NUL	'75/BWR431'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11026N	Licence to take water	Issued	15/09/2029	Stock	NUL	'75/BWR431'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11123N	Licence to take water	Issued	31/03/2023	Stock	NUL	'42/BWR489'	4222.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	11396N	Licence to take water	Issued	31/05/2014	Stock	NUL	'2/RP79850'	4223.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11530N	Licence to take water	Issued	30/11/2013	Stock	NUL	'469/BUL349'	4222.DONCA/Doncaster Member
Dogwood Creek	Dogwood Creek	11720N	Licence to take water	Issued	31/10/2022	Stock	NUL	'59/BWR637'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	11867N	Licence to take water	Issued	31/10/2030	Stock	NUL	'46/BWR185'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	12077N	Licence to take water	Issued	20/10/2029	Stock	NUL	'12/BWR26'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	12136N	Licence to take water	Issued	16/12/2029	Stock	NUL	'33/BWR466'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	12157N	Licence to take water	Issued	31/03/2023	Stock	NUL	'31/BWR704'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	12157N	Licence to take water	Issued	31/03/2023	Stock	NUL	'31/BWR704'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	12188N	Licence to take water	Issued	31/05/2021	Stock	NUL	'52/BUL3458'	4223.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	13453N	Licence to take water	Issued	31/08/2032	Stock	NUL	'1/BWR614'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	13456N	Licence to take water	Issued	30/06/2030	Stock	NUL	'1/BWR89'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	13462N	Licence to take water	Issued	31/07/2031	Stock	NUL		4222.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	13462N	Licence to take water	Issued	31/07/2031	Stock	NUL		4222.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	13572N	Licence to take water	Issued	30/04/2020	Stock	NUL	'12/WV954; 8/BWR155'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	13606N	Licence to take water	Issued	31/10/2029	Stock	NUL	'2/SP144176'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	13921N	Licence to take water	Issued	30/09/2029	Stock	NUL	'48/BWR498'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	13932N	Licence to take water	Issued	28/02/2023	Stock	NUL	'201/BWR277'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	13953N	Licence to take water	Issued	31/01/2014	Stock	NUL	'50/BWR608'	4222.BUNGI/Bungil Formation; 4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	13953N	Licence to take water	Issued	31/01/2014	Stock	NUL	'50/BWR608'	4222.BUNGI/Bungil Formation; 4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14059N	Licence to take water	Issued	31/07/2031	Stock	NUL	'467/BUL348'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14101N	Licence to take water	Issued	31/07/2030	Stock	NUL	'53/BWR143'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	14216N	Licence to take water	Issued	30/06/2030	Stock	NUL	'51/AU41'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	14307N	Licence to take water	Issued	30/09/2020	Stock	NUL	'711/SP144572'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14307N	Licence to take water	Issued	30/09/2020	Stock	NUL	'711/SP144572'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14307N	Licence to take water	Issued	30/09/2020	Stock	NUL	'711/SP144572'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14382N	Licence to take water	Issued	30/11/2032	Stock	NUL	'112/BWR486'	4223.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	14467N	Licence to take water	Issued	31/08/2030	Stock	NUL	'89/BWR146'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14614N	Licence to take water	Issued	31/08/2030	Stock	NUL	'2/RP121108'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	14614N	Licence to take water	Issued	31/08/2030	Stock	NUL	'2/RP121108'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	14688N	Licence to take water	Issued	30/11/2030	Stock	NUL	'23/AU65'	4222.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	14740N	Licence to take water	Issued	31/01/2031	Stock	NUL	'19/RP227975; 26/BWR195'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	14740N	Licence to take water	Issued	31/01/2031	Stock	NUL	'19/RP227975; 26/BWR195'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	14780N	Licence to take water	Issued	8/04/2030	Stock	NUL	'88/BWR474'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	14780N	Licence to take water	Issued	8/04/2030	Stock	NUL	'88/BWR474'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Dogwood Creek	Dogwood Creek	14857N	Licence to take water	Issued	31/01/2030	Stock	NUL	'2/BWR668'	4223.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	14964N	Licence to take water	Issued	31/10/2013	Stock	NUL	'7/WV1257'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	15234N	Licence to take water	Issued	30/11/2031	Stock	NUL	'18/BWR98; 20/BWR267; 30/BWR98; 51/RP896380'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	15572N	Licence to take water	Issued	28/02/2031	Stock	NUL	'10/BWR499'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	15581N	Licence to take water	Issued	31/03/2031	Stock	NUL	'38/BWR730; 7/BWR740'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	15581N	Licence to take water	Issued	31/03/2031	Stock	NUL	'38/BWR730; 7/BWR740'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	15581N	Licence to take water	Issued	31/03/2031	Stock	NUL	'38/BWR730; 7/BWR740'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	15581N	Licence to take water	Issued	31/03/2031	Stock	NUL	'38/BWR730; 7/BWR740'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	15581N	Licence to take water	Issued	31/03/2031	Stock	NUL	'38/BWR730; 7/BWR740'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	15581N	Licence to take water	Issued	31/03/2031	Stock	NUL	'38/BWR730; 7/BWR740'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	15696N	Licence to take water	Issued	31/10/2030	Stock	NUL	'57/J4615'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	15807N	Licence to take water	Issued	30/11/2030	Stock	NUL	'23/BWR314'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	15930N	Licence to take water	Issued	24/12/2029	Stock	NUL	'144/BWR303'	4222.DONCA/Doncaster Member
Dogwood Creek	Dogwood Creek	15981N	Licence to take water	Issued	15/01/2030	Stock	NUL	'56/BWR490'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16023N	Licence to take water	Issued	31/08/2022	Stock	NUL	'3/WV922'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16027N	Licence to take water	Issued	31/07/2031	Stock	NUL	'68/BWR258'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16094N	Licence to take water	Issued	31/03/2023	Stock	NUL	'115/BWR497'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	16117N	Licence to take water	Issued	4/01/2030	Stock	NUL	'13/BWR622'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16117N	Licence to take water	Issued	4/01/2030	Stock	NUL	'13/BWR622'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16204N	Licence to take water	Issued	31/05/2022	Stock	NUL	'1/BWR465'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16204N	Licence to take water	Issued	31/05/2022	Stock	NUL	'1/BWR465'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16264N	Licence to take water	Issued	31/03/2031	Stock	NUL	'2/WV797'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	17145N	Licence to take water	Issued	30/04/2014	Stock	NUL	'1/RP90330'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	17186N	Licence to take water	Issued	30/06/2021	Stock	NUL	'17/BWR82; 20/BWR85; 21/BWR85; 22/BWR112'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	17186N	Licence to take water	Issued	30/06/2021	Stock	NUL	'17/BWR82; 20/BWR85; 21/BWR85; 22/BWR112'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	17186N	Licence to take water	Issued	30/06/2021	Stock	NUL	'17/BWR82; 20/BWR85; 21/BWR85; 22/BWR112'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	17186N	Licence to take water	Issued	30/06/2021	Stock	NUL	'17/BWR82; 20/BWR85; 21/BWR85; 22/BWR112'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	17186N	Licence to take water	Issued	30/06/2021	Stock	NUL	'17/BWR82; 20/BWR85; 21/BWR85; 22/BWR112'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	18159N	Licence to take water	Issued	30/04/2032	Stock	NUL	'23/BWR184'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	26291N	Licence to take water	Issued	31/12/2032	Stock	NUL	'2/RP114829'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	26332N	Licence to take water	Issued	27/10/2014	Stock	NUL	'6/AU195'	4222.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	26332N	Licence to take water	Issued	27/10/2014	Stock	NUL	'6/AU195'	4222.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	26333N	Licence to take water	Issued	30/06/2014	Stock	NUL	'2/AU97'	4222.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	30688N	Licence to take water	Issued	30/11/2013	Stock	NUL	'6/BWR189'	4222.DONCA/Doncaster Member
Dogwood Creek	Dogwood Creek	31137N	Licence to take water	Issued	30/09/2029	Stock	NUL	'5/BWR170'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	31421N	Licence to take water	Issued	31/10/2032	Stock	NUL	'2/RP124059'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	31421N	Licence to take water	Issued	31/10/2032	Stock	NUL	'2/RP124059'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	32613N	Licence to take water	Issued	31/07/2019	Stock	NUL	'47/AU41'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	32613N	Licence to take water	Issued	31/07/2019	Stock	NUL	'47/AU41'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	33141N	Licence to take water	Issued	30/11/2021	Stock	NUL	'38/BUL3443'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	34169N	Licence to take water	Issued	31/03/2019	Stock	NUL	'36/BWR202'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	36336N	Licence to take water	Issued	31/08/2021	Stock	NUL	'9/SP183139'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	36336N	Licence to take water	Issued	31/08/2021	Stock	NUL	'9/SP183139'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	36365N	Licence to take water	Issued	31/12/2020	Stock	NUL	'27/BWR619'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	36436N	Licence to take water	Issued	28/02/2022	Stock	NUL	'41/BWR611'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	37151N	Licence to take water	Issued	28/02/2022	Stock	NUL	'38/SP193216'	4222.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	43815N	Licence to take water	Issued	9/12/2029	Stock	NUL	'1/BWR484'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	43815N	Licence to take water	Issued	9/12/2029	Stock	NUL	'1/BWR484'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	48856N	Licence to take water	Issued	31/08/2030	Stock	NUL	'4/BWR210'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	48857N	Licence to take water	Issued	29/02/2032	Stock	NUL	'15/BWR155; 48/AU41'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	48857N	Licence to take water	Issued	29/02/2032	Stock	NUL	'15/BWR155; 48/AU41'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	48857N	Licence to take water	Issued	29/02/2032	Stock	NUL	'15/BWR155; 48/AU41'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	48870N	Licence to take water	Issued	31/07/2030	Stock	NUL	'1/BWR9'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	48910N	Licence to take water	Issued	31/07/2031	Stock	NUL	'27/AU36; 32/AU36; 69/AU66'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	48910N	Licence to take water	Issued	31/07/2031	Stock	NUL	'27/AU36; 32/AU36; 69/AU66'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	48910N	Licence to take water	Issued	31/07/2031	Stock	NUL	'27/AU36; 32/AU36; 69/AU66'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	48976N	Licence to take water	Issued	31/08/2019	Stock	NUL	'26/AU36'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	58015N	Licence to take water	Issued	30/09/2013	Stock	NUL	'1/AU132'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	58016N	Licence to take water	Issued	30/04/2021	Stock	NUL	'54/BWR171'	4222.WALLU/Wallumbilla Formation
Dogwood Creek	Dogwood Creek	58018N	Licence to take water	Issued	31/08/2022	Stock	NUL	'3/BWR119'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	58018N	Licence to take water	Issued	31/08/2022	Stock	NUL	'3/BWR119'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	58024N	Licence to take water	Issued	31/10/2022	Stock	NUL	'29/FT301'	1303.EUROM/Eurombah Formation
Dogwood Creek	Dogwood Creek	58051N	Licence to take water	Issued	30/11/2021	Stock	NUL	'7/BWR508'	4222.DONCA/Doncaster Member
Dogwood Creek	Dogwood Creek	58072N	Licence to take water	Issued	31/12/2022	Stock	NUL	'12/BWR438'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	58108N	Licence to take water	Issued	30/09/2022	Stock	NUL	'3/BWR37'	4222.KUMBA/Kumbarilla Beds

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Dogwood Creek	Dogwood Creek	58140N	Licence to take water	Issued	30/06/2032	Stock	NULL	'7/BWR189'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58222N	Licence to take water	Issued	30/06/2030	Stock	NULL	'32/BWR308'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58230N	Licence to take water	Issued	31/05/2013	Stock	NULL	'1/RP59706'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58252N	Licence to take water	Issued	31/05/2013	Stock	NULL	'2/RP137265'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	58305N	Licence to take water	Issued	31/07/2019	Stock	NULL	'3/BWR218'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	58459N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/BWR1'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58478N	Licence to take water	Issued	31/10/2022	Stock	NULL	'10/RP18062'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58535N	Licence to take water	Issued	31/05/2030	Stock	NULL	'11/BWR183'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58535N	Licence to take water	Issued	31/05/2030	Stock	NULL	'11/BWR183'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58582N	Licence to take water	Issued	31/10/2013	Stock	NULL	'9/BWR533'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58582N	Licence to take water	Issued	31/10/2013	Stock	NULL	'9/BWR533'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58588N	Licence to take water	Issued	30/06/2030	Stock	NULL	'9/BWR155'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58593N	Licence to take water	Issued	31/08/2030	Stock	NULL	'24/BWR12'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58610N	Licence to take water	Issued	30/11/2013	Stock	NULL	'12/AU174'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	58648N	Licence to take water	Issued	31/01/2032	Stock	NULL	'20/BWR148'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58717N	Licence to take water	Issued	31/08/2031	Stock	NULL	'27/RP896381'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58843N	Licence to take water	Issued	31/03/2022	Stock	NULL	'23/BWR112'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	58864N	Licence to take water	Issued	30/04/2013	Stock	NULL	'62/BWR249; 63/BWR249; 66/BWR249'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58864N	Licence to take water	Issued	30/04/2013	Stock	NULL	'62/BWR249; 63/BWR249; 66/BWR249'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58864N	Licence to take water	Issued	30/04/2013	Stock	NULL	'62/BWR249; 63/BWR249; 66/BWR249'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58876N	Licence to take water	Issued	30/09/2013	Stock	NULL	'301/RP817699'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	58885N	Licence to take water	Issued	30/09/2021	Stock	NULL	'3/RP85302'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58891N	Licence to take water	Issued	31/03/2021	Stock	NULL	'37/AU35'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	15234N	Licence to take water	Issued	30/11/2031	Stock	NULL	'18/BWR98; 20/BWR267; 30/BWR98; 51/RP896380'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	15234N	Licence to take water	Issued	30/11/2031	Stock	NULL	'18/BWR98; 20/BWR267; 30/BWR98; 51/RP896380'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	15234N	Licence to take water	Issued	30/11/2031	Stock	NULL	'18/BWR98; 20/BWR267; 30/BWR98; 51/RP896380'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58372N	Licence to take water	Issued	31/03/2021	Stock	NULL	'16/AB186; 21/AB53'	1303.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	174604	Licence to take water	Issued	31/03/2030	Stock	NULL	'28/FT972; 30/FT1018; 45/FT167'	1303.ORALL/Orallo Formation
Dogwood Creek	Dogwood Creek	58494N	Licence to take water	Issued	28/02/2022	Stock	NULL	'30/FT1018'	1303.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	58578N	Licence to take water	Issued	31/07/2029	Stock	NULL	'65/BWR518'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58578N	Licence to take water	Issued	31/07/2029	Stock	NULL	'65/BWR518'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58578N	Licence to take water	Issued	31/07/2029	Stock	NULL	'65/BWR518'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	05414N	Licence to take water	Issued	31/03/2022	Stock	NULL	'18/BWR803'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58838N	Licence to take water	Issued	31/03/2022	Stock	NULL	'18/BWR803'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	07428N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	16007N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	08192N	Licence to take water	Issued	31/07/2019	Stock	NULL	'55/BWR762'	4223.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	08674N	Licence to take water	Issued	30/03/2019	Stock	NULL	'8/BWR744'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	16300N	Licence to take water	Issued	31/03/2019	Stock	NULL	'8/BWR744'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	08674N	Licence to take water	Issued	30/03/2019	Stock	NULL	'8/BWR744'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	16300N	Licence to take water	Issued	31/03/2019	Stock	NULL	'8/BWR744'	4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	10710N	Licence to take water	Issued	30/04/2031	Stock	NULL	'1/SP242455; 4/WV1481'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	11767N	Licence to take water	Issued	30/04/2031	Stock	NULL	'1/SP242455'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	10810N	Licence to take water	Issued	31/10/2031	Stock	NULL	'28/FT357'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	12338N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	58645N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	14964N	Licence to take water	Issued	31/10/2013	Stock	NULL	'7/WV1257'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	15935N	Licence to take water	Issued	31/08/2022	Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	15935N	Licence to take water	Issued	31/08/2022	Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	15935N	Licence to take water	Issued	31/08/2022	Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	16264N	Licence to take water	Issued	31/03/2031	Stock	NULL	'2/WV797'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	26332N	Licence to take water	Issued	27/10/2014	Stock	NULL	'6/AU195'	4222.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	26333N	Licence to take water	Issued	30/06/2014	Stock	NULL	'2/AU97'	4222.INJUN/Injune Creek Group

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Dogwood Creek	Dogwood Creek	36336N	Licence to take water	Issued	31/08/2021	Stock	NULL	'9/SP183139'	4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58015N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/AU132'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	58024N	Licence to take water	Issued	31/10/2022	Stock	NULL	'29/FT301'	1303.EUROM/Eurombah Formation
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58252N	Licence to take water	Issued	31/05/2013	Stock	NULL	'2/RP137265'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	10197N	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	58372N	Licence to take water	Issued	31/03/2021	Stock	NULL	'16/AB186; 21/AB53'	1303.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	174604	Licence to take water	Issued	31/03/2030	Stock	NULL	'28/FT972; 30/FT1018; 45/FT167'	1303.ORALL/Orallo Formation
Dogwood Creek	Dogwood Creek	58494N	Licence to take water	Issued	28/02/2022	Stock	NULL	'30/FT1018'	1303.NOT/Formation Name Not Specified
Dogwood Creek	Dogwood Creek	37257N	Licence to take water	Issued	30/06/2021	Stock	NULL	'36/BWR466'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.INJUN/Injune Creek Group
Dogwood Creek	Dogwood Creek	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	48907N	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/RP227339'	4222.WALLU/Wallumbilla Formation
Dogwood Creek	Dogwood Creek	58375N	Licence to take water	Issued	30/09/2021	Stock Intensive	570	'2/RP227339'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	58714N	Licence to take water	Issued	31/10/2019	Stock Intensive	12	'134/BWR309; 135/BWR309'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	58714N	Licence to take water	Issued	31/10/2019	Stock Intensive	12	'134/BWR309; 135/BWR309'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	100929	Licence to take water	Issued	31/05/2013	Stock; Stock Intensive	17	'23/BWR212'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	100929	Licence to take water	Issued	31/05/2013	Stock; Stock Intensive	17	'23/BWR212'	4222.BUNGI/Bungil Formation
Dogwood Creek	Dogwood Creek	07443N	Licence to take water	Issued	28/02/2020	Stock; Stock Intensive	24	'136/BWR725'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58313N	Licence to take water	Issued	28/02/2022	Stock; Stock Intensive	25	'6/FT947'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	58335N	Licence to take water	Issued	30/11/2013	Stock; Stock Intensive	15	'20/FT303'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	173141	Licence to take water	Issued	28/02/2014	Stock; Stock Intensive	74	'17/BWR98'	4223.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58644N	Licence to take water	Issued	30/04/2014	Stock; Stock Intensive	14	'17/BWR98'	4222.KUMBA/Kumbarilla Beds
Dogwood Creek	Dogwood Creek	58313N	Licence to take water	Issued	28/02/2022	Stock; Stock Intensive	25	'6/FT947'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	58335N	Licence to take water	Issued	30/11/2013	Stock; Stock Intensive	15	'20/FT303'	1303.HUTTO/Hutton Sandstone
Dogwood Creek	Dogwood Creek	58856N	Licence to take water	Issued	31/10/2022	Stock; Stock Intensive	38	'134/BWR309; 135/BWR309'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	58856N	Licence to take water	Issued	31/10/2022	Stock; Stock Intensive	38	'134/BWR309; 135/BWR309'	4222.GUBBE/Gubberamunda Sandstone
Dogwood Creek	Dogwood Creek	406476	Licence to take water	Issued	31/05/2013	Town Water Supply	65		4222.MOOGA/Mooga Sandstone
Dogwood Creek	Dogwood Creek	406491	Licence to take water	Issued	30/09/2021	Town Water Supply	400		4222.PRECI/Precipice Sandstone
Dogwood Creek	Dogwood Creek	50863N	Licence to take water	Issued	14/05/2020	Waterharvesting	NULL	'11/CP898876'	4222.01.16/Dogwood Creek
Dogwood Creek	Dogwood Creek	50863N	Licence to take water	Issued	14/05/2020	Waterharvesting	NULL	'11/CP898876'	4222.01.16/Dogwood Creek
Lower Dawson River	Lower Dawson River	35740S	Licence to take water	Issued	31/12/2021	Amenities	NULL		1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	57843S	Licence to take water	Issued	31/08/2021	Aquaculture; Irrigation	100	'5/SP236971'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	89635S	Licence to take water	Issued	31/10/2021	Aquaculture; Stock	11	'1/RP615514'	1303.BASAL/Basalt
Lower Dawson River	Lower Dawson River	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Lower Dawson River	Lower Dawson River	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Lower Dawson River	Lower Dawson River	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Lower Dawson River	Lower Dawson River	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Lower Dawson River	Lower Dawson River	10828S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	10829S	Licence to take water	Issued	30/06/2013	Commercial	1		130.01.18.18.00/North Mimosa Creek
Lower Dawson River	Lower Dawson River	403565	Licence to take water	Issued	8/12/2019	Construction	12		1303.TERT/Tertiary - Undefined
Lower Dawson River	Lower Dawson River	403565	Licence to take water	Issued	8/12/2019	Construction	12		1303.TERT/Tertiary - Undefined

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Lower Dawson River	Lower Dawson River	403565	Licence to take water	Issued	8/12/2019	Construction	12		1303.TERT/Tertiary - Undefined
Lower Dawson River	Lower Dawson River	403565	Licence to take water	Issued	8/12/2019	Construction	12		1303.TERT/Tertiary - Undefined
Lower Dawson River	Lower Dawson River	607535	Permit to Take Water	Issued	31/12/2013	Construction	30		1303.GRANI/Granite
Lower Dawson River	Lower Dawson River	607535	Permit to Take Water	Issued	31/12/2013	Construction	30		1303.GRANI/Granite
Lower Dawson River	Lower Dawson River	14597S	Licence to take water	Issued	31/08/2014	Domestic Supply; Irrigation; Stock	74	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	14597S	Licence to take water	Issued	31/08/2014	Domestic Supply; Irrigation; Stock	74	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	14597S	Licence to take water	Issued	31/08/2014	Domestic Supply; Irrigation; Stock	74	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	14597S	Licence to take water	Issued	31/08/2014	Domestic Supply; Irrigation; Stock	74	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	33566S	Licence to take water	Issued	28/02/2021	Domestic Supply; Irrigation; Stock	NULL	'1/BH289'	130.01.18.18.02.02.00+/Unnamed Tributary of Little Roundstone Creek
Lower Dawson River	Lower Dawson River	176328	Licence to take water	Issued	31/08/2030	Domestic Supply; Stock	NULL	'1/BH246'	1303.BOXVA/Boxvale Sandstone Member
Lower Dawson River	Lower Dawson River	183884	Licence to take water	Issued	31/07/2029	Domestic Supply; Stock	NULL	'782/PH1345'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	183884	Licence to take water	Issued	31/07/2029	Domestic Supply; Stock	NULL	'782/PH1345'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	183884	Licence to take water	Issued	31/07/2029	Domestic Supply; Stock	NULL	'782/PH1345'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	183884	Licence to take water	Issued	31/07/2029	Domestic Supply; Stock	NULL	'782/PH1345'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	183884	Licence to take water	Issued	31/07/2029	Domestic Supply; Stock	NULL	'782/PH1345'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	403050	Licence to take water	Issued	31/05/2014	Domestic Supply; Stock	NULL	'7/BH283'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	500327	Licence to take water	Issued	27/08/2029	Domestic Supply; Stock	NULL	'4/SP126052'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	604410	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'21/SP220240'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	604410	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'21/SP220240'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	604410	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'21/SP220240'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	604410	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'21/SP220240'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	604413	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'22/SP220240'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	604413	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'22/SP220240'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	17679S	Licence to take water	Issued	30/06/2014	Domestic Supply; Stock	NULL	'1/RP614987; 3/RP614763'	1303.MOOLA/Moolayember Formation

Appendix D: List of Surface Water Licenses (Raw - General)

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Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Lower Dawson River	Lower Dawson River	67399S	Licence to take water	Issued	31/08/2030	Domestic Supply; Stock	NUL	'9/BH167'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	67399S	Licence to take water	Issued	31/08/2030	Domestic Supply; Stock	NUL	'9/BH167'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	84426S	Licence to take water	Issued	31/07/2031	Domestic Supply; Stock	NUL	'36/BH278'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	84495S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'6/RP836484'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	89505S	Licence to take water	Under Renewal	31/08/2012	Domestic Supply; Stock	NUL	'3/FT992; 8/FT992'	1303.EVERG/Evergreen Formation
Lower Dawson River	Lower Dawson River	89515S	Licence to take water	Issued	30/06/2021	Domestic Supply; Stock	NUL	'6/BH214'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	89608S	Licence to take water	Issued	31/01/2014	Domestic Supply; Stock	NUL	'12/FT7'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	407554	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NUL	'12/BH136'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	47572S	Licence to take water	Issued	30/09/2014	Domestic Supply; Stock	NUL	'12/BH136'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	407554	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NUL	'12/BH136'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	47572S	Licence to take water	Issued	30/09/2014	Domestic Supply; Stock	NUL	'12/BH136'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	16492S	Licence to take water	Issued	31/10/2030	Domestic Supply; Stock	NUL	'8/BH169'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57861S	Licence to take water	Issued	31/05/2032	Domestic Supply; Stock	NUL	'5/RP836484'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	67507S	Licence to take water	Issued	31/10/2019	Domestic Supply; Stock	NUL	'2/SP136872'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	67277S	Licence to take water	Issued	31/03/2014	Domestic Supply; Stock	NUL	'11/BH145'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	67294S	Licence to take water	Issued	30/09/2029	Domestic Supply; Stock	NUL	'4736/PH1907'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	67294S	Licence to take water	Issued	30/09/2029	Domestic Supply; Stock	NUL	'4736/PH1907'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	89505S	Licence to take water	Under Renewal	31/08/2012	Domestic Supply; Stock	NUL	'3/FT992; 8/FT992'	1303.EVERG/Evergreen Formation
Lower Dawson River	Lower Dawson River	89510S	Licence to take water	Under Renewal	31/08/2012	Domestic Supply; Stock	NUL	'8/FT992'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	35912S	Licence to take water	Issued	30/06/2013	Domestic Supply; Stock	NUL	'14/FT1'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	15417S	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	89599S	Licence to take water	Issued	31/10/2030	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	89517S	Licence to take water	Issued	31/08/2014	Domestic Supply; Stock	NUL	'10/CP903254'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	89517S	Licence to take water	Issued	31/08/2014	Domestic Supply; Stock	NUL	'10/CP903254'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	57844S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'5/SP236971'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	41315S	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2021	Impound Water	200	'3/DW455'	130.01.18.28/Orange Creek
Lower Dawson River	Lower Dawson River	00192S	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	00192S	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	00192S	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	14810S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	12	'2/BH125'	130.01.18.18.02.02.00+/Unnamed Tributary of Little Roundstone Creek

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Lower Dawson River	Lower Dawson River	19175S	Licence to interfere by impounding-Embankment or Wall	Under Renewal	28/02/2013	Impound Water	11	'2/BH125'	130.01.18.18.02.02.00+/Unnamed Tributary of Little Roundstone Creek
Lower Dawson River	Lower Dawson River	19176S	Licence to interfere by impounding-Embankment or Wall	Under Renewal	28/02/2013	Impound Water	17	'2/BH125'	130.01.18.18.02.03.00+/Unnamed Tributary of Angle Creek
Lower Dawson River	Lower Dawson River	14810S	Licence to interfere by impounding-Embankment or Wall	Under Renewal	28/02/2013	Impound Water	12	'2/BH125'	130.01.18.18.02.02.00+/Unnamed Tributary of Little Roundstone Creek
Lower Dawson River	Lower Dawson River	19175S	Licence to interfere by impounding-Embankment or Wall	Under Renewal	28/02/2013	Impound Water	11	'2/BH125'	130.01.18.18.02.02.00+/Unnamed Tributary of Little Roundstone Creek
Lower Dawson River	Lower Dawson River	19176S	Licence to interfere by impounding-Embankment or Wall	Under Renewal	28/02/2013	Impound Water	17	'2/BH125'	130.01.18.18.02.03.00+/Unnamed Tributary of Angle Creek
Lower Dawson River	Lower Dawson River	19690U	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2013	Impound Water	6	'1/SP110093'	130.01.19.01.00+/Unnamed Tributary of Bridgewater Creek
Lower Dawson River	Lower Dawson River	19691U	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2013	Impound Water	7	'1/SP110093'	130.01.18.03.02.03.01/Giles Creek
Lower Dawson River	Lower Dawson River	25394U	Licence to interfere by impounding-Excavation	Issued	30/04/2013	Impound Water	4	'1/SP110093'	130.01.19.01.00+/Unnamed Tributary of Bridgewater Creek
Lower Dawson River	Lower Dawson River	33567S	Licence to interfere by impounding-Embankment or Wall	Issued	28/02/2021	Impound Water	150	'1/BH289'	130.01.18.18.02.02.00+/Unnamed Tributary of Little Roundstone Creek
Lower Dawson River	Lower Dawson River	00192S	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	00192S	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2013	Impound Water	1		130.01.29.04.02/Two Mile Creek
Lower Dawson River	Lower Dawson River	32355S	Licence to interfere by impounding-Embankment or Wall	Issued	28/02/2014	Impound Water	50	'2/BH259'	130.01.18.18.03.02.04.00+/Unnamed Tributary of Clovermook Creek
Lower Dawson River	Lower Dawson River	32356S	Licence to interfere by impounding-Embankment or Wall	Issued	28/02/2014	Impound Water	23	'2/BH259'	130.01.18.18.03.02.04.00+/Unnamed Tributary of Clovermook Creek
Lower Dawson River	Lower Dawson River	32357S	Licence to interfere by impounding-Excavation	Issued	28/02/2014	Impound Water	4	'2/BH259'	130.01.18.18.03.02.04.00+/Unnamed Tributary of Clovermook Creek
Lower Dawson River	Lower Dawson River	51407S	Licence to take water	Issued	28/02/2020	Irrigation	NULL	'1/BH11'; 6/BH192'	130.01.18.18.02/Roundstone Creek
Lower Dawson River	Lower Dawson River	177906	Licence to take water	Under Renewal	31/07/2012	Stock	NULL	'1/SP148087'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	500166	Licence to take water	Issued	30/06/2030	Stock	NULL	'12/BH253'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	500166	Licence to take water	Issued	30/06/2030	Stock	NULL	'12/BH253'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	500337	Licence to take water	Issued	1/09/2029	Stock	NULL	'2/SP101354'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	500337	Licence to take water	Issued	1/09/2029	Stock	NULL	'2/SP101354'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	10989S	Licence to take water	Under Renewal	28/02/2013	Stock	NULL	'4/LE33'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	13220S	Licence to take water	Issued	30/06/2013	Stock	NULL		1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	14781S	Licence to take water	Issued	31/07/2013	Stock	NULL	'29/BH262'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	16771S	Licence to take water	Issued	31/10/2030	Stock	NULL	'14/BH264'	1303.CLEMA/Clematis Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Lower Dawson River	Lower Dawson River	17253S	Licence to take water	Under Renewal	31/01/2013	Stock	NULL	'3/RP615252'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	17266S	Licence to take water	Issued	30/11/2020	Stock	NULL	'2/RP614987'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	17382S	Licence to take water	Issued	28/02/2030	Stock	NULL	'11/BH100'	130.01.18.18.03.02/Zamia Creek
Lower Dawson River	Lower Dawson River	17652S	Licence to take water	Issued	30/04/2015	Stock	NULL	'5167/PH839'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	17657S1	Licence to take water	Issued	31/05/2019	Stock	NULL	'10/BH91'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18317S	Licence to take water	Issued	31/03/2018	Stock	NULL	'7/KM271'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18326S	Licence to take water	Issued	31/12/2018	Stock	NULL	'22/BH218'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18326S	Licence to take water	Issued	31/12/2018	Stock	NULL	'22/BH218'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18326S	Licence to take water	Issued	31/12/2018	Stock	NULL	'22/BH218'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18327S	Licence to take water	Issued	31/12/2018	Stock	NULL	'6/WNA116'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	18327S	Licence to take water	Issued	31/12/2018	Stock	NULL	'6/WNA116'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	18328S	Licence to take water	Issued	31/12/2018	Stock	NULL	'4430/PH305'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18328S	Licence to take water	Issued	31/12/2018	Stock	NULL	'4430/PH305'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18329S	Licence to take water	Issued	31/12/2018	Stock	NULL	'1/KM294'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18329S	Licence to take water	Issued	31/12/2018	Stock	NULL	'1/KM294'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18330S	Licence to take water	Issued	31/12/2018	Stock	NULL	'8/WNA122'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18353S	Licence to take water	Issued	31/05/2018	Stock	NULL	'15/BH280'	1303.NOT/Formation Name Not Specified
Lower Dawson River	Lower Dawson River	30345S	Licence to take water	Issued	31/05/2015	Stock	NULL	'16/CP903255'	1303.HUTTO/Hutton Sandstone
Lower Dawson River	Lower Dawson River	36026S	Licence to take water	Issued	30/11/2020	Stock	NULL	'2/RP618682'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	43774S	Licence to take water	Issued	30/04/2014	Stock	NULL	'3/BH178'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	43774S	Licence to take water	Issued	30/04/2014	Stock	NULL	'3/BH178'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	43774S	Licence to take water	Issued	30/04/2014	Stock	NULL	'3/BH178'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	43774S	Licence to take water	Issued	30/04/2014	Stock	NULL	'3/BH178'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	47013S	Licence to take water	Issued	31/12/2018	Stock	NULL	'1/RP866568'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	47376S	Licence to take water	Issued	31/03/2018	Stock	NULL	'7/BH275'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	47376S	Licence to take water	Issued	31/03/2018	Stock	NULL	'7/BH275'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	47376S	Licence to take water	Issued	31/03/2018	Stock	NULL	'7/BH275'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	47380S	Licence to take water	Under Renewal	31/03/2013	Stock	NULL	'11/BH116'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	47591S	Licence to take water	Issued	30/04/2014	Stock	NULL	'10/BH163'	1303.NOT/Formation Name Not Specified
Lower Dawson River	Lower Dawson River	47591S	Licence to take water	Issued	30/04/2014	Stock	NULL	'10/BH163'	1303.NOT/Formation Name Not Specified
Lower Dawson River	Lower Dawson River	47696S	Licence to take water	Issued	28/02/2014	Stock	NULL	'16/BH269'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57313S	Licence to take water	Issued	30/09/2019	Stock	NULL	'2/LE268'	1303.HUTTO/Hutton Sandstone
Lower Dawson River	Lower Dawson River	57497S	Licence to take water	Under Transfer	31/07/2021	Stock	NULL	'4/WNA66'	1303.CLEMA/Clematis Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Lower Dawson River	Lower Dawson River	57564S	Licence to take water	Issued	30/06/2021	Stock	NULL	'7/WNA154'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57565S	Licence to take water	Issued	30/04/2031	Stock	NULL	'2/SP148087'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57620S	Licence to take water	Issued	30/06/2021	Stock	NULL	'3/WNA153'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57620S	Licence to take water	Issued	30/06/2021	Stock	NULL	'3/WNA153'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57620S	Licence to take water	Issued	30/06/2021	Stock	NULL	'3/WNA153'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57621S	Licence to take water	Issued	31/03/2014	Stock	NULL	'4/WNA128'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57621S	Licence to take water	Issued	31/03/2014	Stock	NULL	'4/WNA128'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	62275S	Licence to take water	Issued	31/03/2014	Stock	NULL	'4/WNA90'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	62534S	Licence to take water	Issued	31/05/2019	Stock	NULL	'7/BH172'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	62607S	Licence to take water	Issued	30/04/2030	Stock	NULL	'4/BH188'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	62616S	Licence to take water	Issued	30/04/2031	Stock	NULL	'2/BH178'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	62616S	Licence to take water	Issued	30/04/2031	Stock	NULL	'2/BH178'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	62616S	Licence to take water	Issued	30/04/2031	Stock	NULL	'2/BH178'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	62763S	Licence to take water	Issued	31/10/2030	Stock	NULL		1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	62877S	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/FT942'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	67281S	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT734'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	67281S	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT734'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	67281S	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT734'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	67281S	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT734'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	67315S	Licence to take water	Issued	31/03/2032	Stock	NULL	'12/WNA2'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	67315S	Licence to take water	Issued	31/03/2032	Stock	NULL	'12/WNA2'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	67315S	Licence to take water	Issued	31/03/2032	Stock	NULL	'12/WNA2'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	84049S	Licence to take water	Issued	31/03/2014	Stock	NULL	'4/SP142673'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	84760S	Licence to take water	Issued	31/10/2014	Stock	NULL	'14/BH280'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	84858S	Licence to take water	Issued	31/10/2019	Stock	NULL	'7/BH139'	1303.NOT/Formation Name Not Specified
Lower Dawson River	Lower Dawson River	84858S	Licence to take water	Issued	31/10/2019	Stock	NULL	'7/BH139'	1303.NOT/Formation Name Not Specified
Lower Dawson River	Lower Dawson River	84908S	Licence to take water	Issued	31/07/2030	Stock	NULL	'4/KM170'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	89538S	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'16/BH287; 17/BH287; 18/BH287; 9/BH287'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	89538S	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'16/BH287; 17/BH287; 18/BH287; 9/BH287'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	89538S	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'16/BH287; 17/BH287; 18/BH287; 9/BH287'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	89538S	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'16/BH287; 17/BH287; 18/BH287; 9/BH287'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	89538S	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'16/BH287; 17/BH287; 18/BH287; 9/BH287'	1303.MOOLA/Moolayember Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Lower Dawson River	Lower Dawson River	89775S	Licence to take water	Issued	30/04/2021	Stock	NULL	'4/FT284; 4493/PH738'	1303.NOT/Formation Name Not Specified
Lower Dawson River	Lower Dawson River	89775S	Licence to take water	Issued	30/04/2021	Stock	NULL	'4/FT284; 4493/PH738'	1303.NOT/Formation Name Not Specified
Lower Dawson River	Lower Dawson River	89777S	Licence to take water	Issued	31/10/2019	Stock	NULL	'4051/PH2185'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	89808S	Licence to take water	Issued	30/04/2023	Stock	NULL	'3/FT840'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	37201S	Licence to take water	Issued	31/05/2030	Stock	NULL	'2/LE284'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	188318	Licence to take water	Issued	31/07/2029	Stock	NULL	'1/WNA84'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	35256S	Licence to take water	Issued	31/08/2013	Stock	NULL	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	35256S	Licence to take water	Issued	31/08/2013	Stock	NULL	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	35256S	Licence to take water	Issued	31/08/2013	Stock	NULL	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	35256S	Licence to take water	Issued	31/08/2013	Stock	NULL	'3/LE232'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	31564S	Licence to take water	Issued	31/10/2018	Stock	NULL	'8/BH169'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	18381S	Licence to take water	Issued	31/10/2019	Stock	NULL	'1/BH240'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	89656S	Licence to take water	Issued	31/10/2019	Stock	NULL	'1/BH240'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	34627S	Licence to take water	Issued	31/03/2014	Stock	NULL	'5/RP836484'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	35489S	Licence to take water	Issued	31/10/2019	Stock	NULL	'2/SP136872'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	44588S	Licence to take water	Issued	31/03/2030	Stock	NULL	'11/BH145'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	47302S	Licence to take water	Issued	30/04/2031	Stock	NULL	'5/BH166'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	47522S	Licence to take water	Under Renewal	31/03/2013	Stock	NULL	'5/BH166'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57657S	Licence to take water	Issued	31/08/2019	Stock	NULL	'13/BH293'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	57664S	Licence to take water	Issued	31/08/2019	Stock	NULL	'13/BH293'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	89695S	Licence to take water	Under Renewal	30/06/2012	Stock	NULL	'14/FT1'	1303.PRECI/Precipice Sandstone
Lower Dawson River	Lower Dawson River	47329S	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP191511'	1303.EVERG/Evergreen Formation
Lower Dawson River	Lower Dawson River	47710S	Licence to take water	Issued	30/04/2018	Stock	NULL	'1/BH289'	1303.MOOLA/Moolayember Formation
Lower Dawson River	Lower Dawson River	84447S	Licence to take water	Issued	31/08/2014	Stock	NULL	'10/CP903254'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	89589S	Licence to take water	Issued	31/08/2014	Stock	NULL	'10/CP903254'	1303.EVERG/Evergreen Formation
Lower Dawson River	Lower Dawson River	84447S	Licence to take water	Issued	31/08/2014	Stock	NULL	'10/CP903254'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	89589S	Licence to take water	Issued	31/08/2014	Stock	NULL	'10/CP903254'	1303.EVERG/Evergreen Formation
Lower Dawson River	Lower Dawson River	47503S	Licence to take water	Under Renewal	31/07/2012	Stock	NULL	'2/BH259'	1303.CLEMA/Clematis Sandstone
Lower Dawson River	Lower Dawson River	174709	Licence to take water	Under Renewal	31/03/2013	Stock; Stock Intensive	24	'831/PH1344'	1303.BASAL/Basalt
Lower Dawson River	Lower Dawson River	174709	Licence to take water	Under Renewal	31/03/2013	Stock; Stock Intensive	24	'831/PH1344'	1303.BASAL/Basalt
Lower Dawson River	Lower Dawson River	174709	Licence to take water	Under Renewal	31/03/2013	Stock; Stock Intensive	24	'831/PH1344'	1303.BASAL/Basalt

Appendix D: List of Surface Water Licenses (Raw - General)

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Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Lower Dawson River	Lower Dawson River	103828	Licence to take water	Issued	31/08/2021	Waterharvesting	NULL	'4/SP236971'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	46335S	Licence to take water	Issued	31/08/2021	Waterharvesting	NULL	'4/SP236971'	130.01.18.31Z/Cockatoo Creek (Glebe Weir Storage)
Lower Dawson River	Lower Dawson River	104146	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104736	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL		130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51446S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51447S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51448S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51469S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104146	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104736	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL		130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51446S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51447S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51448S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51469S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104146	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104736	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL		130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51446S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51447S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51448S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51469S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104146	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104736	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL		130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51446S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51447S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51448S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51469S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104146	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	104736	Licence to take water	Issued	31/07/2020	Waterharvesting	NULL		130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51446S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51447S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51448S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Lower Dawson River	Lower Dawson River	51469S	Licence to take water	Issued	30/06/2020	Waterharvesting	NULL	'23/DW546'	130.01.18/Dawson River
Upper Balonne Tributaries	Balonne River	604605	Permit to Take Water	Issued	31/12/2013	Amenities	45		4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Balonne Tributaries	Balonne River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Balonne Tributaries	Balonne River	179782	Licence to take water	Issued	31/10/2021	Construction	50		4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	179782	Licence to take water	Issued	31/10/2021	Construction	50		4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Balonne Tributaries	Balonne River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Balonne Tributaries	Balonne River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Balonne Tributaries	Balonne River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43901N	Licence to interfere by diversion-Channel	Issued	30/04/2020	Divert the Course of Flow	NULL	'1/RP41913'	422.01.06.01.02/Horse Creek
Upper Balonne Tributaries	Balonne River	50976N	Licence to interfere by diversion-Other	Issued	27/04/2020	Divert the Course of Flow	NULL		422.01.06.00+/Unnamed Tributary of Bundara Creek
Upper Balonne Tributaries	Balonne River	58211N	Licence to take water	Issued	1/01/2020	Domestic Supply	NULL	'19/WAL53407; 38/WAL53471'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	101214	Licence to take water	Issued	30/06/2021	Domestic Supply; Stock	NULL	'2/RP20949'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101297	Licence to take water	Issued	30/06/2021	Domestic Supply; Stock	NULL	'246/WAL53700'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101853	Licence to take water	Under Amendment	31/03/2020	Domestic Supply; Stock	NULL	'5/EG144'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101982	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NULL	'14/WV1921; 2/WV666'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101982	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NULL	'14/WV1921; 2/WV666'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101982	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NULL	'14/WV1921; 2/WV666'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	103381	Licence to take water	Issued	31/03/2031	Domestic Supply; Stock	NULL	'16/EG147'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	174502	Licence to take water	Issued	1/03/2030	Domestic Supply; Stock	NULL	'38/EG38'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	179436	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NULL	'6/SP107013'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	179436	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NULL	'6/SP107013'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	577172	Licence to take water	Issued	26/11/2029	Domestic Supply; Stock	NULL	'17/E5314; 20/E5314'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606365	Licence to take water	Issued	31/01/2032	Domestic Supply; Stock	NULL	'2/SP219063'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	607460	Licence to take water	Issued	31/12/2032	Domestic Supply; Stock	NULL	'3/RP227972'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00010Q	Licence to take water	Issued	29/02/2032	Domestic Supply; Stock	NULL	'11/COG34'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	00062Q	Licence to take water	Under Renewal	31/05/2009	Domestic Supply; Stock	NULL	'10/COG44'	4224.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	02771Q	Licence to take water	Issued	31/12/2032	Domestic Supply; Stock	NULL	'8/COG88'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	02773Q	Licence to take water	Issued	31/05/2031	Domestic Supply; Stock	NULL	'6/COG95'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	03982N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NULL	'41/WV1240'	4222.NOT/Formation Name Not Specified

