



AQUA FERRE (MUCHEA) PTY LTD
ACN 630 936 319
TRADING AS MUCHEA WATER

**Water Licence Application Summary
to Economic Regulation Authority**

October 2019

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Glossary

Aqua Ferre	Aqua Ferre Pty Limited ACN 121 146 772
ASIC	Australian Securities & Investments Commission
Company or Muceha Water	Aqua Ferre (Muceha) Pty Ltd ACN 630 936 319 trading as Muceha Water
DWER	Department of Water & Environmental Regulation
EPANET	a public-domain, water distribution system modelling software package developed by the United States Environmental Protection Agency
ERA	Economic Regulatory Authority Western Australia
Harvis	Harvis Capital Pty Ltd ACN 149 096 284
kL	kilolitre
km	kilometre
m	metre
MEN	Muceha Employment Node, Muceha, WA
ML	megalitres
mm	millimetres
pa	per annum
Pendulum	Pendulum Capital Pty Limited ACN 108 119 848 (AFSL 280970)
Riverside	Riverside Investments (WA) No 2 Pty Ltd ACN 118 963 072
Riverside Development	the residential subdivision located at Lot 2 Reserve Road and Lot 9001 Rosewood Drive, Chittering, WA
WA	Western Australia
Water Corporation	Water Corporation of WA
WTP	water treatment plant

4.1 Identification of applicant and description of structure

Aqua Ferre (Muchea) Pty Ltd trading as Muchea Water is the licence applicant.

Muchea Water is a specific-purpose company that brings together water strategists, engineers, hydrologists, financiers and investors.

Muchea Water's major shareholder is Riverside which holds a 51% interest. Riverside is the owner and developer of the Riverside Development.

Muchea Water's other shareholder is Aqua Ferre which owns 49%. Aqua Ferre was formed in August 2006 and is a holding company for investments primarily in water services.

4.2 Corporate information

4.2.1 Details of the licence applicant

(a) The legal name and the trading name of the applicant, and the ABN or ACN.

Legal Entity Name: Aqua Ferre (Muchea) Pty Ltd
Trading name: Muchea Water
ABN: 86 630 936 319

(b) The applicant's registered office address, contact details, principal place of business (if different from the registered office), and the name and contact details of the primary contact person whom the ERA can contact about the application.

Registered Address: Level 1, 5 Ord Street, West Perth WA 6005
Mailing Address: PO Box 1982, West Perth WA 6872
Phone: 08 9282 5400
Fax: 08 9282 5484
Email: [REDACTED]
Contact Person: Mr Peter Fogarty
Position: Director
Phone: 08 9282 5400
Email: [REDACTED]

(c) The applicant's profile, including the date it was founded, its history, the number of employees and a description of the applicant's core activities.

Muchea Water was established in January 2019 as a water solutions provider with a focus on resolving water supply management problems. Muchea Water brings together the skillsets of water strategists, engineers, hydrologists, property developers, financiers and investors. Aqua Ferre, which is the other major shareholder of Muchea Water, is the parent company to Aqua Ferre Holdings Pty Ltd which is the controlling shareholder of Myalup Wellington Water Corporation Pty Ltd trading as Collie Water. Collie Water is implementing the Wellington Dam rectification project and has in-principle funding from the State and Federal Governments to support the project

(d) Type of company.

Muchea Water is a proprietary limited company registered with ASIC.

(e) A list of all company directors, partners or principals.

The directors of Muchea Water are:

- Mr Peter John Fogarty
- Mr Mark Kevin Giles

(f) A description of company ownership such as the proportions of equity held by the individuals involved in the company.

The Company's major shareholder is Riverside which holds a 51% interest. Riverside is the owner and developer of the Riverside Development.

Aqua Ferre holds the remaining 49% shareholding in the Company.

4.2.2 Associated and/or controlled entities

A list of any associated and/or controlled entities including, where relevant, any parent companies and a description of the degree of control exercised by any associated entity, and how the associated entity exercises that control.

As described above the Company is owned 51% by Riverside and 49 % by Aqua Ferre.

Muchea Water is associated with a number of organisations through the interests of its directors, primarily through, Pendulum. Pendulum is a specialist provider of corporate financial services and has a network of partners, financiers, and sophisticated and corporate investors, including private equity and venture capital funds. Pendulum's services include corporate advisory services, corporate finance services and direct investment.

The Company has established a Board Charter which sets out its governance structure. The Board's general responsibility is to act in the best interests of the Company, be accountable to shareholders and stakeholders and ensure that the Company is properly managed to ensure long-term health and prosperity of the Company.

The Board is responsible for the overall operation and stewardship of the Company and its overall success and long-term growth in a way which ensures that the interests of shareholders and stakeholders are promoted and protected.

4.3 Description of proposed licensed services

Muchea Water is seeking to supply approximately 151ML pa of treated potable water to the Riverside Development and to commercial/industrial allotments in Phase 1 of the MEN development.

The Riverside Development (Figure 1) is located 8km north east of the Muchea town site. It is also in close proximity (4km) to the proposed MEN on the eastern side of the Great Northern Highway. The residential development is part of the Shire of Chittering and the design of the development follows the development planning scheme of the shire.

The Riverside Development consists of approximately 238 residential allotments each of approximately 5,000m² (or greater). Two allotments have been set aside for the potable water infrastructure including the production bore and WTP. The allotments will be developed in progressive stages. The development conditions require that each allotment has a reticulated potable water supply.

Stage 1 of the MEN currently being developed by Harvis is planned for approximately 30 commercial/industrial allotments, and will be connected to the WTP via a pipeline to be built and managed by Muchea Water.

Muchea Water will provide potable water to consumers using treated bore water from the Leederville–Parmelia Aquifer. The potable water system proposed has been designed to supply each stage of the project and will include bore extraction, a treatment plant and a pressurised distribution network.

Customers will be contracted on a take-or-pay basis.