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	10549N	Licence to take water	Issued	30/11/2020	Domestic Supply; Stock	NUL	'295/WV913'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11531N	Licence to take water	Issued	28/02/2022	Domestic Supply; Stock	NUL	'58/WV164'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11808N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NUL	'333/WV1261'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12444N	Licence to take water	Issued	30/06/2020	Domestic Supply; Stock	NUL	'2/RP157670'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13276N	Licence to take water	Issued	31/03/2020	Domestic Supply; Stock	NUL	'53/WAL53611'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	13679N	Licence to take water	Issued	31/03/2023	Domestic Supply; Stock	NUL	'457/WV320'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14237N	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NUL	'1/RP835134'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	14600N	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NUL	'1/BWR825'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16505N	Licence to take water	Issued	30/04/2020	Domestic Supply; Stock	NUL	'46/WT94'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	17667N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NUL	'7/BWR674'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22653N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'18/EG39'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22659N	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NUL	'1/SP140817; 11/SP140817'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22659N	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NUL	'1/SP140817; 11/SP140817'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22659N	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NUL	'1/SP140817; 11/SP140817'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22659N	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NUL	'1/SP140817; 11/SP140817'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	32795N	Licence to take water	Issued	30/09/2019	Domestic Supply; Stock	NUL	'13/WV628'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36930N	Licence to take water	Issued	31/07/2021	Domestic Supply; Stock	NUL	'17/WAL53461'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36970N	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NUL	'26/WV251'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	43688N	Licence to take water	Issued	30/11/2031	Domestic Supply; Stock	NUL	'583/WV394'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48805N	Licence to take water	Issued	31/03/2031	Domestic Supply; Stock	NUL	'225/WV495'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48931N	Licence to take water	Issued	30/11/2013	Domestic Supply; Stock	NUL	'39/WV730'	4222.WESTB/Westbourne Formation
Upper Balonne Tributaries	Balonne River	48943N	Licence to take water	Issued	30/11/2013	Domestic Supply; Stock	NUL	'107/WV1644'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	48967N	Licence to take water	Issued	30/04/2021	Domestic Supply; Stock	NUL	'135/WAL53277'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48968N	Licence to take water	Issued	31/10/2019	Domestic Supply; Stock	NUL	'1/WV11'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	49008Q	Licence to take water	Issued	21/01/2030	Domestic Supply; Stock	NUL	'3/COG6'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	49008Q	Licence to take water	Issued	21/01/2030	Domestic Supply; Stock	NUL	'3/COG6'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	49352Q	Licence to take water	Issued	31/10/2022	Domestic Supply; Stock	NUL	'8/COG75'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	49661Q	Licence to take water	Issued	31/03/2031	Domestic Supply; Stock	NUL	'7/COG67'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	49661Q	Licence to take water	Issued	31/03/2031	Domestic Supply; Stock	NUL	'7/COG67'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58060N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NUL	'86/WV419'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58060N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NUL	'86/WV419'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58094N	Licence to take water	Issued	31/07/2022	Domestic Supply; Stock	NUL	'36/WV1026'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58099N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NUL	'9/RP170110'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	58124N	Licence to take water	Issued	31/01/2023	Domestic Supply; Stock	NUL	'23/WV267'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58248N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'13/WV1398'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58255N	Licence to take water	Issued	31/12/2022	Domestic Supply; Stock	NUL	'25/WAL53273'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58256N	Licence to take water	Issued	31/05/2021	Domestic Supply; Stock	NUL	'146/RP864614'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58333N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'40/WV852'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58359N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'343/WAL53150'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58359N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'343/WAL53150'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58366N	Licence to take water	Issued	30/11/2020	Domestic Supply; Stock	NUL	'130/WAL53480'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58383N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NUL	'2/AB233'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58385N	Licence to take water	Issued	31/07/2021	Domestic Supply; Stock	NUL	'11/RP207622'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58386N	Licence to take water	Issued	31/01/2014	Domestic Supply; Stock	NUL	'2/RP227972'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58408N	Licence to take water	Issued	31/01/2021	Domestic Supply; Stock	NUL	'346/WAL53365'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58422N	Licence to take water	Issued	31/12/2021	Domestic Supply; Stock	NUL	'30/WV612'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58439N	Licence to take water	Issued	30/11/2022	Domestic Supply; Stock	NUL	'16/RP204590'	4224.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	58450N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'41/WAL53311'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58470N	Licence to take water	Issued	31/03/2023	Domestic Supply; Stock	NUL	'459/WAL53530'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58477N	Licence to take water	Issued	31/10/2019	Domestic Supply; Stock	NUL	'140/WV415'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58595N	Licence to take water	Issued	30/11/2030	Domestic Supply; Stock	NUL	'19/WAL53553'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58595N	Licence to take water	Issued	30/11/2030	Domestic Supply; Stock	NUL	'19/WAL53553'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58650N	Licence to take water	Issued	30/06/2022	Domestic Supply; Stock	NUL	'25/WAL53249'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58681N	Licence to take water	Issued	31/05/2019	Domestic Supply; Stock	NUL	'534/WAL53234'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58704N	Licence to take water	Issued	30/06/2019	Domestic Supply; Stock	NUL	'434/WAL53193; 435/WAL53193'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58704N	Licence to take water	Issued	30/06/2019	Domestic Supply; Stock	NUL	'434/WAL53193; 435/WAL53193'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58723N	Licence to take water	Issued	30/04/2021	Domestic Supply; Stock	NUL	'112/RP892787'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58742N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'1/WV1663'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58752N	Licence to take water	Issued	31/01/2020	Domestic Supply; Stock	NUL	'112/WAL53322'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58904N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'4/AB209'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58915N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NUL	'1/RP119344; 3/RP119344; 6/WAL537; 8/WAL537'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58915N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NUL	'1/RP119344; 3/RP119344; 6/WAL537; 8/WAL537'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58915N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NUL	'1/RP119344; 3/RP119344; 6/WAL537; 8/WAL537'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58915N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NUL	'1/RP119344; 3/RP119344; 6/WAL537; 8/WAL537'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58922N	Licence to take water	Issued	31/01/2022	Domestic Supply; Stock	NUL	'211/SP140824'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	100699	Licence to take water	Issued	31/01/2021	Domestic Supply; Stock	NUL	'32/WV1035'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	100699	Licence to take water	Issued	31/01/2021	Domestic Supply; Stock	NUL	'32/WV1035'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58517N	Licence to take water	Issued	31/01/2022	Domestic Supply; Stock	NUL	'32/WV768; 36/WV634'	1303.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58517N	Licence to take water	Issued	31/01/2022	Domestic Supply; Stock	NUL	'32/WV768; 36/WV634'	1303.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16155N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NUL	'49/WV540'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48989N	Licence to take water	Issued	30/06/2020	Domestic Supply; Stock	NUL	'7/WAL53368'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48989N	Licence to take water	Issued	30/06/2020	Domestic Supply; Stock	NUL	'7/WAL53368'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	102805	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'14/COG50'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	102805	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'14/COG50'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	08130N	Licence to take water	Issued	30/04/2019	Domestic Supply; Stock	NUL	'466/WV475'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	43856N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'56/WV367'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58744N	Licence to take water	Issued	31/03/2023	Domestic Supply; Stock	NUL	'4/RP887933'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	10624N	Licence to take water	Issued	31/01/2014	Domestic Supply; Stock	NUL	'1/WV1958'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	36952N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'71/WV285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36952N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'71/WV285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36952N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'71/WV285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36738N	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NUL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36738N	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NUL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58685N	Licence to take water	Issued	31/05/2019	Domestic Supply; Stock	NUL		4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14600N	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NUL	'1/BWR825'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14810N	Licence to take water	Issued	30/04/2021	Domestic Supply; Stock	NUL	'26/WV15'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58641N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NUL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58641N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NUL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58641N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NUL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48986N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	16505N	Licence to take water	Issued	30/04/2020	Domestic Supply; Stock	NUL	'46/WT94'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22589N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'9/WV1807'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22589N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'9/WV1807'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22589N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'9/WV1807'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36960N	Licence to take water	Issued	31/01/2021	Domestic Supply; Stock	NUL	'37/WAL53470'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58381N	Licence to take water	Issued	31/01/2021	Domestic Supply; Stock	NUL	'37/WAL53470'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58194N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NUL	'59/WV1524'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	43872N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabran
Upper Balonne Tributaries	Balonne River	43873N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabran

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	43872N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43873N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43872N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43873N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43872N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43873N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43872N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43873N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	48843N	Licence to take water	Issued	30/11/2022	Domestic Supply; Stock	NULL	'19/WV841'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58046N	Licence to take water	Issued	30/11/2022	Domestic Supply; Stock	NULL	'19/WV841'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58383N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NULL	'2/AB233'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58516N	Licence to take water	Issued	31/08/2022	Domestic Supply; Stock	NULL	'6/WV282'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58904N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'4/AB209'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58915N	Licence to take water	Issued	31/12/2013	Domestic Supply; Stock	NULL	'1/RP119344; 3/RP119344; 6/WAL537; 8/WAL537'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	10542N	Licence to take water	Issued	30/09/2020	Domestic Supply; Stock	NULL	'283/WAL53101'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36738N	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NULL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	13212N	Licence to take water	Issued	31/10/2022	Domestic Supply; Stock	NULL	'527/WV904'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	38302N	Licence to take water	Issued	31/10/2022	Domestic Supply; Stock	NULL	'527/WV904'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48986N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NULL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	43872N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	43873N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'12/WAL53552; 31/WAL53599; 32/WAL53603; 33/WAL53603; 34/WAL53607'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	12829N	Licence to take water	Issued	31/05/2021	Domestic Supply; Stock; Stock Intensive	3	'12/WV954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12829N	Licence to take water	Issued	31/05/2021	Domestic Supply; Stock; Stock Intensive	3	'12/WV954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12829N	Licence to take water	Issued	31/05/2021	Domestic Supply; Stock; Stock Intensive	3	'12/WV954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12829N	Licence to take water	Issued	31/05/2021	Domestic Supply; Stock; Stock Intensive	3	'12/WV954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48875N	Licence to take water	Issued	31/08/2021	Educational Facility	2	'59/WV856'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	102188	Licence to interfere by impounding-Excavation	Issued	30/06/2022	Impound Water	2.5	'13/M53100'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	17454Q	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2020	Impound Water	NULL	'3/EG48'	422.01.04.02.00+/Unnamed Tributary of Yungerman Creek

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	17454Q	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2020	Impound Water	NULL	'3/EG48'	422.01.04.02.00+/Unnamed Tributary of Yungerman Creek
Upper Balonne Tributaries	Balonne River	17608N	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2021	Impound Water	NULL	'90/WV1714'	422.01.12.05/Rocky Creek
Upper Balonne Tributaries	Balonne River	31107Q	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2022	Impound Water	150	'20/SP187998'	422.01.02/Tartulla Creek
Upper Balonne Tributaries	Balonne River	39555N	Licence to interfere by impounding-Embankment or Wall	Issued	15/02/2020	Impound Water	10	'143/WAL53463'	422.01.08.06.02/Sleepy Creek
Upper Balonne Tributaries	Balonne River	40998N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2015	Impound Water	2	'148/WV417'	422.01.12.06/Kangaroo Creek
Upper Balonne Tributaries	Balonne River	43255Q	Licence to interfere by impounding-Embankment or Wall	Issued	30/11/2013	Impound Water	150	'4/COG33'	422.01.06.00.B+/Unnamed Tributary of Cogoon River
Upper Balonne Tributaries	Balonne River	49178WQ	Licence to interfere by impounding-Embankment or Wall	Issued	31/12/2020	Impound Water	500	'9/COG132'	422.01.05.06/Megine Creek
Upper Balonne Tributaries	Balonne River	49178WQ	Licence to interfere by impounding-Embankment or Wall	Issued	31/12/2020	Impound Water	500	'9/COG132'	422.01.05.06/Megine Creek
Upper Balonne Tributaries	Balonne River	50829N	Licence to interfere by impounding-Embankment or Wall	Issued	31/01/2014	Impound Water	4	'46/WV374'	422.01.08.05/Bony Creek
Upper Balonne Tributaries	Balonne River	50840N	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2013	Impound Water	30	'9/WAL53317'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	50840N	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2013	Impound Water	30	'9/WAL53317'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	50840N	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2013	Impound Water	30	'9/WAL53317'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	50851N	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2020	Impound Water	1500	'2/E531'	422.01.11/Ogilvie Creek
Upper Balonne Tributaries	Balonne River	50887N	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	100	'2/WV1209'	422.01.12/Yuleba Creek
Upper Balonne Tributaries	Balonne River	50887N	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	100	'2/WV1209'	422.01.12/Yuleba Creek
Upper Balonne Tributaries	Balonne River	50887N	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	100	'2/WV1209'	422.01.12/Yuleba Creek
Upper Balonne Tributaries	Balonne River	50887N	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	100	'2/WV1209'	422.01.12/Yuleba Creek
Upper Balonne Tributaries	Balonne River	50901N	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2020	Impound Water	50	'109/WAL53322'	422.01.08.07/Bungeworgorai Creek
Upper Balonne Tributaries	Balonne River	50911N	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2020	Impound Water	600	'8/WV1587'	422.01.16+/Dogwood Creek Anabranh
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	51053N	Licence to interfere by impounding-Embankment or Wall	Issued	31/05/2018	Impound Water	715	'124/EG247'	422.01.00/Balonne River
Upper Balonne Tributaries	Balonne River	43324Q	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	NULL	'14/COG50'	422.01.02/Tartulla Creek
Upper Balonne Tributaries	Balonne River	43324Q	Licence to interfere by impounding-Embankment or Wall	Issued	31/07/2020	Impound Water	NULL	'14/COG50'	422.01.02/Tartulla Creek

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	402980	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2022	Impound Water	1132	'24/WV1605'	422.01.14/Warkon Lagoon
Upper Balonne Tributaries	Balonne River	402986	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2022	Impound Water	664	'24/WV1605'	422.01.14/Warkon Lagoon
Upper Balonne Tributaries	Balonne River	402980	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2022	Impound Water	1132	'24/WV1605'	422.01.14/Warkon Lagoon
Upper Balonne Tributaries	Balonne River	402986	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2022	Impound Water	664	'24/WV1605'	422.01.14/Warkon Lagoon
Upper Balonne Tributaries	Balonne River	402980	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2022	Impound Water	1132	'24/WV1605'	422.01.14/Warkon Lagoon
Upper Balonne Tributaries	Balonne River	402986	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2022	Impound Water	664	'24/WV1605'	422.01.14/Warkon Lagoon
Upper Balonne Tributaries	Balonne River	04354N	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2020	Impound Water	70	'6/WV1822'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	04354N	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2020	Impound Water	70	'6/WV1822'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	04354N	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2020	Impound Water	70	'6/WV1822'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	04354N	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2020	Impound Water	70	'6/WV1822'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	04354N	Licence to interfere by impounding-Embankment or Wall	Issued	31/03/2020	Impound Water	70	'6/WV1822'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	44029N	Licence to interfere by impounding-Embankment or Wall	Issued	30/09/2019	Impound Water	310	'31/WV601'	422.01.08.19.00+/Unnamed Tributary of Eumamurrin Creek
Upper Balonne Tributaries	Balonne River	40283Q	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2013	Impound Water	2300	'3/COG63'	422.01.01.00.+ /Unnamed Tributary of Maranoa River
Upper Balonne Tributaries	Balonne River	04941N	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2018	Impound Water	NULL	'25/WV834'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	04941N	Licence to interfere by impounding-Embankment or Wall	Issued	30/04/2018	Impound Water	NULL	'25/WV834'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	14919Q	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2020	Impound Water	NULL	'3/COG55'	422.01.02/Tartulla Creek
Upper Balonne Tributaries	Balonne River	43318Q	Licence to interfere by impounding-Embankment or Wall	Issued	31/08/2020	Impound Water	10	'3/COG55'	422.01.02/Tartulla Creek
Upper Balonne Tributaries	Balonne River	50801N	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2019	Impound Water	50	'9/WV1807'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	50801N	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2019	Impound Water	50	'9/WV1807'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	50801N	Licence to interfere by impounding-Embankment or Wall	Issued	30/06/2019	Impound Water	50	'9/WV1807'	422.01.08/Bungil Creek
Upper Balonne Tributaries	Balonne River	31844N	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2019	Impound Water	1200	'25/WV1930'	422.01.00+/Unnamed Tributary of Balonne River
Upper Balonne Tributaries	Balonne River	31844N	Licence to interfere by impounding-Embankment or Wall	Issued	31/10/2019	Impound Water	1200	'25/WV1930'	422.01.00+/Unnamed Tributary of Balonne River

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	43271N	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2017	Impound Water	NULL	'11/WV1620'	422.01.07/Yalebone Creek
Upper Balonne Tributaries	Balonne River	43271N	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2017	Impound Water	NULL	'11/WV1620'	422.01.07/Yalebone Creek
Upper Balonne Tributaries	Balonne River	43802WN	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2014	Impound Water	5	'479/WV1464'	422.01.10.06/Middle Creek
Upper Balonne Tributaries	Balonne River	43803N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2014	Impound Water	NULL	'479/WV1464'	422.01.10.06/Middle Creek
Upper Balonne Tributaries	Balonne River	50802N	Licence to interfere by impounding- Embankment or Wall	Issued	31/10/2021	Impound Water	5	'6/RP41913'	422.01.09/Griman Creek
Upper Balonne Tributaries	Balonne River	50842N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2014	Impound Water	30	'9/EG83'	422.01.06.01.02/Horse Creek
Upper Balonne Tributaries	Balonne River	51014N	Licence to interfere by impounding- Embankment or Wall	Issued	30/11/2019	Impound Water	60	'9/EG83'	422.01.06.01.02/Horse Creek
Upper Balonne Tributaries	Balonne River	50842N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2014	Impound Water	30	'9/EG83'	422.01.06.01.02/Horse Creek
Upper Balonne Tributaries	Balonne River	51014N	Licence to interfere by impounding- Embankment or Wall	Issued	30/11/2019	Impound Water	60	'9/EG83'	422.01.06.01.02/Horse Creek
Upper Balonne Tributaries	Balonne River	50911N	Licence to interfere by impounding- Embankment or Wall	Issued	30/06/2020	Impound Water	600	'8/WV1587'	422.01.16+/Dogwood Creek Anabranh
Upper Balonne Tributaries	Balonne River	15163N	Licence to interfere by impounding- Embankment or Wall	Issued	31/05/2014	Impound Water	23	'33/WV964'	422.01.08.05/Bony Creek
Upper Balonne Tributaries	Balonne River	43871N	Licence to interfere by impounding- Embankment or Wall	Issued	31/12/2022	Impound Water	100	'21/WAL53635'	422.01.08.02/Beranga Anabranh
Upper Balonne Tributaries	Balonne River	50814N	Licence to interfere by impounding- Embankment or Wall	Issued	31/01/2021	Impound Water	170	'23/WV954'	422.01.10/Wallumbilla Creek
Upper Balonne Tributaries	Balonne River	500220	Licence to take water	Issued	20/07/2014	Industrial	480	'2/SP197617'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601915	Licence to take water	Issued	3/03/2020	Industrial	500	'208/RP835683; 209/RP835683; 210/WAL53390'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601915	Licence to take water	Issued	3/03/2020	Industrial	500	'208/RP835683; 209/RP835683; 210/WAL53390'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601915	Licence to take water	Issued	3/03/2020	Industrial	500	'208/RP835683; 209/RP835683; 210/WAL53390'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601916	Licence to take water	Issued	3/03/2020	Industrial	500	'2/SP126473'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	49273N	Licence to take water	Issued	31/10/2020	Industrial; Irrigation	40	'6/RP41913'	4222.GRIMA/Griman Creek Formation
Upper Balonne Tributaries	Balonne River	602521	Licence to take water	Issued	8/04/2020	Industrial; Stock	2	'29/SP206879'	4223.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48899N	Licence to take water	Issued	30/06/2020	Irrigation	25	'315/WV8'	4222.BUNGL/Bungil Creek Alluvium
Upper Balonne Tributaries	Balonne River	34752N	Licence to take water	Issued	12/02/2020	Irrigation	30	'7/RP173059'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48900N	Licence to take water	Issued	31/05/2022	Irrigation	25	'316/WV125'	4222.BUNGL/Bungil Creek Alluvium
Upper Balonne Tributaries	Balonne River	44043N	Licence to take water	Issued	29/01/2020	Relift Water	NULL	'25/WV1930'	422.01.00+/Unnamed Tributary of Balonne River
Upper Balonne Tributaries	Balonne River	44043N	Licence to take water	Issued	29/01/2020	Relift Water	NULL	'25/WV1930'	422.01.00+/Unnamed Tributary of Balonne River
Upper Balonne Tributaries	Balonne River	100026	Licence to take water	Issued	31/12/2020	Stock	NULL	'53/WV30'	4222.NOT/Formation Name Not Specified

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	100026	Licence to take water	Issued	31/12/2020	Stock	NULL	'53/WV30'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	100698	Licence to take water	Issued	31/10/2030	Stock	NULL	'5/SP103841'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	100861	Licence to take water	Issued	30/06/2014	Stock	NULL	'39/WV613'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	100890	Licence to take water	Issued	31/05/2021	Stock	NULL	'29/SP252074; 30/SP252074'	4222.BIRKH/Birkhead Formation
Upper Balonne Tributaries	Balonne River	100890	Licence to take water	Issued	31/05/2021	Stock	NULL	'29/SP252074; 30/SP252074'	4222.BIRKH/Birkhead Formation
Upper Balonne Tributaries	Balonne River	101114	Licence to take water	Issued	31/05/2021	Stock	NULL	'31/WV688; 32/WV768; 35/WV774; 36/WV634; 48/WV634'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101114	Licence to take water	Issued	31/05/2021	Stock	NULL	'31/WV688; 32/WV768; 35/WV774; 36/WV634; 48/WV634'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101114	Licence to take water	Issued	31/05/2021	Stock	NULL	'31/WV688; 32/WV768; 35/WV774; 36/WV634; 48/WV634'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101114	Licence to take water	Issued	31/05/2021	Stock	NULL	'31/WV688; 32/WV768; 35/WV774; 36/WV634; 48/WV634'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101805	Licence to take water	Issued	31/01/2022	Stock	NULL	'366/WAL53165'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	101816	Licence to take water	Issued	31/08/2022	Stock	NULL	'49/WV540; 50/WV540'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	101854	Licence to take water	Issued	31/03/2020	Stock	NULL	'1/EG51'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101922	Licence to take water	Issued	31/05/2022	Stock	NULL	'158/WV846'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	101922	Licence to take water	Issued	31/05/2022	Stock	NULL	'158/WV846'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	102039	Licence to take water	Issued	30/06/2022	Stock	NULL	'16/WV926; 281/WV686'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	102039	Licence to take water	Issued	30/06/2022	Stock	NULL	'16/WV926; 281/WV686'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	102078	Licence to take water	Issued	31/10/2030	Stock	NULL	'58/COG83'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	102078	Licence to take water	Issued	31/10/2030	Stock	NULL	'58/COG83'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	102078	Licence to take water	Issued	31/10/2030	Stock	NULL	'58/COG83'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	102277	Licence to take water	Issued	30/06/2020	Stock	NULL	'14/EG231'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	102277	Licence to take water	Issued	30/06/2020	Stock	NULL	'14/EG231'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	102842	Licence to take water	Issued	31/08/2020	Stock	NULL	'2/E5367; 25/E5313; 27/E5313; 96/E5347'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	102842	Licence to take water	Issued	31/08/2020	Stock	NULL	'2/E5367; 25/E5313; 27/E5313; 96/E5347'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	102842	Licence to take water	Issued	31/08/2020	Stock	NULL	'2/E5367; 25/E5313; 27/E5313; 96/E5347'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	102842	Licence to take water	Issued	31/08/2020	Stock	NULL	'2/E5367; 25/E5313; 27/E5313; 96/E5347'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	103896	Licence to take water	Issued	30/09/2030	Stock	NULL	'69/WV569; 71/WAL53672; 8/WAL53284'	4223.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	103896	Licence to take water	Issued	30/09/2030	Stock	NULL	'69/WV569; 71/WAL53672; 8/WAL53284'	4223.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	103896	Licence to take water	Issued	30/09/2030	Stock	NULL	'69/WV569; 71/WAL53672; 8/WAL53284'	4223.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	103896	Licence to take water	Issued	30/09/2030	Stock	NULL	'69/WV569; 71/WAL53672; 8/WAL53284'	4223.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	171022	Licence to take water	Issued	28/02/2031	Stock	NULL	'23/WV405'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	171337	Licence to take water	Issued	31/07/2031	Stock	NULL	'9/COG139'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	171337	Licence to take water	Issued	31/07/2031	Stock	NULL	'9/COG139'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	171337	Licence to take water	Issued	31/07/2031	Stock	NULL	'9/COG139'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	171351	Licence to take water	Issued	30/09/2013	Stock	NULL	'79/WV1784'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	171351	Licence to take water	Issued	30/09/2013	Stock	NULL	'79/WV1784'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	171661	Licence to take water	Issued	3/11/2029	Stock	NULL	'13/WV1558'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	171661	Licence to take water	Issued	3/11/2029	Stock	NULL	'13/WV1558'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	171662	Licence to take water	Issued	31/03/2031	Stock	NULL	'192/WV212; 482/WV1655'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172524	Licence to take water	Issued	30/09/2018	Stock	NULL	'53/WV421; 54/WV421'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172524	Licence to take water	Issued	30/09/2018	Stock	NULL	'53/WV421; 54/WV421'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172695	Licence to take water	Issued	30/09/2029	Stock	NULL	'1/RP179173'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	172965	Licence to take water	Issued	30/09/2029	Stock	NULL	'18/WV848; 19/WV853; 23/WV853'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172965	Licence to take water	Issued	30/09/2029	Stock	NULL	'18/WV848; 19/WV853; 23/WV853'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172965	Licence to take water	Issued	30/09/2029	Stock	NULL	'18/WV848; 19/WV853; 23/WV853'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172965	Licence to take water	Issued	30/09/2029	Stock	NULL	'18/WV848; 19/WV853; 23/WV853'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172965	Licence to take water	Issued	30/09/2029	Stock	NULL	'18/WV848; 19/WV853; 23/WV853'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172965	Licence to take water	Issued	30/09/2029	Stock	NULL	'18/WV848; 19/WV853; 23/WV853'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	172966	Licence to take water	Issued	31/10/2029	Stock	NULL	'21/WAL53542'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	173139	Licence to take water	Issued	28/02/2031	Stock	NULL	'21/WV271'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173360	Licence to take water	Issued	23/12/2029	Stock	NULL	'3/COG48'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173692	Licence to take water	Issued	30/11/2029	Stock	NULL	'445/WAL53201'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	173696	Licence to take water	Issued	6/01/2030	Stock	NULL	'361/M5321; 42/WV1512; 56/M5330; 93/M5358'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173696	Licence to take water	Issued	6/01/2030	Stock	NULL	'361/M5321; 42/WV1512; 56/M5330; 93/M5358'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173696	Licence to take water	Issued	6/01/2030	Stock	NULL	'361/M5321; 42/WV1512; 56/M5330; 93/M5358'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173838	Licence to take water	Issued	31/10/2031	Stock	NULL	'1/RP168325; 2/RP168325; 345/WV142; 348/WV132; 554/WV239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173838	Licence to take water	Issued	31/10/2031	Stock	NULL	'1/RP168325; 2/RP168325; 345/WV142; 348/WV132; 554/WV239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173838	Licence to take water	Issued	31/10/2031	Stock	NULL	'1/RP168325; 2/RP168325; 345/WV142; 348/WV132; 554/WV239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173838	Licence to take water	Issued	31/10/2031	Stock	NULL	'1/RP168325; 2/RP168325; 345/WV142; 348/WV132; 554/WV239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	173838	Licence to take water	Issued	31/10/2031	Stock	NULL	'1/RP168325; 2/RP168325; 345/WV142; 348/WV132; 554/WV239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	174070	Licence to take water	Issued	3/11/2029	Stock	NULL	'28/WAL53250'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	174224	Licence to take water	Issued	31/01/2030	Stock	NULL	'27/WV1358; 4/WV355; 5/WV355'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	174224	Licence to take water	Issued	31/01/2030	Stock	NULL	'27/WV1358; 4/WV355; 5/WV355'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	174224	Licence to take water	Issued	31/01/2030	Stock	NULL	'27/WV1358; 4/WV355; 5/WV355'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	174261	Licence to take water	Issued	10/03/2030	Stock	NULL	'1/RP218981; 2/RP218981'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	174261	Licence to take water	Issued	10/03/2030	Stock	NULL	'1/RP218981; 2/RP218981'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	176731	Licence to take water	Issued	30/09/2029	Stock	NULL	'4/SP127239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	176732	Licence to take water	Issued	30/09/2030	Stock	NULL	'3/SP127239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	176733	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/SP127239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	176875	Licence to take water	Issued	31/10/2030	Stock	NULL	'121/WV1262'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	176875	Licence to take water	Issued	31/10/2030	Stock	NULL	'121/WV1262'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	177085	Licence to take water	Issued	18/01/2030	Stock	NULL	'17/SP109854'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	177189	Licence to take water	Issued	30/11/2030	Stock	NULL	'156/WV846; 157/WV846'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	177754	Licence to take water	Issued	30/04/2013	Stock	NULL	'169/WAL53457; 211/WV988'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	177754	Licence to take water	Issued	30/04/2013	Stock	NULL	'169/WAL53457; 211/WV988'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	177754	Licence to take water	Issued	30/04/2013	Stock	NULL	'169/WAL53457; 211/WV988'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	177897	Licence to take water	Issued	30/11/2030	Stock	NULL	'3/WV293'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	177897	Licence to take water	Issued	30/11/2030	Stock	NULL	'3/WV293'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	177897	Licence to take water	Issued	30/11/2030	Stock	NULL	'3/WV293'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	177960	Licence to take water	Issued	31/01/2031	Stock	NULL	'178/WAL53311; 179/WAL53311; 40/WAL53311'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	177960	Licence to take water	Issued	31/01/2031	Stock	NULL	'178/WAL53311; 179/WAL53311; 40/WAL53311'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	177960	Licence to take water	Issued	31/01/2031	Stock	NULL	'178/WAL53311; 179/WAL53311; 40/WAL53311'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	178122	Licence to take water	Issued	28/02/2031	Stock	NULL	'555/WAL53231'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	178533	Licence to take water	Issued	31/05/2031	Stock	NULL	'215/RP908608'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	178662	Licence to take water	Issued	30/04/2031	Stock	NULL	'17/EG94'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	178778	Licence to take water	Issued	31/05/2031	Stock	NULL	'16/SP206073'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	178778	Licence to take water	Issued	31/05/2031	Stock	NULL	'16/SP206073'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	179337	Licence to take water	Issued	31/07/2031	Stock	NULL	'1/SP148645; 2/SP148645; 3/SP148645'	4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	179337	Licence to take water	Issued	31/07/2031	Stock	NULL	'1/SP148645; 2/SP148645; 3/SP148645'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	179337	Licence to take water	Issued	31/07/2031	Stock	NULL	'1/SP148645; 2/SP148645; 3/SP148645'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	179600	Licence to take water	Issued	31/08/2031	Stock	NULL	'28/WV932'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	179790	Licence to take water	Issued	31/05/2031	Stock	NULL	'1/WV956'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	179790	Licence to take water	Issued	31/05/2031	Stock	NULL	'1/WV956'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	179790	Licence to take water	Issued	31/05/2031	Stock	NULL	'1/WV956'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	180136	Licence to take water	Issued	31/10/2013	Stock	NULL	'466/WV475; 468/WV1816; 497/WV475; 498/WV475'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	180136	Licence to take water	Issued	31/10/2013	Stock	NULL	'466/WV475; 468/WV1816; 497/WV475; 498/WV475'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	180136	Licence to take water	Issued	31/10/2013	Stock	NULL	'466/WV475; 468/WV1816; 497/WV475; 498/WV475'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	180391	Licence to take water	Issued	30/11/2013	Stock	NULL	'1/RP114937'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180398	Licence to take water	Issued	30/11/2013	Stock	NULL	'74/WV993'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180519	Licence to take water	Issued	31/07/2013	Stock	NULL	'152/WV442'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180551	Licence to take water	Issued	30/11/2013	Stock	NULL	'2/WV548; 387/WAL53182; 388/WAL53182; 4/WAL53424; 42/WAL53424; 75/WV548'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180551	Licence to take water	Issued	30/11/2013	Stock	NULL	'2/WV548; 387/WAL53182; 388/WAL53182; 4/WAL53424; 42/WAL53424; 75/WV548'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180551	Licence to take water	Issued	30/11/2013	Stock	NULL	'2/WV548; 387/WAL53182; 388/WAL53182; 4/WAL53424; 42/WAL53424; 75/WV548'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180551	Licence to take water	Issued	30/11/2013	Stock	NULL	'2/WV548; 387/WAL53182; 388/WAL53182; 4/WAL53424; 42/WAL53424; 75/WV548'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180551	Licence to take water	Issued	30/11/2013	Stock	NULL	'2/WV548; 387/WAL53182; 388/WAL53182; 4/WAL53424; 42/WAL53424; 75/WV548'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180551	Licence to take water	Issued	30/11/2013	Stock	NULL	'2/WV548; 387/WAL53182; 388/WAL53182; 4/WAL53424; 42/WAL53424; 75/WV548'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180583	Licence to take water	Issued	30/11/2031	Stock	NULL	'1/SP126470'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	181178	Licence to take water	Issued	31/01/2014	Stock	NULL	'1/COG33'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	181317	Licence to take water	Issued	29/02/2032	Stock	NULL	'329/WAL53330'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	181358	Licence to take water	Issued	29/02/2032	Stock	NULL	'1/SP163462; 2/SP163462'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	181358	Licence to take water	Issued	29/02/2032	Stock	NULL	'1/SP163462; 2/SP163462'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	181358	Licence to take water	Issued	29/02/2032	Stock	NULL	'1/SP163462; 2/SP163462'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	181371	Licence to take water	Issued	28/02/2030	Stock	NULL	'6/RP844536'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	181490	Licence to take water	Issued	31/07/2013	Stock	NULL	'4/RP179173'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	181648	Licence to take water	Issued	31/03/2014	Stock	NULL	'235/WAL53330'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	181794	Licence to take water	Issued	31/05/2032	Stock	NULL	'38/WAL53474'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	182048	Licence to take water	Issued	30/04/2032	Stock	NULL	'42/WAL53311; 488/WAL53218'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	182048	Licence to take water	Issued	30/04/2032	Stock	NULL	'42/WAL53311; 488/WAL53218'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	182140	Licence to take water	Issued	30/06/2030	Stock	NULL	'3/WV95'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	182209	Licence to take water	Issued	30/04/2014	Stock	NULL	'370/WAL53175'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	182229	Licence to take water	Issued	31/07/2032	Stock	NULL	'257/M532; 258/M532; 259/M532; 260/M532; 261/M532'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182229	Licence to take water	Issued	31/07/2032	Stock	NULL	'257/M532; 258/M532; 259/M532; 260/M532; 261/M532'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182229	Licence to take water	Issued	31/07/2032	Stock	NULL	'257/M532; 258/M532; 259/M532; 260/M532; 261/M532'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182229	Licence to take water	Issued	31/07/2032	Stock	NULL	'257/M532; 258/M532; 259/M532; 260/M532; 261/M532'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182229	Licence to take water	Issued	31/07/2032	Stock	NULL	'257/M532; 258/M532; 259/M532; 260/M532; 261/M532'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182803	Licence to take water	Issued	30/06/2032	Stock	NULL	'40/WAL53374'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	182949	Licence to take water	Issued	20/10/2029	Stock	NULL	'21/SP132318; 22/WV1819'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182949	Licence to take water	Issued	20/10/2029	Stock	NULL	'21/SP132318; 22/WV1819'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182949	Licence to take water	Issued	20/10/2029	Stock	NULL	'21/SP132318; 22/WV1819'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182949	Licence to take water	Issued	20/10/2029	Stock	NULL	'21/SP132318; 22/WV1819'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	182990	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WV296; 13/WV297; 14/WV295; 33/WV1805; 9/WV296'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182990	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WV296; 13/WV297; 14/WV295; 33/WV1805; 9/WV296'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182990	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WV296; 13/WV297; 14/WV295; 33/WV1805; 9/WV296'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182990	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WV296; 13/WV297; 14/WV295; 33/WV1805; 9/WV296'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182990	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WV296; 13/WV297; 14/WV295; 33/WV1805; 9/WV296'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182990	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WV296; 13/WV297; 14/WV295; 33/WV1805; 9/WV296'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	183795	Licence to take water	Issued	31/08/2030	Stock	NULL	'15/WV295; 8/WV296'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	183795	Licence to take water	Issued	31/08/2030	Stock	NULL	'15/WV295; 8/WV296'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	183795	Licence to take water	Issued	31/08/2030	Stock	NULL	'15/WV295; 8/WV296'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	184433	Licence to take water	Issued	31/08/2032	Stock	NULL	'206/WV1262'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	184433	Licence to take water	Issued	31/08/2032	Stock	NULL	'206/WV1262'	4222.ORALL/Orallo Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	185809	Licence to take water	Issued	4/12/2029	Stock	NULL	'128/WV197; 14/WV598; 38/WAL53598; 39/WAL53598; 40/WAL53598; 45/WV90; 46/WV90; 638/WV1528; 643/WV452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	188129	Licence to take water	Issued	30/04/2033	Stock	NULL	'157/WAL5311; 241/WAL5370; 28/WAL53482; 29/WAL53570; 97/M5376'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	188129	Licence to take water	Issued	30/04/2033	Stock	NULL	'157/WAL5311; 241/WAL5370; 28/WAL53482; 29/WAL53570; 97/M5376'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	188129	Licence to take water	Issued	30/04/2033	Stock	NULL	'157/WAL5311; 241/WAL5370; 28/WAL53482; 29/WAL53570; 97/M5376'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	188129	Licence to take water	Issued	30/04/2033	Stock	NULL	'157/WAL5311; 241/WAL5370; 28/WAL53482; 29/WAL53570; 97/M5376'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	188129	Licence to take water	Issued	30/04/2033	Stock	NULL	'157/WAL5311; 241/WAL5370; 28/WAL53482; 29/WAL53570; 97/M5376'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	188245	Licence to take water	Issued	31/12/2031	Stock	NULL	'31/RP857474'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	189875	Licence to take water	Issued	30/09/2031	Stock	NULL	'3/RP813727'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	190001	Licence to take water	Issued	31/08/2031	Stock	NULL	'68/WV438; 69/WV438'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	190001	Licence to take water	Issued	31/08/2031	Stock	NULL	'68/WV438; 69/WV438'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	190057	Licence to take water	Issued	30/09/2031	Stock	NULL	'93/WV1471'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	190105	Licence to take water	Issued	31/10/2031	Stock	NULL	'195/WV1268; 39/WAL53311'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	190105	Licence to take water	Issued	31/10/2031	Stock	NULL	'195/WV1268; 39/WAL53311'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	190345	Licence to take water	Issued	30/09/2031	Stock	NULL	'10/RP204590'	4222.MOOGA/Mooga Sandstone

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Upper Balonne Tributaries	Balonne River	190390	Licence to take water	Issued	30/09/2031	Stock	NULL	'135/WV1678'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	400274	Licence to take water	Issued	31/10/2013	Stock	NULL	'3/SP171540'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400379	Licence to take water	Issued	31/10/2031	Stock	NULL	'2/SP152678'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400380	Licence to take water	Issued	31/12/2030	Stock	NULL	'1/SP152678'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400421	Licence to take water	Issued	30/11/2021	Stock	NULL	'1/RP80121; 12/WV1032; 2/RP80121; 27/WV1045; 4/RP887933'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400421	Licence to take water	Issued	30/11/2021	Stock	NULL	'1/RP80121; 12/WV1032; 2/RP80121; 27/WV1045; 4/RP887933'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400421	Licence to take water	Issued	30/11/2021	Stock	NULL	'1/RP80121; 12/WV1032; 2/RP80121; 27/WV1045; 4/RP887933'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400490	Licence to take water	Issued	16/12/2029	Stock	NULL	'2/RP908597'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400492	Licence to take water	Issued	30/11/2013	Stock	NULL	'84/WV277'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	401162	Licence to take water	Issued	28/02/2033	Stock	NULL	'123/WV468; 124/WAL53367; 125/WAL53367'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	401162	Licence to take water	Issued	28/02/2033	Stock	NULL	'123/WV468; 124/WAL53367; 125/WAL53367'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	401162	Licence to take water	Issued	28/02/2033	Stock	NULL	'123/WV468; 124/WAL53367; 125/WAL53367'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	402015	Licence to take water	Issued	1/04/2014	Stock	NULL	'2/B3861; 2/RP121859; 3/B3861; 3/RP121859'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	402015	Licence to take water	Issued	1/04/2014	Stock	NULL	'2/B3861; 2/RP121859; 3/B3861; 3/RP121859'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	402015	Licence to take water	Issued	1/04/2014	Stock	NULL	'2/B3861; 2/RP121859; 3/B3861; 3/RP121859'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	402015	Licence to take water	Issued	1/04/2014	Stock	NULL	'2/B3861; 2/RP121859; 3/B3861; 3/RP121859'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	403107	Licence to take water	Issued	30/06/2014	Stock	NULL	'21/SP109854'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	403168	Licence to take water	Issued	18/01/2030	Stock	NULL	'19/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403169	Licence to take water	Issued	18/01/2030	Stock	NULL	'18/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403170	Licence to take water	Issued	31/07/2031	Stock	NULL	'17/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403171	Licence to take water	Issued	30/06/2013	Stock	NULL	'16/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403172	Licence to take water	Issued	31/08/2031	Stock	NULL	'15/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403173	Licence to take water	Issued	30/06/2030	Stock	NULL	'14/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403178	Licence to take water	Issued	31/08/2030	Stock	NULL	'8/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403179	Licence to take water	Issued	30/06/2030	Stock	NULL	'7/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403180	Licence to take water	Issued	30/06/2014	Stock	NULL	'6/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403181	Licence to take water	Issued	30/06/2030	Stock	NULL	'5/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403182	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403184	Licence to take water	Issued	17/09/2029	Stock	NULL	'2/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403185	Licence to take water	Issued	17/09/2029	Stock	NULL	'1/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403293	Licence to take water	Issued	31/08/2032	Stock	NULL	'23/WV1542'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	403293	Licence to take water	Issued	31/08/2032	Stock	NULL	'23/WV1542'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	403293	Licence to take water	Issued	31/08/2032	Stock	NULL	'23/WV1542'	4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	403923	Licence to take water	Issued	31/08/2029	Stock	NULL	'212/SP140824'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	403923	Licence to take water	Issued	31/08/2029	Stock	NULL	'212/SP140824'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	404035	Licence to take water	Issued	30/09/2029	Stock	NULL	'12/WV1148; 27/WAL53455'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	404774	Licence to take water	Issued	5/11/2029	Stock	NULL	'153/WAL539; 161/WAL539; 169/WAL5313; 41/WV1577'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	404774	Licence to take water	Issued	5/11/2029	Stock	NULL	'153/WAL539; 161/WAL539; 169/WAL5313; 41/WV1577'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	404774	Licence to take water	Issued	5/11/2029	Stock	NULL	'153/WAL539; 161/WAL539; 169/WAL5313; 41/WV1577'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	404774	Licence to take water	Issued	5/11/2029	Stock	NULL	'153/WAL539; 161/WAL539; 169/WAL5313; 41/WV1577'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	404774	Licence to take water	Issued	5/11/2029	Stock	NULL	'153/WAL539; 161/WAL539; 169/WAL5313; 41/WV1577'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	404929	Licence to take water	Issued	30/11/2029	Stock	NULL	'5/WV840'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	404931	Licence to take water	Issued	30/11/2029	Stock	NULL	'192/WAL53355'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	404980	Licence to take water	Issued	30/11/2029	Stock	NULL	'490/WAL53218; 544/WAL53236; 574/WAL53262'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	404980	Licence to take water	Issued	30/11/2029	Stock	NULL	'490/WAL53218; 544/WAL53236; 574/WAL53262'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	404980	Licence to take water	Issued	30/11/2029	Stock	NULL	'490/WAL53218; 544/WAL53236; 574/WAL53262'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	405265	Licence to take water	Issued	30/11/2029	Stock	NULL	'250/M531; 251/WV1720'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405265	Licence to take water	Issued	30/11/2029	Stock	NULL	'250/M531; 251/WV1720'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405294	Licence to take water	Issued	30/11/2029	Stock	NULL	'20/WV1049'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	405297	Licence to take water	Issued	15/12/2029	Stock	NULL	'15/WAL5320; 16/WAL5320; 262/WAL5379; 269/WAL5399; 43/WAL53332'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	405297	Licence to take water	Issued	15/12/2029	Stock	NULL	'15/WAL5320; 16/WAL5320; 262/WAL5379; 269/WAL5399; 43/WAL53332'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	405297	Licence to take water	Issued	15/12/2029	Stock	NULL	'15/WAL5320; 16/WAL5320; 262/WAL5379; 269/WAL5399; 43/WAL53332'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	405297	Licence to take water	Issued	15/12/2029	Stock	NULL	'15/WAL5320; 16/WAL5320; 262/WAL5379; 269/WAL5399; 43/WAL53332'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	405297	Licence to take water	Issued	15/12/2029	Stock	NULL	'15/WAL5320; 16/WAL5320; 262/WAL5379; 269/WAL5399; 43/WAL53332'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	405297	Licence to take water	Issued	15/12/2029	Stock	NULL	'15/WAL5320; 16/WAL5320; 262/WAL5379; 269/WAL5399; 43/WAL53332'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	405305	Licence to take water	Issued	22/12/2029	Stock	NULL	'15/SP206904'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	405305	Licence to take water	Issued	22/12/2029	Stock	NULL	'15/SP206904'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	405310	Licence to take water	Issued	30/11/2029	Stock	NULL	'340/WV1060'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone

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Upper Balonne Tributaries	Balonne River	405319	Licence to take water	Issued	18/12/2029	Stock	NULL	'21/SP163452; 22/E5313; 24/E5313; 26/E5313; 47/E5328; 51/E5328; 7/E5313; 8/SP163452'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405421	Licence to take water	Issued	31/12/2030	Stock	NULL	'2/RP35388'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405590	Licence to take water	Issued	31/12/2032	Stock	NULL	'1/RP910356'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405739	Licence to take water	Issued	31/01/2030	Stock	NULL	'347/WAL53153'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	405772	Licence to take water	Issued	31/01/2030	Stock	NULL	'15/SP130707'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	405774	Licence to take water	Issued	22/04/2030	Stock	NULL	'1/SP203117'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	405791	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/RP227972; 344/WAL53364; 345/WAL53364'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405791	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/RP227972; 344/WAL53364; 345/WAL53364'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405791	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/RP227972; 344/WAL53364; 345/WAL53364'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406037	Licence to take water	Issued	28/02/2030	Stock	NULL	'14/WAL53319; 18/WAL53571; 2/RP105322; 25/WAL53343'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	406037	Licence to take water	Issued	28/02/2030	Stock	NULL	'14/WAL53319; 18/WAL53571; 2/RP105322; 25/WAL53343'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	406037	Licence to take water	Issued	28/02/2030	Stock	NULL	'14/WAL53319; 18/WAL53571; 2/RP105322; 25/WAL53343'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	406037	Licence to take water	Issued	28/02/2030	Stock	NULL	'14/WAL53319; 18/WAL53571; 2/RP105322; 25/WAL53343'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	406037	Licence to take water	Issued	28/02/2030	Stock	NULL	'14/WAL53319; 18/WAL53571; 2/RP105322; 25/WAL53343'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	406183	Licence to take water	Issued	16/03/2030	Stock	NULL	'3/SP180959'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406184	Licence to take water	Issued	16/03/2030	Stock	NULL	'2/SP180959'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406329	Licence to take water	Issued	12/03/2030	Stock	NULL	'3/RP20942'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406728	Licence to take water	Issued	20/05/2030	Stock	NULL	'12/H1495; 13/H1495'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	406728	Licence to take water	Issued	20/05/2030	Stock	NULL	'12/H1495; 13/H1495'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	406736	Licence to take water	Issued	31/05/2030	Stock	NULL	'8/RP174849'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	407835	Licence to take water	Issued	31/07/2013	Stock	NULL	'404/WAL53190'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	407908	Licence to take water	Issued	31/07/2013	Stock	NULL	'1/RP908597'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408072	Licence to take water	Issued	31/08/2030	Stock	NULL	'10/WAL5321; 11/WAL5321; 358/WAL53161; 4/WAL5317; 8/WV1121'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	408072	Licence to take water	Issued	31/08/2030	Stock	NULL	'10/WAL5321; 11/WAL5321; 358/WAL53161; 4/WAL5317; 8/WV1121'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	408072	Licence to take water	Issued	31/08/2030	Stock	NULL	'10/WAL5321; 11/WAL5321; 358/WAL53161; 4/WAL5317; 8/WV1121'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	408072	Licence to take water	Issued	31/08/2030	Stock	NULL	'10/WAL5321; 11/WAL5321; 358/WAL53161; 4/WAL5317; 8/WV1121'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	408258	Licence to take water	Issued	30/09/2030	Stock	NULL	'1/SP212819'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408291	Licence to take water	Issued	30/09/2013	Stock	NULL	'9/SP197878'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408299	Licence to take water	Issued	30/09/2030	Stock	NULL	'8/RP228002'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408299	Licence to take water	Issued	30/09/2030	Stock	NULL	'8/RP228002'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408306	Licence to take water	Issued	30/09/2030	Stock	NULL	'2/SP200055'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408442	Licence to take water	Issued	30/09/2029	Stock	NULL	'13/SP212832'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408770	Licence to take water	Issued	30/11/2030	Stock	NULL	'4/SP184947'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	408770	Licence to take water	Issued	30/11/2030	Stock	NULL	'4/SP184947'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408773	Licence to take water	Issued	30/11/2030	Stock	NULL	'5/SP184947'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408774	Licence to take water	Issued	30/11/2013	Stock	NULL	'6/SP184947'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408796	Licence to take water	Issued	30/11/2030	Stock	NULL	'4/SP135048'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408833	Licence to take water	Issued	30/11/2030	Stock	NULL	'354/WV133; 355/WV290; 361/WV290; 363/WV134; 364/WV62; 403/WV29; 404/WV19; 405/WAL53504; 407/WV70; 408/WV70'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	409498	Licence to take water	Issued	31/03/2031	Stock	NULL	'3/WV879'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500051	Licence to take water	Issued	19/05/2014	Stock	NULL	'226/WV495'	4223.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500052	Licence to take water	Issued	31/08/2031	Stock	NULL	'9/WV269'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500053	Licence to take water	Issued	19/05/2014	Stock	NULL	'5/RP42201'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500083	Licence to take water	Issued	31/10/2030	Stock	NULL	'7/SP222888'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500084	Licence to take water	Issued	31/10/2030	Stock	NULL	'6/SP222888'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500085	Licence to take water	Issued	31/10/2030	Stock	NULL	'5/SP222888'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500086	Licence to take water	Issued	30/06/2030	Stock	NULL	'4/SP222888'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500087	Licence to take water	Issued	31/10/2030	Stock	NULL	'3/SP222888'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500135	Licence to take water	Issued	31/07/2031	Stock	NULL	'1/SP171540'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500136	Licence to take water	Issued	30/06/2031	Stock	NULL	'308/WAL53522'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500140	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/SP209771'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500141	Licence to take water	Issued	31/07/2030	Stock	NULL	'2/SP209771'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500142	Licence to take water	Issued	31/07/2030	Stock	NULL	'3/SP209771'	4222.GUBBE/Gubberamunda Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	500143	Licence to take water	Issued	31/07/2030	Stock	NULL	'4/SP209771'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500241	Licence to take water	Issued	29/07/2014	Stock	NULL	'19/RP204590; 20/RP204590'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500241	Licence to take water	Issued	29/07/2014	Stock	NULL	'19/RP204590; 20/RP204590'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500284	Licence to take water	Issued	31/08/2031	Stock	NULL	'4/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500317	Licence to take water	Issued	24/08/2029	Stock	NULL	'98/M53107'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500335	Licence to take water	Issued	30/09/2031	Stock	NULL	'13/SP218514'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500335	Licence to take water	Issued	30/09/2031	Stock	NULL	'13/SP218514'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500369	Licence to take water	Issued	30/09/2031	Stock	NULL	'1/RP839499'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500370	Licence to take water	Issued	30/09/2030	Stock	NULL	'177/WAL53463'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500387	Licence to take water	Issued	17/09/2029	Stock	NULL	'1/SP219048'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500392	Licence to take water	Issued	30/09/2031	Stock	NULL	'2/SP194573'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500393	Licence to take water	Issued	30/09/2031	Stock	NULL	'1/SP194573'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	567932	Licence to take water	Issued	1/10/2014	Stock	NULL	'11/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	568023	Licence to take water	Issued	20/10/2029	Stock	NULL	'9/WV284'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577100	Licence to take water	Issued	16/11/2029	Stock	NULL	'397/WAL53186'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577162	Licence to take water	Issued	30/11/2031	Stock	NULL	'13/WV1701; 26/WV1745; 27/WV1780; 35/WV851'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577162	Licence to take water	Issued	30/11/2031	Stock	NULL	'13/WV1701; 26/WV1745; 27/WV1780; 35/WV851'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577162	Licence to take water	Issued	30/11/2031	Stock	NULL	'13/WV1701; 26/WV1745; 27/WV1780; 35/WV851'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577162	Licence to take water	Issued	30/11/2031	Stock	NULL	'13/WV1701; 26/WV1745; 27/WV1780; 35/WV851'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577162	Licence to take water	Issued	30/11/2031	Stock	NULL	'13/WV1701; 26/WV1745; 27/WV1780; 35/WV851'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577162	Licence to take water	Issued	30/11/2031	Stock	NULL	'13/WV1701; 26/WV1745; 27/WV1780; 35/WV851'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577162	Licence to take water	Issued	30/11/2031	Stock	NULL	'13/WV1701; 26/WV1745; 27/WV1780; 35/WV851'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	577243	Licence to take water	Issued	8/12/2029	Stock	NULL	'3/RP207630'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	578951	Licence to take water	Issued	23/12/2029	Stock	NULL	'39/WV852'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	578968	Licence to take water	Issued	7/01/2030	Stock	NULL	'323/WV8; 324/WV275'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	578968	Licence to take water	Issued	7/01/2030	Stock	NULL	'323/WV8; 324/WV275'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	579042	Licence to take water	Issued	21/01/2030	Stock	NULL	'3/RP20953; 301/WAL53554; 320/WAL53134; 326/WAL53136; 327/WAL53136; 336/WAL53143; 351/WAL53158; 352/WAL53158; 4/RP20953; 405/WAL53188; 5/WAL53481; 59/WV1218'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	601773	Licence to take water	Issued	10/02/2030	Stock	NULL	'172/WV1589; 173/WV1589; 174/WAL53451; 175/WAL53577; 177/WAL53483'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601773	Licence to take water	Issued	10/02/2030	Stock	NULL	'172/WV1589; 173/WV1589; 174/WAL53451; 175/WAL53577; 177/WAL53483'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601773	Licence to take water	Issued	10/02/2030	Stock	NULL	'172/WV1589; 173/WV1589; 174/WAL53451; 175/WAL53577; 177/WAL53483'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601773	Licence to take water	Issued	10/02/2030	Stock	NULL	'172/WV1589; 173/WV1589; 174/WAL53451; 175/WAL53577; 177/WAL53483'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601773	Licence to take water	Issued	10/02/2030	Stock	NULL	'172/WV1589; 173/WV1589; 174/WAL53451; 175/WAL53577; 177/WAL53483'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	601857	Licence to take water	Issued	23/02/2030	Stock	NULL	'66/WV1253'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	602815	Licence to take water	Issued	14/05/2020	Stock	NULL	'12/RP204590'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603007	Licence to take water	Issued	30/06/2030	Stock	NULL	'2/SP184933'	4222.BIRKH/Birkhead Formation
Upper Balonne Tributaries	Balonne River	603008	Licence to take water	Issued	30/06/2030	Stock	NULL	'1/SP184933'	4222.BIRKH/Birkhead Formation
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group

Appendix D: List of Surface Water Licenses (Raw - General)

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Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603220	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP49531; 1/RP81742; 1/SP214966; 1/WV1563; 102/WV1536; 103/WV287; 165/WV1195; 2/RP83950; 2/SP214966; 2/WV1563; 2/WV362; 65/WV287; 66/WV287; 67/WV170; 69/WV170; 78/WV171; 79/WV171; 95/WV198; 97/WV198'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603885	Licence to take water	Issued	30/11/2030	Stock	NULL	'8/SP236780'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603886	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/SP236780'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603913	Licence to take water	Issued	31/12/2030	Stock	NULL	'14/SP171539'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603978	Licence to take water	Issued	31/12/2030	Stock	NULL	'162/WAL5312'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	604121	Licence to take water	Issued	28/02/2031	Stock	NULL	'23/WV534'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	604149	Licence to take water	Issued	28/02/2031	Stock	NULL	'2/WV1931'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	604149	Licence to take water	Issued	28/02/2031	Stock	NULL	'2/WV1931'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	604239	Licence to take water	Issued	31/03/2031	Stock	NULL	'317/WV274'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	604266	Licence to take water	Issued	31/03/2031	Stock	NULL	'73/WV291'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	604303	Licence to take water	Issued	31/03/2031	Stock	NULL	'1/WAL53480; 1/WV1645; 2/WAL53419; 3/WV1645'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	604303	Licence to take water	Issued	31/03/2031	Stock	NULL	'1/WAL53480; 1/WV1645; 2/WAL53419; 3/WV1645'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	604303	Licence to take water	Issued	31/03/2031	Stock	NULL	'1/WAL53480; 1/WV1645; 2/WAL53419; 3/WV1645'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	604303	Licence to take water	Issued	31/03/2031	Stock	NULL	'1/WAL53480; 1/WV1645; 2/WAL53419; 3/WV1645'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	604493	Licence to take water	Issued	31/05/2031	Stock	NULL	'31/WV601; 32/WV601'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	604494	Licence to take water	Issued	31/05/2031	Stock	NULL	'88/WAL53564'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	604655	Licence to take water	Issued	30/06/2031	Stock	NULL	'3/RP20940'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	605902	Licence to take water	Issued	31/10/2031	Stock	NULL	'30/WV27'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	606074	Licence to take water	Issued	31/12/2031	Stock	NULL	'51/WV1292'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	606074	Licence to take water	Issued	31/12/2031	Stock	NULL	'51/WV1292'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	606079	Licence to take water	Issued	31/12/2031	Stock	NULL	'592/WV398'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606370	Licence to take water	Issued	31/01/2032	Stock	NULL	'14/WV1181'	4224.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606520	Licence to take water	Issued	31/03/2032	Stock	NULL	'10/WV346; 2/WV346; 21/WV1465; 22/WV404; 3/WV346; 30/WV1465; 31/WAL53671; 36/WAL53654; 37/WAL53654; 4/WAL53655; 4/WV346; 5/WV346; 6/WV346; 7/WV667; 8/WV667; 9/WV346'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606613	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/RP858911'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	606713	Licence to take water	Issued	31/05/2032	Stock	NULL	'5/SP250502; 6/SP250502'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606713	Licence to take water	Issued	31/05/2032	Stock	NULL	'5/SP250502; 6/SP250502'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606857	Licence to take water	Issued	31/07/2032	Stock	NULL	'1/WV1333'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	606857	Licence to take water	Issued	31/07/2032	Stock	NULL	'1/WV1333'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	606865	Licence to take water	Issued	31/07/2032	Stock	NULL	'30/WV390; 31/WV391'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606865	Licence to take water	Issued	31/07/2032	Stock	NULL	'30/WV390; 31/WV391'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606865	Licence to take water	Issued	31/07/2032	Stock	NULL	'30/WV390; 31/WV391'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	607029	Licence to take water	Issued	31/08/2032	Stock	NULL	'19/WV1028'	4222.CLEMA/Clematis Sandstone
Upper Balonne Tributaries	Balonne River	607031	Licence to take water	Issued	31/08/2032	Stock	NULL	'32/WV722'	4222.HUTTO/Hutton Sandstone

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Upper Balonne Tributaries	Balonne River	607032	Licence to take water	Issued	31/08/2032	Stock	NULL	'104/E5364; 113/E5364; 116/E5357; 118/E5354; 9/E5364'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	607032	Licence to take water	Issued	31/08/2032	Stock	NULL	'104/E5364; 113/E5364; 116/E5357; 118/E5354; 9/E5364'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	607032	Licence to take water	Issued	31/08/2032	Stock	NULL	'104/E5364; 113/E5364; 116/E5357; 118/E5354; 9/E5364'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	607032	Licence to take water	Issued	31/08/2032	Stock	NULL	'104/E5364; 113/E5364; 116/E5357; 118/E5354; 9/E5364'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	607032	Licence to take water	Issued	31/08/2032	Stock	NULL	'104/E5364; 113/E5364; 116/E5357; 118/E5354; 9/E5364'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	607034	Licence to take water	Issued	31/08/2032	Stock	NULL	'201/H1491'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607246	Licence to take water	Issued	31/10/2032	Stock	NULL	'33/WAL53311'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	607328	Licence to take water	Issued	30/11/2032	Stock	NULL	'3/EG55'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607463	Licence to take water	Issued	31/12/2032	Stock	NULL	'9/WV850'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	607555	Licence to take water	Issued	31/01/2033	Stock	NULL	'28/WV844'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	607612	Licence to take water	Issued	28/02/2033	Stock	NULL	'228/WV213'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	607708	Licence to take water	Issued	31/03/2033	Stock	NULL	'96/WV368'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607708	Licence to take water	Issued	31/03/2033	Stock	NULL	'96/WV368'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607713	Licence to take water	Issued	31/03/2033	Stock	NULL	'290/WAL53106'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607747	Licence to take water	Issued	31/03/2033	Stock	NULL	'42/SP243766'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	607761	Licence to take water	Issued	31/03/2033	Stock	NULL	'10/WV1621'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	607799	Licence to take water	Issued	30/04/2033	Stock	NULL	'19/WV1760; 24/WV1369; 26/RP809778'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607799	Licence to take water	Issued	30/04/2033	Stock	NULL	'19/WV1760; 24/WV1369; 26/RP809778'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607799	Licence to take water	Issued	30/04/2033	Stock	NULL	'19/WV1760; 24/WV1369; 26/RP809778'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00244N	Licence to take water	Issued	31/05/2019	Stock	NULL	'13/WV1689'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	02343N	Licence to take water	Issued	30/04/2014	Stock	NULL	'6/WV1120'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	02762Q	Licence to take water	Issued	31/10/2030	Stock	NULL	'10/COG73'	4224.WESTB/Westbourne Formation
Upper Balonne Tributaries	Balonne River	03850N	Licence to take water	Issued	31/05/2031	Stock	NULL	'40/WV865'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	03850N	Licence to take water	Issued	31/05/2031	Stock	NULL	'40/WV865'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	03853N	Licence to take water	Under Transfer	28/02/2030	Stock	NULL	'28/WV866'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	03979N	Licence to take water	Issued	31/03/2023	Stock	NULL	'8/WV1581'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	04051N	Licence to take water	Issued	31/07/2029	Stock	NULL	'49/E539'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	04051N	Licence to take water	Issued	31/07/2029	Stock	NULL	'49/E539'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	04053N	Licence to take water	Issued	30/04/2031	Stock	NULL	'10/E532'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	04258N	Licence to take water	Issued	31/08/2031	Stock	NULL	'416/WAL53193'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04261N	Licence to take water	Issued	31/07/2022	Stock	NULL	'203/WAL5340'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	04261N	Licence to take water	Issued	31/07/2022	Stock	NULL	'203/WAL5340'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	04262N	Licence to take water	Issued	30/09/2019	Stock	NULL	'158/WAL5311'	4222.NOT/Formation Name Not Specified

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Upper Balonne Tributaries	Balonne River	04263N	Licence to take water	Issued	30/06/2014	Stock	NULL	'4/RP50619'	4222.PRECI/Precipice Sandstone
Upper Balonne Tributaries	Balonne River	04263N	Licence to take water	Issued	30/06/2014	Stock	NULL	'4/RP50619'	4222.PRECI/Precipice Sandstone
Upper Balonne Tributaries	Balonne River	04990N	Licence to take water	Issued	31/07/2022	Stock	NULL	'109/WV1811'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	05600N	Licence to take water	Issued	31/01/2031	Stock	NULL	'2/RP207626'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	05885N	Licence to take water	Issued	28/02/2023	Stock	NULL	'565/WAL53241'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	05885N	Licence to take water	Issued	28/02/2023	Stock	NULL	'565/WAL53241'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	06160N	Licence to take water	Issued	31/01/2031	Stock	NULL	'73/WV379'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	06270N	Licence to take water	Issued	30/04/2031	Stock	NULL	'15/WV842'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	06588N	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/WV1159; 2/WAL5317'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	07410N	Licence to take water	Issued	31/10/2013	Stock	NULL	'508/WV835101'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	07659N	Licence to take water	Issued	31/01/2031	Stock	NULL	'5/WV406'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	07962N	Licence to take water	Issued	31/08/2022	Stock	NULL	'412/WAL53189'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	08018N	Licence to take water	Issued	30/04/2021	Stock	NULL	'44/WV969'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	08018N	Licence to take water	Issued	30/04/2021	Stock	NULL	'44/WV969'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	08018N	Licence to take water	Issued	30/04/2021	Stock	NULL	'44/WV969'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	08099N	Licence to take water	Issued	31/03/2023	Stock	NULL	'35/WV844'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	08110N	Licence to take water	Issued	31/01/2023	Stock	NULL	'34/SP212840'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	08110N	Licence to take water	Issued	31/01/2023	Stock	NULL	'34/SP212840'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	08148N	Licence to take water	Issued	31/10/2013	Stock	NULL	'48/WV1901'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	08148N	Licence to take water	Issued	31/10/2013	Stock	NULL	'48/WV1901'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	09232N	Licence to take water	Issued	30/11/2031	Stock	NULL	'18/WV408'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09438N	Licence to take water	Issued	30/05/2030	Stock	NULL	'51/WV280'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	09702N	Licence to take water	Issued	30/06/2030	Stock	NULL	'585/WV394; 586/WV394; 83/WV455; 85/WV455'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09702N	Licence to take water	Issued	30/06/2030	Stock	NULL	'585/WV394; 586/WV394; 83/WV455; 85/WV455'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09702N	Licence to take water	Issued	30/06/2030	Stock	NULL	'585/WV394; 586/WV394; 83/WV455; 85/WV455'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09702N	Licence to take water	Issued	30/06/2030	Stock	NULL	'585/WV394; 586/WV394; 83/WV455; 85/WV455'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09702N	Licence to take water	Issued	30/06/2030	Stock	NULL	'585/WV394; 586/WV394; 83/WV455; 85/WV455'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09702N	Licence to take water	Issued	30/06/2030	Stock	NULL	'585/WV394; 586/WV394; 83/WV455; 85/WV455'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09895N	Licence to take water	Issued	31/05/2031	Stock	NULL	'2/RP204584'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09968N	Licence to take water	Issued	28/02/2023	Stock	NULL	'20/WV623'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10295N	Licence to take water	Issued	31/05/2031	Stock	NULL	'71/WV636'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10295N	Licence to take water	Issued	31/05/2031	Stock	NULL	'71/WV636'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10606N	Licence to take water	Under Replacement	31/05/2013	Stock	NULL	'1/SP216096; 2/SP216096'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	10606N	Licence to take water	Under Replacement	31/05/2013	Stock	NULL	'1/SP216096; 2/SP216096'	4222.ORALL/Orallo Formation

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Upper Balonne Tributaries	Balonne River	10607N	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP186211'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10639N	Licence to take water	Issued	31/10/2013	Stock	NULL	'24/WV1115'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10686N	Licence to take water	Issued	31/03/2030	Stock	NULL		4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10702N	Licence to take water	Issued	31/10/2019	Stock	NULL	'22/WV938'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10746N	Licence to take water	Issued	31/10/2032	Stock	NULL	'29/WV374; 55/WV518; 8/WAL53437'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10746N	Licence to take water	Issued	31/10/2032	Stock	NULL	'29/WV374; 55/WV518; 8/WAL53437'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10746N	Licence to take water	Issued	31/10/2032	Stock	NULL	'29/WV374; 55/WV518; 8/WAL53437'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10799N	Licence to take water	Issued	31/10/2019	Stock	NULL	'3/RP82691; 5/RP82691'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10799N	Licence to take water	Issued	31/10/2019	Stock	NULL	'3/RP82691; 5/RP82691'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10841N	Licence to take water	Issued	31/08/2032	Stock	NULL	'21/CP858382; 22/WV1136'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10841N	Licence to take water	Issued	31/08/2032	Stock	NULL	'21/CP858382; 22/WV1136'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10841N	Licence to take water	Issued	31/08/2032	Stock	NULL	'21/CP858382; 22/WV1136'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10841N	Licence to take water	Issued	31/08/2032	Stock	NULL	'21/CP858382; 22/WV1136'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10841N	Licence to take water	Issued	31/08/2032	Stock	NULL	'21/CP858382; 22/WV1136'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10885N	Licence to take water	Issued	30/06/2020	Stock	NULL	'29/WV473'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	10902N	Licence to take water	Issued	28/02/2031	Stock	NULL	'1/RP42701; 2/RP42701'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10902N	Licence to take water	Issued	28/02/2031	Stock	NULL	'1/RP42701; 2/RP42701'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	10931N	Licence to take water	Issued	30/04/2013	Stock	NULL	'22/SP127245'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10938N	Licence to take water	Issued	13/05/2030	Stock	NULL	'108/WAL53322'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11065N	Licence to take water	Issued	31/03/2023	Stock	NULL	'49/WV614'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11065N	Licence to take water	Issued	31/03/2023	Stock	NULL	'49/WV614'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11079N	Licence to take water	Issued	31/08/2030	Stock	NULL	'35/WAL53575'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11093N	Licence to take water	Issued	31/03/2023	Stock	NULL	'133/WV415'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11414N	Licence to take water	Issued	31/10/2022	Stock	NULL	'51/WV923'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11430N	Licence to take water	Issued	31/01/2031	Stock	NULL	'219/WAL5345'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11453N	Licence to take water	Issued	31/01/2031	Stock	NULL	'41/WAL53602'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	11507N	Licence to take water	Issued	31/12/2029	Stock	NULL	'153/WV442'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11507N	Licence to take water	Issued	31/12/2029	Stock	NULL	'153/WV442'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11584N	Licence to take water	Issued	31/03/2031	Stock	NULL	'26/WV593'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11640N	Licence to take water	Issued	31/10/2013	Stock	NULL	'82/WV613'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	11677N	Licence to take water	Issued	31/08/2029	Stock	NULL	'178/WV889; 29/WAL53356'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	11677N	Licence to take water	Issued	31/08/2029	Stock	NULL	'178/WV889; 29/WAL53356'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	11777N	Licence to take water	Issued	31/01/2021	Stock	NULL	'2/WV1345; 48/WAL53470'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	11777N	Licence to take water	Issued	31/01/2021	Stock	NULL	'2/WV1345; 48/WAL53470'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11799N	Licence to take water	Issued	31/07/2032	Stock	NULL	'75/WV759'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11926N	Licence to take water	Issued	30/04/2020	Stock	NULL	'257/WV945'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11926N	Licence to take water	Issued	30/04/2020	Stock	NULL	'257/WV945'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12004N	Licence to take water	Issued	30/06/2030	Stock	NULL	'171/WV636; 49/WV635'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12004N	Licence to take water	Issued	30/06/2030	Stock	NULL	'171/WV636; 49/WV635'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12021N	Licence to take water	Issued	31/01/2031	Stock	NULL	'114/WV1539'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12038N	Licence to take water	Issued	4/01/2030	Stock	NULL	'653/WV513'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12042N	Licence to take water	Issued	30/04/2021	Stock	NULL	'4/WV911'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	12056N	Licence to take water	Issued	28/02/2023	Stock	NULL	'88/WV1910'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12056N	Licence to take water	Issued	28/02/2023	Stock	NULL	'88/WV1910'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12102N	Licence to take water	Issued	28/02/2023	Stock	NULL	'15/WV1398'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12103N	Licence to take water	Issued	28/02/2033	Stock	NULL	'28/WAL53467'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12203N	Licence to take water	Issued	31/03/2031	Stock	NULL	'140/WV1864'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12239N	Licence to take water	Issued	31/07/2031	Stock	NULL	'16/WV847'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12239N	Licence to take water	Issued	31/07/2031	Stock	NULL	'16/WV847'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12257N	Licence to take water	Issued	30/04/2033	Stock	NULL	'9/WV1230'	4224.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12264N	Licence to take water	Issued	31/10/2030	Stock	NULL	'7/WAL5395'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12264N	Licence to take water	Issued	31/10/2030	Stock	NULL	'7/WAL5395'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12323N	Licence to take water	Issued	16/12/2029	Stock	NULL	'17/WV842'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12330N	Licence to take water	Issued	31/07/2029	Stock	NULL	'530/WAL53237'	4223.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12443N	Licence to take water	Issued	6/07/2014	Stock	NULL	'2/RP57241'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12476N	Licence to take water	Issued	31/03/2014	Stock	NULL	'48/WV332'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12542N	Licence to take water	Issued	31/03/2031	Stock	NULL	'137/WV415'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12590N	Licence to take water	Issued	30/09/2031	Stock	NULL	'75/WV965'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12606N	Licence to take water	Issued	31/01/2031	Stock	NULL	'146/WV431'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12680N	Licence to take water	Issued	30/11/2031	Stock	NULL	'57/WV1906'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12704N	Licence to take water	Issued	31/05/2014	Stock	NULL	'448/WAL53203'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	12728N	Licence to take water	Issued	31/07/2020	Stock	NULL	'1/RP200573; 3/RP200573'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	12728N	Licence to take water	Issued	31/07/2020	Stock	NULL	'1/RP200573; 3/RP200573'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone

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Upper Balonne Tributaries	Balonne River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12847N	Licence to take water	Issued	31/07/2029	Stock	NULL	'676/WV953'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12857N	Licence to take water	Issued	31/03/2031	Stock	NULL	'111/WV311; 138/WAL53581'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12857N	Licence to take water	Issued	31/03/2031	Stock	NULL	'111/WV311; 138/WAL53581'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12888N	Licence to take water	Issued	31/05/2031	Stock	NULL	'593/WV1582'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12905N	Licence to take water	Issued	28/02/2023	Stock	NULL	'131/WV119'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12909N	Licence to take water	Issued	30/04/2021	Stock	NULL	'281/WV156'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	13102N	Licence to take water	Issued	30/04/2014	Stock	NULL	'34/WV964'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13154N	Licence to take water	Issued	31/10/2029	Stock	NULL	'14/WV902'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13294N	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/WV1768'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13324N	Licence to take water	Issued	30/11/2031	Stock	NULL	'494/WV511'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13405N	Licence to take water	Issued	30/06/2019	Stock	NULL	'20/RP813681'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	13417N	Licence to take water	Issued	31/01/2031	Stock	NULL	'60/WV422'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	13456N	Licence to take water	Issued	30/06/2030	Stock	NULL	'1/BWR89'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13458N	Licence to take water	Issued	31/03/2014	Stock	NULL	'61/WV422'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	13626N	Licence to take water	Issued	31/01/2032	Stock	NULL	'375/WV58'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13704N	Licence to take water	Issued	9/12/2029	Stock	NULL	'8/WAL53303'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13706N	Licence to take water	Issued	28/02/2031	Stock	NULL	'15/WV841'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13715N	Licence to take water	Issued	30/11/2030	Stock	NULL	'37/WAL53374'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13746N	Licence to take water	Issued	30/11/2031	Stock	NULL	'318/WV169'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	13873N	Licence to take water	Issued	31/10/2013	Stock	NULL	'43/WV575'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13975N	Licence to take water	Issued	31/05/2031	Stock	NULL	'96/M53105'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14037N	Licence to take water	Under Transfer	31/07/2029	Stock	NULL	'38/WV994'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14037N	Licence to take water	Under Transfer	31/07/2029	Stock	NULL	'38/WV994'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14075N	Licence to take water	Issued	13/05/2030	Stock	NULL	'46/WV941'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14080N	Licence to take water	Issued	31/01/2031	Stock	NULL	'1/SP240425'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14109N	Licence to take water	Issued	31/10/2013	Stock	NULL	'11/WV1853'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14109N	Licence to take water	Issued	31/10/2013	Stock	NULL	'11/WV1853'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14109N	Licence to take water	Issued	31/10/2013	Stock	NULL	'11/WV1853'	4222.BUNGI/Bungil Formation

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Upper Balonne Tributaries	Balonne River	14116N	Licence to take water	Issued	30/11/2031	Stock	NULL	'446/WAL53490'	4222.KINGU/Kingull Member
Upper Balonne Tributaries	Balonne River	14159N	Licence to take water	Issued	31/10/2013	Stock	NULL	'21/WV736'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14163N	Licence to take water	Issued	6/01/2030	Stock	NULL	'469/WAL53530'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14163N	Licence to take water	Issued	6/01/2030	Stock	NULL	'469/WAL53530'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14316N	Licence to take water	Issued	31/07/2031	Stock	NULL	'14/WV842'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14343N	Licence to take water	Issued	31/10/2013	Stock	NULL	'31/WAL5311'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14343N	Licence to take water	Issued	31/10/2013	Stock	NULL	'31/WAL5311'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14431N	Licence to take water	Issued	31/08/2030	Stock	NULL	'309/WV952'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	14436N	Licence to take water	Issued	28/02/2023	Stock	NULL	'129/WV96'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14468N	Licence to take water	Issued	30/11/2013	Stock	NULL	'458/WV320'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	14489N	Licence to take water	Issued	31/01/2033	Stock	NULL	'4/WV797'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14509N	Licence to take water	Issued	30/06/2031	Stock	NULL	'139/WV415'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	14515N	Licence to take water	Issued	30/11/2030	Stock	NULL	'198/WAL53663'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14551N	Licence to take water	Issued	31/10/2013	Stock	NULL	'99/M51360'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14551N	Licence to take water	Issued	31/10/2013	Stock	NULL	'99/M51360'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14613N	Licence to take water	Issued	31/05/2014	Stock	NULL	'173/WV1503'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14693N	Licence to take water	Issued	30/09/2032	Stock	NULL	'145/WAL53582'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	14821N	Licence to take water	Issued	15/01/2030	Stock	NULL	'400/WAL53187; 401/WAL53187'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14821N	Licence to take water	Issued	15/01/2030	Stock	NULL	'400/WAL53187; 401/WAL53187'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14826N	Licence to take water	Issued	31/12/2031	Stock	NULL	'14/WV1586'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14907N	Licence to take water	Issued	11/01/2030	Stock	NULL	'401/WV54'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14948N	Licence to take water	Issued	17/06/2014	Stock	NULL	'2/RP227982'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14948N	Licence to take water	Issued	17/06/2014	Stock	NULL	'2/RP227982'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14964N	Licence to take water	Issued	31/10/2013	Stock	NULL	'7/WV1257'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14964N	Licence to take water	Issued	31/10/2013	Stock	NULL	'7/WV1257'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14976N	Licence to take water	Issued	30/09/2029	Stock	NULL	'293/WAL53108'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	15302N	Licence to take water	Issued	30/11/2030	Stock	NULL		4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	15302N	Licence to take water	Issued	30/11/2030	Stock	NULL		4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	15426N	Licence to take water	Issued	30/04/2013	Stock	NULL	'184/WAL53457'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15529N	Licence to take water	Issued	30/09/2032	Stock	NULL	'598/WV399'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15536N	Licence to take water	Issued	30/09/2029	Stock	NULL	'285/WV1474'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15570N	Licence to take water	Issued	31/05/2030	Stock	NULL	'31/WV613'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15615N	Licence to take water	Issued	15/01/2030	Stock	NULL	'71/WV733'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	15619N	Licence to take water	Issued	31/10/2019	Stock	NULL	'21/WV534'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	15693N	Licence to take water	Issued	31/10/2030	Stock	NULL	'34/WV1126'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	15693N	Licence to take water	Issued	31/10/2030	Stock	NULL	'34/WV1126'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	15693N	Licence to take water	Issued	31/10/2030	Stock	NULL	'34/WV1126'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16023N	Licence to take water	Issued	31/08/2022	Stock	NULL	'3/WV922'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16048N	Licence to take water	Issued	31/01/2022	Stock	NULL	'2/RP23179'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16099N	Licence to take water	Issued	31/03/2022	Stock	NULL	'46/WV634'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	16148N	Licence to take water	Issued	31/07/2013	Stock	NULL	'117/WV1274'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16156N	Licence to take water	Issued	31/08/2022	Stock	NULL	'71/WV1525'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16159N	Licence to take water	Issued	30/09/2021	Stock	NULL	'690/WV394'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16174N	Licence to take water	Issued	30/09/2029	Stock	NULL	'3/WV603'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16244N	Licence to take water	Issued	30/11/2031	Stock	NULL	'54/WV1906'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16252N	Licence to take water	Issued	30/06/2030	Stock	NULL	'1/SP236782'	4223.WALLM/Walloon Coal Measures
Upper Balonne Tributaries	Balonne River	16252N	Licence to take water	Issued	30/06/2030	Stock	NULL	'1/SP236782'	4223.WALLM/Walloon Coal Measures
Upper Balonne Tributaries	Balonne River	16262N	Licence to take water	Issued	30/09/2013	Stock	NULL	'27/WAL53250'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16264N	Licence to take water	Issued	31/03/2031	Stock	NULL	'2/WV797'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16264N	Licence to take water	Issued	31/03/2031	Stock	NULL	'2/WV797'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16325N	Licence to take water	Issued	31/05/2014	Stock	NULL	'15/WV961'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16338N	Licence to take water	Issued	31/12/2032	Stock	NULL	'17/WV731'	4224.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	16356N	Licence to take water	Issued	22/12/2029	Stock	NULL	'20/WV1410'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16805N	Licence to take water	Issued	30/09/2030	Stock	NULL	'98/WV1726'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16805N	Licence to take water	Issued	30/09/2030	Stock	NULL	'98/WV1726'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16805N	Licence to take water	Issued	30/09/2030	Stock	NULL	'98/WV1726'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	16805N	Licence to take water	Issued	30/09/2030	Stock	NULL	'98/WV1726'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	17191N	Licence to take water	Issued	30/09/2029	Stock	NULL	'24/WAL53338'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	17191N	Licence to take water	Issued	30/09/2029	Stock	NULL	'24/WAL53338'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	17212N	Licence to take water	Issued	16/12/2029	Stock	NULL	'234/WV496'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17236N	Licence to take water	Issued	30/09/2032	Stock	NULL	'314/WAL53129'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	17340N	Licence to take water	Issued	31/12/2013	Stock	NULL	'96/WAL53352'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17479N	Licence to take water	Issued	31/05/2031	Stock	NULL	'23/WV717; 25/WV834'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	17489N	Licence to take water	Issued	15/12/2029	Stock	NULL	'461/WAL53211'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	17501N	Licence to take water	Issued	9/12/2029	Stock	NULL	'285/WV459'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	17675N	Licence to take water	Issued	31/10/2032	Stock	NULL	'10/WV1193; 11/RP147698; 12/RP901553'	4222.INJUN/Injune Creek Group

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	17675N	Licence to take water	Issued	31/10/2032	Stock	NULL	'10/WV1193; 11/RP147698; 12/RP901553'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	17675N	Licence to take water	Issued	31/10/2032	Stock	NULL	'10/WV1193; 11/RP147698; 12/RP901553'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	17675N	Licence to take water	Issued	31/10/2032	Stock	NULL	'10/WV1193; 11/RP147698; 12/RP901553'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	17769N	Licence to take water	Issued	30/11/2029	Stock	NULL	'1/WV1270'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17807N	Licence to take water	Issued	30/09/2029	Stock	NULL	'594/WV1928'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17862N	Licence to take water	Issued	31/10/2019	Stock	NULL	'37/WV1394'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	17862N	Licence to take water	Issued	31/10/2019	Stock	NULL	'37/WV1394'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	18248N	Licence to take water	Issued	31/03/2031	Stock	NULL	'473/WAL53210'	4222.EUROM/Eurombah Formation
Upper Balonne Tributaries	Balonne River	18281N	Licence to take water	Issued	23/07/2029	Stock	NULL	'2/RP98009'	1303.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	18282N	Licence to take water	Issued	31/07/2032	Stock	NULL	'5/WV1609'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22217N	Licence to take water	Issued	30/04/2014	Stock	NULL	'38/WV1184; 44/WAL53425; 45/WAL53425'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22217N	Licence to take water	Issued	30/04/2014	Stock	NULL	'38/WV1184; 44/WAL53425; 45/WAL53425'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22217N	Licence to take water	Issued	30/04/2014	Stock	NULL	'38/WV1184; 44/WAL53425; 45/WAL53425'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22242N	Licence to take water	Issued	30/11/2031	Stock	NULL	'317/WAL53125'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22326N	Licence to take water	Issued	30/04/2014	Stock	NULL	'11/CP892972'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22326N	Licence to take water	Issued	30/04/2014	Stock	NULL	'11/CP892972'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22393N	Licence to take water	Issued	31/07/2022	Stock	NULL	'1/WAL53343'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22423N	Licence to take water	Issued	28/02/2022	Stock	NULL	'27/WV1404'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	22643N	Licence to take water	Issued	31/01/2023	Stock	NULL	'6/WV435'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22838N	Licence to take water	Issued	31/10/2031	Stock	NULL	'1/WAL53424'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	23224Q	Licence to take water	Issued	1/01/2020	Stock	NULL	'3/COG33'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	23580N	Licence to take water	Issued	31/07/2030	Stock	NULL	'7/RP844536'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	26171N	Licence to take water	Issued	31/05/2030	Stock	NULL	'34/WV613'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	26254N	Licence to take water	Issued	30/09/2032	Stock	NULL	'9/WV1091'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	26258N	Licence to take water	Issued	31/03/2031	Stock	NULL	'1/RP227982'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	26342N	Licence to take water	Issued	30/06/2013	Stock	NULL	'350/RP896194'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	26377N	Licence to take water	Issued	26/10/2029	Stock	NULL	'26/WAL53249'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	26427N	Licence to take water	Issued	28/02/2014	Stock	NULL	'1/RP118459'	4222.GUBBE/Gubberamunda Sandstone; 4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	30036N	Licence to take water	Issued	31/05/2031	Stock	NULL	'2/RP119344'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	30036N	Licence to take water	Issued	31/05/2031	Stock	NULL	'2/RP119344'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	30075N	Licence to take water	Issued	31/07/2032	Stock	NULL	'1/RP59550'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	30733N	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV301'	4222.WALLU/Wallumbilla Formation