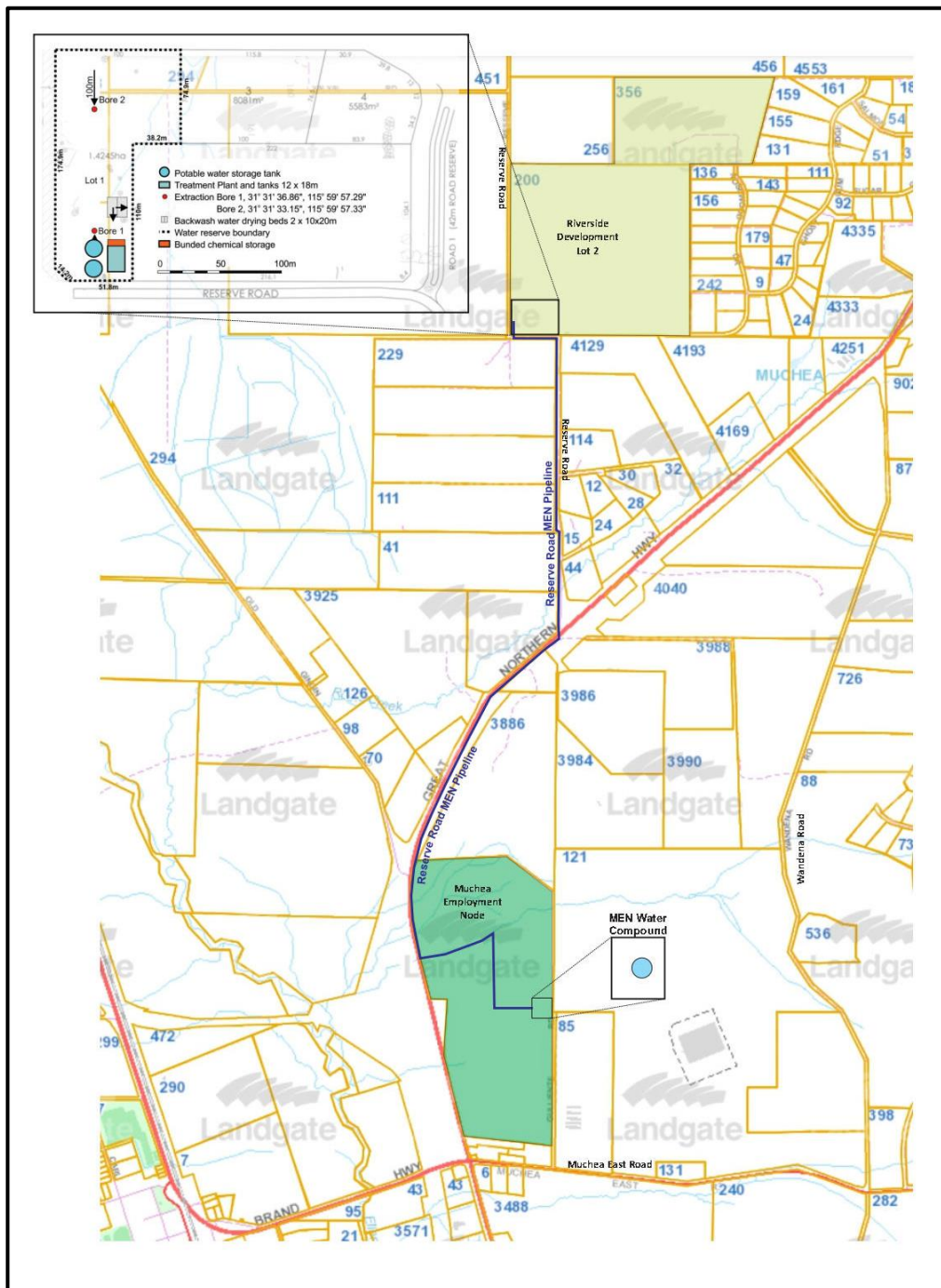


Figure 1: Location of Riverside Development and MEN

4.4 Technical information

4.4.1 Description of physical environment

Land use in the Shire of Chittering is highly diverse but largely dominated by agricultural activities, such as grazing and horticulture. The Riverside Development site has been used as a commercial wildflower farm with small pockets of original bushland still present. The southern portion adjacent to the subject site contains houses, stores, farming equipment and wildflowers. East of the development is the locality of Chittering Rise where a residential development (Chittering Rise Estate) has been established. The allotments in the adjacent residential area range between 2ha and 4ha but do not have a reticulated water supply. Land use and activities in the surrounding areas of the development site are not expected to change in the short term.

The urban area (Muchea town site) is located 8km south west of the development site with an estimated population of 968 (ABS, 2016). The MEN is approximately 4km south of the development site at the intersection of the Brand Highway and Great Northern Highway.

The development site and its surroundings are on the Ellen Brook Pallus Plain. The landform is generally flat and the site has a moderate grade, some 2%, with a ridgeline located along the western perimeter of the site. The land slopes towards the south-eastern corner of the site, towards Rocky Creek some 800m south east of the site. There is no surface drainage feature and/or stream on the property. Figure 2 shows the site and the surrounding land uses.

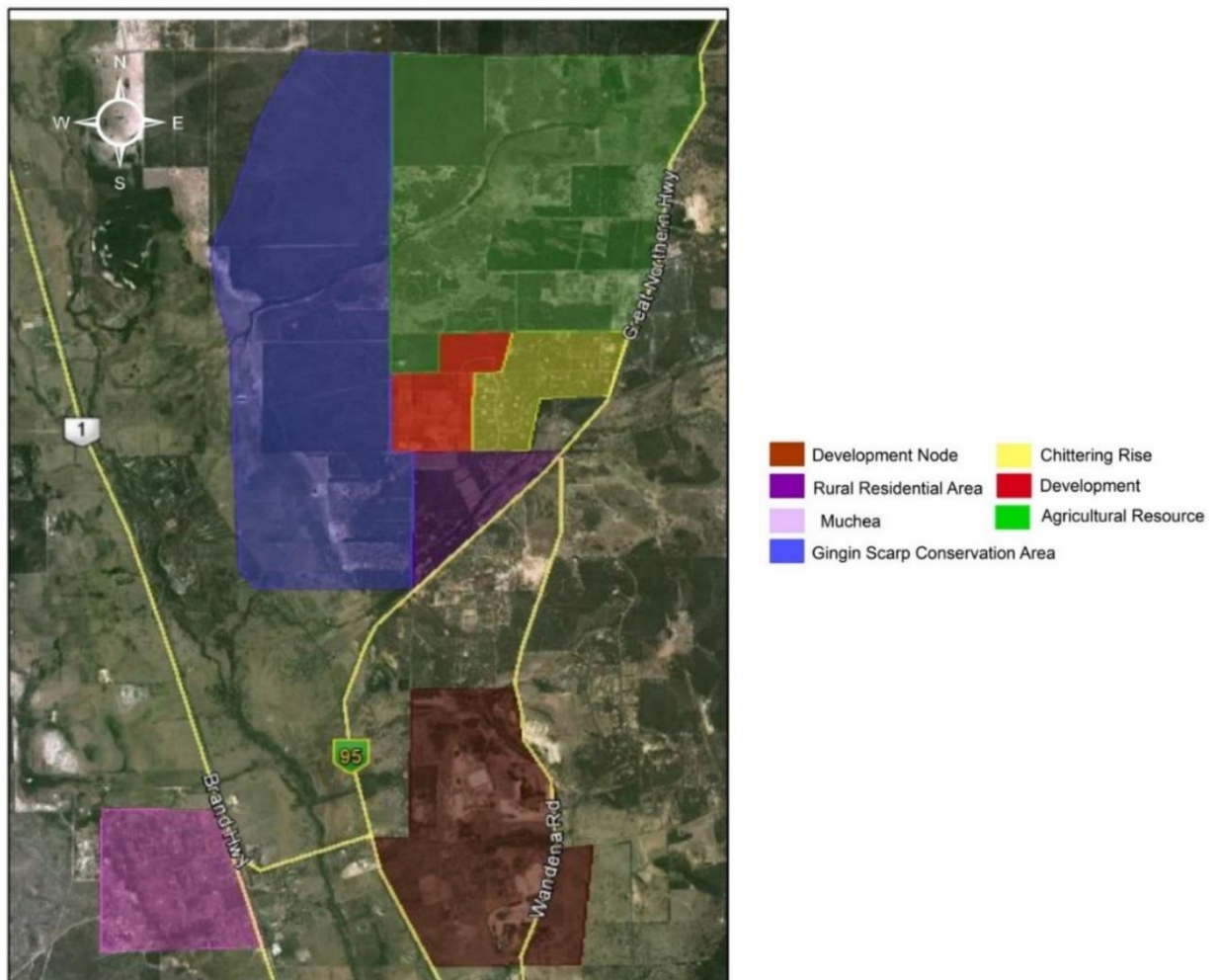


Figure 2: Site and surrounding land uses

4.4.2 Description of service infrastructure works

There is an existing production bore located within the Riverside Development, where the proposed potable WTP will be located. The developer, Riverside, has a water entitlement or allocation (licence to abstract water from an artesian aquifer) of 288.8 ML pa, sufficient to meet the demands of the planned development. The raw bore water is of excellent quality with low total dissolved solids of 300 mg/L.

The proposed treatment plant will be operated at a constant flow rate which promotes a stable process as the feedwater is not variable and any changes will be very slow. The treatment plant includes the following infrastructure elements:

- oxidation of iron and manganese with chlorine
- iron and manganese sludge settling (in oxidation tank)
- deep-bed sand filtration
- green sands – zeolite iron and manganese polishing
- pH trim (adjustment as required)
- UV disinfection
- chlorination with residual levels for reticulation.

The feed water quality has shown limited variability over time and it is anticipated that this will continue in the future. Hence, it is not necessary for the WTP to be designed to accommodate highly variable water quality.

To optimise flows and pressures, the water reticulation system has been developed as a closed-loop network. The trunk pipelines are laid along the main roads of the development and nodes represent demands within the network as shown in Figure 3.

The proposed network infrastructure is 11.6km and 6.9km for Riverside and the Harvis MEN respectively. It will be constructed with uPVC pipe suitable for potable water meeting Water Corporation Standard DS63 Water Reticulation Standard Design and Construction Requirements for Water Reticulation Systems up to DN250.

The Riverside Development will use nominal diameters of 100mm (reticulation) and 150mm and 200mm (trunk and reticulation) and a minimum nominal pressure rating of 120m head (PN12).

The Harvis MEN development will use nominal diameters of 150mm and 200mm (reticulation) and a minimum nominal pressure rating of 120mWA head (PN12).

All the pipes exceed the minimum acceptable mains pipe size of 100mm diameter for residential areas and 150mm for industrial areas. The design of the residential connection will be 32mm poly from mains to meter (meter is 20mm with double backflow protection); whereas, the Harvis MEN development will have a 40mm tapping and a 50mm poly from mains to the meter (40mm). All meters will have smart radio frequency capability for monitoring supply and meter reading for billing. The water network was modelled in EPANET 2 in order to determine flows, pressures, velocities, and correct pipe size diameter. Modelling is described in detail in Muceha Water's Reticulation System Design document. Figure 3 shows the reticulation network for the site, at the completion of all construction stages.