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Upper Balonne Tributaries	Balonne River	30733N	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV301'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	30779N	Licence to take water	Issued	12/12/2020	Stock	NULL	'22/WV1488'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	30779N	Licence to take water	Issued	12/12/2020	Stock	NULL	'22/WV1488'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	30844N	Licence to take water	Issued	31/08/2013	Stock	NULL	'21/WV1677'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	30979N	Licence to take water	Issued	31/03/2032	Stock	NULL	'38/WV852'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	31115N	Licence to take water	Issued	28/02/2014	Stock	NULL	'8/CP868236'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	31215N	Licence to take water	Issued	31/07/2031	Stock	NULL	'80/WV426'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	31215N	Licence to take water	Issued	31/07/2031	Stock	NULL	'80/WV426'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	31490N	Licence to take water	Issued	30/06/2030	Stock	NULL	'369/WAL53168'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	31503N	Licence to take water	Issued	31/08/2029	Stock	NULL	'94/WV223'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	31851N	Licence to take water	Issued	31/08/2019	Stock	NULL	'5/RP228502'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	31874N	Licence to take water	Issued	31/12/2019	Stock	NULL	'164/WV1353'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	31874N	Licence to take water	Issued	31/12/2019	Stock	NULL	'164/WV1353'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	32220N	Licence to take water	Issued	31/03/2031	Stock	NULL	'124/WV225; 219/WAL53664; 283/WV686; 284/WV650; 45/WV684'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	32220N	Licence to take water	Issued	31/03/2031	Stock	NULL	'124/WV225; 219/WAL53664; 283/WV686; 284/WV650; 45/WV684'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	32220N	Licence to take water	Issued	31/03/2031	Stock	NULL	'124/WV225; 219/WAL53664; 283/WV686; 284/WV650; 45/WV684'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	32220N	Licence to take water	Issued	31/03/2031	Stock	NULL	'124/WV225; 219/WAL53664; 283/WV686; 284/WV650; 45/WV684'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	32220N	Licence to take water	Issued	31/03/2031	Stock	NULL	'124/WV225; 219/WAL53664; 283/WV686; 284/WV650; 45/WV684'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	32220N	Licence to take water	Issued	31/03/2031	Stock	NULL	'124/WV225; 219/WAL53664; 283/WV686; 284/WV650; 45/WV684'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	32897N	Licence to take water	Issued	31/05/2013	Stock	NULL	'25/WV283'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	34347N	Licence to take water	Issued	31/05/2020	Stock	NULL	'58/WV737'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	35390N	Licence to take water	Issued	30/06/2020	Stock	NULL	'240/WAL53170'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36336N	Licence to take water	Issued	31/08/2021	Stock	NULL	'9/SP183139'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	36695N	Licence to take water	Issued	31/08/2020	Stock	NULL	'227/WV74'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36740N	Licence to take water	Issued	31/10/2021	Stock	NULL	'10/WV783'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36757N	Licence to take water	Issued	30/06/2021	Stock	NULL	'23/WV1727'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36757N	Licence to take water	Issued	30/06/2021	Stock	NULL	'23/WV1727'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36758N	Licence to take water	Issued	30/06/2021	Stock	NULL	'11/WV296'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36856N	Licence to take water	Issued	30/04/2021	Stock	NULL	'30/WV1416; 41/WV1646'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	36856N	Licence to take water	Issued	30/04/2021	Stock	NULL	'30/WV1416; 41/WV1646'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	36932N	Licence to take water	Issued	31/07/2021	Stock	NULL	'64/WAL53470'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36942N	Licence to take water	Issued	31/05/2021	Stock	NULL	'29/WV729'	4222.INJUN/Injune Creek Group

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	36943N	Licence to take water	Issued	31/05/2021	Stock	NULL	'24/WV534'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	36961N	Licence to take water	Issued	31/01/2021	Stock	NULL	'29/SP178386'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	36962N	Licence to take water	Issued	31/01/2021	Stock	NULL	'31/SP178386'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	36962N	Licence to take water	Issued	31/01/2021	Stock	NULL	'31/SP178386'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	36962N	Licence to take water	Issued	31/01/2021	Stock	NULL	'31/SP178386'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	36971N	Licence to take water	Issued	30/11/2021	Stock	NULL	'79/WV254'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	36972N	Licence to take water	Issued	30/11/2021	Stock	NULL	'1/RP911767'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	36972N	Licence to take water	Issued	30/11/2021	Stock	NULL	'1/RP911767'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	36984N	Licence to take water	Issued	31/05/2020	Stock	NULL	'62/WV733'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	37275N	Licence to take water	Issued	31/01/2021	Stock	NULL	'3/RP179173'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	37427N	Licence to take water	Issued	30/11/2022	Stock	NULL	'17/WV980'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	37427N	Licence to take water	Issued	30/11/2022	Stock	NULL	'17/WV980'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	38780N	Licence to take water	Issued	30/04/2022	Stock	NULL	'18/WV294; 59/WV1524'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	38781N	Licence to take water	Issued	30/06/2022	Stock	NULL	'61/WV1527'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	38781N	Licence to take water	Issued	30/06/2022	Stock	NULL	'61/WV1527'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	38782N	Licence to take water	Issued	30/06/2022	Stock	NULL	'1/WV1364'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43409N	Licence to take water	Issued	18/05/2030	Stock	NULL	'48/WV737'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	43550N	Licence to take water	Issued	31/05/2019	Stock	NULL	'29/WV630; 34/WV774'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43550N	Licence to take water	Issued	31/05/2019	Stock	NULL	'29/WV630; 34/WV774'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43657N	Licence to take water	Issued	31/05/2019	Stock	NULL	'14/WV549; 77/WV754'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43657N	Licence to take water	Issued	31/05/2019	Stock	NULL	'14/WV549; 77/WV754'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43657N	Licence to take water	Issued	31/05/2019	Stock	NULL	'14/WV549; 77/WV754'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43657N	Licence to take water	Issued	31/05/2019	Stock	NULL	'14/WV549; 77/WV754'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43829N	Licence to take water	Issued	22/04/2030	Stock	NULL	'6/WT256'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	43966N	Licence to take water	Issued	31/10/2013	Stock	NULL	'6/WV967'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	43966N	Licence to take water	Issued	31/10/2013	Stock	NULL	'6/WV967'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	43966N	Licence to take water	Issued	31/10/2013	Stock	NULL	'6/WV967'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	44144N	Licence to take water	Issued	31/01/2023	Stock	NULL	'94/WV456'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	48812N	Licence to take water	Issued	31/10/2031	Stock	NULL	'285/SP157752'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	48828N	Licence to take water	Issued	30/06/2030	Stock	NULL	'338/WV275'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48834N	Licence to take water	Issued	30/04/2022	Stock	NULL	'58/WV1522'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48834N	Licence to take water	Issued	30/04/2022	Stock	NULL	'58/WV1522'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48846N	Licence to take water	Issued	31/07/2029	Stock	NULL	'101/WV123'	4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	48847N	Licence to take water	Issued	30/06/2022	Stock	NULL	'56/WV1887'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48847N	Licence to take water	Issued	30/06/2022	Stock	NULL	'56/WV1887'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48866N	Licence to take water	Issued	31/10/2030	Stock	NULL	'21/WV1519; 25/SP214993; 26/SP214993'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48866N	Licence to take water	Issued	31/10/2030	Stock	NULL	'21/WV1519; 25/SP214993; 26/SP214993'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48866N	Licence to take water	Issued	31/10/2030	Stock	NULL	'21/WV1519; 25/SP214993; 26/SP214993'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48874N	Licence to take water	Issued	31/05/2031	Stock	NULL	'1/RP20956'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	48904N	Licence to take water	Issued	30/11/2029	Stock	NULL	'2/RP142488'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48905N	Licence to take water	Issued	30/11/2032	Stock	NULL	'123/WAL53569'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48906N	Licence to take water	Issued	31/05/2032	Stock	NULL	'196/WAL53523'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48925N	Licence to take water	Issued	3/11/2029	Stock	NULL	'1/RP200575; 40/WV436'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48925N	Licence to take water	Issued	3/11/2029	Stock	NULL	'1/RP200575; 40/WV436'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48934N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/WV757; 8/WV298'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48934N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/WV757; 8/WV298'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48934N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/WV757; 8/WV298'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48934N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/WV757; 8/WV298'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	48963N	Licence to take water	Issued	31/08/2013	Stock	NULL	'85/WV310'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	48963N	Licence to take water	Issued	31/08/2013	Stock	NULL	'85/WV310'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	48969N	Licence to take water	Issued	31/10/2019	Stock	NULL	'152/WV64'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	48974N	Licence to take water	Issued	31/01/2014	Stock	NULL	'2/WV355'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48974N	Licence to take water	Issued	31/01/2014	Stock	NULL	'2/WV355'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	49051N	Licence to take water	Issued	30/11/2022	Stock	NULL	'8/WV3'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	49087N	Licence to take water	Issued	30/11/2022	Stock	NULL		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	49262N	Licence to take water	Issued	31/01/2020	Stock	NULL	'4/M5352'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	49324Q	Licence to take water	Issued	31/12/2030	Stock	NULL	'4/COG59'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	50060N	Licence to take water	Issued	28/02/2014	Stock	NULL	'154/WV442'	4224.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	50062N	Licence to take water	Issued	30/11/2031	Stock	NULL	'1/WV1232'	4222.SPRIN/Springbok Sandstone Member
Upper Balonne Tributaries	Balonne River	50062N	Licence to take water	Issued	30/11/2031	Stock	NULL	'1/WV1232'	4222.SPRIN/Springbok Sandstone Member
Upper Balonne Tributaries	Balonne River	58000N	Licence to take water	Issued	30/06/2022	Stock	NULL	'42/WV612'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58002N	Licence to take water	Issued	31/05/2021	Stock	NULL	'5/WV1285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58002N	Licence to take water	Issued	31/05/2021	Stock	NULL	'5/WV1285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58002N	Licence to take water	Issued	31/05/2021	Stock	NULL	'5/WV1285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58002N	Licence to take water	Issued	31/05/2021	Stock	NULL	'5/WV1285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58019N	Licence to take water	Issued	30/06/2030	Stock	NULL	'19/SP236782'	4223.WALLM/Walloon Coal Measures

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	58030N	Licence to take water	Issued	31/07/2020	Stock	NULL	'161/WV552'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58050N	Licence to take water	Issued	30/11/2032	Stock	NULL	'1/RP217561; 2/RP217561'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58050N	Licence to take water	Issued	30/11/2032	Stock	NULL	'1/RP217561; 2/RP217561'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58052N	Licence to take water	Issued	30/09/2022	Stock	NULL	'55/WV1204'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58061N	Licence to take water	Issued	1/01/2020	Stock	NULL	'1/R869'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58074N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/RP185444'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58080N	Licence to take water	Issued	31/05/2021	Stock	NULL	'109/WV1566'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58083N	Licence to take water	Issued	30/06/2022	Stock	NULL	'87/WV1266'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58085N	Licence to take water	Issued	31/07/2013	Stock	NULL	'171/Y22111'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58114N	Licence to take water	Issued	31/05/2019	Stock	NULL	'67/WV618'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58123N	Licence to take water	Issued	31/05/2031	Stock	NULL	'232/WV154'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58125N	Licence to take water	Issued	30/11/2022	Stock	NULL	'168/WAL53457'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58136N	Licence to take water	Issued	30/06/2031	Stock	NULL	'128/WV1814'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58138N	Licence to take water	Issued	30/11/2030	Stock	NULL	'5/WV842'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58149N	Licence to take water	Issued	31/01/2014	Stock	NULL	'102/M5381'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58155N	Licence to take water	Issued	24/05/2030	Stock	NULL	'4/RP803835'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58162N	Licence to take water	Issued	31/05/2013	Stock	NULL	'10/WV845'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58169N	Licence to take water	Issued	30/04/2022	Stock	NULL	'280/WV536'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58173N	Licence to take water	Issued	23/04/2030	Stock	NULL	'12/WV841'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58206N	Licence to take water	Issued	31/12/2030	Stock	NULL	'79/WV1000'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58207N	Licence to take water	Issued	4/11/2029	Stock	NULL	'1/RP202190'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58215N	Licence to take water	Issued	31/10/2032	Stock	NULL	'132/WAL53585'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58235N	Licence to take water	Issued	31/08/2031	Stock	NULL	'2/RP96904'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58235N	Licence to take water	Issued	31/08/2031	Stock	NULL	'2/RP96904'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58250N	Licence to take water	Issued	31/03/2023	Stock	NULL	'12/WV1301'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58251N	Licence to take water	Issued	31/10/2029	Stock	NULL	'80/WV1219'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58254N	Licence to take water	Issued	31/08/2019	Stock	NULL	'9/WAL53247'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58262N	Licence to take water	Issued	30/11/2032	Stock	NULL	'325/WV8'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58264N	Licence to take water	Issued	31/07/2029	Stock	NULL	'2/RP23227'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58290N	Licence to take water	Issued	31/08/2013	Stock	NULL	'12/WAL53231'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58293N	Licence to take water	Issued	31/05/2030	Stock	NULL	'601/H1491'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58314N	Licence to take water	Issued	30/11/2031	Stock	NULL	'5/WV1272'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58321N	Licence to take water	Issued	31/01/2031	Stock	NULL	'85/WAL53167'	4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	58334N	Licence to take water	Issued	31/10/2032	Stock	NULL	'11/SP209790'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58357N	Licence to take water	Issued	31/01/2022	Stock	NULL	'9/WV293'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58358N	Licence to take water	Issued	30/09/2021	Stock	NULL	'199/WAL53640'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58368N	Licence to take water	Issued	31/05/2021	Stock	NULL	'67/WV741'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	58373N	Licence to take water	Issued	31/10/2013	Stock	NULL	'14/WV841'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58397N	Licence to take water	Issued	30/09/2013	Stock	NULL	'31/WV843'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58398N	Licence to take water	Issued	31/05/2019	Stock	NULL	'60/WV1781'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58401N	Licence to take water	Issued	31/08/2030	Stock	NULL	'4/WV406'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58406N	Licence to take water	Issued	31/08/2019	Stock	NULL	'10/WV1554'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58440N	Licence to take water	Issued	31/03/2021	Stock	NULL	'77/WV759'	4224.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58453N	Licence to take water	Issued	30/09/2013	Stock	NULL	'8/CP860892'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58453N	Licence to take water	Issued	30/09/2013	Stock	NULL	'8/CP860892'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58465N	Licence to take water	Issued	31/07/2013	Stock	NULL	'111/WV1566'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58465N	Licence to take water	Issued	31/07/2013	Stock	NULL	'111/WV1566'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58467N	Licence to take water	Issued	31/10/2031	Stock	NULL	'197/WAL5338'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58469N	Licence to take water	Issued	30/09/2013	Stock	NULL	'46/WV422'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58471N	Licence to take water	Issued	30/11/2029	Stock	NULL	'72/SP157752'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58502N	Licence to take water	Issued	31/07/2022	Stock	NULL	'2/SP219048'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58503N	Licence to take water	Issued	28/02/2021	Stock	NULL	'17/M5315'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	58504N	Licence to take water	Issued	30/09/2021	Stock	NULL	'4/WV392'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58504N	Licence to take water	Issued	30/09/2021	Stock	NULL	'4/WV392'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58507N	Licence to take water	Under Renewal	30/04/2013	Stock	NULL	'353/WAL53159; 4/RP119344'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58507N	Licence to take water	Under Renewal	30/04/2013	Stock	NULL	'353/WAL53159; 4/RP119344'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58508N	Licence to take water	Issued	30/06/2014	Stock	NULL	'1/WV1532; 24/WV1532'	4224.SLAND/Southlands Formation
Upper Balonne Tributaries	Balonne River	58508N	Licence to take water	Issued	30/06/2014	Stock	NULL	'1/WV1532; 24/WV1532'	4224.SLAND/Southlands Formation
Upper Balonne Tributaries	Balonne River	58528N	Licence to take water	Issued	31/12/2029	Stock	NULL	'2/RP809762'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58531N	Licence to take water	Under Transfer	31/01/2033	Stock	NULL	'3/RP858912'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58543N	Licence to take water	Issued	28/02/2023	Stock	NULL	'25/WV592'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58544N	Licence to take water	Issued	30/04/2014	Stock	NULL	'45/WAL53466'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58545N	Licence to take water	Issued	28/02/2014	Stock	NULL	'2/RP204589'	4222.BUNGI/Bungii Formation
Upper Balonne Tributaries	Balonne River	58552N	Licence to take water	Issued	31/12/2031	Stock	NULL	'50/SP243766'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58557N	Licence to take water	Issued	30/09/2030	Stock	NULL	'1/SP103845'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58572N	Licence to take water	Issued	31/08/2030	Stock	NULL	'1/RP835132'	4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	58576N	Licence to take water	Issued	30/06/2030	Stock	NULL	'55/WAL53611'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58598N	Licence to take water	Issued	31/07/2031	Stock	NULL	'7/WV152'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58616N	Licence to take water	Issued	31/05/2030	Stock	NULL	'247/WV969'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58621N	Licence to take water	Issued	30/04/2031	Stock	NULL	'1/SP209798; 6/WV380; 8/SP209798'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	58621N	Licence to take water	Issued	30/04/2031	Stock	NULL	'1/SP209798; 6/WV380; 8/SP209798'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	58621N	Licence to take water	Issued	30/04/2031	Stock	NULL	'1/SP209798; 6/WV380; 8/SP209798'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	58630N	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/WV840'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58636N	Licence to take water	Issued	31/03/2014	Stock	NULL	'1/WAL53269; 225/WV1207'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58636N	Licence to take water	Issued	31/03/2014	Stock	NULL	'1/WAL53269; 225/WV1207'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58636N	Licence to take water	Issued	31/03/2014	Stock	NULL	'1/WAL53269; 225/WV1207'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58636N	Licence to take water	Issued	31/03/2014	Stock	NULL	'1/WAL53269; 225/WV1207'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58636N	Licence to take water	Issued	31/03/2014	Stock	NULL	'1/WAL53269; 225/WV1207'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58665N	Licence to take water	Issued	31/03/2031	Stock	NULL	'48/WV374'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58669N	Licence to take water	Issued	31/05/2013	Stock	NULL	'7/M5373'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58672N	Licence to take water	Issued	31/01/2033	Stock	NULL	'1/RP20949'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58673N	Licence to take water	Issued	31/03/2033	Stock	NULL	'52/WV540'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58677N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/SP235496'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58682N	Licence to take water	Issued	17/06/2014	Stock	NULL	'2/RP816997'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58684N	Licence to take water	Issued	30/04/2014	Stock	NULL	'1/RP53522'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58692N	Licence to take water	Issued	31/01/2019	Stock	NULL	'140/WV1328'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58694N	Licence to take water	Issued	31/05/2032	Stock	NULL	'17/WAL53272'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58719N	Licence to take water	Issued	31/08/2021	Stock	NULL	'1/RP218989'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58728N	Licence to take water	Issued	31/10/2020	Stock	NULL	'434/WV226'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58733N	Licence to take water	Issued	16/12/2029	Stock	NULL	'68/WV733'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58736N	Licence to take water	Issued	16/12/2029	Stock	NULL	'19/WV731; 22/WV731'	4224.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	58748N	Licence to take water	Issued	31/12/2013	Stock	NULL	'3/RP217130'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58753N	Licence to take water	Issued	30/11/2013	Stock	NULL	'53/WV1743; 55/WV1743'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	58753N	Licence to take water	Issued	30/11/2013	Stock	NULL	'53/WV1743; 55/WV1743'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58757N	Licence to take water	Issued	16/04/2030	Stock	NULL	'12/SP103843'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	58848N	Licence to take water	Issued	31/05/2022	Stock	NULL	'53/WV528'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58887N	Licence to take water	Issued	30/09/2029	Stock	NULL	'193/WV1246'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58902N	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/WV785; 45/WV748; 51/WV737; 56/WV748'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58902N	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/WV785; 45/WV748; 51/WV737; 56/WV748'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58902N	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/WV785; 45/WV748; 51/WV737; 56/WV748'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58902N	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/WV785; 45/WV748; 51/WV737; 56/WV748'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58902N	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/WV785; 45/WV748; 51/WV737; 56/WV748'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58905N	Licence to take water	Issued	18/05/2030	Stock	NULL	'470/WV1487'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58912N	Licence to take water	Issued	30/09/2032	Stock	NULL	'261/WAL5376; 32/WAL53474; 33/WAL53482; 34/WAL53528; 35/WAL53528; 40/WV907'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58912N	Licence to take water	Issued	30/09/2032	Stock	NULL	'261/WAL5376; 32/WAL53474; 33/WAL53482; 34/WAL53528; 35/WAL53528; 40/WV907'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58912N	Licence to take water	Issued	30/09/2032	Stock	NULL	'261/WAL5376; 32/WAL53474; 33/WAL53482; 34/WAL53528; 35/WAL53528; 40/WV907'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58912N	Licence to take water	Issued	30/09/2032	Stock	NULL	'261/WAL5376; 32/WAL53474; 33/WAL53482; 34/WAL53528; 35/WAL53528; 40/WV907'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58912N	Licence to take water	Issued	30/09/2032	Stock	NULL	'261/WAL5376; 32/WAL53474; 33/WAL53482; 34/WAL53528; 35/WAL53528; 40/WV907'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58912N	Licence to take water	Issued	30/09/2032	Stock	NULL	'261/WAL5376; 32/WAL53474; 33/WAL53482; 34/WAL53528; 35/WAL53528; 40/WV907'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58933N	Licence to take water	Issued	31/05/2021	Stock	NULL	'124/WAL53572'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58933N	Licence to take water	Issued	31/05/2021	Stock	NULL	'124/WAL53572'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58934N	Licence to take water	Issued	31/05/2021	Stock	NULL	'2/SP118798'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58934N	Licence to take water	Issued	31/05/2021	Stock	NULL	'2/SP118798'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	100289	Licence to take water	Issued	30/09/2021	Stock	NULL	'439/WAL53197'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58143N	Licence to take water	Issued	30/11/2030	Stock	NULL	'439/WAL53197'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12316N	Licence to take water	Issued	31/01/2014	Stock	NULL	'32/WV1035'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12316N	Licence to take water	Issued	31/01/2014	Stock	NULL	'32/WV1035'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	100861	Licence to take water	Issued	30/06/2014	Stock	NULL	'39/WV613'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	17254N	Licence to take water	Issued	30/09/2031	Stock	NULL	'39/WV613'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	101114	Licence to take water	Issued	31/05/2021	Stock	NULL	'31/WV688; 32/WV768; 35/WV774; 36/WV634; 48/WV634'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101114	Licence to take water	Issued	31/05/2021	Stock	NULL	'31/WV688; 32/WV768; 35/WV774; 36/WV634; 48/WV634'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101298	Licence to take water	Issued	31/03/2021	Stock	NULL	'21/WV845'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	06605N	Licence to take water	Issued	31/03/2014	Stock	NULL	'21/WV845'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	101816	Licence to take water	Issued	31/08/2022	Stock	NULL	'49/WV540; 50/WV540'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	101836	Licence to take water	Issued	30/06/2022	Stock	NULL	'7/WAL53368'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	101836	Licence to take water	Issued	30/06/2022	Stock	NULL	'7/WAL53368'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	171662	Licence to take water	Issued	31/03/2031	Stock	NULL	'192/WV212; 482/WV1655'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00207N	Licence to take water	Issued	31/03/2020	Stock	NULL	'482/WV1655'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	171662	Licence to take water	Issued	31/03/2031	Stock	NULL	'192/WV212; 482/WV1655'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00207N	Licence to take water	Issued	31/03/2020	Stock	NULL	'482/WV1655'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	171662	Licence to take water	Issued	31/03/2031	Stock	NULL	'192/WV212; 482/WV1655'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00207N	Licence to take water	Issued	31/03/2020	Stock	NULL	'482/WV1655'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	171662	Licence to take water	Issued	31/03/2031	Stock	NULL	'192/WV212; 482/WV1655'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00207N	Licence to take water	Issued	31/03/2020	Stock	NULL	'482/WV1655'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	171662	Licence to take water	Issued	31/03/2031	Stock	NULL	'192/WV212; 482/WV1655'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00207N	Licence to take water	Issued	31/03/2020	Stock	NULL	'482/WV1655'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	171662	Licence to take water	Issued	31/03/2031	Stock	NULL	'192/WV212; 482/WV1655'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	00207N	Licence to take water	Issued	31/03/2020	Stock	NULL	'482/WV1655'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	171686	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58164N	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	172526	Licence to take water	Issued	30/09/2029	Stock	NULL	'66/WV762'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	173185	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/WV1884'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58523N	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/WV1884'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	173696	Licence to take water	Issued	6/01/2030	Stock	NULL	'361/M5321; 42/WV1512; 56/M5330; 93/M5358'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	48927N	Licence to take water	Issued	30/06/2031	Stock	NULL	'93/M5358'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	174224	Licence to take water	Issued	31/01/2030	Stock	NULL	'27/WV1358; 4/WV355; 5/WV355'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	30998N	Licence to take water	Issued	30/09/2019	Stock	NULL	'5/WV355'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	175960	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WAL53410; 15/WV306; 21/WAL53650'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406204	Licence to take water	Issued	28/02/2013	Stock	NULL	'512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406204	Licence to take water	Issued	28/02/2013	Stock	NULL	'512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406204	Licence to take water	Issued	28/02/2013	Stock	NULL	'512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406204	Licence to take water	Issued	28/02/2013	Stock	NULL	'512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	177189	Licence to take water	Issued	30/11/2030	Stock	NULL	'156/WV846; 157/WV846'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	14095N	Licence to take water	Issued	31/05/2014	Stock	NULL	'156/WV846'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	177525	Licence to take water	Issued	31/12/2013	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603558	Licence to take water	Issued	30/09/2030	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	177525	Licence to take water	Issued	31/12/2013	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603558	Licence to take water	Issued	30/09/2030	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	177525	Licence to take water	Issued	31/12/2013	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603558	Licence to take water	Issued	30/09/2030	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	177525	Licence to take water	Issued	31/12/2013	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603558	Licence to take water	Issued	30/09/2030	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	177525	Licence to take water	Issued	31/12/2013	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603558	Licence to take water	Issued	30/09/2030	Stock	NULL	'21/WAL5395; 6/WAL5395; 8/WV919'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58902N	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/WV785; 45/WV748; 51/WV737; 56/WV748'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58902N	Licence to take water	Issued	9/12/2029	Stock	NULL	'3/WV785; 45/WV748; 51/WV737; 56/WV748'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	180040	Licence to take water	Issued	31/10/2031	Stock	NULL	'12/AB233'	1303.PRECI/Precipice Sandstone
Upper Balonne Tributaries	Balonne River	44554N	Licence to take water	Issued	31/01/2021	Stock	NULL	'12/AB233'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	180136	Licence to take water	Issued	31/10/2013	Stock	NULL	'466/WV475; 468/WV1816; 497/WV475; 498/WV475'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	180439	Licence to take water	Issued	30/11/2013	Stock	NULL	'159/WV846'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12032N	Licence to take water	Issued	30/06/2021	Stock	NULL	'159/WV846'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	180607	Licence to take water	Issued	30/11/2030	Stock	NULL	'13/SP171539'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603913	Licence to take water	Issued	31/12/2030	Stock	NULL	'14/SP171539'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182319	Licence to take water	Issued	31/07/2013	Stock	NULL	'46/WV86'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182328	Licence to take water	Issued	31/07/2013	Stock	NULL	'45/WV146'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58880N	Licence to take water	Under Amendment	31/03/2021	Stock	NULL	'195/WAL53663'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	182338	Licence to take water	Issued	31/07/2030	Stock	NULL	'133/WV443; 194/WAL53663; 195/WAL53663; 213/WV645; 214/WV645; 254/WV944; 255/WV944; 4/RP120747'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58880N	Licence to take water	Under Amendment	31/03/2021	Stock	NULL	'195/WAL53663'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	182990	Licence to take water	Issued	31/07/2032	Stock	NULL	'10/WV296; 13/WV297; 14/WV295; 33/WV1805; 9/WV296'	4222.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	58542N	Licence to take water	Issued	30/11/2013	Stock	NULL	'14/WV295'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58553N	Licence to take water	Issued	30/06/2013	Stock	NULL	'7/SP206903'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	58553N	Licence to take water	Issued	30/06/2013	Stock	NULL	'7/SP206903'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58400N	Licence to take water	Issued	31/05/2019	Stock	NULL	'47/WV86'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	34975N	Licence to take water	Issued	31/05/2020	Stock	NULL	'54/WV528'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	36848N	Licence to take water	Issued	28/02/2021	Stock	NULL	'57/WV943'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	36848N	Licence to take water	Issued	28/02/2021	Stock	NULL	'57/WV943'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58365N	Licence to take water	Issued	28/02/2021	Stock	NULL	'91/WAL53633'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	36851N	Licence to take water	Issued	28/02/2021	Stock	NULL	'93/WV943'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	189450	Licence to take water	Under Replacement	31/07/2031	Stock	NULL	'1/AP3786; 1/AP5811; 33/WV85; 45/WV146; 46/WV86; 47/WV86; 48/WV85; 52/WV489; 54/WV528; 56/WV367; 57/WV943; 91/WAL53633; 92/WAL53633; 93/WV943'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	36851N	Licence to take water	Issued	28/02/2021	Stock	NULL	'93/WV943'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	190532	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58916N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	190532	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58916N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	400274	Licence to take water	Issued	31/10/2013	Stock	NULL	'3/SP171540'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500135	Licence to take water	Issued	31/07/2031	Stock	NULL	'1/SP171540'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	400421	Licence to take water	Issued	30/11/2021	Stock	NULL	'1/RP80121; 12/WV1032; 2/RP80121; 27/WV1045; 4/RP887933'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58745N	Licence to take water	Issued	31/03/2023	Stock	NULL	'2/RP80121'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	400421	Licence to take water	Issued	30/11/2021	Stock	NULL	'1/RP80121; 12/WV1032; 2/RP80121; 27/WV1045; 4/RP887933'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	401025	Licence to take water	Issued	31/01/2030	Stock	NULL	'15/COG50'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11881Q	Licence to take water	Issued	28/02/2031	Stock	NULL	'15/COG50'	4222.COREE/Coreena Member

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	401025	Licence to take water	Issued	31/01/2030	Stock	NULL	'15/COG50'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11881Q	Licence to take water	Issued	28/02/2031	Stock	NULL	'15/COG50'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	404044	Licence to take water	Issued	30/09/2032	Stock	NULL	'12/SP168358'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	404414	Licence to take water	Issued	30/09/2032	Stock	NULL	'12/SP168358'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	405305	Licence to take water	Issued	22/12/2029	Stock	NULL	'15/SP206904'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	405418	Licence to take water	Issued	31/12/2030	Stock	NULL	'2/RP35389'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405421	Licence to take water	Issued	31/12/2030	Stock	NULL	'2/RP35388'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	405590	Licence to take water	Issued	31/12/2032	Stock	NULL	'1/RP910356'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603553	Licence to take water	Issued	30/09/2030	Stock	NULL	'3/RP910356'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406726	Licence to take water	Issued	17/05/2030	Stock	NULL	'2/SP135048'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	408796	Licence to take water	Issued	30/11/2030	Stock	NULL	'4/SP135048'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406727	Licence to take water	Issued	13/05/2030	Stock	NULL	'34/WAL53311; 37/WAL53311'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	607801	Licence to take water	Issued	30/04/2033	Stock	NULL	'37/WAL53311'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	408070	Licence to take water	Issued	31/08/2030	Stock	NULL	'8/WV1121'	4223.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408072	Licence to take water	Issued	31/08/2030	Stock	NULL	'10/WAL5321; 11/WAL5321; 358/WAL53161; 4/WAL5317; 8/WV1121'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	408070	Licence to take water	Issued	31/08/2030	Stock	NULL	'8/WV1121'	4223.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408072	Licence to take water	Issued	31/08/2030	Stock	NULL	'10/WAL5321; 11/WAL5321; 358/WAL53161; 4/WAL5317; 8/WV1121'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	408291	Licence to take water	Issued	30/09/2013	Stock	NULL	'9/SP197878'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408299	Licence to take water	Issued	30/09/2030	Stock	NULL	'8/RP228002'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500309	Licence to take water	Issued	20/08/2014	Stock	NULL	'29/SP206879'	4223.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603197	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/WV1958'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603885	Licence to take water	Issued	30/11/2030	Stock	NULL	'8/SP236780'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	603886	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/SP236780'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	604121	Licence to take water	Issued	28/02/2031	Stock	NULL	'23/WV534'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	604493	Licence to take water	Issued	31/05/2031	Stock	NULL	'31/WV601; 32/WV601'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	58387N	Licence to take water	Issued	31/03/2023	Stock	NULL	'96/WV457'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	02764Q	Licence to take water	Issued	31/10/2015	Stock	NULL	'3/COG63'	4224.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	17479N	Licence to take water	Issued	31/05/2031	Stock	NULL	'23/WV717; 25/WV834'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	17479N	Licence to take water	Issued	31/05/2031	Stock	NULL	'23/WV717; 25/WV834'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	05442N	Licence to take water	Issued	31/01/2023	Stock	NULL	'177/WV802'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16100N	Licence to take water	Issued	31/01/2023	Stock	NULL	'177/WV802'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	05442N	Licence to take water	Issued	31/01/2023	Stock	NULL	'177/WV802'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16100N	Licence to take water	Issued	31/01/2023	Stock	NULL	'177/WV802'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	05442N	Licence to take water	Issued	31/01/2023	Stock	NULL	'177/WV802'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16100N	Licence to take water	Issued	31/01/2023	Stock	NULL	'177/WV802'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	06588N	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/WV1159; 2/WAL5317'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	38790N	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/WV1159'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	06588N	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/WV1159; 2/WAL5317'	4222.DONCA/Doncaster Member
Upper Balonne Tributaries	Balonne River	38790N	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/WV1159'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	07428N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16007N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	07428N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16007N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	07428N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	16007N	Licence to take water	Issued	31/01/2023	Stock	NULL	'73/WV930'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	09001N	Licence to take water	Issued	31/08/2020	Stock	NULL	'71/WV285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	09001N	Licence to take water	Issued	31/08/2020	Stock	NULL	'71/WV285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	09001N	Licence to take water	Issued	31/08/2020	Stock	NULL	'71/WV285'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	09906N	Licence to take water	Issued	31/05/2020	Stock	NULL	'12/WV830'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	37283N	Licence to take water	Issued	31/10/2020	Stock	NULL	'./STOCKROUTE'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	10192N	Licence to take water	Issued	31/07/2021	Stock	NULL	'21/WV1388'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	11368N	Licence to take water	Issued	31/10/2013	Stock	NULL	'21/WV1388'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	10558N	Licence to take water	Issued	30/11/2021	Stock	NULL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	10558N	Licence to take water	Issued	30/11/2021	Stock	NULL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	10710N	Licence to take water	Issued	30/04/2031	Stock	NULL	'1/SP242455; 4/WV1481'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	11767N	Licence to take water	Issued	30/04/2031	Stock	NULL	'1/SP242455'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	11088N	Licence to take water	Issued	30/06/2030	Stock	NULL	'3/M5368'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	11382N	Licence to take water	Issued	31/07/2031	Stock	NULL	'77/WV975'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17788N	Licence to take water	Issued	31/07/2031	Stock	NULL	'77/WV975'	4222.BUNGI/Bungil Formation

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Upper Balonne Tributaries	Balonne River	11382N	Licence to take water	Issued	31/07/2031	Stock	NULL	'77/WV975'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17788N	Licence to take water	Issued	31/07/2031	Stock	NULL	'77/WV975'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	11382N	Licence to take water	Issued	31/07/2031	Stock	NULL	'77/WV975'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17788N	Licence to take water	Issued	31/07/2031	Stock	NULL	'77/WV975'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	11725N	Licence to take water	Issued	28/02/2014	Stock	NULL	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11777N	Licence to take water	Issued	31/01/2021	Stock	NULL	'2/WV1345; 48/WAL53470'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58711N	Licence to take water	Issued	31/01/2021	Stock	NULL	'2/WV1345'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11777N	Licence to take water	Issued	31/01/2021	Stock	NULL	'2/WV1345; 48/WAL53470'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58711N	Licence to take water	Issued	31/01/2021	Stock	NULL	'2/WV1345'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12257N	Licence to take water	Issued	30/04/2033	Stock	NULL	'9/WV1230'	4224.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	12338N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58645N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	13572N	Licence to take water	Issued	30/04/2020	Stock	NULL	'12/WV954; 8/BWR155'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13572N	Licence to take water	Issued	30/04/2020	Stock	NULL	'12/WV954; 8/BWR155'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13572N	Licence to take water	Issued	30/04/2020	Stock	NULL	'12/WV954; 8/BWR155'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13572N	Licence to take water	Issued	30/04/2020	Stock	NULL	'12/WV954; 8/BWR155'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12904N	Licence to take water	Issued	31/05/2013	Stock	NULL	'28/WV1825'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58001N	Licence to take water	Issued	31/05/2014	Stock	NULL	'28/WV1825'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13405N	Licence to take water	Issued	30/06/2019	Stock	NULL	'20/RP813681'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	13428N	Licence to take water	Issued	31/05/2021	Stock	NULL	'14/WV590'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	36986N	Licence to take water	Issued	31/05/2020	Stock	NULL	'14/WV590'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	14806N	Licence to take water	Issued	30/09/2032	Stock	NULL	'11/WV1759'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58606N	Licence to take water	Issued	30/09/2032	Stock	NULL	'11/WV1759'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	14806N	Licence to take water	Issued	30/09/2032	Stock	NULL	'11/WV1759'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58606N	Licence to take water	Issued	30/09/2032	Stock	NULL	'11/WV1759'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22333N	Licence to take water	Issued	30/04/2021	Stock	NULL	'26/WV15'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	14964N	Licence to take water	Issued	31/10/2013	Stock	NULL	'7/WV1257'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15024N	Licence to take water	Issued	31/08/2022	Stock	NULL	'74/WV965'	4222.TIMHF/Timburry Hills Formation
Upper Balonne Tributaries	Balonne River	16684N	Licence to take water	Issued	31/08/2022	Stock	NULL	'74/WV965'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15187N	Licence to take water	Issued	31/01/2032	Stock	NULL	'83/WV426'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	18313N	Licence to take water	Issued	31/01/2032	Stock	NULL	'83/WV426'	4222.MOOGA/Mooga Sandstone

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Upper Balonne Tributaries	Balonne River	15187N	Licence to take water	Issued	31/01/2032	Stock	NULL	'83/WV426'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	18313N	Licence to take water	Issued	31/01/2032	Stock	NULL	'83/WV426'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15615N	Licence to take water	Issued	15/01/2030	Stock	NULL	'71/WV733'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	15753N	Licence to take water	Issued	31/05/2019	Stock	NULL	'69/WV618'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	30313N	Licence to take water	Issued	31/05/2019	Stock	NULL	'69/WV618'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	15935N	Licence to take water	Issued	31/08/2022	Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15935N	Licence to take water	Issued	31/08/2022	Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	15935N	Licence to take water	Issued	31/08/2022	Stock	NULL	'6/BWR732'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	16222N	Licence to take water	Issued	31/08/2020	Stock	NULL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	16264N	Licence to take water	Issued	31/03/2031	Stock	NULL	'2/WV797'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	31851N	Licence to take water	Issued	31/08/2019	Stock	NULL	'5/RP228502'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	36336N	Licence to take water	Issued	31/08/2021	Stock	NULL	'9/SP183139'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	36846N	Licence to take water	Issued	30/11/2022	Stock	NULL	'2/WV1203'	4224.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58901N	Licence to take water	Issued	30/11/2022	Stock	NULL	'2/WV1203'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	36846N	Licence to take water	Issued	30/11/2022	Stock	NULL	'2/WV1203'	4224.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	58901N	Licence to take water	Issued	30/11/2022	Stock	NULL	'2/WV1203'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	36942N	Licence to take water	Issued	31/05/2021	Stock	NULL	'29/WV729'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	37427N	Licence to take water	Issued	30/11/2022	Stock	NULL	'17/WV980'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	38780N	Licence to take water	Issued	30/04/2022	Stock	NULL	'18/WV294; 59/WV1524'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43551N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58533N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	43829N	Licence to take water	Issued	22/04/2030	Stock	NULL	'6/WT256'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	48851N	Licence to take water	Issued	31/05/2032	Stock	NULL	'316/WV125'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58515N	Licence to take water	Issued	31/08/2022	Stock	NULL	'6/WV282'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58733N	Licence to take water	Issued	16/12/2029	Stock	NULL	'68/WV733'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58757N	Licence to take water	Issued	16/04/2030	Stock	NULL	'12/SP103843'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	101543	Licence to take water	Issued	30/09/2021	Stock	NULL	'10/WV1758'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14336N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	22847N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	101543	Licence to take water	Issued	30/09/2021	Stock	NULL	'10/WV1758'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14336N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	22847N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	101543	Licence to take water	Issued	30/09/2021	Stock	NULL	'10/WV1758'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14336N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	22847N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	101543	Licence to take water	Issued	30/09/2021	Stock	NULL	'10/WV1758'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14336N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	22847N	Licence to take water	Issued	30/09/2022	Stock	NULL	'10/WV1758'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	171686	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58164N	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	172526	Licence to take water	Issued	30/09/2029	Stock	NULL	'66/WV762'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406204	Licence to take water	Issued	28/02/2013	Stock	NULL	'512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11852N	Licence to take water	Issued	31/01/2014	Stock	NULL	'651/WV978'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	176730	Licence to take water	Issued	30/09/2032	Stock	NULL	'2/SP127239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	176731	Licence to take water	Issued	30/09/2029	Stock	NULL	'4/SP127239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	176732	Licence to take water	Issued	30/09/2030	Stock	NULL	'3/SP127239'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	180040	Licence to take water	Issued	31/10/2031	Stock	NULL	'12/AB233'	1303.PRECI/Precipice Sandstone
Upper Balonne Tributaries	Balonne River	44554N	Licence to take water	Issued	31/01/2021	Stock	NULL	'12/AB233'	1303.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11163N	Licence to take water	Issued	31/08/2032	Stock	NULL	'2/SP124668'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11163N	Licence to take water	Issued	31/08/2032	Stock	NULL	'2/SP124668'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11163N	Licence to take water	Issued	31/08/2032	Stock	NULL	'2/SP124668'	4222.COREE/Coreena Member

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11163N	Licence to take water	Issued	31/08/2032	Stock	NULL	'2/SP124668'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11163N	Licence to take water	Issued	31/08/2032	Stock	NULL	'2/SP124668'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11163N	Licence to take water	Issued	31/08/2032	Stock	NULL	'2/SP124668'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	182120	Licence to take water	Issued	31/05/2032	Stock	NULL	'2/SP124668; 3/EG105; 3/SP124668; 32/EG14; B/EG185'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185929	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/SP124668; 3/SP124668; 32/EG14; B/EG185'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	11163N	Licence to take water	Issued	31/08/2032	Stock	NULL	'2/SP124668'	4222.COREE/Coreena Member
Upper Balonne Tributaries	Balonne River	182140	Licence to take water	Issued	30/06/2030	Stock	NULL	'3/WV95'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	182209	Licence to take water	Issued	30/04/2014	Stock	NULL	'370/WAL53175'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	22286N	Licence to take water	Issued	31/01/2023	Stock	NULL	'332/WAL53141'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	09287N	Licence to take water	Issued	31/01/2030	Stock	NULL	'10/WV406'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58152N	Licence to take water	Issued	31/01/2030	Stock	NULL	'10/WV406'	4222.EUROM/Eurombah Formation
Upper Balonne Tributaries	Balonne River	08126N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	16753N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	190532	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	08433N	Licence to take water	Issued	31/03/2021	Stock	NULL	'15/WV731'	4222.BIRKH/Birkhead Formation
Upper Balonne Tributaries	Balonne River	58916N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	190532	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	15571N	Licence to take water	Issued	31/03/2031	Stock	NULL	'24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58916N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	406727	Licence to take water	Issued	13/05/2030	Stock	NULL	'34/WAL53311; 37/WAL53311'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	607801	Licence to take water	Issued	30/04/2033	Stock	NULL	'37/WAL53311'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	607802	Licence to take water	Issued	30/04/2033	Stock	NULL	'34/WAL53311'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	408770	Licence to take water	Issued	30/11/2030	Stock	NULL	'4/SP184947'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408773	Licence to take water	Issued	30/11/2030	Stock	NULL	'5/SP184947'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408774	Licence to take water	Issued	30/11/2013	Stock	NULL	'6/SP184947'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Balonne Tributaries	Balonne River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500391	Licence to take water	Issued	30/09/2031	Stock	NULL	'3/SP194573'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500392	Licence to take water	Issued	30/09/2031	Stock	NULL	'2/SP194573'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	500393	Licence to take water	Issued	30/09/2031	Stock	NULL	'1/SP194573'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	606415	Licence to take water	Issued	29/02/2032	Stock	NULL	'283/WAL53101'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	607017	Licence to take water	Issued	31/08/2032	Stock	NULL	'283/WAL53101'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	10558N	Licence to take water	Issued	30/11/2021	Stock	NULL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	11351N	Licence to take water	Issued	31/07/2031	Stock	NULL	'11/WV1549'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	12519N	Licence to take water	Issued	31/07/2031	Stock	NULL	'11/WV1549'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	13961N	Licence to take water	Issued	31/07/2031	Stock	NULL	'11/WV1549'	4222.WALLU/Wallumbilla Formation
Upper Balonne Tributaries	Balonne River	11384N	Licence to take water	Issued	22/10/2014	Stock	NULL	'33/WV964'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14930N	Licence to take water	Issued	31/03/2014	Stock	NULL	'33/WV964'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11522N	Licence to take water	Issued	31/10/2022	Stock	NULL	'527/WV904'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11725N	Licence to take water	Issued	28/02/2014	Stock	NULL	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12338N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	58645N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	14332N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58154N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.SLAND/Southlands Formation
Upper Balonne Tributaries	Balonne River	58295N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	16222N	Licence to take water	Issued	31/08/2020	Stock	NULL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Balonne Tributaries	Balonne River	43551N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58533N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	08126N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	4222.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	16753N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	1303.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	190532	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	15571N	Licence to take water	Issued	31/03/2031	Stock	NULL	'24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58916N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500140	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/SP209771'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500141	Licence to take water	Issued	31/07/2030	Stock	NULL	'2/SP209771'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500142	Licence to take water	Issued	31/07/2030	Stock	NULL	'3/SP209771'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	500143	Licence to take water	Issued	31/07/2030	Stock	NULL	'4/SP209771'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	12854N	Licence to take water	Issued	31/03/2031	Stock	NULL	'23/WV954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	13286N	Licence to take water	Issued	31/03/2031	Stock	NULL	'23/WV954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	17859N	Licence to take water	Issued	31/03/2031	Stock	NULL	'23/WV954'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11119N	Licence to take water	Issued	31/10/2030	Stock	NULL	'3/SP163459; 5/SP163459'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	13299N	Licence to take water	Issued	31/10/2030	Stock	NULL	'4/M53108'	4222.BUNGI/Bungil Formation

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11119N	Licence to take water	Issued	31/10/2030	Stock	NULL	'3/SP163459; 5/SP163459'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	13513N	Licence to take water	Issued	31/10/2030	Stock	NULL	'8/WAL5319'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	401586	Licence to take water	Issued	16/04/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408865	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	408870	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	04257N	Licence to take water	Issued	31/10/2030	Stock	NULL	'1/RP57241; 1/RP85832; 1/WAL5319; 19/WAL53611; 2/RP64680; 2/RP85832; 2/WAL5319; 2/WV1176; 24/WV71; 3/RP57241; 3/RP85832; 3/SP163459; 3/WAL5319; 4/M53108; 4/RP85832; 5/SP163459; 51/WAL53512; 52/WAL53611; 8/WAL5319; 9/WAL5319'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	11837N	Licence to take water	Issued	31/10/2030	Stock	NULL	'2/RP85832'	4222.MOOGA/Mooga Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	13382N	Licence to take water	Issued	31/10/2030	Stock	NULL	'2/RP85832'	4222.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	403168	Licence to take water	Issued	18/01/2030	Stock	NULL	'19/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403169	Licence to take water	Issued	18/01/2030	Stock	NULL	'18/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403170	Licence to take water	Issued	31/07/2031	Stock	NULL	'17/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403171	Licence to take water	Issued	30/06/2013	Stock	NULL	'16/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403172	Licence to take water	Issued	31/08/2031	Stock	NULL	'15/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403173	Licence to take water	Issued	30/06/2030	Stock	NULL	'14/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403178	Licence to take water	Issued	31/08/2030	Stock	NULL	'8/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403179	Licence to take water	Issued	30/06/2030	Stock	NULL	'7/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403180	Licence to take water	Issued	30/06/2014	Stock	NULL	'6/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403181	Licence to take water	Issued	30/06/2030	Stock	NULL	'5/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403182	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403184	Licence to take water	Issued	17/09/2029	Stock	NULL	'2/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	403185	Licence to take water	Issued	17/09/2029	Stock	NULL	'1/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	408442	Licence to take water	Issued	30/09/2029	Stock	NULL	'13/SP212832'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	567932	Licence to take water	Issued	1/10/2014	Stock	NULL	'11/SP194563'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	176675	Licence to take water	Issued	30/09/2022	Stock Intensive	25	'225/WV1730; 512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4223.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	178627	Licence to take water	Issued	31/12/2020	Stock Intensive	5	'336/WV79; 337/WV79; 379/WAL53662'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	178627	Licence to take water	Issued	31/12/2020	Stock Intensive	5	'336/WV79; 337/WV79; 379/WAL53662'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	178627	Licence to take water	Issued	31/12/2020	Stock Intensive	5	'336/WV79; 337/WV79; 379/WAL53662'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	58532N	Licence to take water	Issued	28/02/2020	Stock Intensive	12	'10/WV357; 9/WV357'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58532N	Licence to take water	Issued	28/02/2020	Stock Intensive	12	'10/WV357; 9/WV357'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58532N	Licence to take water	Issued	28/02/2020	Stock Intensive	12	'10/WV357; 9/WV357'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	176675	Licence to take water	Issued	30/09/2022	Stock Intensive	25	'225/WV1730; 512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4223.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	176675	Licence to take water	Issued	30/09/2022	Stock Intensive	25	'225/WV1730; 512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4223.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	176675	Licence to take water	Issued	30/09/2022	Stock Intensive	25	'225/WV1730; 512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4223.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	176675	Licence to take water	Issued	30/09/2022	Stock Intensive	25	'225/WV1730; 512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4223.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	406598	Licence to take water	Issued	30/06/2020	Stock Intensive	25	'6/WV1822'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406598	Licence to take water	Issued	30/06/2020	Stock Intensive	25	'6/WV1822'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406598	Licence to take water	Issued	30/06/2020	Stock Intensive	25	'6/WV1822'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406598	Licence to take water	Issued	30/06/2020	Stock Intensive	25	'6/WV1822'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406598	Licence to take water	Issued	30/06/2020	Stock Intensive	25	'6/WV1822'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	14358N	Licence to take water	Issued	28/02/2014	Stock Intensive	3	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	176675	Licence to take water	Issued	30/09/2022	Stock Intensive	25	'225/WV1730; 512/RP208620; 651/WV978; 652/WV643; 672/WV454'	4223.BUNGI/Bungil Formation
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	14358N	Licence to take water	Issued	28/02/2014	Stock Intensive	3	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	102031	Licence to take water	Issued	31/05/2014	Stock; Stock Intensive	12	'14/SP130707'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	102031	Licence to take water	Issued	31/05/2014	Stock; Stock Intensive	12	'14/SP130707'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58663N	Licence to take water	Issued	31/05/2013	Stock; Stock Intensive	14	'149/WAL53549; 189/WAL53523; 210/WAL53630; 213/WV991'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58663N	Licence to take water	Issued	31/05/2013	Stock; Stock Intensive	14	'149/WAL53549; 189/WAL53523; 210/WAL53630; 213/WV991'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58663N	Licence to take water	Issued	31/05/2013	Stock; Stock Intensive	14	'149/WAL53549; 189/WAL53523; 210/WAL53630; 213/WV991'	4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	58701N	Licence to take water	Issued	31/03/2022	Stock; Stock Intensive	24	'11/WV1620'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58701N	Licence to take water	Issued	31/03/2022	Stock; Stock Intensive	24	'11/WV1620'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58701N	Licence to take water	Issued	31/03/2022	Stock; Stock Intensive	24	'11/WV1620'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	58701N	Licence to take water	Issued	31/03/2022	Stock; Stock Intensive	24	'11/WV1620'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406469	Licence to take water	Issued	31/01/2022	Town Water Supply	180		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	406965	Licence to take water	Issued	31/05/2013	Town Water Supply	50		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	406966	Licence to take water	Issued	31/05/2013	Town Water Supply	10		4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603834	Licence to take water	Issued	30/11/2020	Town Water Supply	108		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603835	Licence to take water	Issued	30/11/2020	Town Water Supply	72		4222.MOOGA/Mooga Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603756	Licence to take water	Issued	30/11/2020	Town Water Supply	200		4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Balonne Tributaries	Balonne River	603756	Licence to take water	Issued	30/11/2020	Town Water Supply	200		4222.HUTTO/Hutton Sandstone
Upper Balonne Tributaries	Balonne River	603757	Licence to take water	Issued	30/11/2020	Town Water Supply	2895		4222.GUBBE/Gubberamunda Sandstone
Upper Balonne Tributaries	Balonne River	603758	Licence to take water	Issued	30/10/2020	Town Water Supply	300		4222.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	35740S	Licence to take water	Issued	31/12/2021	Amenities	NULL		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604532	Permit to Take Water	Issued	31/12/2013	Amenities	57		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604532	Permit to Take Water	Issued	31/12/2013	Amenities	57		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604532	Permit to Take Water	Issued	31/12/2013	Amenities	57		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	57843S	Licence to take water	Issued	31/08/2021	Aquaculture; Irrigation	100	'5/SP236971'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	57843S	Licence to take water	Issued	31/08/2021	Aquaculture; Irrigation	100	'5/SP236971'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	50905N	Licence to take water	Under Reinstatement	31/07/2012	Aquaculture; Waterharvesting	NULL	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50905N	Licence to take water	Under Reinstatement	31/07/2012	Aquaculture; Waterharvesting	NULL	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50905N	Licence to take water	Under Reinstatement	31/07/2012	Aquaculture; Waterharvesting	NULL	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	606580	Permit to Take Water	Issued	30/06/2014	Construction	700		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606584	Permit to Take Water	Issued	31/12/2013	Construction	0.85		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606584	Permit to Take Water	Issued	31/12/2013	Construction	0.85		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606866	Permit to Take Water	Issued	1/09/2013	Construction	30		130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	607033	Permit to Take Water	Issued	30/06/2014	Construction	45		4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Dawson River	Upper Dawson River	604265	Permit to Take Water	Issued	31/12/2013	Construction	55		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604265	Permit to Take Water	Issued	31/12/2013	Construction	55		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604265	Permit to Take Water	Issued	31/12/2013	Construction	55		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607033	Permit to Take Water	Issued	30/06/2014	Construction	45		4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Dawson River	Upper Dawson River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Dawson River	Upper Dawson River	607607	Permit to Take Water	Issued	31/12/2013	Construction	30		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607607	Permit to Take Water	Issued	31/12/2013	Construction	30		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606517	Permit to Take Water	Issued	30/06/2013	Construction	40		1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607249	Permit to Take Water	Issued	30/06/2013	Construction	27		1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	607536	Permit to Take Water	Issued	31/12/2013	Construction	30		1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	607560	Permit to Take Water	Issued	31/07/2013	Construction	105		4222.WALLM/Walloon Coal Measures
Upper Dawson River	Upper Dawson River	607467	Permit to Take Water	Issued	31/01/2014	Construction	75		4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	50908N	Licence to interfere by diversion-Channel	Under Reinstatement	31/07/2012	Divert the Course of Flow	NULL	'2/WT299'	130.01.18.37.13/Lagoon Creek
Upper Dawson River	Upper Dawson River	50908N	Licence to interfere by diversion-Channel	Under Reinstatement	31/07/2012	Divert the Course of Flow	NULL	'2/WT299'	130.01.18.37.13/Lagoon Creek
Upper Dawson River	Upper Dawson River	50908N	Licence to interfere by diversion-Channel	Under Reinstatement	31/07/2012	Divert the Course of Flow	NULL	'2/WT299'	130.01.18.37.13/Lagoon Creek
Upper Dawson River	Upper Dawson River	48311S	Licence to interfere by diversion-Channel	Under Renewal	28/02/2013	Divert the Course of Flow	NULL	'6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	48311S	Licence to interfere by diversion-Channel	Under Renewal	28/02/2013	Divert the Course of Flow	NULL	'6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	59786S	Licence to interfere by diversion-Channel	Issued	31/07/2021	Divert the Course of Flow	NULL	'9/AB123'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	48315S	Licence to interfere by diversion-Channel	Under Renewal	28/02/2013	Divert the Course of Flow	NULL	'5/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	48315S	Licence to interfere by diversion-Channel	Under Renewal	28/02/2013	Divert the Course of Flow	NULL	'5/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	58412N	Licence to take water	Issued	31/05/2021	Domestic Supply	NULL	'87/WT226'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	182760	Licence to take water	Issued	30/04/2015	Domestic Supply	15	'236/NPW490'	130.01.31.24/Carnarvon Creek
Upper Dawson River	Upper Dawson River	182760	Licence to take water	Issued	30/04/2015	Domestic Supply	15	'236/NPW490'	130.01.31.24/Carnarvon Creek
Upper Dawson River	Upper Dawson River	57632S	Licence to take water	Issued	28/02/2021	Domestic Supply; Irrigation; Stock	120	'26/LE9'	1303.ROBIA/Robinson Creek Alluvium
Upper Dawson River	Upper Dawson River	57632S	Licence to take water	Issued	28/02/2021	Domestic Supply; Irrigation; Stock	120	'26/LE9'	1303.ROBIA/Robinson Creek Alluvium
Upper Dawson River	Upper Dawson River	14597S	Licence to take water	Issued	31/08/2014	Domestic Supply; Irrigation; Stock	74	'3/LE232'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14597S	Licence to take water	Issued	31/08/2014	Domestic Supply; Irrigation; Stock	74	'3/LE232'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	101924	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NULL	'222/RP868424; 28/FT672; 57/FT901'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101924	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NULL	'222/RP868424; 28/FT672; 57/FT901'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101924	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NULL	'222/RP868424; 28/FT672; 57/FT901'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101924	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NULL	'222/RP868424; 28/FT672; 57/FT901'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101924	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NULL	'222/RP868424; 28/FT672; 57/FT901'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	171339	Licence to take water	Issued	30/06/2031	Domestic Supply; Stock	NULL	'12/LE11; 6/LE38'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	171339	Licence to take water	Issued	30/06/2031	Domestic Supply; Stock	NULL	'12/LE11; 6/LE38'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	171341	Licence to take water	Issued	30/06/2031	Domestic Supply; Stock	NULL	'3/LE90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	171341	Licence to take water	Issued	30/06/2031	Domestic Supply; Stock	NULL	'3/LE90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	171341	Licence to take water	Issued	30/06/2031	Domestic Supply; Stock	NULL	'3/LE90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	177021	Licence to take water	Issued	28/02/2033	Domestic Supply; Stock	NULL	'31/LE25; 32/LE25'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	177021	Licence to take water	Issued	28/02/2033	Domestic Supply; Stock	NULL	'31/LE25; 32/LE25'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	177428	Licence to take water	Issued	31/12/2020	Domestic Supply; Stock	NULL	'2/AB220; 3/RP866852; 5/SP110490; 6/RP866852'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177428	Licence to take water	Issued	31/12/2020	Domestic Supply; Stock	NULL	'2/AB220; 3/RP866852; 5/SP110490; 6/RP866852'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177428	Licence to take water	Issued	31/12/2020	Domestic Supply; Stock	NULL	'2/AB220; 3/RP866852; 5/SP110490; 6/RP866852'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177428	Licence to take water	Issued	31/12/2020	Domestic Supply; Stock	NULL	'2/AB220; 3/RP866852; 5/SP110490; 6/RP866852'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404219	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'34/AB30; 35/AB31'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404219	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NULL	'34/AB30; 35/AB31'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607620	Licence to take water	Issued	28/02/2033	Domestic Supply; Stock	NULL	'37/FT803582'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607762	Licence to take water	Issued	31/03/2033	Domestic Supply; Stock	NULL	'2/SP243217'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607763	Licence to take water	Issued	31/03/2033	Domestic Supply; Stock	NULL	'1/SP243217'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	09726S	Licence to take water	Issued	31/07/2029	Domestic Supply; Stock	NULL	'25/F4016'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	11558S	Licence to take water	Under Renewal	30/09/2012	Domestic Supply; Stock	NULL	'20/FT139'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	12882S	Licence to take water	Issued	31/01/2018	Domestic Supply; Stock	NULL	'19/FT138'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13881S	Licence to take water	Issued	31/05/2031	Domestic Supply; Stock	NULL	'2/CP818391'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14177S	Licence to take water	Issued	30/06/2018	Domestic Supply; Stock	NULL	'29/LE16'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	14553S	Licence to take water	Issued	31/01/2032	Domestic Supply; Stock	NULL	'84/F406'	1303.EUROM/Eurombah Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	14561S	Licence to take water	Issued	31/10/2018	Domestic Supply; Stock	NUL	'1/SP134955'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14970S	Licence to take water	Issued	31/05/2032	Domestic Supply; Stock	NUL	'32/FT899'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15590S	Licence to take water	Under Renewal	31/12/2012	Domestic Supply; Stock	NUL	'1/FT823'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15590S	Licence to take water	Under Renewal	31/12/2012	Domestic Supply; Stock	NUL	'1/FT823'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15590S	Licence to take water	Under Renewal	31/12/2012	Domestic Supply; Stock	NUL	'1/FT823'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15717N	Licence to take water	Issued	31/05/2031	Domestic Supply; Stock	NUL	'22/FT548'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	15836N	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NUL	'38/FT440'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NUL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NUL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NUL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NUL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16270S	Licence to take water	Issued	30/04/2031	Domestic Supply; Stock	NUL	'10/FT847; 2/FT597; 3/FT733'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16505N	Licence to take water	Issued	30/04/2020	Domestic Supply; Stock	NUL	'46/WT94'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	16605S	Licence to take water	Issued	31/10/2032	Domestic Supply; Stock	NUL	'23/LE260'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	16605S	Licence to take water	Issued	31/10/2032	Domestic Supply; Stock	NUL	'23/LE260'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	16836S	Licence to take water	Issued	31/05/2013	Domestic Supply; Stock	NUL	'11/LE53'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17197S	Licence to take water	Issued	31/01/2032	Domestic Supply; Stock	NUL	'3/FT267'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	17640N	Licence to take water	Issued	28/02/2031	Domestic Supply; Stock	NUL	'1/SP219064'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	17690S	Licence to take water	Under Renewal	30/09/2012	Domestic Supply; Stock	NUL	'3/F4037'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	17690S	Licence to take water	Under Renewal	30/09/2012	Domestic Supply; Stock	NUL	'3/F4037'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	23147N	Licence to take water	Issued	28/02/2021	Domestic Supply; Stock	NUL	'27/FT969'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	26074S	Licence to take water	Issued	30/11/2014	Domestic Supply; Stock	NUL	'222/F4038'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	34597S	Licence to take water	Issued	31/08/2019	Domestic Supply; Stock	NUL	'1/LE52'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	34597S	Licence to take water	Issued	31/08/2019	Domestic Supply; Stock	NUL	'1/LE52'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	34597S	Licence to take water	Issued	31/08/2019	Domestic Supply; Stock	NUL	'1/LE52'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	34597S	Licence to take water	Issued	31/08/2019	Domestic Supply; Stock	NUL	'1/LE52'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	36743N	Licence to take water	Issued	31/05/2021	Domestic Supply; Stock	NUL	'73/SP154286'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	36743N	Licence to take water	Issued	31/05/2021	Domestic Supply; Stock	NUL	'73/SP154286'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	38156S	Licence to take water	Issued	30/04/2014	Domestic Supply; Stock	NUL	'1/FT861'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	38156S	Licence to take water	Issued	30/04/2014	Domestic Supply; Stock	NUL	'1/FT861'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	38156S	Licence to take water	Issued	30/04/2014	Domestic Supply; Stock	NUL	'1/FT861'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	44518N	Licence to take water	Issued	30/11/2030	Domestic Supply; Stock	NUL	'41/WT98'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	47214S	Licence to take water	Issued	28/02/2030	Domestic Supply; Stock	NUL	'47/LE167; 5/LE167'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	47670S	Licence to take water	Issued	31/08/2019	Domestic Supply; Stock	NUL	'56/F4023'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48816S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'4/FT775'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48816S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'4/FT775'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48816S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'4/FT775'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48816S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'4/FT775'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48823N	Licence to take water	Issued	30/06/2022	Domestic Supply; Stock	NUL	'50/WT51'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48852N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NUL	'28/CP885313'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58089N	Licence to take water	Issued	31/05/2022	Domestic Supply; Stock	NUL	'16/WT80'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58107N	Licence to take water	Issued	31/01/2023	Domestic Supply; Stock	NUL	'114/WT88'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58174N	Licence to take water	Issued	30/09/2022	Domestic Supply; Stock	NUL	'96/WT75'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58174N	Licence to take water	Issued	30/09/2022	Domestic Supply; Stock	NUL	'96/WT75'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58296N	Licence to take water	Issued	30/11/2019	Domestic Supply; Stock	NUL	'5/AB68'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58383N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NUL	'2/AB233'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58409N	Licence to take water	Issued	4/11/2029	Domestic Supply; Stock	NUL	'55/FT919'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58409N	Licence to take water	Issued	4/11/2029	Domestic Supply; Stock	NUL	'55/FT919'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58409N	Licence to take water	Issued	4/11/2029	Domestic Supply; Stock	NUL	'55/FT919'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58427N	Licence to take water	Issued	30/11/2022	Domestic Supply; Stock	NUL	'4/WT213'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58521N	Licence to take water	Issued	30/09/2019	Domestic Supply; Stock	NUL	'5/WAR20; 6/WAR24'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58713N	Licence to take water	Issued	30/04/2020	Domestic Supply; Stock	NUL	'3/RP173978; 4/RP173978'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58767N	Licence to take water	Issued	31/01/2021	Domestic Supply; Stock	NUL	'4/RP846113'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58904N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'4/AB209'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	84045S	Licence to take water	Issued	28/02/2014	Domestic Supply; Stock	NUL	'4/LE135'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	84045S	Licence to take water	Issued	28/02/2014	Domestic Supply; Stock	NUL	'4/LE135'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	84045S	Licence to take water	Issued	28/02/2014	Domestic Supply; Stock	NUL	'4/LE135'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	84212F	Licence to take water	Issued	30/11/2031	Domestic Supply; Stock	NUL	'2/TR56'	1305.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	84413S	Licence to take water	Issued	30/09/2013	Domestic Supply; Stock	NUL	'1/LE32'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84413S	Licence to take water	Issued	30/09/2013	Domestic Supply; Stock	NUL	'1/LE32'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	88465S	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NUL	'9/LE12'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	88466S	Licence to take water	Issued	31/08/2015	Domestic Supply; Stock	NUL	'13/LE12'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89505S	Licence to take water	Under Renewal	31/08/2012	Domestic Supply; Stock	NUL	'3/FT992; 8/FT992'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	89541S	Licence to take water	Issued	27/10/2014	Domestic Supply; Stock	NUL	'83/FT625'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89541S	Licence to take water	Issued	27/10/2014	Domestic Supply; Stock	NUL	'83/FT625'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89541S	Licence to take water	Issued	27/10/2014	Domestic Supply; Stock	NUL	'83/FT625'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	89562S	Licence to take water	Issued	31/07/2013	Domestic Supply; Stock	NUL	'2/LE246'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89562S	Licence to take water	Issued	31/07/2013	Domestic Supply; Stock	NUL	'2/LE246'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89566S	Licence to take water	Issued	31/08/2015	Domestic Supply; Stock	NUL	'14/LE12'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	89603S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'3/SP104607; 4/SP104607'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	89608S	Licence to take water	Issued	31/01/2014	Domestic Supply; Stock	NUL	'12/FT7'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89609S	Licence to take water	Issued	31/10/2030	Domestic Supply; Stock	NUL	'4/LE28'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	89622S	Licence to take water	Issued	30/11/2013	Domestic Supply; Stock	NUL	'9/LE226'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89622S	Licence to take water	Issued	30/11/2013	Domestic Supply; Stock	NUL	'9/LE226'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89622S	Licence to take water	Issued	30/11/2013	Domestic Supply; Stock	NUL	'9/LE226'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89653S	Licence to take water	Issued	31/10/2013	Domestic Supply; Stock	NUL	'6/RP32433'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	89787S	Licence to take water	Issued	30/11/2019	Domestic Supply; Stock	NUL	'4/T5039'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89787S	Licence to take water	Issued	30/11/2019	Domestic Supply; Stock	NUL	'4/T5039'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89787S	Licence to take water	Issued	30/11/2019	Domestic Supply; Stock	NUL	'4/T5039'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89787S	Licence to take water	Issued	30/11/2019	Domestic Supply; Stock	NUL	'4/T5039'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89793S	Licence to take water	Issued	28/02/2014	Domestic Supply; Stock	NUL	'10/CP903548'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89793S	Licence to take water	Issued	28/02/2014	Domestic Supply; Stock	NUL	'10/CP903548'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89793S	Licence to take water	Issued	28/02/2014	Domestic Supply; Stock	NUL	'10/CP903548'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	100235	Licence to take water	Issued	31/12/2020	Domestic Supply; Stock	NUL	'3047/PH1181'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58897N	Licence to take water	Issued	31/08/2021	Domestic Supply; Stock	NUL	'2/FT880'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58897N	Licence to take water	Issued	31/08/2021	Domestic Supply; Stock	NUL	'2/FT880'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58897N	Licence to take water	Issued	31/08/2021	Domestic Supply; Stock	NUL	'2/FT880'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	23147N	Licence to take water	Issued	28/02/2021	Domestic Supply; Stock	NUL	'27/FT969'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	174071	Licence to take water	Issued	31/01/2030	Domestic Supply; Stock	NUL	'8/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	174071	Licence to take water	Issued	31/01/2030	Domestic Supply; Stock	NUL	'8/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	174071	Licence to take water	Issued	31/01/2030	Domestic Supply; Stock	NUL	'8/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	174071	Licence to take water	Issued	31/01/2030	Domestic Supply; Stock	NUL	'8/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	174071	Licence to take water	Issued	31/01/2030	Domestic Supply; Stock	NUL	'8/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	174071	Licence to take water	Issued	31/01/2030	Domestic Supply; Stock	NUL	'8/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177428	Licence to take water	Issued	31/12/2020	Domestic Supply; Stock	NUL	'2/AB220; 3/RP866852; 5/SP110490; 6/RP866852'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177428	Licence to take water	Issued	31/12/2020	Domestic Supply; Stock	NUL	'2/AB220; 3/RP866852; 5/SP110490; 6/RP866852'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	189839	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'2/LE297'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58048N	Licence to take water	Issued	8/07/2014	Domestic Supply; Stock	NUL	'2/AB132; 4/AB50; 5/AB50'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58048N	Licence to take water	Issued	8/07/2014	Domestic Supply; Stock	NUL	'2/AB132; 4/AB50; 5/AB50'	1303.GUBBE/Gubberamunda Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58048N	Licence to take water	Issued	8/07/2014	Domestic Supply; Stock	NUL	'2/AB132; 4/AB50; 5/AB50'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58048N	Licence to take water	Issued	8/07/2014	Domestic Supply; Stock	NUL	'2/AB132; 4/AB50; 5/AB50'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58048N	Licence to take water	Issued	8/07/2014	Domestic Supply; Stock	NUL	'2/AB132; 4/AB50; 5/AB50'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	89742S	Licence to take water	Issued	28/02/2021	Domestic Supply; Stock	NUL	'7/FT840'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89742S	Licence to take water	Issued	28/02/2021	Domestic Supply; Stock	NUL	'7/FT840'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	36738N	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NUL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	26062S	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'10/LE54'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	26062S	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'10/LE54'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	89604S	Licence to take water	Issued	31/12/2030	Domestic Supply; Stock	NUL	'12/LE282'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89604S	Licence to take water	Issued	31/12/2030	Domestic Supply; Stock	NUL	'12/LE282'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89603S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'3/SP104607; 4/SP104607'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58031N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NUL	'8/AB127'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48986N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	16505N	Licence to take water	Issued	30/04/2020	Domestic Supply; Stock	NUL	'46/WT94'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	44404S	Licence to take water	Issued	31/03/2014	Domestic Supply; Stock	NUL	'9/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	44404S	Licence to take water	Issued	31/03/2014	Domestic Supply; Stock	NUL	'9/SP152696'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31579S	Licence to take water	Issued	31/05/2030	Domestic Supply; Stock	NUL	'9/LE189'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	31579S	Licence to take water	Issued	31/05/2030	Domestic Supply; Stock	NUL	'9/LE189'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58713N	Licence to take water	Issued	30/04/2020	Domestic Supply; Stock	NUL	'3/RP173978; 4/RP173978'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89565S	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'8/LE317'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	44215N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NUL	'2/FT58'	1303.TERT/Tertiary - Undefined
Upper Dawson River	Upper Dawson River	58417N	Licence to take water	Issued	31/07/2019	Domestic Supply; Stock	NUL	'15/WT308'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58417N	Licence to take water	Issued	31/07/2019	Domestic Supply; Stock	NUL	'15/WT308'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58417N	Licence to take water	Issued	31/07/2019	Domestic Supply; Stock	NUL	'15/WT308'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	50103N	Licence to take water	Issued	31/10/2021	Domestic Supply; Stock	NUL	'8/WAR45'	4224.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	57304S	Licence to take water	Issued	31/08/2018	Domestic Supply; Stock	NUL	'5/LE28'	1303.PRECI/Precipice Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	57322S	Licence to take water	Issued	30/09/2019	Domestic Supply; Stock	NULL	'1/LE267'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57322S	Licence to take water	Issued	30/09/2019	Domestic Supply; Stock	NULL	'1/LE267'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57575S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'5272/PH1859'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57575S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'5272/PH1859'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57575S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'5272/PH1859'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57575S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'5272/PH1859'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57575S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'5272/PH1859'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57575S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'5272/PH1859'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57575S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'5272/PH1859'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58383N	Licence to take water	Issued	30/04/2022	Domestic Supply; Stock	NULL	'2/AB233'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58720N	Licence to take water	Issued	31/05/2019	Domestic Supply; Stock	NULL	'1/CP908592'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58720N	Licence to take water	Issued	31/05/2019	Domestic Supply; Stock	NULL	'1/CP908592'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58904N	Licence to take water	Issued	28/02/2023	Domestic Supply; Stock	NULL	'4/AB209'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	62589S	Licence to take water	Issued	31/01/2014	Domestic Supply; Stock	NULL	'37/SP153280'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62589S	Licence to take water	Issued	31/01/2014	Domestic Supply; Stock	NULL	'37/SP153280'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62880S	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NULL	'3/FT966'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62880S	Licence to take water	Issued	30/06/2030	Domestic Supply; Stock	NULL	'3/FT966'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	84212F	Licence to take water	Issued	30/11/2031	Domestic Supply; Stock	NULL	'2/TR56'	1305.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	84377S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'2/LE52'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84377S	Licence to take water	Issued	30/11/2018	Domestic Supply; Stock	NULL	'2/LE52'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	88449S	Licence to take water	Issued	31/05/2030	Domestic Supply; Stock	NULL	'6/LE309'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	88449S	Licence to take water	Issued	31/05/2030	Domestic Supply; Stock	NULL	'6/LE309'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	88449S	Licence to take water	Issued	31/05/2030	Domestic Supply; Stock	NULL	'6/LE309'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	88449S	Licence to take water	Issued	31/05/2030	Domestic Supply; Stock	NULL	'6/LE309'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89505S	Licence to take water	Under Renewal	31/08/2012	Domestic Supply; Stock	NULL	'3/FT992; 8/FT992'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	89510S	Licence to take water	Under Renewal	31/08/2012	Domestic Supply; Stock	NULL	'8/FT992'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58585N	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58585N	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58585N	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58585N	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NUL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58585N	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NUL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58585N	Licence to take water	Issued	30/09/2031	Domestic Supply; Stock	NUL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	35912S	Licence to take water	Issued	30/06/2013	Domestic Supply; Stock	NUL	'14/FT1'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	401989	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'86/FT51'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404241	Licence to take water	Issued	30/11/2019	Domestic Supply; Stock	NUL	'86/FT51'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	401989	Licence to take water	Issued	31/03/2030	Domestic Supply; Stock	NUL	'86/FT51'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404241	Licence to take water	Issued	30/11/2019	Domestic Supply; Stock	NUL	'86/FT51'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	08461N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'7/WAR32'	4224.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	36738N	Licence to take water	Issued	30/11/2021	Domestic Supply; Stock	NUL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	14231S	Licence to take water	Under Renewal	28/02/2013	Domestic Supply; Stock	NUL	'11/LE179'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	62284S	Licence to take water	Under Renewal	28/02/2013	Domestic Supply; Stock	NUL	'11/LE179'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14231S	Licence to take water	Under Renewal	28/02/2013	Domestic Supply; Stock	NUL	'11/LE179'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	62284S	Licence to take water	Under Renewal	28/02/2013	Domestic Supply; Stock	NUL	'11/LE179'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14278S	Licence to take water	Issued	28/02/2030	Domestic Supply; Stock	NUL	'51/LE244'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	14278S	Licence to take water	Issued	28/02/2030	Domestic Supply; Stock	NUL	'51/LE244'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	15417S	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89599S	Licence to take water	Issued	31/10/2030	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15417S	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89599S	Licence to take water	Issued	31/10/2030	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15417S	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89599S	Licence to take water	Issued	31/10/2030	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15417S	Licence to take water	Issued	31/08/2013	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89599S	Licence to take water	Issued	31/10/2030	Domestic Supply; Stock	NUL	'4/SP191511'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48986N	Licence to take water	Issued	31/08/2020	Domestic Supply; Stock	NUL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	30852S	Licence to take water	Issued	31/03/2019	Domestic Supply; Stock	NUL	'6/LAB4011'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58017N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'11/AB125'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58017N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'11/AB125'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58017N	Licence to take water	Issued	31/05/2020	Domestic Supply; Stock	NUL	'11/AB125'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	33771N	Licence to take water	Issued	30/09/2021	Domestic Supply; Stock	NUL	'7/AB167'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	33771N	Licence to take water	Issued	30/09/2021	Domestic Supply; Stock	NUL	'7/AB167'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	47214S	Licence to take water	Issued	28/02/2030	Domestic Supply; Stock	NUL	'47/LE167; 5/LE167'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	47214S	Licence to take water	Issued	28/02/2030	Domestic Supply; Stock	NUL	'47/LE167; 5/LE167'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	89517S	Licence to take water	Issued	31/08/2014	Domestic Supply; Stock	NUL	'10/CP903254'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NUL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	100450	Licence to take water	Issued	31/07/2020	Domestic Supply; Stock	NUL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	57844S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'5/SP236971'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	57844S	Licence to take water	Issued	30/04/2030	Domestic Supply; Stock	NUL	'5/SP236971'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	401758	Licence to take water	Issued	31/03/2014	Domestic Supply; Stock	NUL	'132/FT722'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15598S	Licence to take water	Issued	28/02/2033	Domestic Supply; Stock	NUL	'132/FT722'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	401758	Licence to take water	Issued	31/03/2014	Domestic Supply; Stock	NUL	'132/FT722'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15598S	Licence to take water	Issued	28/02/2033	Domestic Supply; Stock	NUL	'132/FT722'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58726N	Licence to take water	Issued	30/04/2020	Domestic Supply; Stock	NUL	'5/AB154'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58229N	Licence to take water	Issued	31/01/2023	Domestic Supply; Stock	NUL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58229N	Licence to take water	Issued	31/01/2023	Domestic Supply; Stock	NUL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58131N	Licence to take water	Issued	30/11/2022	Domestic Supply; Stock	NUL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58131N	Licence to take water	Issued	30/11/2022	Domestic Supply; Stock	NUL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48942N	Licence to take water	Issued	31/12/2019	Educational Facility	3	'78/FT580'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603700	Licence to take water	Issued	31/10/2020	Group Domestic; Stock	50	'1/RP144130; 1/RP204781; 2/RP170076; 2/RP227994; 40/FT329; 58/FT520; 59/FT820; 60/FT904; 68/SP137906; 69/SP137906'	1303.HUTTO/Hutton Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

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Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	607485	Licence to take water	Issued	31/01/2023	Group Domestic; Stock	100	'20/FT464; 25/FT835698; 26/FT835699; 27/FT835700; 28/FT563; 34/FT480; 35/FT575; 39/FT503; 40/FT503; 41/CP857459; 42/FT505; 53/FT505; 54/FT504; 55/FT503; 58/FT556; 70/FT590; 72/FT590; 78/FT580'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607485	Licence to take water	Issued	31/01/2023	Group Domestic; Stock	100	'20/FT464; 25/FT835698; 26/FT835699; 27/FT835700; 28/FT563; 34/FT480; 35/FT575; 39/FT503; 40/FT503; 41/CP857459; 42/FT505; 53/FT505; 54/FT504; 55/FT503; 58/FT556; 70/FT590; 72/FT590; 78/FT580'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14562S	Licence to take water	Issued	31/10/2018	Group Domestic; Stock	20	'370/RP908507'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607485	Licence to take water	Issued	31/01/2023	Group Domestic; Stock	100	'20/FT464; 25/FT835698; 26/FT835699; 27/FT835700; 28/FT563; 34/FT480; 35/FT575; 39/FT503; 40/FT503; 41/CP857459; 42/FT505; 53/FT505; 54/FT504; 55/FT503; 58/FT556; 70/FT590; 72/FT590; 78/FT580'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607485	Licence to take water	Issued	31/01/2023	Group Domestic; Stock	100	'20/FT464; 25/FT835698; 26/FT835699; 27/FT835700; 28/FT563; 34/FT480; 35/FT575; 39/FT503; 40/FT503; 41/CP857459; 42/FT505; 53/FT505; 54/FT504; 55/FT503; 58/FT556; 70/FT590; 72/FT590; 78/FT580'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607485	Licence to take water	Issued	31/01/2023	Group Domestic; Stock	100	'20/FT464; 25/FT835698; 26/FT835699; 27/FT835700; 28/FT563; 34/FT480; 35/FT575; 39/FT503; 40/FT503; 41/CP857459; 42/FT505; 53/FT505; 54/FT504; 55/FT503; 58/FT556; 70/FT590; 72/FT590; 78/FT580'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607485	Licence to take water	Issued	31/01/2023	Group Domestic; Stock	100	'20/FT464; 25/FT835698; 26/FT835699; 27/FT835700; 28/FT563; 34/FT480; 35/FT575; 39/FT503; 40/FT503; 41/CP857459; 42/FT505; 53/FT505; 54/FT504; 55/FT503; 58/FT556; 70/FT590; 72/FT590; 78/FT580'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	02557N	Licence to interfere by impounding- Embankment or Wall	Issued	31/12/2018	Impound Water	NULL	'60/FT933'	130.01.18.34.16/Ten Mile Creek
Upper Dawson River	Upper Dawson River	02557N	Licence to interfere by impounding- Embankment or Wall	Issued	31/12/2018	Impound Water	NULL	'60/FT933'	130.01.18.34.16/Ten Mile Creek
Upper Dawson River	Upper Dawson River	19340N	Licence to interfere by impounding- Embankment or Wall	Issued	31/03/2019	Impound Water	68	'38/CP899702'	130.01.18.34.08.00+/Unnamed Tributary of Mud Creek
Upper Dawson River	Upper Dawson River	26365N	Licence to interfere by impounding- Embankment or Wall	Issued	30/09/2016	Impound Water	58	'8/TR23'	130.01.31-02.00+/Unnamed Tributary of Brown River
Upper Dawson River	Upper Dawson River	50834N	Licence to interfere by impounding- Embankment or Wall	Issued	30/04/2019	Impound Water	1	'6/TR20'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	50906N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	31/07/2012	Impound Water	6	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50906N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	31/07/2012	Impound Water	6	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50906N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	31/07/2012	Impound Water	6	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50906N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	31/07/2012	Impound Water	6	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	25508S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	15	'1/FT921'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	25508S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	15	'1/FT921'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	25508S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	15	'1/FT921'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	18414N	Licence to interfere by impounding- Embankment or Wall	Issued	31/08/2017	Impound Water	14	'5/TR18'	130.01.31-02/Brown River

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	50817N	Licence to interfere by impounding- Embankment or Wall	Issued	31/03/2021	Impound Water	2	'5/TR18'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	26365N	Licence to interfere by impounding- Embankment or Wall	Issued	30/09/2016	Impound Water	58	'8/TR23'	130.01.31-02.00+/Unnamed Tributary of Brown River
Upper Dawson River	Upper Dawson River	50834N	Licence to interfere by impounding- Embankment or Wall	Issued	30/04/2019	Impound Water	1	'6/TR20'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	18414N	Licence to interfere by impounding- Embankment or Wall	Issued	31/08/2017	Impound Water	14	'5/TR18'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	50817N	Licence to interfere by impounding- Embankment or Wall	Issued	31/03/2021	Impound Water	2	'5/TR18'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	33294S	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2021	Impound Water	150	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	52837S	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2021	Impound Water	20	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	33294S	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2021	Impound Water	150	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	52837S	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2021	Impound Water	20	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	33294S	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2021	Impound Water	150	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	52837S	Licence to interfere by impounding- Embankment or Wall	Issued	28/02/2021	Impound Water	20	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	50906N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	31/07/2012	Impound Water	6	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50907N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	30/07/2012	Impound Water	5	'2/WT299'	130.01.18.37.13/Lagoon Creek
Upper Dawson River	Upper Dawson River	50906N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	31/07/2012	Impound Water	6	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50907N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	30/07/2012	Impound Water	5	'2/WT299'	130.01.18.37.13/Lagoon Creek
Upper Dawson River	Upper Dawson River	50906N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	31/07/2012	Impound Water	6	'2/WT299'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	50907N	Licence to interfere by impounding- Embankment or Wall	Under Reinstatement	30/07/2012	Impound Water	5	'2/WT299'	130.01.18.37.13/Lagoon Creek
Upper Dawson River	Upper Dawson River	100224	Licence to interfere by impounding- Embankment or Wall	Issued	31/01/2020	Impound Water	150	'25/FT293'	130.01.18.34.15.00+/Unnamed Tributary of Downfall Creek
Upper Dawson River	Upper Dawson River	100229	Licence to interfere by impounding- Embankment or Wall	Issued	31/01/2020	Impound Water	400	'25/FT293'	130.01.18.34.15.00+/Unnamed Tributary of Downfall Creek
Upper Dawson River	Upper Dawson River	50889N	Licence to interfere by impounding- Embankment or Wall	Issued	30/05/2014	Impound Water	15	'25/FT293'	130.01.18.34.15.00+/Unnamed Tributary of Downfall Creek
Upper Dawson River	Upper Dawson River	50890N	Licence to interfere by impounding- Embankment or Wall	Under Renewal	30/04/2013	Impound Water	250	'25/FT293'	130.01.18.34.15.00+/Unnamed Tributary of Downfall Creek
Upper Dawson River	Upper Dawson River	48312S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	400	'6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	48312S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	400	'6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	52840S	Licence to interfere by impounding- Embankment or Wall	Issued	31/07/2021	Impound Water	6	'9/AB123'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	48313S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	400	'5/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	48317S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	220	'5/AB84'	130.01.18.00+Z/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	48313S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	400	'5/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	48317S	Licence to interfere by impounding- Embankment or Wall	Under Renewal	28/02/2013	Impound Water	220	'5/AB84'	130.01.18.00+Z/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	58432N	Licence to take water	Issued	31/03/2020	Industrial	41	'8/WT384'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	403138	Licence to take water	Issued	30/06/2020	Irrigation	2	'77/FT136'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	14134S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'9/AB102'	130.01.18.00+Z/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	14134S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'9/AB102'	130.01.18.00+Z/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	18165S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'6/FT12'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	18165S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'6/FT12'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	52814S	Licence to take water	Issued	28/02/2020	Irrigation	NULL	'108/FT53; 48/FT47'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	89679U	Licence to take water	Issued	31/05/2013	Irrigation	200	'116/FT51; 117/FT51'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	89679U	Licence to take water	Issued	31/05/2013	Irrigation	200	'116/FT51; 117/FT51'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	52814S	Licence to take water	Issued	28/02/2020	Irrigation	NULL	'108/FT53; 48/FT47'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	43886S	Licence to take water	Issued	28/02/2020	Irrigation	NULL	'8/AB103'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	17866S	Licence to take water	Issued	31/08/2021	Irrigation	74	'1/LE269'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17866S	Licence to take water	Issued	31/08/2021	Irrigation	74	'1/LE269'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17866S	Licence to take water	Issued	31/08/2021	Irrigation	74	'1/LE269'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17319N	Licence to take water	Issued	30/11/2013	Irrigation	NULL	'17/WT17'	130.01.18.41/Hutton Creek
Upper Dawson River	Upper Dawson River	17319N	Licence to take water	Issued	30/11/2013	Irrigation	NULL	'17/WT17'	130.01.18.41/Hutton Creek
Upper Dawson River	Upper Dawson River	48582S	Licence to take water	Issued	30/06/2020	Irrigation	NULL	'151/FT114'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	48583S	Licence to take water	Issued	30/06/2020	Irrigation	NULL	'151/FT114'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	89659S	Licence to take water	Issued	31/01/2022	Irrigation	60	'37/SP153280'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89659S	Licence to take water	Issued	31/01/2022	Irrigation	60	'37/SP153280'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	52849S	Licence to take water	Issued	28/02/2022	Irrigation	NULL	'86/FT51'	130.01.18.33A.01/Deep Lagoon
Upper Dawson River	Upper Dawson River	52849S	Licence to take water	Issued	28/02/2022	Irrigation	NULL	'86/FT51'	130.01.18.33A.01/Deep Lagoon
Upper Dawson River	Upper Dawson River	44700S	Licence to take water	Issued	28/02/2020	Irrigation	200	'51/LE244'	1303.ROBIA/Robinson Creek Alluvium
Upper Dawson River	Upper Dawson River	44700S	Licence to take water	Issued	28/02/2020	Irrigation	200	'51/LE244'	1303.ROBIA/Robinson Creek Alluvium

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	15939S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'1/FT921'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	15939S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'1/FT921'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	15939S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'1/FT921'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	89560S	Licence to take water	Issued	23/10/2019	Irrigation	360	'6/LAB4011'	1303.ROBIA/Robinson Creek Alluvium
Upper Dawson River	Upper Dawson River	52827S	Licence to take water	Issued	31/05/2013	Irrigation	NULL	'11/AB125'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	52827S	Licence to take water	Issued	31/05/2013	Irrigation	NULL	'11/AB125'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	52827S	Licence to take water	Issued	31/05/2013	Irrigation	NULL	'11/AB125'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	89644S	Licence to take water	Under Renewal	28/02/2013	Irrigation	300	'47/LE167'	1303.ROBIA/Robinson Creek Alluvium
Upper Dawson River	Upper Dawson River	89644S	Licence to take water	Under Renewal	28/02/2013	Irrigation	300	'47/LE167'	1303.ROBIA/Robinson Creek Alluvium
Upper Dawson River	Upper Dawson River	33292S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'10/AB124'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	38540S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	33292S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'10/AB124'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	38540S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	33292S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'10/AB124'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	38540S	Licence to take water	Issued	28/02/2021	Irrigation	NULL	'10/AB124'	130.01.18.00+/Unnamed Tributary of Dawson River
Upper Dawson River	Upper Dawson River	50957N	Licence to take water	Under Renewal	30/04/2013	Irrigation	NULL	'25/FT293'	130.01.18.34.15.00+/Unnamed Tributary of Downfall Creek
Upper Dawson River	Upper Dawson River	48314S	Licence to take water	Under Renewal	28/02/2013	Irrigation	NULL	'5/AB84; 6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	48314S	Licence to take water	Under Renewal	28/02/2013	Irrigation	NULL	'5/AB84; 6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	48314S	Licence to take water	Under Renewal	28/02/2013	Irrigation	NULL	'5/AB84; 6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	48314S	Licence to take water	Under Renewal	28/02/2013	Irrigation	NULL	'5/AB84; 6/AB84'	130.01.18.00+Z/Dawson River (Anabranh)
Upper Dawson River	Upper Dawson River	25793S	Licence to take water	Issued	28/02/2021	Irrigation; Stock	NULL	'30/F4014'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	16601N	Licence to take water	Issued	31/05/2013	Irrigation; Stock	60	'11/WT292'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	38658S	Licence to take water	Issued	30/06/2020	Irrigation; Stock	444	'6/RP882887'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	33177N	Licence to take water	Issued	31/05/2014	Irrigation; Stock	60	'11/AB125'	1303.EURO/Eurombah Creek Alluvium
Upper Dawson River	Upper Dawson River	33177N	Licence to take water	Issued	31/05/2014	Irrigation; Stock	60	'11/AB125'	1303.EURO/Eurombah Creek Alluvium
Upper Dawson River	Upper Dawson River	33177N	Licence to take water	Issued	31/05/2014	Irrigation; Stock	60	'11/AB125'	1303.EURO/Eurombah Creek Alluvium
Upper Dawson River	Upper Dawson River	45223S	Licence to take water	Issued	28/02/2014	Irrigation; Stock	NULL	'7/AB167'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	45224S	Licence to take water	Issued	28/02/2014	Irrigation; Stock	NULL	'7/AB167'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	45223S	Licence to take water	Issued	28/02/2014	Irrigation; Stock	NULL	'7/AB167'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	45224S	Licence to take water	Issued	28/02/2014	Irrigation; Stock	NULL	'7/AB167'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	57894S	Licence to take water	Issued	31/12/2020	Irrigation; Stock Intensive	39	'1/AB842550; 2/AB83; 3/AB83'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	57894S	Licence to take water	Issued	31/12/2020	Irrigation; Stock Intensive	39	'1/AB842550; 2/AB83; 3/AB83'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	57894S	Licence to take water	Issued	31/12/2020	Irrigation; Stock Intensive	39	'1/AB842550; 2/AB83; 3/AB83'	1303.DAWSA/Dawson River Alluvium

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	578945	Licence to take water	Issued	31/12/2020	Irrigation; Stock Intensive	39	'1/AB842550; 2/AB83; 3/AB83'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	578945	Licence to take water	Issued	31/12/2020	Irrigation; Stock Intensive	39	'1/AB842550; 2/AB83; 3/AB83'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	578945	Licence to take water	Issued	31/12/2020	Irrigation; Stock Intensive	39	'1/AB842550; 2/AB83; 3/AB83'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	578945	Licence to take water	Issued	31/12/2020	Irrigation; Stock Intensive	39	'1/AB842550; 2/AB83; 3/AB83'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	407921	Licence to take water	Issued	31/10/2020	Irrigation; Stock Intensive	71	'2/SP214982; 6/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	407921	Licence to take water	Issued	31/10/2020	Irrigation; Stock Intensive	71	'2/SP214982; 6/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	578946	Licence to take water	Issued	23/12/2019	Irrigation; Stock Intensive	87	'4/AB84; 5/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	578946	Licence to take water	Issued	23/12/2019	Irrigation; Stock Intensive	87	'4/AB84; 5/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	409177	Licence to take water	Issued	28/02/2021	Irrigation; Stock Intensive	130	'10/RP880092'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	409177	Licence to take water	Issued	28/02/2021	Irrigation; Stock Intensive	130	'10/RP880092'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	409177	Licence to take water	Issued	28/02/2021	Irrigation; Stock Intensive	130	'10/RP880092'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	409177	Licence to take water	Issued	28/02/2021	Irrigation; Stock Intensive	130	'10/RP880092'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	407921	Licence to take water	Issued	31/10/2020	Irrigation; Stock Intensive	71	'2/SP214982; 6/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	407921	Licence to take water	Issued	31/10/2020	Irrigation; Stock Intensive	71	'2/SP214982; 6/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	578952	Licence to take water	Issued	31/01/2022	Irrigation; Stock Intensive	58	'9/AB123'	1303.EURO/Eurombah Creek Alluvium
Upper Dawson River	Upper Dawson River	578946	Licence to take water	Issued	23/12/2019	Irrigation; Stock Intensive	87	'4/AB84; 5/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	578946	Licence to take water	Issued	23/12/2019	Irrigation; Stock Intensive	87	'4/AB84; 5/AB84'	1303.DAWSA/Dawson River Alluvium
Upper Dawson River	Upper Dawson River	603823	Licence to take water	Issued	30/11/2020	Irrigation; Stock Intensive	120	'2/SP214982; 4/AB84; 5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	100161	Licence to take water	Issued	30/11/2020	Stock	NULL	'33/AB128'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	100634	Licence to take water	Issued	28/02/2021	Stock	NULL	'3/FT845130'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	100634	Licence to take water	Issued	28/02/2021	Stock	NULL	'3/FT845130'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	100854	Licence to take water	Under Amendment	28/02/2021	Stock	NULL	'17/LE5; 18/LE5'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	100854	Licence to take water	Under Amendment	28/02/2021	Stock	NULL	'17/LE5; 18/LE5'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	100854	Licence to take water	Under Amendment	28/02/2021	Stock	NULL	'17/LE5; 18/LE5'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101544	Licence to take water	Issued	31/01/2022	Stock	NULL	'13/FT792; 14/FT792'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	101544	Licence to take water	Issued	31/01/2022	Stock	NULL	'13/FT792; 14/FT792'	1303.GUBBE/Gubberamunda Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	102590	Licence to take water	Issued	9/12/2029	Stock	NULL	'26/FT88'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	171099	Licence to take water	Issued	31/01/2031	Stock	NULL	'22/FT801; 6/FT801'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	172585	Licence to take water	Issued	30/06/2014	Stock	NULL	'15/FT311; 165/FT149; 166/FT149'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	172585	Licence to take water	Issued	30/06/2014	Stock	NULL	'15/FT311; 165/FT149; 166/FT149'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	172969	Licence to take water	Issued	31/10/2013	Stock	NULL	'39/WT97'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	173375	Licence to take water	Issued	30/06/2031	Stock	NULL	'131/SP121742; 132/SP121742'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	173558	Licence to take water	Issued	5/01/2030	Stock	NULL	'181/SP147005; 182/SP147005'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	173558	Licence to take water	Issued	5/01/2030	Stock	NULL	'181/SP147005; 182/SP147005'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	173558	Licence to take water	Issued	5/01/2030	Stock	NULL	'181/SP147005; 182/SP147005'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	173558	Licence to take water	Issued	5/01/2030	Stock	NULL	'181/SP147005; 182/SP147005'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	173767	Licence to take water	Issued	4/01/2030	Stock	NULL	'62/WT86'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	175874	Licence to take water	Issued	30/06/2022	Stock	NULL	'51/WT51'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176592	Licence to take water	Issued	31/08/2030	Stock	NULL		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176863	Licence to take water	Issued	31/10/2030	Stock	NULL	'24/FT951'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176865	Licence to take water	Issued	31/10/2030	Stock	NULL	'18/FT509'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176869	Licence to take water	Issued	31/10/2030	Stock	NULL	'9/FT486'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176902	Licence to take water	Issued	31/10/2029	Stock	NULL	'8/FT486'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177054	Licence to take water	Issued	31/10/2013	Stock	NULL	'12/WT18; 13/WT18'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177054	Licence to take water	Issued	31/10/2013	Stock	NULL	'12/WT18; 13/WT18'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177418	Licence to take water	Issued	6/01/2030	Stock	NULL	'11/WT344'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	177746	Licence to take water	Issued	31/07/2013	Stock	NULL	'1/SP166541; 24/WT28'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	177756	Licence to take water	Issued	30/09/2032	Stock	NULL	'1/AB247; 1/AB81'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177756	Licence to take water	Issued	30/09/2032	Stock	NULL	'1/AB247; 1/AB81'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	177883	Licence to take water	Issued	30/09/2013	Stock	NULL	'92/FT584; 93/FT584'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	180400	Licence to take water	Issued	30/11/2029	Stock	NULL	'101/WT88'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	187295	Licence to take water	Issued	29/02/2032	Stock	NULL	'9/AB187'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	189976	Licence to take water	Issued	31/08/2031	Stock	NULL	'2/LE35'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	190015	Licence to take water	Issued	31/08/2031	Stock	NULL	'9/FT94'	4222.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	400405	Licence to take water	Issued	4/12/2029	Stock	NULL	'1/SP174422'	1303.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	401084	Licence to take water	Issued	1/02/2030	Stock	NULL	'15/FT738; 17/FT99'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	401084	Licence to take water	Issued	1/02/2030	Stock	NULL	'15/FT738; 17/FT99'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	401084	Licence to take water	Issued	1/02/2030	Stock	NULL	'15/FT738; 17/FT99'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	401084	Licence to take water	Issued	1/02/2030	Stock	NULL	'15/FT738; 17/FT99'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	402987	Licence to take water	Issued	31/05/2032	Stock	NULL	'72/WT83; 73/WT83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	402987	Licence to take water	Issued	31/05/2032	Stock	NULL	'72/WT83; 73/WT83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404094	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/FT418; 62/FT218; 68/FT246; 69/FT246; 9/FT246'	4222.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404094	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/FT418; 62/FT218; 68/FT246; 69/FT246; 9/FT246'	4222.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404094	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/FT418; 62/FT218; 68/FT246; 69/FT246; 9/FT246'	4222.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404094	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/FT418; 62/FT218; 68/FT246; 69/FT246; 9/FT246'	4222.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404094	Licence to take water	Issued	30/11/2032	Stock	NULL	'2/FT418; 62/FT218; 68/FT246; 69/FT246; 9/FT246'	4222.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	405279	Licence to take water	Issued	31/12/2032	Stock	NULL	'5/AB238'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	405279	Licence to take water	Issued	31/12/2032	Stock	NULL	'5/AB238'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	405305	Licence to take water	Issued	22/12/2029	Stock	NULL	'15/SP206904'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	405751	Licence to take water	Issued	24/03/2030	Stock	NULL	'10/AB238'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	405751	Licence to take water	Issued	24/03/2030	Stock	NULL	'10/AB238'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	405788	Licence to take water	Issued	31/01/2030	Stock	NULL	'4/RP802102'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	405790	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/SP184589'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	406752	Licence to take water	Issued	30/04/2013	Stock	NULL	'1/RP210398; 2/RP210398'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	406752	Licence to take water	Issued	30/04/2013	Stock	NULL	'1/RP210398; 2/RP210398'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	406846	Licence to take water	Issued	30/06/2030	Stock	NULL	'87/WT75'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	406949	Licence to take water	Issued	31/05/2030	Stock	NULL	'41/SP137907'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	406949	Licence to take water	Issued	31/05/2030	Stock	NULL	'41/SP137907'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	407919	Licence to take water	Issued	10/12/2029	Stock	NULL	'1/SP209799'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	407920	Licence to take water	Issued	31/07/2029	Stock	NULL	'84/SP209799'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	500359	Licence to take water	Issued	30/09/2030	Stock	NULL	'4/FT87'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	601716	Licence to take water	Issued	1/02/2030	Stock	NULL	'31/F4010'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	601725	Licence to take water	Issued	2/02/2030	Stock	NULL	'5/SP207428'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	602479	Licence to take water	Issued	7/04/2030	Stock	NULL	'5/SP229751'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603107	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/SP214982'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	603107	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/SP214982'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	603606	Licence to take water	Issued	30/09/2030	Stock	NULL	'28/WT76'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603607	Licence to take water	Issued	30/09/2030	Stock	NULL	'2/WT51'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603885	Licence to take water	Issued	30/11/2030	Stock	NULL	'8/SP236780'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	603885	Licence to take water	Issued	30/11/2030	Stock	NULL	'8/SP236780'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	603886	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/SP236780'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	603886	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/SP236780'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	603886	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/SP236780'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	603923	Licence to take water	Issued	31/12/2030	Stock	NULL	'6/SP195959'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	603924	Licence to take water	Issued	31/12/2030	Stock	NULL	'37/FT620'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604121	Licence to take water	Issued	28/02/2031	Stock	NULL	'23/WV534'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	604391	Licence to take water	Issued	30/04/2031	Stock	NULL	'25/SP227753'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606332	Licence to take water	Issued	31/01/2032	Stock	NULL	'5/FT1004; 7/FT1004'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606332	Licence to take water	Issued	31/01/2032	Stock	NULL	'5/FT1004; 7/FT1004'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606463	Licence to take water	Issued	29/02/2032	Stock	NULL	'3/SP107648'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606463	Licence to take water	Issued	29/02/2032	Stock	NULL	'3/SP107648'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606463	Licence to take water	Issued	29/02/2032	Stock	NULL	'3/SP107648'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606714	Licence to take water	Issued	31/05/2032	Stock	NULL	'10/FT98'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606714	Licence to take water	Issued	31/05/2032	Stock	NULL	'10/FT98'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606771	Licence to take water	Issued	30/06/2032	Stock	NULL	'4/SP207428'	1303.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	607619	Licence to take water	Issued	28/02/2033	Stock	NULL	'88/WT74; 89/WT74; 90/WT74'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	607619	Licence to take water	Issued	28/02/2033	Stock	NULL	'88/WT74; 89/WT74; 90/WT74'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	607619	Licence to take water	Issued	28/02/2033	Stock	NULL	'88/WT74; 89/WT74; 90/WT74'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	08154N	Licence to take water	Issued	31/01/2031	Stock	NULL	'48/WT119'	4224.SPRIN/Springbok Sandstone Member
Upper Dawson River	Upper Dawson River	08155N	Licence to take water	Issued	30/11/2030	Stock	NULL	'22/WT101'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	08155N	Licence to take water	Issued	30/11/2030	Stock	NULL	'22/WT101'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	08356N	Licence to take water	Issued	31/07/2019	Stock	NULL	'48/FT602'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	08357N	Licence to take water	Under Reinstatement	28/02/2013	Stock	NULL	'1/RP190841'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10422S	Licence to take water	Issued	28/02/2014	Stock	NULL	'62/F4018'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	10459N	Licence to take water	Issued	5/05/2030	Stock	NULL	'15/FT161'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	10479N	Licence to take water	Issued	6/05/2030	Stock	NULL		1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	10480S	Licence to take water	Issued	31/03/2019	Stock	NULL	'66/FT1024'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	10690N	Licence to take water	Issued	31/08/2029	Stock	NULL	'26/SP154283'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10809N	Licence to take water	Issued	31/07/2031	Stock	NULL	'7/FT96'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	10809N	Licence to take water	Issued	31/07/2031	Stock	NULL	'7/FT96'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	10810N	Licence to take water	Issued	31/10/2031	Stock	NULL	'28/FT357'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	10810N	Licence to take water	Issued	31/10/2031	Stock	NULL	'28/FT357'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	10886N	Licence to take water	Issued	28/02/2014	Stock	NULL	'12/FT99'	4223.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10886N	Licence to take water	Issued	28/02/2014	Stock	NULL	'12/FT99'	4223.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10989S	Licence to take water	Under Renewal	28/02/2013	Stock	NULL	'4/LE33'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	11104S	Licence to take water	Issued	31/01/2031	Stock	NULL	'18/FT138'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	11176N	Licence to take water	Issued	4/01/2030	Stock	NULL	'3/FT343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11176N	Licence to take water	Issued	4/01/2030	Stock	NULL	'3/FT343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11390N	Licence to take water	Issued	28/02/2031	Stock	NULL	'5/SP227753'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	11425N	Licence to take water	Issued	30/06/2030	Stock	NULL	'62/FT815'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	11425N	Licence to take water	Issued	30/06/2030	Stock	NULL	'62/FT815'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	11491N	Licence to take water	Issued	31/01/2023	Stock	NULL	'35/FT167'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	11491N	Licence to take water	Issued	31/01/2023	Stock	NULL	'35/FT167'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	11560N	Licence to take water	Issued	4/11/2029	Stock	NULL	'91/FT320'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11590N	Licence to take water	Issued	30/06/2030	Stock	NULL	'6/AB112'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	11600N	Licence to take water	Issued	31/05/2031	Stock	NULL	'44/FT167'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	11649N	Licence to take water	Issued	31/05/2030	Stock	NULL	'21/FT937'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	11694N	Licence to take water	Issued	30/11/2029	Stock	NULL	'7/FT956'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11694N	Licence to take water	Issued	30/11/2029	Stock	NULL	'7/FT956'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11694N	Licence to take water	Issued	30/11/2029	Stock	NULL	'7/FT956'	1303.HUTTO/Hutton Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	11694N	Licence to take water	Issued	30/11/2029	Stock	NULL	'7/FT956'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11712N	Licence to take water	Issued	28/02/2031	Stock	NULL	'28/WT152'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	11739N	Licence to take water	Issued	21/01/2030	Stock	NULL	'27/FT784'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11850S	Licence to take water	Issued	30/06/2013	Stock	NULL		1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	11882N	Licence to take water	Issued	28/02/2031	Stock	NULL	'5/FT111'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11882N	Licence to take water	Issued	28/02/2031	Stock	NULL	'5/FT111'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11882N	Licence to take water	Issued	28/02/2031	Stock	NULL	'5/FT111'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11923N	Licence to take water	Issued	31/03/2014	Stock	NULL	'20/WT100; 21/WT100; 23/WT101'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11923N	Licence to take water	Issued	31/03/2014	Stock	NULL	'20/WT100; 21/WT100; 23/WT101'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11923N	Licence to take water	Issued	31/03/2014	Stock	NULL	'20/WT100; 21/WT100; 23/WT101'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11923N	Licence to take water	Issued	31/03/2014	Stock	NULL	'20/WT100; 21/WT100; 23/WT101'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12221N	Licence to take water	Issued	30/09/2032	Stock	NULL	'12/FT545'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12238S	Licence to take water	Issued	31/01/2030	Stock	NULL	'11/FT5'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	12372N	Licence to take water	Issued	31/03/2030	Stock	NULL	'32/FT549'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12626N	Licence to take water	Issued	21/01/2030	Stock	NULL	'2/WT233'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	12627N	Licence to take water	Issued	30/09/2030	Stock	NULL	'91/FT560'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	12651N	Licence to take water	Issued	30/06/2032	Stock	NULL	'6/AB166'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12651N	Licence to take water	Issued	30/06/2032	Stock	NULL	'6/AB166'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12696N	Licence to take water	Issued	30/06/2013	Stock	NULL	'57/AB114'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	12696N	Licence to take water	Issued	30/06/2013	Stock	NULL	'57/AB114'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	12763N	Licence to take water	Issued	30/09/2020	Stock	NULL	'87/FT325'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	12838N	Licence to take water	Issued	31/01/2030	Stock	NULL	'28/FT511'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13041N	Licence to take water	Issued	31/03/2032	Stock	NULL	'63/FT960'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	13060N	Licence to take water	Issued	30/06/2030	Stock	NULL	'77/FT565'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13073S	Licence to take water	Issued	30/09/2030	Stock	NULL	'224/F402'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13179N	Licence to take water	Issued	31/10/2030	Stock	NULL	'31/WT19'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13179N	Licence to take water	Issued	31/10/2030	Stock	NULL	'31/WT19'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13179N	Licence to take water	Issued	31/10/2030	Stock	NULL	'31/WT19'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13218N	Licence to take water	Issued	31/01/2023	Stock	NULL	'34/FT167'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	13220S	Licence to take water	Issued	30/06/2013	Stock	NULL		1303.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	13220S	Licence to take water	Issued	30/06/2013	Stock	NULL		1303.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	13405N	Licence to take water	Issued	30/06/2019	Stock	NULL	'20/RP813681'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13405N	Licence to take water	Issued	30/06/2019	Stock	NULL	'20/RP813681'	1303.HUTTO/Hutton Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	13791S	Licence to take water	Issued	30/06/2013	Stock	NULL		1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14191S	Licence to take water	Issued	31/03/2030	Stock	NULL	'6/RP216387"	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14203N	Licence to take water	Issued	30/04/2031	Stock	NULL	'4/AB68; 8/AB227'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14203N	Licence to take water	Issued	30/04/2031	Stock	NULL	'4/AB68; 8/AB227'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14203N	Licence to take water	Issued	30/04/2031	Stock	NULL	'4/AB68; 8/AB227'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14206S	Licence to take water	Issued	31/08/2031	Stock	NULL	'27/LE9'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14206S	Licence to take water	Issued	31/08/2031	Stock	NULL	'27/LE9'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14368N	Licence to take water	Under Renewal	30/06/2012	Stock	NULL	'3/AB68'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	14368N	Licence to take water	Under Renewal	30/06/2012	Stock	NULL	'3/AB68'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	14368N	Licence to take water	Under Renewal	30/06/2012	Stock	NULL	'3/AB68'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	14368N	Licence to take water	Under Renewal	30/06/2012	Stock	NULL	'3/AB68'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	14423N	Licence to take water	Issued	29/02/2032	Stock	NULL	'4/AB5'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14459S	Licence to take water	Issued	31/05/2013	Stock	NULL	'6/LE53'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14461N	Licence to take water	Issued	5/05/2030	Stock	NULL	'17/FT943'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14573N	Licence to take water	Issued	28/02/2014	Stock	NULL	'2/SP107648'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14609S	Licence to take water	Issued	31/01/2018	Stock	NULL	'21/FT138'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14609S	Licence to take water	Issued	31/01/2018	Stock	NULL	'21/FT138'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14617N	Licence to take water	Issued	31/10/2021	Stock	NULL	'38/FT620'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14618N	Licence to take water	Issued	30/04/2022	Stock	NULL	'3/AB121'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	14654N	Licence to take water	Issued	4/11/2029	Stock	NULL	'103/FT897'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14680N	Licence to take water	Issued	29/02/2032	Stock	NULL	'40/AB151'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14680N	Licence to take water	Issued	29/02/2032	Stock	NULL	'40/AB151'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14690N	Licence to take water	Issued	31/07/2029	Stock	NULL	'16/FT951'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14871S	Licence to take water	Issued	31/07/2030	Stock	NULL	'5/LE19'	1303.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14887S	Licence to take water	Under Renewal	31/07/2012	Stock	NULL	'3/LE246'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14888N	Licence to take water	Issued	11/03/2030	Stock	NULL	'68/FT803559'	1303.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14888N	Licence to take water	Issued	11/03/2030	Stock	NULL	'68/FT803559'	1303.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15171N	Licence to take water	Issued	31/07/2030	Stock	NULL	'39/FT962'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15292N	Licence to take water	Issued	31/03/2014	Stock	NULL	'37/AB31'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	15386N	Licence to take water	Issued	30/09/2030	Stock	NULL	'1/AB45'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15398N	Licence to take water	Issued	9/12/2029	Stock	NULL	'7/WT48'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	15399N	Licence to take water	Issued	31/03/2023	Stock	NULL	'2/RP803845'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15400N	Licence to take water	Issued	31/03/2023	Stock	NULL	'5/WT56'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15508N	Licence to take water	Issued	28/02/2023	Stock	NULL	'43/FT58'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15558N	Licence to take water	Issued	31/03/2021	Stock	NULL	'10/FT87; 11/FT87'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	15558N	Licence to take water	Issued	31/03/2021	Stock	NULL	'10/FT87; 11/FT87'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	15611N	Licence to take water	Issued	31/08/2029	Stock	NULL	'22/WT95'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	15615N	Licence to take water	Issued	15/01/2030	Stock	NULL	'71/WV733'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	15616N	Licence to take water	Issued	22/12/2029	Stock	NULL	'38/WT78'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15640N	Licence to take water	Issued	15/12/2029	Stock	NULL	'44/WT53'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15669S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'8/LE34'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	15669S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'8/LE34'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	15669S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'8/LE34'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	15669S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'8/LE34'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	15674N	Licence to take water	Issued	31/10/2029	Stock	NULL	'96/FT598'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	15674N	Licence to take water	Issued	31/10/2029	Stock	NULL	'96/FT598'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	15674N	Licence to take water	Issued	31/10/2029	Stock	NULL	'96/FT598'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	15676N	Licence to take water	Issued	28/02/2030	Stock	NULL	'33/FT550'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	15744N	Licence to take water	Issued	11/05/2030	Stock	NULL	'46/FT579'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15785N	Licence to take water	Issued	30/09/2030	Stock	NULL	'95/FT598'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15785N	Licence to take water	Issued	30/09/2030	Stock	NULL	'95/FT598'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15831N	Licence to take water	Issued	31/12/2030	Stock	NULL	'43/FT506'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	15857N	Licence to take water	Issued	28/02/2021	Stock	NULL	'37/FT440'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	15888N	Licence to take water	Issued	29/10/2021	Stock	NULL	'21/FT191'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	15961N	Licence to take water	Issued	30/04/2031	Stock	NULL	'26/WT76'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16040N	Licence to take water	Issued	12/10/2029	Stock	NULL	'25/FT481'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	16044N	Licence to take water	Issued	30/09/2029	Stock	NULL	'5/AB27'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16065N	Licence to take water	Issued	31/05/2030	Stock	NULL	'1/CP855418'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16225N	Licence to take water	Issued	31/03/2014	Stock	NULL	'35/FT619'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16229S	Licence to take water	Under Renewal	31/05/2012	Stock	NULL	'1/FT950'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16229S	Licence to take water	Under Renewal	31/05/2012	Stock	NULL	'1/FT950'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16229S	Licence to take water	Under Renewal	31/05/2012	Stock	NULL	'1/FT950'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16241S	Licence to take water	Issued	31/05/2014	Stock	NULL	'3/LE41'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16312N	Licence to take water	Issued	31/10/2029	Stock	NULL	'38/FT72'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	16537N	Licence to take water	Issued	30/06/2030	Stock	NULL	'43/FT828'	1303.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	16537N	Licence to take water	Issued	30/06/2030	Stock	NULL	'43/FT828'	1303.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	16598N	Licence to take water	Issued	31/10/2031	Stock	NULL	'8/AB126'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	16607N	Licence to take water	Issued	28/02/2031	Stock	NULL	'19/AB242'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16696N	Licence to take water	Issued	31/03/2031	Stock	NULL	'3/RP32433'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	16752N	Licence to take water	Issued	31/03/2014	Stock	NULL	'51/SP191663; 52/SP191663'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16752N	Licence to take water	Issued	31/03/2014	Stock	NULL	'51/SP191663; 52/SP191663'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16785N	Licence to take water	Issued	30/11/2030	Stock	NULL	'11/WT15'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	16793N	Licence to take water	Issued	31/05/2030	Stock	NULL	'10/WT16'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16831N	Licence to take water	Issued	30/06/2019	Stock	NULL	'13/WT318'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16831N	Licence to take water	Issued	30/06/2019	Stock	NULL	'13/WT318'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16831N	Licence to take water	Issued	30/06/2019	Stock	NULL	'13/WT318'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16873N	Licence to take water	Issued	30/06/2030	Stock	NULL	'9/WT99'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17002N	Licence to take water	Issued	30/09/2031	Stock	NULL	'85/WT82'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	17003N	Licence to take water	Issued	31/05/2032	Stock	NULL	'27/WT50'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17005N	Licence to take water	Issued	31/10/2030	Stock	NULL	'4/AB20'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	17149N	Licence to take water	Issued	4/11/2029	Stock	NULL	'29/WT316'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17149N	Licence to take water	Issued	4/11/2029	Stock	NULL	'29/WT316'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17149N	Licence to take water	Issued	4/11/2029	Stock	NULL	'29/WT316'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17149N	Licence to take water	Issued	4/11/2029	Stock	NULL	'29/WT316'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17149N	Licence to take water	Issued	4/11/2029	Stock	NULL	'29/WT316'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17149N	Licence to take water	Issued	4/11/2029	Stock	NULL	'29/WT316'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17211N	Licence to take water	Issued	31/01/2031	Stock	NULL	'43/WT98'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	17306N	Licence to take water	Issued	20/07/2014	Stock	NULL	'13/FT100'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17448N	Licence to take water	Issued	31/01/2014	Stock	NULL	'9/AB127'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17457N	Licence to take water	Issued	31/03/2021	Stock	NULL	'12/FT87; 9/FT87'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	17568N	Licence to take water	Issued	30/11/2013	Stock	NULL	'14/WT27; 15/WT17; 17/WT17; 18/WT17'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	17568N	Licence to take water	Issued	30/11/2013	Stock	NULL	'14/WT27; 15/WT17; 17/WT17; 18/WT17'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	17620N	Licence to take water	Issued	31/10/2031	Stock	NULL	'7/AB145'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17620N	Licence to take water	Issued	31/10/2031	Stock	NULL	'7/AB145'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17652S	Licence to take water	Issued	30/04/2015	Stock	NULL	'5167/PH839'	1303.MOOLA/Moolayember Formation
Upper Dawson River	Upper Dawson River	17655N	Licence to take water	Issued	28/02/2023	Stock	NULL	'5/A4017'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17776S	Licence to take water	Issued	31/05/2013	Stock	NULL	'16/RP906546'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	17796S	Licence to take water	Under Renewal	30/09/2012	Stock	NULL	'17/FT139'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	17906N	Licence to take water	Issued	31/07/2031	Stock	NULL	'3480/WAR805968; 4/WAR12'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	18011N	Licence to take water	Issued	31/07/2032	Stock	NULL	'6/AB211'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	18090N	Licence to take water	Issued	31/05/2032	Stock	NULL	'108/WT69'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	18178N	Licence to take water	Issued	6/05/2030	Stock	NULL	'15/FT419'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	18202N	Licence to take water	Issued	31/05/2032	Stock	NULL	'106/WT69'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	18489N	Licence to take water	Issued	31/10/2031	Stock	NULL	'77/WT84; 78/WT84'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	18489N	Licence to take water	Issued	31/10/2031	Stock	NULL	'77/WT84; 78/WT84'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	22117N	Licence to take water	Issued	30/11/2021	Stock	NULL	'10/FT949; 9/FT384'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	22117N	Licence to take water	Issued	30/11/2021	Stock	NULL	'10/FT949; 9/FT384'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	22117N	Licence to take water	Issued	30/11/2021	Stock	NULL	'10/FT949; 9/FT384'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	22371N	Licence to take water	Issued	1/10/2029	Stock	NULL	'2/RP115747'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	23172N	Licence to take water	Issued	30/04/2014	Stock	NULL	'42/FT103'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	23172N	Licence to take water	Issued	30/04/2014	Stock	NULL	'42/FT103'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	24893N	Licence to take water	Issued	31/08/2031	Stock	NULL	'39/WT185'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	24893N	Licence to take water	Issued	31/08/2031	Stock	NULL	'39/WT185'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	24934N	Licence to take water	Issued	28/02/2014	Stock	NULL	'1/FT87; 3/FT87'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	24934N	Licence to take water	Issued	28/02/2014	Stock	NULL	'1/FT87; 3/FT87'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	26262N	Licence to take water	Issued	30/06/2014	Stock	NULL	'3/WT313'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	26281N	Licence to take water	Issued	30/06/2032	Stock	NULL	'30/WT62'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	26292N	Licence to take water	Issued	30/09/2029	Stock	NULL	'76/RP895260'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	26332N	Licence to take water	Issued	27/10/2014	Stock	NULL	'6/AU195'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	26333N	Licence to take water	Issued	30/06/2014	Stock	NULL	'2/AU97'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	26390N	Licence to take water	Issued	31/05/2030	Stock	NULL	'59/AB182'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	26390N	Licence to take water	Issued	31/05/2030	Stock	NULL	'59/AB182'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	26429N	Licence to take water	Issued	31/10/2030	Stock	NULL	'74/SP229733'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	30231N	Licence to take water	Issued	31/07/2029	Stock	NULL	'17/AB158'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	30231N	Licence to take water	Issued	31/07/2029	Stock	NULL	'17/AB158'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30231N	Licence to take water	Issued	31/07/2029	Stock	NULL	'17/AB158'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30260N	Licence to take water	Issued	30/04/2032	Stock	NULL	'16/CP882776'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30260N	Licence to take water	Issued	30/04/2032	Stock	NULL	'16/CP882776'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30345S	Licence to take water	Issued	31/05/2015	Stock	NULL	'16/CP903255'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30345S	Licence to take water	Issued	31/05/2015	Stock	NULL	'16/CP903255'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30553N	Licence to take water	Issued	30/04/2013	Stock	NULL	'26/AB131'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	30706N	Licence to take water	Issued	30/09/2030	Stock	NULL	'94/WT171'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	30709S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/LE249'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30709S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/LE249'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30960N	Licence to take water	Issued	31/10/2021	Stock	NULL	'2/SP194542'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	30960N	Licence to take water	Issued	31/10/2021	Stock	NULL	'2/SP194542'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	30972N	Licence to take water	Issued	30/04/2031	Stock	NULL	'47/FT928'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	30972N	Licence to take water	Issued	30/04/2031	Stock	NULL	'47/FT928'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	30974N	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/RP99766'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	30988N	Licence to take water	Issued	30/11/2031	Stock	NULL	'64/WT54'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	30988N	Licence to take water	Issued	30/11/2031	Stock	NULL	'64/WT54'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	30990N	Licence to take water	Issued	30/09/2030	Stock	NULL	'4/AB240; 91/SP140745'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30990N	Licence to take water	Issued	30/09/2030	Stock	NULL	'4/AB240; 91/SP140745'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30990N	Licence to take water	Issued	30/09/2030	Stock	NULL	'4/AB240; 91/SP140745'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	31184N	Licence to take water	Issued	28/02/2014	Stock	NULL	'3/AB106'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	31194S	Licence to take water	Issued	31/10/2015	Stock	NULL	'35/CP855792'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	31328S	Licence to take water	Issued	31/12/2030	Stock	NULL	'13/LE180'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	31331N	Licence to take water	Issued	31/01/2031	Stock	NULL	'43/FT495'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	31417N	Licence to take water	Issued	30/06/2013	Stock	NULL	'29/AB24'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	31851N	Licence to take water	Issued	31/08/2019	Stock	NULL	'5/RP228502'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	32260N	Licence to take water	Issued	31/05/2031	Stock	NULL	'8/SP157737'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	32512N	Licence to take water	Issued	30/11/2030	Stock	NULL	'24/WT101; 25/WT101'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	32512N	Licence to take water	Issued	30/11/2030	Stock	NULL	'24/WT101; 25/WT101'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	32713N	Licence to take water	Issued	31/08/2019	Stock	NULL	'5/FT1008'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	32713N	Licence to take water	Issued	31/08/2019	Stock	NULL	'5/FT1008'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	32939N	Licence to take water	Issued	31/07/2031	Stock	NULL	'5/AB37'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	32939N	Licence to take water	Issued	31/07/2031	Stock	NULL	'5/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	32939N	Licence to take water	Issued	31/07/2031	Stock	NULL	'5/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	33283S	Licence to take water	Issued	31/12/2030	Stock	NULL	'1/RP156607'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	33746N	Licence to take water	Issued	28/02/2031	Stock	NULL	'15/WT59'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	34165N	Licence to take water	Issued	30/04/2014	Stock	NULL	'14/WT215'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	34708N	Licence to take water	Issued	30/06/2019	Stock	NULL	'34/SP106737'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	34708N	Licence to take water	Issued	30/06/2019	Stock	NULL	'34/SP106737'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	34805N	Licence to take water	Issued	17/03/2030	Stock	NULL	'11/WT99'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35267N	Licence to take water	Issued	16/04/2030	Stock	NULL	'39/AB31'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35458N	Licence to take water	Issued	31/03/2033	Stock	NULL	'18/AB158'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35458N	Licence to take water	Issued	31/03/2033	Stock	NULL	'18/AB158'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35458N	Licence to take water	Issued	31/03/2033	Stock	NULL	'18/AB158'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35458N	Licence to take water	Issued	31/03/2033	Stock	NULL	'18/AB158'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35458N	Licence to take water	Issued	31/03/2033	Stock	NULL	'18/AB158'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35600N	Licence to take water	Issued	31/03/2020	Stock	NULL	'23/FT946'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	35600N	Licence to take water	Issued	31/03/2020	Stock	NULL	'23/FT946'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	35600N	Licence to take water	Issued	31/03/2020	Stock	NULL	'23/FT946'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	36120S	Licence to take water	Issued	30/04/2031	Stock	NULL	'8/FT693'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	36393N	Licence to take water	Issued	31/08/2020	Stock	NULL	'21/AB98'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	36395S	Licence to take water	Issued	31/03/2030	Stock	NULL	'3/LE53'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	36395S	Licence to take water	Issued	31/03/2030	Stock	NULL	'3/LE53'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	36607N	Licence to take water	Issued	31/01/2033	Stock	NULL	'6/AB155'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	36742N	Licence to take water	Issued	30/09/2020	Stock	NULL	'24/WT50'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	36942N	Licence to take water	Issued	31/05/2021	Stock	NULL	'29/WV729'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	36946N	Licence to take water	Issued	31/08/2021	Stock	NULL	'42/WT85'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	36947N	Licence to take water	Issued	31/08/2021	Stock	NULL	'44/WT85'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	37085N	Licence to take water	Issued	31/03/2023	Stock	NULL	'40/WT63'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	37121N	Licence to take water	Issued	30/11/2020	Stock	NULL	'23/WT306'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37121N	Licence to take water	Issued	30/11/2020	Stock	NULL	'23/WT306'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37342N	Licence to take water	Issued	30/11/2031	Stock	NULL	'5/AB184'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	37427N	Licence to take water	Issued	30/11/2022	Stock	NULL	'17/WV980'	4222.BUNGI/Bungil Formation
Upper Dawson River	Upper Dawson River	37430N	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/CP861821'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	37698N	Licence to take water	Issued	31/08/2022	Stock	NULL	'9/WT57'	1303.INJUN/Injune Creek Group

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	37699N	Licence to take water	Issued	31/08/2022	Stock	NULL	'11/WT58'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	37699N	Licence to take water	Issued	31/08/2022	Stock	NULL	'11/WT58'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	37710N	Licence to take water	Issued	31/08/2022	Stock	NULL	'8/WT57'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	37796N	Licence to take water	Issued	31/10/2013	Stock	NULL	'57/WT65'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	37864N	Licence to take water	Issued	30/11/2032	Stock	NULL	'7/WT382'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	37864N	Licence to take water	Issued	30/11/2032	Stock	NULL	'7/WT382'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	37949N	Licence to take water	Issued	30/11/2022	Stock	NULL	'4/AB121'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	38573N	Licence to take water	Issued	30/11/2013	Stock	NULL	'23/FT272'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	38818N	Licence to take water	Issued	25/05/2014	Stock	NULL	'61/WT54'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	38896N	Licence to take water	Issued	31/05/2032	Stock	NULL	'16/WT17'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	43112N	Licence to take water	Issued	28/02/2031	Stock	NULL	'58/WT87'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	43363N	Licence to take water	Issued	10/03/2030	Stock	NULL	'3/FT831'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	43540N	Licence to take water	Issued	31/10/2021	Stock	NULL	'1/FT642'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43657N	Licence to take water	Issued	31/05/2019	Stock	NULL	'14/WV549; 77/WV754'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	43687S	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/SP186438'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	43687S	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/SP186438'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	43687S	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/SP186438'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	43687S	Licence to take water	Issued	31/01/2030	Stock	NULL	'1/SP186438'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	43689N	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43689N	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43689N	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43689N	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43829N	Licence to take water	Issued	22/04/2030	Stock	NULL	'6/WT256'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43838N	Licence to take water	Issued	31/08/2021	Stock	NULL	'19/WT19'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	43917S	Licence to take water	Issued	31/07/2030	Stock	NULL	'4/LHDT40324'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	44000N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/RP110817'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	44202N	Licence to take water	Issued	30/11/2020	Stock	NULL	'13/WT307'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	44541S	Licence to take water	Under Renewal	31/08/2012	Stock	NULL	'1/RP911099; 2/RP911099'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	44541S	Licence to take water	Under Renewal	31/08/2012	Stock	NULL	'1/RP911099; 2/RP911099'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	44699N	Licence to take water	Issued	31/01/2031	Stock	NULL	'16/FT132'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	44712N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/FT684; 52/RP880173; 55/FT170'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	47467S	Licence to take water	Issued	30/06/2013	Stock	NULL	'2/LE178'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	48803N	Licence to take water	Issued	31/12/2022	Stock	NULL	'11/AB153'	1303.INJUN/Injune Creek Group

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	48803N	Licence to take water	Issued	31/12/2022	Stock	NULL	'11/AB153'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48803N	Licence to take water	Issued	31/12/2022	Stock	NULL	'11/AB153'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48820N	Licence to take water	Issued	28/02/2031	Stock	NULL	'69/WT66; 70/WT66'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48820N	Licence to take water	Issued	28/02/2031	Stock	NULL	'69/WT66; 70/WT66'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48827N	Licence to take water	Issued	30/11/2013	Stock	NULL	'20/WT32; 21/WT32; 22/WT277; 55/FTY1153'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48831N	Licence to take water	Issued	23/04/2030	Stock	NULL	'8/AB172'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48835N	Licence to take water	Issued	31/05/2014	Stock	NULL	'29/FT169; 50/FT167; 51/FT429'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48835N	Licence to take water	Issued	31/05/2014	Stock	NULL	'29/FT169; 50/FT167; 51/FT429'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48835N	Licence to take water	Issued	31/05/2014	Stock	NULL	'29/FT169; 50/FT167; 51/FT429'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48835N	Licence to take water	Issued	31/05/2014	Stock	NULL	'29/FT169; 50/FT167; 51/FT429'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48845N	Licence to take water	Issued	31/01/2014	Stock	NULL	'31/WT95; 32/WT95'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48845N	Licence to take water	Issued	31/01/2014	Stock	NULL	'31/WT95; 32/WT95'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48849N	Licence to take water	Issued	30/06/2030	Stock	NULL	'91/WT74'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48863N	Licence to take water	Issued	31/10/2029	Stock	NULL	'12/FT96'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48863N	Licence to take water	Issued	31/10/2029	Stock	NULL	'12/FT96'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48884N	Licence to take water	Issued	30/11/2019	Stock	NULL	'38/WT55'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48893N	Licence to take water	Issued	31/05/2031	Stock	NULL	'22/WT297; 23/WT289'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48916N	Licence to take water	Issued	30/11/2031	Stock	NULL	'2/CP835110; 4/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48916N	Licence to take water	Issued	30/11/2031	Stock	NULL	'2/CP835110; 4/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48916N	Licence to take water	Issued	30/11/2031	Stock	NULL	'2/CP835110; 4/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48916N	Licence to take water	Issued	30/11/2031	Stock	NULL	'2/CP835110; 4/SP184943'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48916N	Licence to take water	Issued	30/11/2031	Stock	NULL	'2/CP835110; 4/SP184943'	1303.INJUN/Injune Creek Group

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	48950N	Licence to take water	Issued	31/10/2021	Stock	NULL	'1/RP144660'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48950N	Licence to take water	Issued	31/10/2021	Stock	NULL	'1/RP144660'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48951N	Licence to take water	Issued	31/10/2020	Stock	NULL	'5/AB223'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48951N	Licence to take water	Issued	31/10/2020	Stock	NULL	'5/AB223'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48953N	Licence to take water	Issued	31/01/2014	Stock	NULL	'1/AB110; 2/AB237'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48953N	Licence to take water	Issued	31/01/2014	Stock	NULL	'1/AB110; 2/AB237'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48953N	Licence to take water	Issued	31/01/2014	Stock	NULL	'1/AB110; 2/AB237'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48953N	Licence to take water	Issued	31/01/2014	Stock	NULL	'1/AB110; 2/AB237'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48958N	Licence to take water	Issued	31/07/2020	Stock	NULL	'17/AB53; 18/AB53; 19/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48965N	Licence to take water	Issued	18/12/2029	Stock	NULL	'35/AB226'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48972N	Licence to take water	Issued	30/06/2019	Stock	NULL	'8/WT218'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	48972N	Licence to take water	Issued	30/06/2019	Stock	NULL	'8/WT218'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	57313S	Licence to take water	Issued	30/09/2019	Stock	NULL	'2/LE268'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57313S	Licence to take water	Issued	30/09/2019	Stock	NULL	'2/LE268'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58009N	Licence to take water	Issued	30/06/2022	Stock	NULL	'26/FT165'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58009N	Licence to take water	Issued	30/06/2022	Stock	NULL	'26/FT165'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58010N	Licence to take water	Issued	31/05/2013	Stock	NULL	'39/FT167; 40/FT167; 41/FT103'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58010N	Licence to take water	Issued	31/05/2013	Stock	NULL	'39/FT167; 40/FT167; 41/FT103'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58015N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/AU132'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58024N	Licence to take water	Issued	31/10/2022	Stock	NULL	'29/FT301'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	58043N	Licence to take water	Issued	30/06/2021	Stock	NULL	'74/WT84'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58070N	Licence to take water	Issued	30/06/2030	Stock	NULL	'5/WT388; 6/WT392'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58071N	Licence to take water	Issued	31/12/2030	Stock	NULL	'5317/WT805970'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58071N	Licence to take water	Issued	31/12/2030	Stock	NULL	'5317/WT805970'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58082N	Licence to take water	Issued	30/09/2022	Stock	NULL	'95/WT75'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58088N	Licence to take water	Issued	31/03/2023	Stock	NULL	'39/WT55'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58100N	Licence to take water	Issued	30/11/2029	Stock	NULL	'37/WT60'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58102N	Licence to take water	Issued	30/09/2022	Stock	NULL	'5/CP861820'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58109N	Licence to take water	Issued	30/06/2030	Stock	NULL	'16/RP228502; 8/WT320'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58109N	Licence to take water	Issued	30/06/2030	Stock	NULL	'16/RP228502; 8/WT320'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58109N	Licence to take water	Issued	30/06/2030	Stock	NULL	'16/RP228502; 8/WT320'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58109N	Licence to take water	Issued	30/06/2030	Stock	NULL	'16/RP228502; 8/WT320'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58110N	Licence to take water	Issued	30/04/2022	Stock	NULL	'1/RP173977; 2/RP173977'	1303.WALLO/Walloon Coal Measure

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58113N	Licence to take water	Issued	31/05/2031	Stock	NULL	'10/SP157737'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58116N	Licence to take water	Issued	30/04/2032	Stock	NULL	'10/WT81'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58129N	Licence to take water	Issued	30/11/2022	Stock	NULL	'50/FT573'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58145N	Licence to take water	Issued	28/02/2031	Stock	NULL	'18/FT792'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58157N	Licence to take water	Issued	31/05/2031	Stock	NULL	'21/FT558'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58157N	Licence to take water	Issued	31/05/2031	Stock	NULL	'21/FT558'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58158N	Licence to take water	Issued	31/05/2022	Stock	NULL	'7/WT12'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58160N	Licence to take water	Issued	31/07/2030	Stock	NULL	'17/WT61'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58182N	Licence to take water	Issued	30/11/2029	Stock	NULL	'3/FT956'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58183N	Licence to take water	Issued	30/11/2029	Stock	NULL	'6/FT111'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58183N	Licence to take water	Issued	30/11/2029	Stock	NULL	'6/FT111'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58213N	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/FT740'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58216N	Licence to take water	Issued	30/09/2029	Stock	NULL	'67/FT518'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58221N	Licence to take water	Issued	31/03/2031	Stock	NULL	'47/WT63'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58223N	Licence to take water	Issued	30/06/2031	Stock	NULL	'30/WT47'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58224N	Licence to take water	Issued	31/05/2031	Stock	NULL	'40/WT52'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58224N	Licence to take water	Issued	31/05/2031	Stock	NULL	'40/WT52'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58225N	Licence to take water	Issued	28/02/2033	Stock	NULL	'43/WT53'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58232N	Licence to take water	Issued	30/06/2013	Stock	NULL	'22/FT746'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58252N	Licence to take water	Issued	31/05/2013	Stock	NULL	'2/RP137265'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58266N	Licence to take water	Issued	31/07/2013	Stock	NULL	'41/FT603'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58266N	Licence to take water	Issued	31/07/2013	Stock	NULL	'41/FT603'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58266N	Licence to take water	Issued	31/07/2013	Stock	NULL	'41/FT603'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58294N	Licence to take water	Issued	31/05/2013	Stock	NULL	'48/SP127252'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58306N	Licence to take water	Issued	31/08/2013	Stock	NULL	'18/SP152687'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58306N	Licence to take water	Issued	31/08/2013	Stock	NULL	'18/SP152687'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58310N	Licence to take water	Issued	31/07/2031	Stock	NULL	'58/AB150'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58323N	Licence to take water	Issued	11/03/2030	Stock	NULL	'33/WT347'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58336N	Licence to take water	Issued	27/10/2029	Stock	NULL	'17/WT264'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58372N	Licence to take water	Issued	31/03/2021	Stock	NULL	'16/AB186; 21/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58380N	Licence to take water	Issued	30/04/2022	Stock	NULL	'5/WT51'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58393N	Licence to take water	Issued	31/05/2021	Stock	NULL	'11/SP181416'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	58411N	Licence to take water	Issued	29/02/2032	Stock	NULL	'83/WT82'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58415N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WT94'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58441N	Licence to take water	Issued	31/08/2021	Stock	NULL	'37/WT47'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58448N	Licence to take water	Issued	17/03/2030	Stock	NULL	'109/WT69'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58452N	Licence to take water	Issued	31/03/2033	Stock	NULL	'3/WT90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58456N	Licence to take water	Issued	31/01/2023	Stock	NULL	'2/A409'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58473N	Licence to take water	Issued	30/11/2030	Stock	NULL	'12/AB52'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58491N	Licence to take water	Issued	16/04/2030	Stock	NULL	'34/FT447'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58518N	Licence to take water	Issued	30/11/2031	Stock	NULL	'71/WT288; 9/WT128'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58518N	Licence to take water	Issued	30/11/2031	Stock	NULL	'71/WT288; 9/WT128'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58526N	Licence to take water	Issued	31/10/2022	Stock	NULL	'5/WT210'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58537N	Licence to take water	Issued	30/04/2021	Stock	NULL	'38/AB188'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58537N	Licence to take water	Issued	30/04/2021	Stock	NULL	'38/AB188'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58560N	Licence to take water	Issued	30/11/2030	Stock	NULL	'10/SP184726; 11/SP184726'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	58560N	Licence to take water	Issued	30/11/2030	Stock	NULL	'10/SP184726; 11/SP184726'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	58560N	Licence to take water	Issued	30/11/2030	Stock	NULL	'10/SP184726; 11/SP184726'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58603N	Licence to take water	Issued	11/02/2030	Stock	NULL	'4977/PH903'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58608N	Licence to take water	Issued	30/09/2030	Stock	NULL	'19/FT1028'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58624N	Licence to take water	Issued	28/02/2031	Stock	NULL	'15/FT111'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58624N	Licence to take water	Issued	28/02/2031	Stock	NULL	'15/FT111'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58632N	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/WT235'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58632N	Licence to take water	Issued	31/07/2030	Stock	NULL	'1/WT235'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58640N	Licence to take water	Issued	29/02/2032	Stock	NULL	'3/WT7'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58640N	Licence to take water	Issued	29/02/2032	Stock	NULL	'3/WT7'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58647N	Licence to take water	Issued	31/03/2032	Stock	NULL	'76/WT84'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58651N	Licence to take water	Issued	11/03/2030	Stock	NULL	'25/WT62'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58676N	Licence to take water	Issued	31/12/2030	Stock	NULL	'4/WT391'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58676N	Licence to take water	Issued	31/12/2030	Stock	NULL	'4/WT391'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58676N	Licence to take water	Issued	31/12/2030	Stock	NULL	'4/WT391'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58687N	Licence to take water	Issued	30/04/2014	Stock	NULL	'2/RP807566'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58689N	Licence to take water	Issued	31/07/2019	Stock	NULL	'18/WT19'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58709N	Licence to take water	Issued	30/11/2019	Stock	NULL	'72/WT327'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58710N	Licence to take water	Issued	30/11/2019	Stock	NULL	'25/WT22; 9/WT21'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58710N	Licence to take water	Issued	30/11/2019	Stock	NULL	'25/WT22; 9/WT21'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58710N	Licence to take water	Issued	30/11/2019	Stock	NULL	'25/WT22; 9/WT21'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58724N	Licence to take water	Issued	31/05/2019	Stock	NULL	'2/CP908592'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58730N	Licence to take water	Issued	30/11/2020	Stock	NULL	'10/WT76; 11/WT76; 9/WT76'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58730N	Licence to take water	Issued	30/11/2020	Stock	NULL	'10/WT76; 11/WT76; 9/WT76'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58733N	Licence to take water	Issued	16/12/2029	Stock	NULL	'68/WV733'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58747N	Licence to take water	Issued	30/09/2029	Stock	NULL	'103/WT88'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58747N	Licence to take water	Issued	30/09/2029	Stock	NULL	'103/WT88'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58755N	Licence to take water	Issued	22/04/2030	Stock	NULL	'5/WT214'	1303.PRECI/Precipice Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58755N	Licence to take water	Issued	22/04/2030	Stock	NULL	'5/WT214'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58757N	Licence to take water	Issued	16/04/2030	Stock	NULL	'12/SP103843'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58759N	Licence to take water	Issued	30/04/2031	Stock	NULL	'11/RP839475'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58835N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/WT307'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58846N	Licence to take water	Issued	31/01/2022	Stock	NULL	'38/FT103'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58868N	Licence to take water	Issued	31/08/2030	Stock	NULL	'1/SP184934; 10/RP896637; 13/AB192; 2/SP184934; 20/RP896637; 21/RP896637'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58868N	Licence to take water	Issued	31/08/2030	Stock	NULL	'1/SP184934; 10/RP896637; 13/AB192; 2/SP184934; 20/RP896637; 21/RP896637'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58868N	Licence to take water	Issued	31/08/2030	Stock	NULL	'1/SP184934; 10/RP896637; 13/AB192; 2/SP184934; 20/RP896637; 21/RP896637'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58868N	Licence to take water	Issued	31/08/2030	Stock	NULL	'1/SP184934; 10/RP896637; 13/AB192; 2/SP184934; 20/RP896637; 21/RP896637'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58868N	Licence to take water	Issued	31/08/2030	Stock	NULL	'1/SP184934; 10/RP896637; 13/AB192; 2/SP184934; 20/RP896637; 21/RP896637'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58869N	Licence to take water	Issued	31/01/2023	Stock	NULL	'5/FT92'	1303.TERT/Tertiary - Undefined
Upper Dawson River	Upper Dawson River	58870N	Licence to take water	Issued	6/01/2030	Stock	NULL	'31/FT549'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58884N	Licence to take water	Issued	30/09/2029	Stock	NULL	'19/WT322; 9/WT800343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58884N	Licence to take water	Issued	30/09/2029	Stock	NULL	'19/WT322; 9/WT800343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58884N	Licence to take water	Issued	30/09/2029	Stock	NULL	'19/WT322; 9/WT800343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58892N	Licence to take water	Issued	29/02/2032	Stock	NULL	'33/SP157754; 34/SP157754'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58892N	Licence to take water	Issued	29/02/2032	Stock	NULL	'33/SP157754; 34/SP157754'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58913N	Licence to take water	Issued	31/05/2031	Stock	NULL	'48/WT45; 49/WT45'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58913N	Licence to take water	Issued	31/05/2031	Stock	NULL	'48/WT45; 49/WT45'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58914N	Licence to take water	Issued	30/06/2030	Stock	NULL	'117/WT255; 98/WT72; 99/WT71'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58914N	Licence to take water	Issued	30/06/2030	Stock	NULL	'117/WT255; 98/WT72; 99/WT71'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58914N	Licence to take water	Issued	30/06/2030	Stock	NULL	'117/WT255; 98/WT72; 99/WT71'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58914N	Licence to take water	Issued	30/06/2030	Stock	NULL	'117/WT255; 98/WT72; 99/WT71'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58928N	Licence to take water	Issued	6/01/2030	Stock	NULL	'44/FT988'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58930N	Licence to take water	Issued	31/07/2013	Stock	NULL	'11/AB55; 12/AB55'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58930N	Licence to take water	Issued	31/07/2013	Stock	NULL	'11/AB55; 12/AB55'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58930N	Licence to take water	Issued	31/07/2013	Stock	NULL	'11/AB55; 12/AB55'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58930N	Licence to take water	Issued	31/07/2013	Stock	NULL	'11/AB55; 12/AB55'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	62213S	Licence to take water	Issued	31/03/2031	Stock	NULL	'1/FT1002'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62213S	Licence to take water	Issued	31/03/2031	Stock	NULL	'1/FT1002'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62308S	Licence to take water	Issued	30/06/2013	Stock	NULL	'187/FT680'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62308S	Licence to take water	Issued	30/06/2013	Stock	NULL	'187/FT680'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62308S	Licence to take water	Issued	30/06/2013	Stock	NULL	'187/FT680'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	62877S	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/FT942'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	62877S	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/FT942'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	67338N	Licence to take water	Issued	31/01/2031	Stock	NULL	'16/RP887925'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	67338N	Licence to take water	Issued	31/01/2031	Stock	NULL	'16/RP887925'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	67338N	Licence to take water	Issued	31/01/2031	Stock	NULL	'16/RP887925'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	67338N	Licence to take water	Issued	31/01/2031	Stock	NULL	'16/RP887925'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	68097S	Licence to take water	Issued	29/02/2032	Stock	NULL	'4/FT800'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	68097S	Licence to take water	Issued	29/02/2032	Stock	NULL	'4/FT800'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84046S	Licence to take water	Issued	31/03/2014	Stock	NULL	'7/LE12'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	84046S	Licence to take water	Issued	31/03/2014	Stock	NULL	'7/LE12'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	89502S	Licence to take water	Under Renewal	31/08/2012	Stock	NULL	'34/LE25'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89545S	Licence to take water	Issued	31/05/2032	Stock	NULL	'49/CP855791'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	89549S	Licence to take water	Issued	31/05/2030	Stock	NULL	'780/PH1311'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89549S	Licence to take water	Issued	31/05/2030	Stock	NULL	'780/PH1311'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89549S	Licence to take water	Issued	31/05/2030	Stock	NULL	'780/PH1311'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89572S	Licence to take water	Under Renewal	31/08/2012	Stock	NULL	'9/FT992'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89602S	Licence to take water	Issued	30/06/2030	Stock	NULL	'10/LAB405; 11/LE12; 8/LE12'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	89602S	Licence to take water	Issued	30/06/2030	Stock	NULL	'10/LAB405; 11/LE12; 8/LE12'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	89602S	Licence to take water	Issued	30/06/2030	Stock	NULL	'10/LAB405; 11/LE12; 8/LE12'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	89602S	Licence to take water	Issued	30/06/2030	Stock	NULL	'10/LAB405; 11/LE12; 8/LE12'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	89605S	Licence to take water	Issued	30/09/2014	Stock	NULL	'1/RP216387'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89611S	Licence to take water	Issued	28/02/2014	Stock	NULL	'213/F402'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	89629S	Licence to take water	Issued	28/02/2014	Stock	NULL	'44/FTY1714'	1303.NOT/Formation Name Not Specified

Appendix D: List of Surface Water Licenses (Raw - General)

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Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	100585	Licence to take water	Issued	31/05/2021	Stock	NULL	'23/FT36; 24/FT36; 27/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58736N	Licence to take water	Issued	16/12/2029	Stock	NULL	'19/WV731; 22/WV731'	4224.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	58372N	Licence to take water	Issued	31/03/2021	Stock	NULL	'16/AB186; 21/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	101984	Licence to take water	Issued	30/11/2021	Stock	NULL	'94/FT584'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30650N	Licence to take water	Issued	30/11/2019	Stock	NULL	'94/FT584'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	102068	Licence to take water	Issued	31/03/2022	Stock	NULL	'3/SP110482'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30167N	Licence to take water	Issued	31/03/2014	Stock	NULL	'3/SP110482'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	102068	Licence to take water	Issued	31/03/2022	Stock	NULL	'3/SP110482'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30167N	Licence to take water	Issued	31/03/2014	Stock	NULL	'3/SP110482'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	102068	Licence to take water	Issued	31/03/2022	Stock	NULL	'3/SP110482'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30167N	Licence to take water	Issued	31/03/2014	Stock	NULL	'3/SP110482'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	102068	Licence to take water	Issued	31/03/2022	Stock	NULL	'3/SP110482'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30167N	Licence to take water	Issued	31/03/2014	Stock	NULL	'3/SP110482'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	102157	Licence to take water	Issued	30/04/2022	Stock	NULL	'14/FT591'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	176861	Licence to take water	Issued	31/10/2032	Stock	NULL	'14/FT591'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	102157	Licence to take water	Issued	30/04/2022	Stock	NULL	'14/FT591'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	176861	Licence to take water	Issued	31/10/2032	Stock	NULL	'14/FT591'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	37201S	Licence to take water	Issued	31/05/2030	Stock	NULL	'2/LE284'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	37201S	Licence to take water	Issued	31/05/2030	Stock	NULL	'2/LE284'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	171686	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58164N	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	172526	Licence to take water	Issued	30/09/2029	Stock	NULL	'66/WV762'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	172585	Licence to take water	Issued	30/06/2014	Stock	NULL	'15/FT311; 165/FT149; 166/FT149'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	26388N	Licence to take water	Issued	30/06/2013	Stock	NULL	'15/FT311'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	173375	Licence to take water	Issued	30/06/2031	Stock	NULL	'131/SP121742; 132/SP121742'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	58462N	Licence to take water	Issued	31/10/2031	Stock	NULL	'131/SP121742'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	173375	Licence to take water	Issued	30/06/2031	Stock	NULL	'131/SP121742; 132/SP121742'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	58462N	Licence to take water	Issued	31/10/2031	Stock	NULL	'131/SP121742'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17247S	Licence to take water	Issued	31/03/2019	Stock	NULL	'8/SP152696'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17247S	Licence to take water	Issued	31/03/2019	Stock	NULL	'8/SP152696'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17247S	Licence to take water	Issued	31/03/2019	Stock	NULL	'8/SP152696'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17247S	Licence to take water	Issued	31/03/2019	Stock	NULL	'8/SP152696'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17247S	Licence to take water	Issued	31/03/2019	Stock	NULL	'8/SP152696'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	174604	Licence to take water	Issued	31/03/2030	Stock	NULL	'28/FT972; 30/FT1018; 45/FT167'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	43483N	Licence to take water	Issued	28/02/2022	Stock	NULL	'28/FT972'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	174604	Licence to take water	Issued	31/03/2030	Stock	NULL	'28/FT972; 30/FT1018; 45/FT167'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	43483N	Licence to take water	Issued	28/02/2022	Stock	NULL	'28/FT972'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	174604	Licence to take water	Issued	31/03/2030	Stock	NULL	'28/FT972; 30/FT1018; 45/FT167'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58494N	Licence to take water	Issued	28/02/2022	Stock	NULL	'30/FT1018'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	174604	Licence to take water	Issued	31/03/2030	Stock	NULL	'28/FT972; 30/FT1018; 45/FT167'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58495N	Licence to take water	Issued	28/02/2022	Stock	NULL	'45/FT167'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	177054	Licence to take water	Issued	31/10/2013	Stock	NULL	'12/WT18; 13/WT18'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14988N	Licence to take water	Issued	30/11/2013	Stock	NULL	'13/WT18'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31521N	Licence to take water	Issued	30/11/2030	Stock	NULL	'2/AB220'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	31521N	Licence to take water	Issued	30/11/2030	Stock	NULL	'2/AB220'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	177755	Licence to take water	Issued	31/07/2030	Stock	NULL	'22/AB53; 24/AB53'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	177756	Licence to take water	Issued	30/09/2032	Stock	NULL	'1/AB247; 1/AB81'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58581N	Licence to take water	Issued	31/07/2032	Stock	NULL	'1/AB247'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	177756	Licence to take water	Issued	30/09/2032	Stock	NULL	'1/AB247; 1/AB81'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58581N	Licence to take water	Issued	31/07/2032	Stock	NULL	'1/AB247'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	177756	Licence to take water	Issued	30/09/2032	Stock	NULL	'1/AB247; 1/AB81'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58581N	Licence to take water	Issued	31/07/2032	Stock	NULL	'1/AB247'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	177756	Licence to take water	Issued	30/09/2032	Stock	NULL	'1/AB247; 1/AB81'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58581N	Licence to take water	Issued	31/07/2032	Stock	NULL	'1/AB247'	1303.BOXVA/Boxvale Sandstone Member

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	177883	Licence to take water	Issued	30/09/2013	Stock	NULL	'92/FT584; 93/FT584'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	17110N	Licence to take water	Issued	30/09/2013	Stock	NULL	'92/FT584'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	180040	Licence to take water	Issued	31/10/2031	Stock	NULL	'12/AB233'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	44554N	Licence to take water	Issued	31/01/2021	Stock	NULL	'12/AB233'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	180240	Licence to take water	Issued	31/10/2031	Stock	NULL	'22/RP847424'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58539N	Licence to take water	Issued	31/05/2013	Stock	NULL	'22/RP847424'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58500N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58500N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	182731	Licence to take water	Issued	31/05/2032	Stock	NULL	'1/RP887916'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	36728N	Licence to take water	Issued	31/12/2031	Stock	NULL	'1/RP887916'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	185670	Licence to take water	Issued	30/11/2029	Stock	NULL	'18/FT880'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58443N	Licence to take water	Issued	31/01/2014	Stock	NULL	'18/FT880'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17984S	Licence to take water	Issued	30/06/2014	Stock	NULL	'2/LE297'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	190064	Licence to take water	Issued	30/09/2031	Stock	NULL	'30/FT636'	4222.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	30315N	Licence to take water	Issued	30/04/2033	Stock	NULL	'30/FT636'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	404397	Licence to take water	Issued	16/02/2030	Stock	NULL	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404397	Licence to take water	Issued	16/02/2030	Stock	NULL	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	31894N	Licence to take water	Issued	18/05/2030	Stock	NULL	'13/AB86'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	404924	Licence to take water	Under Renewal	30/11/2012	Stock	NULL	'1/AB842550; 13/AB86; 14/AB86; 15/RP887925; 2/AB83; 3/AB83'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	405279	Licence to take water	Issued	31/12/2032	Stock	NULL	'5/AB238'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	405751	Licence to take water	Issued	24/03/2030	Stock	NULL	'10/AB238'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	405305	Licence to take water	Issued	22/12/2029	Stock	NULL	'15/SP206904'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	405554	Licence to take water	Issued	31/03/2033	Stock	NULL	'4/SP204532; F/AB250; J/AB234'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	604961	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP204532; 9/AB244'	1303.PRECI/Precipice Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	405554	Licence to take water	Issued	31/03/2033	Stock	NULL	'4/SP204532; F/AB250; J/AB234'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	604961	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP204532; 9/AB244'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	408797	Licence to take water	Issued	30/11/2031	Stock	NULL	'92/SP140745'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	408810	Licence to take water	Issued	30/11/2031	Stock	NULL	'92/SP140745'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604452	Licence to take water	Issued	31/05/2031	Stock	NULL	'25/FT36; 26/FT36; 28/FT36'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604452	Licence to take water	Issued	31/05/2031	Stock	NULL	'25/FT36; 26/FT36; 28/FT36'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604452	Licence to take water	Issued	31/05/2031	Stock	NULL	'25/FT36; 26/FT36; 28/FT36'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604452	Licence to take water	Issued	31/05/2031	Stock	NULL	'25/FT36; 26/FT36; 28/FT36'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604452	Licence to take water	Issued	31/05/2031	Stock	NULL	'25/FT36; 26/FT36; 28/FT36'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	602478	Licence to take water	Issued	7/04/2030	Stock	NULL	'6/SP229751'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	602480	Licence to take water	Issued	7/04/2030	Stock	NULL	'6/SP229751'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	603885	Licence to take water	Issued	30/11/2030	Stock	NULL	'8/SP236780'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	603886	Licence to take water	Issued	30/11/2030	Stock	NULL	'9/SP236780'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	604121	Licence to take water	Issued	28/02/2031	Stock	NULL	'23/WV534'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	604134	Licence to take water	Issued	28/02/2031	Stock	NULL	'25/FT835698'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	604135	Licence to take water	Issued	28/02/2031	Stock	NULL	'26/FT835699'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	33433N	Licence to take water	Issued	30/06/2021	Stock	NULL	'5/WT217'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	33433N	Licence to take water	Issued	30/06/2021	Stock	NULL	'5/WT217'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	33433N	Licence to take water	Issued	30/06/2021	Stock	NULL	'5/WT217'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604347	Licence to take water	Issued	30/04/2031	Stock	NULL	'16/WT61'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58638N	Licence to take water	Issued	30/06/2030	Stock	NULL	'16/WT61'	4224.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	606329	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606330	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606329	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	606330	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606329	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606330	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606329	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606330	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606329	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606330	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606329	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606330	Licence to take water	Issued	31/01/2032	Stock	NULL	'2/FT986'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606331	Licence to take water	Issued	31/01/2032	Stock	NULL	'7/FT1004'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606332	Licence to take water	Issued	31/01/2032	Stock	NULL	'5/FT1004; 7/FT1004'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606331	Licence to take water	Issued	31/01/2032	Stock	NULL	'7/FT1004'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606332	Licence to take water	Issued	31/01/2032	Stock	NULL	'5/FT1004; 7/FT1004'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	33821N	Licence to take water	Issued	19/05/2030	Stock	NULL	'1/SP103977'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	33821N	Licence to take water	Issued	19/05/2030	Stock	NULL	'1/SP103977'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	33821N	Licence to take water	Issued	19/05/2030	Stock	NULL	'1/SP103977'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31995N	Licence to take water	Issued	30/04/2022	Stock	NULL	'21/AB47'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31995N	Licence to take water	Issued	30/04/2022	Stock	NULL	'21/AB47'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31995N	Licence to take water	Issued	30/04/2022	Stock	NULL	'21/AB47'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31995N	Licence to take water	Issued	30/04/2022	Stock	NULL	'21/AB47'	1303.NOT/Formation Name Not Specified

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16102N	Licence to take water	Issued	9/07/2014	Stock	NULL	'23/AB47; 25/AB50'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16102N	Licence to take water	Issued	9/07/2014	Stock	NULL	'23/AB47; 25/AB50'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	26251N	Licence to take water	Issued	30/04/2022	Stock	NULL	'24/AB142'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	26251N	Licence to take water	Issued	30/04/2022	Stock	NULL	'24/AB142'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	26251N	Licence to take water	Issued	30/04/2022	Stock	NULL	'24/AB142'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	26251N	Licence to take water	Issued	30/04/2022	Stock	NULL	'24/AB142'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16102N	Licence to take water	Issued	9/07/2014	Stock	NULL	'23/AB47; 25/AB50'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	16102N	Licence to take water	Issued	9/07/2014	Stock	NULL	'23/AB47; 25/AB50'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	607192	Licence to take water	Issued	31/10/2032	Stock	NULL	'48/FT815'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	16661N	Licence to take water	Issued	30/09/2030	Stock	NULL	'48/FT815'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48811N	Licence to take water	Issued	31/08/2022	Stock	NULL	'27/FT835700'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	08445S	Licence to take water	Issued	31/03/2032	Stock	NULL	'3/FT140'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	10592S	Licence to take water	Issued	31/03/2032	Stock	NULL	'3/FT140'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	09794N	Licence to take water	Issued	31/01/2030	Stock	NULL	'6/AB69; 8/AB103'	1303.BIRKH/Birkhead Formation

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	18224N	Licence to take water	Issued	31/01/2030	Stock	NULL	'6/AB69'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	09794N	Licence to take water	Issued	31/01/2030	Stock	NULL	'6/AB69; 8/AB103'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	10476N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/FT637'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	15556N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/FT637'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10558N	Licence to take water	Issued	30/11/2021	Stock	NULL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	10584S	Licence to take water	Issued	31/08/2013	Stock	NULL	'10/LE54'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10584S	Licence to take water	Issued	31/08/2013	Stock	NULL	'10/LE54'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10810N	Licence to take water	Issued	31/10/2031	Stock	NULL	'28/FT357'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	10930N	Licence to take water	Issued	30/06/2013	Stock	NULL	'15/AB29'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58844N	Licence to take water	Issued	30/06/2022	Stock	NULL	'15/AB29'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	10930N	Licence to take water	Issued	30/06/2013	Stock	NULL	'15/AB29'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58844N	Licence to take water	Issued	30/06/2022	Stock	NULL	'15/AB29'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	11433N	Licence to take water	Issued	28/02/2014	Stock	NULL	'1/FT336'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	12576N	Licence to take water	Issued	28/02/2014	Stock	NULL	'1/FT336'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	11433N	Licence to take water	Issued	28/02/2014	Stock	NULL	'1/FT336'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	12576N	Licence to take water	Issued	28/02/2014	Stock	NULL	'1/FT336'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	11501N	Licence to take water	Issued	30/06/2032	Stock	NULL	'9/AB100'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	12941N	Licence to take water	Issued	30/06/2032	Stock	NULL	'9/AB100'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	11647S	Licence to take water	Under Renewal	28/02/2013	Stock	NULL	'12/LE282'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	11647S	Licence to take water	Under Renewal	28/02/2013	Stock	NULL	'12/LE282'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	11725N	Licence to take water	Issued	28/02/2014	Stock	NULL	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	11725N	Licence to take water	Issued	28/02/2014	Stock	NULL	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	11764S	Licence to take water	Issued	31/05/2013	Stock	NULL	'5/LE286'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	67260S	Licence to take water	Issued	31/05/2014	Stock	NULL	'5/LE286'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	11764S	Licence to take water	Issued	31/05/2013	Stock	NULL	'5/LE286'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	67260S	Licence to take water	Issued	31/05/2014	Stock	NULL	'5/LE286'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	11765S	Licence to take water	Issued	30/04/2018	Stock	NULL	'3/SP104607'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12118N	Licence to take water	Issued	31/08/2029	Stock	NULL	'4/FT835681'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	48914N	Licence to take water	Issued	31/08/2029	Stock	NULL	'4/FT835681'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12118N	Licence to take water	Issued	31/08/2029	Stock	NULL	'4/FT835681'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	48914N	Licence to take water	Issued	31/08/2029	Stock	NULL	'4/FT835681'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	12118N	Licence to take water	Issued	31/08/2029	Stock	NULL	'4/FT835681'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	48914N	Licence to take water	Issued	31/08/2029	Stock	NULL	'4/FT835681'	1303.HUTTO/Hutton Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	12338N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58645N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	12753N	Licence to take water	Issued	31/03/2031	Stock	NULL	'24/AB228'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	47366N	Licence to take water	Issued	31/03/2031	Stock	NULL	'24/AB228'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	12930N	Licence to take water	Issued	31/03/2023	Stock	NULL	'2/BDR60'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	33020N	Licence to take water	Issued	31/03/2023	Stock	NULL	'2/BDR60'	4224.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	13405N	Licence to take water	Issued	30/06/2019	Stock	NULL	'20/RP813681'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	13871N	Licence to take water	Issued	16/03/2030	Stock	NULL	'12/WT104; 19/WT104; 65/WV733'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14062N	Licence to take water	Issued	30/11/2031	Stock	NULL	'7/AB176'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	43686N	Licence to take water	Issued	30/11/2029	Stock	NULL	'7/AB176'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14062N	Licence to take water	Issued	30/11/2031	Stock	NULL	'7/AB176'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	43686N	Licence to take water	Issued	30/11/2029	Stock	NULL	'7/AB176'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14188S	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/LE269'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14188S	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/LE269'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14188S	Licence to take water	Issued	31/08/2013	Stock	NULL	'1/LE269'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14203N	Licence to take water	Issued	30/04/2031	Stock	NULL	'4/AB68; 8/AB227'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15979N	Licence to take water	Issued	31/10/2031	Stock	NULL	'8/AB227'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	14204S	Licence to take water	Issued	31/08/2013	Stock	NULL	'48/LE316'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14205S	Licence to take water	Issued	31/08/2013	Stock	NULL	'48/LE316'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14249N	Licence to take water	Issued	30/09/2030	Stock	NULL	'8/FT343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58839N	Licence to take water	Issued	30/09/2020	Stock	NULL	'8/FT343'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14249N	Licence to take water	Issued	30/09/2030	Stock	NULL	'8/FT343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58839N	Licence to take water	Issued	30/09/2020	Stock	NULL	'8/FT343'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14249N	Licence to take water	Issued	30/09/2030	Stock	NULL	'8/FT343'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58839N	Licence to take water	Issued	30/09/2020	Stock	NULL	'8/FT343'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14350S	Licence to take water	Issued	30/06/2013	Stock	NULL	'6/SP113847'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57492S	Licence to take water	Issued	30/06/2013	Stock	NULL	'6/SP113847'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14350S	Licence to take water	Issued	30/06/2013	Stock	NULL	'6/SP113847'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57492S	Licence to take water	Issued	30/06/2013	Stock	NULL	'6/SP113847'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14350S	Licence to take water	Issued	30/06/2013	Stock	NULL	'6/SP113847'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57492S	Licence to take water	Issued	30/06/2013	Stock	NULL	'6/SP113847'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14361N	Licence to take water	Issued	31/07/2031	Stock	NULL	'8/AB127'	1303.BIRKH/Birkhead Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	14365N	Licence to take water	Issued	31/08/2030	Stock	NULL	'2/SP130872'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58871N	Licence to take water	Issued	31/08/2030	Stock	NULL	'2/SP130872'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14365N	Licence to take water	Issued	31/08/2030	Stock	NULL	'2/SP130872'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58871N	Licence to take water	Issued	31/08/2030	Stock	NULL	'2/SP130872'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14365N	Licence to take water	Issued	31/08/2030	Stock	NULL	'2/SP130872'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58871N	Licence to take water	Issued	31/08/2030	Stock	NULL	'2/SP130872'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14454N	Licence to take water	Issued	31/07/2020	Stock	NULL	'17/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48958N	Licence to take water	Issued	31/07/2020	Stock	NULL	'17/AB53; 18/AB53; 19/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	14575N	Licence to take water	Issued	31/05/2030	Stock	NULL	'1/FT821'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14576N	Licence to take water	Issued	31/05/2030	Stock	NULL	'1/FT821'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	35256S	Licence to take water	Issued	31/08/2013	Stock	NULL	'3/LE232'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	35256S	Licence to take water	Issued	31/08/2013	Stock	NULL	'3/LE232'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14616S	Licence to take water	Issued	31/05/2030	Stock	NULL	'1/F4037'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17070S	Licence to take water	Issued	31/05/2030	Stock	NULL	'1/F4037'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14838N	Licence to take water	Issued	30/11/2013	Stock	NULL	'15/WT17'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	17568N	Licence to take water	Issued	30/11/2013	Stock	NULL	'14/WT27; 15/WT17; 17/WT17; 18/WT17'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15580S	Licence to take water	Issued	29/02/2032	Stock	NULL	'2/FT1003'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57790S	Licence to take water	Issued	28/02/2030	Stock	NULL	'2/FT1003'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15580S	Licence to take water	Issued	29/02/2032	Stock	NULL	'2/FT1003'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57790S	Licence to take water	Issued	28/02/2030	Stock	NULL	'2/FT1003'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	15615N	Licence to take water	Issued	15/01/2030	Stock	NULL	'71/WV733'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	16222N	Licence to take water	Issued	31/08/2020	Stock	NULL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	16794N	Licence to take water	Issued	31/05/2032	Stock	NULL	'11/WT292'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	17248S	Licence to take water	Issued	31/03/2019	Stock	NULL	'9/SP152696'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17248S	Licence to take water	Issued	31/03/2019	Stock	NULL	'9/SP152696'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	17568N	Licence to take water	Issued	30/11/2013	Stock	NULL	'14/WT27; 15/WT17; 17/WT17; 18/WT17'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	17568N	Licence to take water	Issued	30/11/2013	Stock	NULL	'14/WT27; 15/WT17; 17/WT17; 18/WT17'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	18207S	Licence to take water	Issued	30/11/2018	Stock	NULL	'6/RP882887'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	18392N	Licence to take water	Issued	31/07/2022	Stock	NULL	'7/FT141'	1303.NOT/Formation Name Not Specified

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	33486N	Licence to take water	Issued	31/07/2022	Stock	NULL	'7/FT141'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	24529N	Licence to take water	Issued	31/01/2014	Stock	NULL	'92/WT74'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	24530N	Licence to take water	Issued	31/01/2014	Stock	NULL	'92/WT74'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	26332N	Licence to take water	Issued	27/10/2014	Stock	NULL	'6/AU195'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	26333N	Licence to take water	Issued	30/06/2014	Stock	NULL	'2/AU97'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	30087N	Licence to take water	Issued	17/05/2030	Stock	NULL	'1/AB78; 2/AB196; 3/AB195; 4/AB78; 6/AB78'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	30310S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30478S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	30310S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30478S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	30310S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30478S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	30310S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30478S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'2/SP140746'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	43940S	Licence to take water	Issued	31/05/2030	Stock	NULL	'9/LE189'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	43940S	Licence to take water	Issued	31/05/2030	Stock	NULL	'9/LE189'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	31851N	Licence to take water	Issued	31/08/2019	Stock	NULL	'5/RP228502'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	31940N	Licence to take water	Issued	31/08/2022	Stock	NULL	'12/WT58'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	37712N	Licence to take water	Issued	31/08/2022	Stock	NULL	'12/WT58'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	31940N	Licence to take water	Issued	31/08/2022	Stock	NULL	'12/WT58'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	37712N	Licence to take water	Issued	31/08/2022	Stock	NULL	'12/WT58'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	32034N	Licence to take water	Issued	31/10/2019	Stock	NULL	'3/RP173978'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	34542N	Licence to take water	Issued	31/07/2022	Stock	NULL	'17/FT908'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	44677N	Licence to take water	Issued	31/07/2022	Stock	NULL	'17/FT908'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	34542N	Licence to take water	Issued	31/07/2022	Stock	NULL	'17/FT908'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	44677N	Licence to take water	Issued	31/07/2022	Stock	NULL	'17/FT908'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	44280N	Licence to take water	Issued	31/03/2033	Stock	NULL	'15/FT87; 8/FT87'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	36340S	Licence to take water	Issued	31/05/2014	Stock	NULL	'2/LE51'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	36627S	Licence to take water	Issued	31/05/2014	Stock	NULL	'2/LE51'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	36942N	Licence to take water	Issued	31/05/2021	Stock	NULL	'29/WV729'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	37427N	Licence to take water	Issued	30/11/2022	Stock	NULL	'17/WV980'	4222.BUNGI/Bungil Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37781S	Licence to take water	Issued	31/03/2030	Stock	NULL	'8/LE317'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	37783S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84669S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	37783S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84669S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	37783S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84669S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	37783S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84669S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	37783S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84669S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	37783S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84669S	Licence to take water	Issued	31/01/2032	Stock	NULL	'745/PH619'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	43551N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58533N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43829N	Licence to take water	Issued	22/04/2030	Stock	NULL	'6/WT256'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58326N	Licence to take water	Issued	28/02/2023	Stock	NULL	'2/FT58'	1303.TERT/Tertiary - Undefined
Upper Dawson River	Upper Dawson River	47369S	Licence to take water	Issued	31/03/2023	Stock	NULL	'1/LE289'	1303.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89728S	Licence to take water	Issued	31/03/2023	Stock	NULL	'1/LE289'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	47369S	Licence to take water	Issued	31/03/2023	Stock	NULL	'1/LE289'	1303.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89728S	Licence to take water	Issued	31/03/2023	Stock	NULL	'1/LE289'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	47369S	Licence to take water	Issued	31/03/2023	Stock	NULL	'1/LE289'	1303.PREC/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89728S	Licence to take water	Issued	31/03/2023	Stock	NULL	'1/LE289'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48802N	Licence to take water	Issued	30/11/2021	Stock	NULL	'16/AB174'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58420N	Licence to take water	Issued	30/11/2021	Stock	NULL	'16/AB174'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	48878N	Licence to take water	Issued	31/07/2031	Stock	NULL	'15/WT308'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48878N	Licence to take water	Issued	31/07/2031	Stock	NULL	'15/WT308'	1303.HUTTO/Hutton Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	48878N	Licence to take water	Issued	31/07/2031	Stock	NULL	'15/WT308'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48958N	Licence to take water	Issued	31/07/2020	Stock	NULL	'17/AB53; 18/AB53; 19/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58309N	Licence to take water	Issued	31/07/2020	Stock	NULL	'19/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48992N	Licence to take water	Issued	30/11/2019	Stock	NULL	'10/WT76'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58730N	Licence to take water	Issued	30/11/2020	Stock	NULL	'10/WT76; 11/WT76; 9/WT76'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	50101N	Licence to take water	Issued	31/10/2021	Stock	NULL	'8/WAR45'	4224.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	50171N	Licence to take water	Issued	29/02/2032	Stock	NULL	'12/WAR44'	4224.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	50173N	Licence to take water	Issued	29/02/2032	Stock	NULL	'12/WAR44'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58304N	Licence to take water	Issued	30/09/2013	Stock	NULL	'24/RP807809'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58012N	Licence to take water	Issued	31/07/2032	Stock	NULL	'29/WT342'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58012N	Licence to take water	Issued	31/07/2032	Stock	NULL	'29/WT342'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58012N	Licence to take water	Issued	31/07/2032	Stock	NULL	'29/WT342'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58012N	Licence to take water	Issued	31/07/2032	Stock	NULL	'29/WT342'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	89772S	Licence to take water	Issued	31/08/2018	Stock	NULL	'5/LE28'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57321S	Licence to take water	Issued	30/09/2019	Stock	NULL	'1/LE267'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57321S	Licence to take water	Issued	30/09/2019	Stock	NULL	'1/LE267'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	57576S	Licence to take water	Issued	30/11/2018	Stock	NULL	'5272/PH1859'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57576S	Licence to take water	Issued	30/11/2018	Stock	NULL	'5272/PH1859'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57576S	Licence to take water	Issued	30/11/2018	Stock	NULL	'5272/PH1859'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57576S	Licence to take water	Issued	30/11/2018	Stock	NULL	'5272/PH1859'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57576S	Licence to take water	Issued	30/11/2018	Stock	NULL	'5272/PH1859'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57576S	Licence to take water	Issued	30/11/2018	Stock	NULL	'5272/PH1859'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57576S	Licence to take water	Issued	30/11/2018	Stock	NULL	'5272/PH1859'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57733S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/FT609'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89612S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/FT609'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	57733S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/FT609'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89612S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/FT609'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	57733S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/FT609'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	89612S	Licence to take water	Issued	28/02/2030	Stock	NULL	'5/FT609'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	57871N	Licence to take water	Issued	31/03/2031	Stock	NULL	'20/CP880493'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	67334N	Licence to take water	Issued	31/03/2031	Stock	NULL	'20/CP880493'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	57871N	Licence to take water	Issued	31/03/2031	Stock	NULL	'20/CP880493'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	67334N	Licence to take water	Issued	31/03/2031	Stock	NULL	'20/CP880493'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58010N	Licence to take water	Issued	31/05/2013	Stock	NULL	'39/FT167; 40/FT167; 41/FT103'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58075N	Licence to take water	Issued	31/05/2013	Stock	NULL	'41/FT103'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58015N	Licence to take water	Issued	30/09/2013	Stock	NULL	'1/AU132'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58024N	Licence to take water	Issued	31/10/2022	Stock	NULL	'29/FT301'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	58045N	Licence to take water	Issued	30/04/2020	Stock	NULL	'3/RP880091'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58115N	Licence to take water	Issued	30/04/2014	Stock	NULL	'3/RP880091'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58071N	Licence to take water	Issued	31/12/2030	Stock	NULL	'5317/WT805970'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58079N	Licence to take water	Issued	30/04/2022	Stock	NULL	'4/FT758'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58850N	Licence to take water	Issued	30/04/2022	Stock	NULL	'4/FT758'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58110N	Licence to take water	Issued	30/04/2022	Stock	NULL	'1/RP173977; 2/RP173977'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58197N	Licence to take water	Issued	31/05/2031	Stock	NULL	'164/FTY1242'	4222.KUMBA/Kumbarilla Beds
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58198N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/WT325; 4/WT323'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58252N	Licence to take water	Issued	31/05/2013	Stock	NULL	'2/RP137265'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58403N	Licence to take water	Issued	28/02/2014	Stock	NULL	'7/WT287'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58437N	Licence to take water	Issued	28/02/2022	Stock	NULL	'7/WT287'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58721N	Licence to take water	Issued	1/12/2019	Stock	NULL	'1/CP908592'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58721N	Licence to take water	Issued	1/12/2019	Stock	NULL	'1/CP908592'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58725N	Licence to take water	Issued	30/11/2020	Stock	NULL	'1/AB97; 368/FTY535'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58733N	Licence to take water	Issued	16/12/2029	Stock	NULL	'68/WV733'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58757N	Licence to take water	Issued	16/04/2030	Stock	NULL	'12/SP103843'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	62015N	Licence to take water	Issued	31/07/2022	Stock	NULL	'1/AB193'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	62069N	Licence to take water	Issued	31/07/2022	Stock	NULL	'1/AB193'	1303.BIRKH/Birkhead Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	62015N	Licence to take water	Issued	31/07/2022	Stock	NULL	'1/AB193'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	62069N	Licence to take water	Issued	31/07/2022	Stock	NULL	'1/AB193'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	62881S	Licence to take water	Issued	30/06/2030	Stock	NULL	'3/FT966'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	62881S	Licence to take water	Issued	30/06/2030	Stock	NULL	'3/FT966'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	67274S	Licence to take water	Issued	31/05/2018	Stock	NULL	'2/LE277'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	88445S	Licence to take water	Issued	31/05/2018	Stock	NULL	'2/LE277'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	67274S	Licence to take water	Issued	31/05/2018	Stock	NULL	'2/LE277'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	88445S	Licence to take water	Issued	31/05/2018	Stock	NULL	'2/LE277'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	67274S	Licence to take water	Issued	31/05/2018	Stock	NULL	'2/LE277'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	88445S	Licence to take water	Issued	31/05/2018	Stock	NULL	'2/LE277'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	84373S	Licence to take water	Issued	30/11/2018	Stock	NULL	'9/LE34'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	84374S	Licence to take water	Issued	30/11/2018	Stock	NULL	'9/LE34'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84373S	Licence to take water	Issued	30/11/2018	Stock	NULL	'9/LE34'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	84374S	Licence to take water	Issued	30/11/2018	Stock	NULL	'9/LE34'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84375S	Licence to take water	Issued	30/11/2018	Stock	NULL	'2/LE52'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	84375S	Licence to take water	Issued	30/11/2018	Stock	NULL	'2/LE52'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	89543S	Licence to take water	Issued	31/05/2030	Stock	NULL	'6/LE309'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	89543S	Licence to take water	Issued	31/05/2030	Stock	NULL	'6/LE309'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	89543S	Licence to take water	Issued	31/05/2030	Stock	NULL	'6/LE309'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	89543S	Licence to take water	Issued	31/05/2030	Stock	NULL	'6/LE309'	1303.EUROM/Eurombah Formation
Upper Dawson River	Upper Dawson River	89168F	Licence to take water	Issued	30/11/2031	Stock	NULL	'3/TR56'	1305.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	181475	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	100585	Licence to take water	Issued	31/05/2021	Stock	NULL	'23/FT36; 24/FT36; 27/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	30681N	Licence to take water	Issued	31/05/2013	Stock	NULL	'23/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	100585	Licence to take water	Issued	31/05/2021	Stock	NULL	'23/FT36; 24/FT36; 27/FT36'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	30681N	Licence to take water	Issued	31/05/2013	Stock	NULL	'23/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	100585	Licence to take water	Issued	31/05/2021	Stock	NULL	'23/FT36; 24/FT36; 27/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	19048N	Licence to take water	Issued	31/05/2013	Stock	NULL	'24/FT36'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	100585	Licence to take water	Issued	31/05/2021	Stock	NULL	'23/FT36; 24/FT36; 27/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	500316	Licence to take water	Issued	31/08/2031	Stock	NULL	'23/FT36; 24/FT36; 25/FT36; 26/FT36; 27/FT36; 28/FT36'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	19048N	Licence to take water	Issued	31/05/2013	Stock	NULL	'24/FT36'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	101879	Licence to take water	Issued	30/11/2021	Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	101879	Licence to take water	Issued	30/11/2021	Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	101879	Licence to take water	Issued	30/11/2021	Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	101879	Licence to take water	Issued	30/11/2021	Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	101879	Licence to take water	Issued	30/11/2021	Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	101879	Licence to take water	Issued	30/11/2021	Stock	NULL	'6/WT800342'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	101883	Licence to take water	Under Amendment	31/03/2020	Stock	NULL	'21/WV731; 22/WV731; 23/WV731; 28/WT96; 29/WT97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58736N	Licence to take water	Issued	16/12/2029	Stock	NULL	'19/WV731; 22/WV731'	4224.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	101979	Licence to take water	Issued	31/03/2022	Stock	NULL	'15/AB52; 16/AB186'	1303.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	58372N	Licence to take water	Issued	31/03/2021	Stock	NULL	'16/AB186; 21/AB53'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	89695S	Licence to take water	Under Renewal	30/06/2012	Stock	NULL	'14/FT1'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	171686	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58164N	Licence to take water	Issued	31/01/2014	Stock	NULL	'3/AB232'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	172526	Licence to take water	Issued	30/09/2029	Stock	NULL	'66/WV762'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	12842N	Licence to take water	Issued	30/09/2018	Stock	NULL	'66/WV762; 71/WV758; 80/WV763; 81/WV763; 83/WV763; 87/WV763'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	172722	Licence to take water	Issued	30/06/2030	Stock	NULL	'2/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14220N	Licence to take water	Issued	30/06/2013	Stock	NULL	'2/AB37'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58253N	Licence to take water	Issued	30/06/2030	Stock	NULL	'2/AB37'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	172722	Licence to take water	Issued	30/06/2030	Stock	NULL	'2/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14220N	Licence to take water	Issued	30/06/2013	Stock	NULL	'2/AB37'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58253N	Licence to take water	Issued	30/06/2030	Stock	NULL	'2/AB37'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	174604	Licence to take water	Issued	31/03/2030	Stock	NULL	'28/FT972; 30/FT1018; 45/FT167'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	58494N	Licence to take water	Issued	28/02/2022	Stock	NULL	'30/FT1018'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	178621	Licence to take water	Issued	30/04/2031	Stock	NULL	'8/AB200; A/AB117; C/AB203'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58191N	Licence to take water	Issued	31/10/2031	Stock	NULL	'8/AB200'	1303.EVERG/Evergreen Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	178621	Licence to take water	Issued	30/04/2031	Stock	NULL	'8/AB200; A/AB117; C/AB203'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58191N	Licence to take water	Issued	31/10/2031	Stock	NULL	'8/AB200'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	178621	Licence to take water	Issued	30/04/2031	Stock	NULL	'8/AB200; A/AB117; C/AB203'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58191N	Licence to take water	Issued	31/10/2031	Stock	NULL	'8/AB200'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	180040	Licence to take water	Issued	31/10/2031	Stock	NULL	'12/AB233'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	44554N	Licence to take water	Issued	31/01/2021	Stock	NULL	'12/AB233'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32977N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48824N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32977N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48824N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14282N	Licence to take water	Issued	31/10/2031	Stock	NULL	'236/NPW490'	4224.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14283N	Licence to take water	Issued	31/08/2031	Stock	NULL	'236/NPW490'	4224.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	08126N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16753N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	190532	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15571N	Licence to take water	Issued	31/03/2031	Stock	NULL	'24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58916N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	30259N	Licence to take water	Under Renewal	31/07/2012	Stock	NULL	'3/A4010; 6/AB190'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58086N	Licence to take water	Under Renewal	31/07/2012	Stock	NULL	'3/A4010; 6/AB190'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30259N	Licence to take water	Under Renewal	31/07/2012	Stock	NULL	'3/A4010; 6/AB190'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58086N	Licence to take water	Under Renewal	31/07/2012	Stock	NULL	'3/A4010; 6/AB190'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	500283	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	500293	Licence to take water	Issued	31/08/2031	Stock	NULL	'3/SP180954'	4222.MOOGA/Mooga Sandstone
Upper Dawson River	Upper Dawson River	604961	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP204532; 9/AB244'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58289N	Licence to take water	Issued	31/10/2032	Stock	NULL	'9/AB244'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58428N	Licence to take water	Issued	31/10/2022	Stock	NULL	'9/AB244'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604961	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP204532; 9/AB244'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58289N	Licence to take water	Issued	31/10/2032	Stock	NULL	'9/AB244'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58428N	Licence to take water	Issued	31/10/2022	Stock	NULL	'9/AB244'	1303.PRECI/Precipice Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	604961	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP204532; 9/AB244'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58289N	Licence to take water	Issued	31/10/2032	Stock	NULL	'9/AB244'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58428N	Licence to take water	Issued	31/10/2022	Stock	NULL	'9/AB244'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	606344	Licence to take water	Issued	31/01/2032	Stock	NULL	'1/SP103977; 2/AB132; 21/AB47; 22/AB47; 23/AB47; 24/AB142; 25/AB130; 25/AB50; 3/AB51; 3/SP103977; 32/AB108; 4/AB50; 5/AB50'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31934N	Licence to take water	Issued	30/04/2022	Stock	NULL	'25/AB130'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48999N	Licence to take water	Issued	30/04/2022	Stock	NULL	'25/AB130'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	13856N	Licence to take water	Issued	31/05/2031	Stock	NULL	'35/FT349'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	11692S	Licence to take water	Issued	31/12/2018	Stock	NULL	'5/FT719'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	43193S	Licence to take water	Issued	31/12/2018	Stock	NULL	'5/FT719'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	31501N	Licence to take water	Issued	31/01/2014	Stock	NULL	'45/WV612; 46/WV615'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	50258N	Licence to take water	Issued	31/08/2020	Stock	NULL	'7/WAR32'	4224.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58476N	Licence to take water	Issued	31/08/2020	Stock	NULL	'7/WAR32'	4224.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	10558N	Licence to take water	Issued	30/11/2021	Stock	NULL	'16/WV980'	4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	10661N	Licence to take water	Issued	30/06/2022	Stock	NULL	'10/AB210; 3/AB208'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14359N	Licence to take water	Under Amendment	30/06/2022	Stock	NULL	'10/AB210; 3/AB208'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	14360N	Licence to take water	Issued	30/06/2022	Stock	NULL	'3/AB208'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	10661N	Licence to take water	Issued	30/06/2022	Stock	NULL	'10/AB210; 3/AB208'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14359N	Licence to take water	Under Amendment	30/06/2022	Stock	NULL	'10/AB210; 3/AB208'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	14360N	Licence to take water	Issued	30/06/2022	Stock	NULL	'3/AB208'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	11725N	Licence to take water	Issued	28/02/2014	Stock	NULL	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	12338N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58645N	Licence to take water	Issued	31/05/2022	Stock	NULL		4222.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	31432S	Licence to take water	Under Renewal	28/02/2013	Stock	NULL	'11/LE179'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	31432S	Licence to take water	Under Renewal	28/02/2013	Stock	NULL	'11/LE179'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	14277S	Licence to take water	Issued	28/02/2031	Stock	NULL	'51/LE244'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14277S	Licence to take water	Issued	28/02/2031	Stock	NULL	'51/LE244'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14332N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58154N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.SLAND/Southlands Formation
Upper Dawson River	Upper Dawson River	58295N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14426N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.INJUN/Injune Creek Group

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58084N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58571N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14426N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58084N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58571N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	47329S	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP191511'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	47329S	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP191511'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	47329S	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP191511'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	47329S	Licence to take water	Issued	31/08/2013	Stock	NULL	'4/SP191511'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	15557N	Licence to take water	Issued	31/07/2019	Stock	NULL	'1/FT921'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15557N	Licence to take water	Issued	31/07/2019	Stock	NULL	'1/FT921'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15557N	Licence to take water	Issued	31/07/2019	Stock	NULL	'1/FT921'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15567N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	34227N	Licence to take water	Issued	31/10/2029	Stock	NULL	'3/AU174'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16222N	Licence to take water	Issued	31/08/2020	Stock	NULL	'14/AB97'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	30783N	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP124669'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	48921N	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP124669'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48994N	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP124669'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	30783N	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP124669'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	48921N	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP124669'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48994N	Licence to take water	Issued	30/06/2013	Stock	NULL	'4/SP124669'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43551N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58533N	Licence to take water	Issued	31/10/2029	Stock	NULL	'4/WT256'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	44712N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/FT684; 52/RP880173; 55/FT170'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48817N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	48818N	Licence to take water	Issued	20/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	44712N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/FT684; 52/RP880173; 55/FT170'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48817N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	48818N	Licence to take water	Issued	20/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	44712N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/FT684; 52/RP880173; 55/FT170'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48817N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.ORALL/Orallo Formation

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	48818N	Licence to take water	Issued	20/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	44712N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/FT684; 52/RP880173; 55/FT170'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48817N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	48818N	Licence to take water	Issued	20/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	44712N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/FT684; 52/RP880173; 55/FT170'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48817N	Licence to take water	Issued	6/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.ORALL/Orallo Formation
Upper Dawson River	Upper Dawson River	48818N	Licence to take water	Issued	20/07/2014	Stock	NULL	'49/SP237297; 52/SP237297'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	47216S	Licence to take water	Issued	29/02/2032	Stock	NULL	'47/LE167'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	47216S	Licence to take water	Issued	29/02/2032	Stock	NULL	'47/LE167'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58062N	Licence to take water	Issued	31/07/2022	Stock	NULL	'21/CP862913'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58121N	Licence to take water	Issued	31/07/2022	Stock	NULL	'21/CP862913'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58489N	Licence to take water	Issued	31/07/2022	Stock	NULL	'21/CP862913'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	58062N	Licence to take water	Issued	31/07/2022	Stock	NULL	'21/CP862913'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58121N	Licence to take water	Issued	31/07/2022	Stock	NULL	'21/CP862913'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58489N	Licence to take water	Issued	31/07/2022	Stock	NULL	'21/CP862913'	1303.BOXVA/Boxvale Sandstone Member
Upper Dawson River	Upper Dawson River	84360S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	84362S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84539S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.MOOLA/Moolayember Formation
Upper Dawson River	Upper Dawson River	84360S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	84362S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84539S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.MOOLA/Moolayember Formation
Upper Dawson River	Upper Dawson River	84360S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	84362S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	84539S	Licence to take water	Issued	31/01/2015	Stock	NULL	'9/LE213'	1303.MOOLA/Moolayember Formation
Upper Dawson River	Upper Dawson River	84447S	Licence to take water	Issued	31/08/2014	Stock	NULL	'10/CP903254'	1303.CLEMA/Clematis Sandstone
Upper Dawson River	Upper Dawson River	89589S	Licence to take water	Issued	31/08/2014	Stock	NULL	'10/CP903254'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	18147S	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	18147S	Licence to take water	Issued	18/01/2030	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15617N	Licence to take water	Issued	31/07/2020	Stock	NULL	'11/WT104; 7/WT90; 8/WT90; 9/WT90'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	404397	Licence to take water	Issued	16/02/2030	Stock	NULL	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58909N	Licence to take water	Issued	30/11/2030	Stock	NULL	'54/FT788; 6/FT788'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	404397	Licence to take water	Issued	16/02/2030	Stock	NULL	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.PRECI/Precipice Sandstone

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58909N	Licence to take water	Issued	30/11/2030	Stock	NULL	'54/FT788; 6/FT788'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32977N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48824N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58500N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32977N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48824N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58500N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32977N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48824N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58500N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14282N	Licence to take water	Issued	31/10/2031	Stock	NULL	'236/NPW490'	4224.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	14283N	Licence to take water	Issued	31/08/2031	Stock	NULL	'236/NPW490'	4224.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	08126N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16753N	Licence to take water	Issued	31/08/2030	Stock	NULL	'25/WV1108'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	189456	Licence to take water	Issued	31/07/2031	Stock	NULL	'10/RP880092'	4222.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58093N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58097N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	189456	Licence to take water	Issued	31/07/2031	Stock	NULL	'10/RP880092'	4222.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58093N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58097N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	189456	Licence to take water	Issued	31/07/2031	Stock	NULL	'10/RP880092'	4222.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58093N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58097N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	189456	Licence to take water	Issued	31/07/2031	Stock	NULL	'10/RP880092'	4222.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	58093N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	58097N	Licence to take water	Issued	31/10/2020	Stock	NULL	'10/RP880092'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	190532	Licence to take water	Issued	30/09/2013	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	15571N	Licence to take water	Issued	31/03/2031	Stock	NULL	'24/WV1260'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58916N	Licence to take water	Issued	31/03/2031	Stock	NULL	'14/WV731; 15/WV731; 16/WV731; 24/WV1260'	4222.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	26120S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'132/FT722'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	62043S	Licence to take water	Issued	31/10/2030	Stock	NULL	'132/FT722'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	26120S	Licence to take water	Under Renewal	31/10/2012	Stock	NULL	'132/FT722'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	62043S	Licence to take water	Issued	31/10/2030	Stock	NULL	'132/FT722'	1303.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	43720N	Licence to take water	Issued	31/05/2014	Stock	NULL	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	14178S	Licence to take water	Issued	31/12/2030	Stock	NULL	'5/LE303'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	14179S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'5/LE303'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14453S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'5/LE303'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30587S	Licence to take water	Issued	31/12/2030	Stock	NULL	'5/LE303'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14178S	Licence to take water	Issued	31/12/2030	Stock	NULL	'5/LE303'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	14179S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'5/LE303'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14453S	Licence to take water	Under Renewal	31/12/2012	Stock	NULL	'5/LE303'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	30587S	Licence to take water	Issued	31/12/2030	Stock	NULL	'5/LE303'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14332N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	58154N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.SLAND/Southlands Formation
Upper Dawson River	Upper Dawson River	58295N	Licence to take water	Issued	31/07/2032	Stock	NULL	'7/BDR71'	4224.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	33567N	Licence to take water	Issued	31/05/2023	Stock	NULL	'46/FT103'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	43986N	Licence to take water	Issued	31/05/2023	Stock	NULL	'46/FT103'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	44168N	Licence to take water	Issued	31/05/2023	Stock	NULL	'46/FT103'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	44713N	Licence to take water	Issued	31/05/2023	Stock	NULL	'46/FT103'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	181563	Licence to take water	Issued	30/06/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32977N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	48824N	Licence to take water	Issued	30/04/2032	Stock	NULL	'1/AB37; 3/AB63; 5/AB137; 5/AB154'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58500N	Licence to take water	Issued	30/04/2032	Stock	NULL	'3/AB63; 5/AB137; 5/AB154; 6/AB37'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	48939N	Licence to take water	Issued	30/06/2013	Stock	NULL	'2/WT299'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	48939N	Licence to take water	Issued	30/06/2013	Stock	NULL	'2/WT299'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	48939N	Licence to take water	Issued	30/06/2013	Stock	NULL	'2/WT299'	1303.WALLO/Walloon Coal Measure
Upper Dawson River	Upper Dawson River	15568N	Licence to take water	Issued	31/10/2029	Stock	NULL	'25/FT293'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	102067	Licence to take water	Issued	30/09/2022	Stock	NULL	'43/FT103'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	103684	Licence to take water	Issued	30/09/2021	Stock	NULL	'43/FT103'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	15189N	Licence to take water	Issued	30/09/2021	Stock	NULL	'43/FT103'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	15371N	Licence to take water	Issued	30/09/2021	Stock	NULL	'43/FT103'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	26482N	Licence to take water	Issued	30/09/2021	Stock	NULL	'43/FT103'	1303.NOT/Formation Name Not Specified
Upper Dawson River	Upper Dawson River	34823N	Licence to take water	Issued	30/09/2021	Stock	NULL	'43/FT103'	1303.NOT/Formation Name Not Specified

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	176861	Licence to take water	Issued	31/10/2032	Stock	NULL	'14/FT591'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176863	Licence to take water	Issued	31/10/2030	Stock	NULL	'24/FT951'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176865	Licence to take water	Issued	31/10/2030	Stock	NULL	'18/FT509'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176869	Licence to take water	Issued	31/10/2030	Stock	NULL	'9/FT486'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176902	Licence to take water	Issued	31/10/2029	Stock	NULL	'8/FT486'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48911N	Licence to take water	Issued	30/11/2032	Stock	NULL	'25/FT970'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	176861	Licence to take water	Issued	31/10/2032	Stock	NULL	'14/FT591'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176863	Licence to take water	Issued	31/10/2030	Stock	NULL	'24/FT951'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176865	Licence to take water	Issued	31/10/2030	Stock	NULL	'18/FT509'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176869	Licence to take water	Issued	31/10/2030	Stock	NULL	'9/FT486'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	176902	Licence to take water	Issued	31/10/2029	Stock	NULL	'8/FT486'	1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	48911N	Licence to take water	Issued	30/11/2032	Stock	NULL	'25/FT970'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	16218N	Licence to take water	Issued	31/08/2030	Stock	NULL	'9/AB123'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14426N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14427N	Licence to take water	Issued	31/01/2023	Stock	NULL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14428N	Licence to take water	Issued	31/01/2023	Stock	NULL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14429N	Licence to take water	Issued	31/01/2023	Stock	NULL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58571N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14426N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14427N	Licence to take water	Issued	31/01/2023	Stock	NULL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14428N	Licence to take water	Issued	31/01/2023	Stock	NULL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	14429N	Licence to take water	Issued	31/01/2023	Stock	NULL	'2/AB177'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58571N	Licence to take water	Issued	31/01/2023	Stock	NULL	'1/AB144; 2/AB177'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	37997N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	38004N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	38005N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	38006N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48801N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58132N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58520N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58859N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	37997N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	38004N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	38005N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	38006N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	48801N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58132N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58520N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	58859N	Licence to take water	Issued	30/11/2022	Stock	NULL	'14/AB237'	1303.INJUN/Injune Creek Group
Upper Dawson River	Upper Dawson River	602480	Licence to take water	Issued	7/04/2030	Stock	NULL	'6/SP229751'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	602480	Licence to take water	Issued	7/04/2030	Stock	NULL	'6/SP229751'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	601782	Licence to take water	Issued	28/02/2021	Stock Intensive	12	'36/RP848747'	1303.JUANA/Juandah Creek Alluvium
Upper Dawson River	Upper Dawson River	601782	Licence to take water	Issued	28/02/2021	Stock Intensive	12	'36/RP848747'	1303.JUANA/Juandah Creek Alluvium
Upper Dawson River	Upper Dawson River	58514N	Licence to take water	Issued	9/12/2019	Stock Intensive	10	'1/PER7083; 97/FT599'	4223.SPRIN/Springbok Sandstone Member
Upper Dawson River	Upper Dawson River	58519N	Licence to take water	Issued	31/12/2020	Stock Intensive	8	'70/FT86'	1303.JUANA/Juandah Creek Alluvium
Upper Dawson River	Upper Dawson River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	14358N	Licence to take water	Issued	28/02/2014	Stock Intensive	3	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	14358N	Licence to take water	Issued	28/02/2014	Stock Intensive	3	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	400541	Licence to take water	Issued	30/11/2013	Stock Intensive	128	'3/A4010; 6/AB190'	1303.EURO/Eurombah Creek Alluvium
Upper Dawson River	Upper Dawson River	400541	Licence to take water	Issued	30/11/2013	Stock Intensive	128	'3/A4010; 6/AB190'	1303.EURO/Eurombah Creek Alluvium
Upper Dawson River	Upper Dawson River	14358N	Licence to take water	Issued	28/02/2014	Stock Intensive	3	'29/WV612'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	185573	Licence to take water	Issued	31/12/2020	Stock Intensive	164	'10/WV406; 2/RP835106; 25/WV1108; 30/WV572; 7/SP206903; 8/WV1578'	4222.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58133N	Licence to take water	Issued	30/11/2019	Stock; Stock Intensive	75		1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58313N	Licence to take water	Issued	28/02/2022	Stock; Stock Intensive	25	'6/FT947'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58335N	Licence to take water	Issued	30/11/2013	Stock; Stock Intensive	15	'20/FT303'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58754N	Licence to take water	Issued	30/06/2020	Stock; Stock Intensive	24	'23/WT50'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	578957	Licence to take water	Issued	31/12/2020	Stock; Stock Intensive	56	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.JUANA/Juandah Creek Alluvium
Upper Dawson River	Upper Dawson River	578957	Licence to take water	Issued	31/12/2020	Stock; Stock Intensive	56	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.JUANA/Juandah Creek Alluvium
Upper Dawson River	Upper Dawson River	35966N	Licence to take water	Issued	31/03/2023	Stock; Stock Intensive	24	'15/FT87; 8/FT87'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58111N	Licence to take water	Issued	30/04/2022	Stock; Stock Intensive	12	'2/RP173977'	1303.BIRKH/Birkhead Formation
Upper Dawson River	Upper Dawson River	58313N	Licence to take water	Issued	28/02/2022	Stock; Stock Intensive	25	'6/FT947'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	58335N	Licence to take water	Issued	30/11/2013	Stock; Stock Intensive	15	'20/FT303'	1303.HUTTO/Hutton Sandstone

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Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	58583N	Licence to take water	Issued	30/09/2021	Stock; Stock Intensive	5	'6/WT800342'	4224.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58583N	Licence to take water	Issued	30/09/2021	Stock; Stock Intensive	5	'6/WT800342'	4224.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58583N	Licence to take water	Issued	30/09/2021	Stock; Stock Intensive	5	'6/WT800342'	4224.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58583N	Licence to take water	Issued	30/09/2021	Stock; Stock Intensive	5	'6/WT800342'	4224.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	58583N	Licence to take water	Issued	30/09/2021	Stock; Stock Intensive	5	'6/WT800342'	4224.EVERG/Evergreen Formation
Upper Dawson River	Upper Dawson River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	105212	Licence to take water	Issued	11/11/2014	Stock; Stock Intensive	24	'54/FT788; 6/FT788'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	578957	Licence to take water	Issued	31/12/2020	Stock; Stock Intensive	56	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.JUANA/Juandah Creek Alluvium
Upper Dawson River	Upper Dawson River	105212	Licence to take water	Issued	11/11/2014	Stock; Stock Intensive	24	'54/FT788; 6/FT788'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	578957	Licence to take water	Issued	31/12/2020	Stock; Stock Intensive	56	'23/FT41; 24/FT41; 54/FT788; 6/FT788'	1303.JUANA/Juandah Creek Alluvium
Upper Dawson River	Upper Dawson River	26169N	Licence to take water	Issued	31/05/2021	Stock; Stock Intensive	4	'22/WV1510'	4222.GUBBE/Gubberamunda Sandstone
Upper Dawson River	Upper Dawson River	16217N	Licence to take water	Issued	30/09/2020	Stock; Stock Intensive	24	'9/AB123'	1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	50835N	Licence to take water	Issued	30/04/2020	Stock; Waterharvesting	NULL	'6/TR20'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	50835N	Licence to take water	Issued	30/04/2020	Stock; Waterharvesting	NULL	'6/TR20'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	406950	Licence to take water	Issued	31/05/2013	Town Water Supply	250		1303.HUTTO/Hutton Sandstone
Upper Dawson River	Upper Dawson River	604281	Licence to take water	Under Amendment	28/02/2021	Town Water Supply	400		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604281	Licence to take water	Under Amendment	28/02/2021	Town Water Supply	400		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	604281	Licence to take water	Under Amendment	28/02/2021	Town Water Supply	400		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32735S	Licence to take water	Issued	30/11/2020	Town Water Supply	500		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	32735S	Licence to take water	Issued	30/11/2020	Town Water Supply	500		1303.PRECI/Precipice Sandstone
Upper Dawson River	Upper Dawson River	50985N	Licence to take water	Issued	31/03/2014	Waterharvesting	NULL	'4/RP866852'	130.01.18.37.04/Slatehill Creek
Upper Dawson River	Upper Dawson River	50992N	Licence to take water	Issued	31/10/2013	Waterharvesting	NULL	'42/WT53'	130.01.18.41.05.01/Highland Plains Creek
Upper Dawson River	Upper Dawson River	102385	Licence to take water	Issued	28/02/2020	Waterharvesting	NULL	'108/FT53'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	104401	Licence to take water	Issued	31/05/2020	Waterharvesting	NULL	'2/LE284'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	104401	Licence to take water	Issued	31/05/2020	Waterharvesting	NULL	'2/LE284'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	26366N	Licence to take water	Issued	30/09/2016	Waterharvesting	NULL	'8/TR23'	130.01.31-02.00+/Unnamed Tributary of Brown River
Upper Dawson River	Upper Dawson River	50845N	Licence to take water	Issued	30/09/2013	Waterharvesting	NULL	'24/RP807809'	130.01.18.34/Juandah Creek
Upper Dawson River	Upper Dawson River	104402	Licence to take water	Under Renewal	30/06/2012	Waterharvesting	NULL	'14/FT1'	130.01.18.31Z/Cockatoo Creek (Glebe Weir Storage)
Upper Dawson River	Upper Dawson River	50816N	Licence to take water	Issued	30/06/2013	Waterharvesting	NULL	'5/TR18'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	26366N	Licence to take water	Issued	30/09/2016	Waterharvesting	NULL	'8/TR23'	130.01.31-02.00+/Unnamed Tributary of Brown River
Upper Dawson River	Upper Dawson River	52822S	Licence to take water	Issued	27/10/2014	Waterharvesting	NULL	'6/LAB4011'	130.01.18.33.02/Robinson Creek

Appendix D: List of Surface Water Licenses (Raw - General)

Study subcatchment	Watercourse	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Associated Parcel ID	Source Formation
Upper Dawson River	Upper Dawson River	103828	Licence to take water	Issued	31/08/2021	Waterharvesting	NULL	'4/SP236971'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	46335S	Licence to take water	Issued	31/08/2021	Waterharvesting	NULL	'4/SP236971'	130.01.18.31Z/Cockatoo Creek (Glebe Weir Storage)
Upper Dawson River	Upper Dawson River	103828	Licence to take water	Issued	31/08/2021	Waterharvesting	NULL	'4/SP236971'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	46335S	Licence to take water	Issued	31/08/2021	Waterharvesting	NULL	'4/SP236971'	130.01.18.31Z/Cockatoo Creek (Glebe Weir Storage)
Upper Dawson River	Upper Dawson River	50816N	Licence to take water	Issued	30/06/2013	Waterharvesting	NULL	'5/TR18'	130.01.31-02/Brown River
Upper Dawson River	Upper Dawson River	48310S	Licence to take water	Under Renewal	28/02/2013	Waterharvesting	NULL	'5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	48310S	Licence to take water	Under Renewal	28/02/2013	Waterharvesting	NULL	'5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	52841S	Licence to take water	Issued	31/07/2021	Waterharvesting	NULL	'9/AB123'	130.01.18.37/Eurombah Creek
Upper Dawson River	Upper Dawson River	48310S	Licence to take water	Under Renewal	28/02/2013	Waterharvesting	NULL	'5/AB84; 6/AB84'	130.01.18/Dawson River
Upper Dawson River	Upper Dawson River	48310S	Licence to take water	Under Renewal	28/02/2013	Waterharvesting	NULL	'5/AB84; 6/AB84'	130.01.18/Dawson River

Appendix D: Surface water licenses for petroleum leases within the GFD Project area (by sub-catchment)

Tenure Type	Tenure Number	Status	Date Lodged	Date Granted	Expiry Date	Principal Holder	Authorisation Number	Authorisation Type	Authorisation Status	Authorisation Expiry Date	Purpose	Allocation (ML)	Formation	Management	Study Sub-catchment
PL	392	APPLICATION	29-APR-2010			QGC PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Balonne Tributaries
PL	276	GRANTED	30-OCT-2008	03-OCT-2011	02-OCT-2041	QGC PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Dogwood Creek
PL	276	GRANTED	30-OCT-2008	03-OCT-2011	02-OCT-2041	QGC PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Dogwood Creek
PL	311	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Balonne Tributaries
PL	312	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Balonne Tributaries
PL	311	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Balonne Tributaries
PL	312	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Balonne Tributaries
PL	309	GRANTED	20-OCT-2009	03-DEC-2009	31-DEC-2030	SANTOS QNT PTY LTD	604469	Licence to take water	Issued	31/05/2021	Industrial; Irrigation	400	4222.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Balonne Tributaries
PL	195	GRANTED	23-OCT-2002	27-MAR-2003	26-MAR-2037	AUSTRALIA PACIFIC LNG PTY LIMITED	603088	Licence to take water	Issued	31/07/2020	Irrigation	2600	1303.BANDA/Bandanna Formation	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	463	APPLICATION	21-APR-2011			BG INTERNATIONAL (AUS) PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	464	APPLICATION	21-APR-2011			BG INTERNATIONAL (AUS) PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	468	APPLICATION	21-APR-2011			BG INTERNATIONAL (AUS) PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	462	APPLICATION	21-APR-2011			BG INTERNATIONAL (AUS) PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	465	APPLICATION	21-APR-2011			BG INTERNATIONAL (AUS) PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	467	APPLICATION	21-APR-2011			BG INTERNATIONAL (AUS) PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	299	APPLICATION	22-MAY-2009			BG INTERNATIONAL (AUS) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	311	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	312	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	311	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	312	APPLICATION	29-OCT-2009			BNG (SURAT) PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	397	APPLICATION	26-JUL-2010			PURE ENERGY RESOURCES PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	402	APPLICATION	26-JUL-2010			PURE ENERGY RESOURCES PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	400	APPLICATION	26-JUL-2010			PURE ENERGY RESOURCES PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	393	APPLICATION	29-APR-2010			QGC PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	276	GRANTED	30-OCT-2008	03-OCT-2011	02-OCT-2041	QGC PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	276	GRANTED	30-OCT-2008	03-OCT-2011	02-OCT-2041	QGC PTY LIMITED	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	171	GRANTED	22-MAR-1999	30-SEP-2004	29-SEP-2034	ROMA PETROLEUM PTY LTD	606336	Licence to take water	Issued	31/01/2022	Any	36500	4223.WALLM/Walloon Coal Measures	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	90	GRANTED	26-APR-1995	30-NOV-1995	29-NOV-2029	SANTOS TOGA PTY LTD	500041	Licence to take water	Issued	31/05/2021	Irrigation	8760	1303.BANDA/Bandanna Formation	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	91	GRANTED	26-APR-1995	30-NOV-1995	29-NOV-2029	SANTOS TOGA PTY LTD	500041	Licence to take water	Issued	31/05/2021	Irrigation	8760	1303.BANDA/Bandanna Formation	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	232	GRANTED	14-JUN-2005	15-DEC-2005	31-DEC-2035	SANTOS TOGA PTY LTD	500041	Licence to take water	Issued	31/05/2021	Irrigation	8760	1303.BANDA/Bandanna Formation	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	92	GRANTED	26-APR-1995	30-NOV-1995	29-NOV-2029	SANTOS TOGA PTY LTD	500041	Licence to take water	Issued	31/05/2021	Irrigation	8760	1303.BANDA/Bandanna Formation	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	100	GRANTED	19-APR-1996	16-DEC-1999	15-DEC-2033	SANTOS TOGA PTY LTD	500041	Licence to take water	Issued	31/05/2021	Irrigation	8760	1303.BANDA/Bandanna Formation	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River
PL	99	GRANTED	19-APR-1996	16-DEC-1999	15-DEC-2033	SANTOS TOGA PTY LTD	500041	Licence to take water	Issued	31/05/2021	Irrigation	8760	1303.BANDA/Bandanna Formation	Associated Water On Supplied From Petroleum Tenure	Upper Dawson River



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