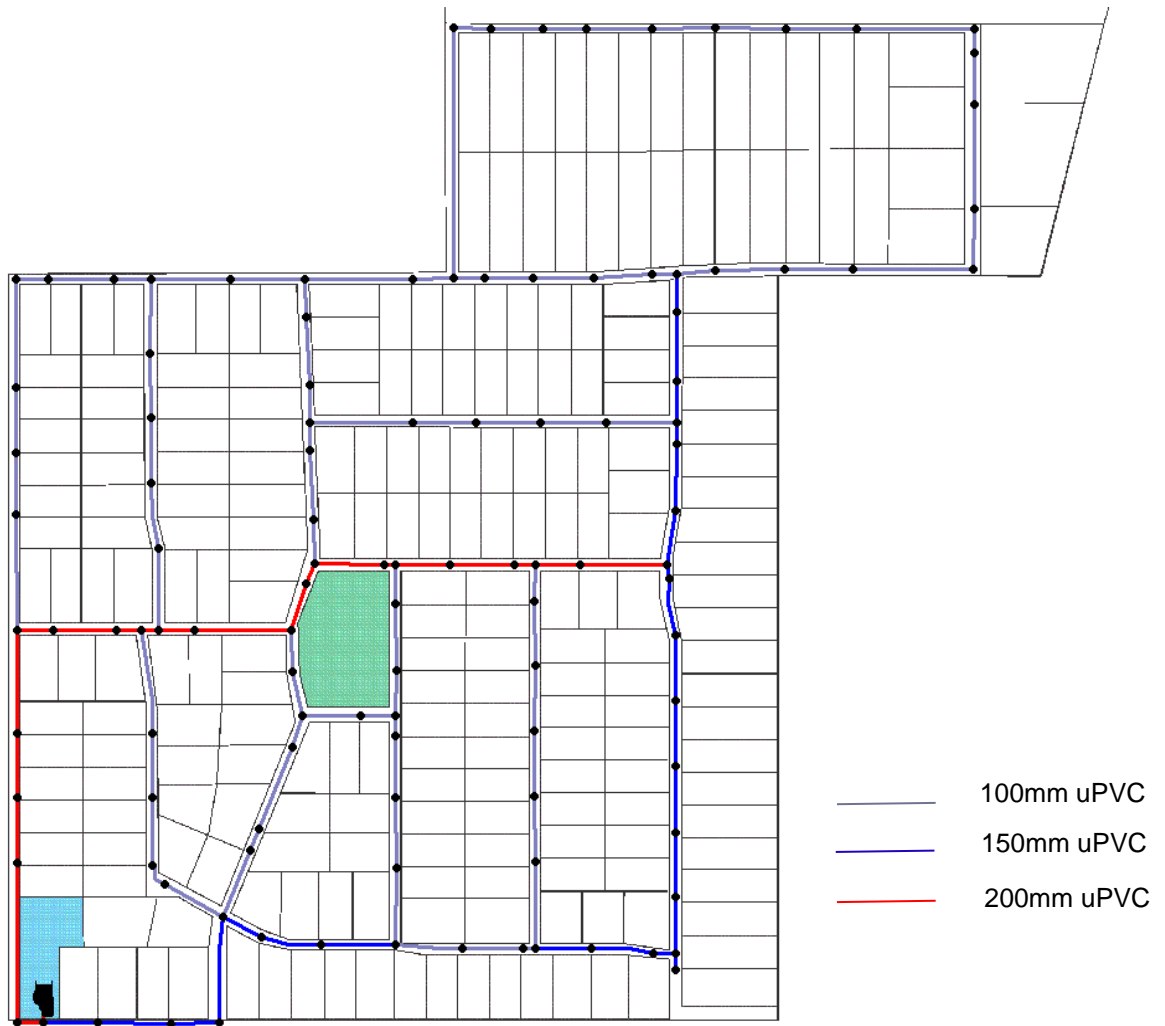


Figure 3: Preliminary reticulation network (EPANET 2.0)

4.4.3 Description of supply area for the proposed licensed services

Water supply will be derived from an existing groundwater production bore located within the Riverside Development which will be refurbished to optimise performance. A new production bore will also be installed nearby within the development (Figure 1). This will ensure a continuity of supply if the other bore is not operating. The existing production bore is currently licenced to extract groundwater from the Leederville Aquifer. This area falls within the Gingin Groundwater Proclamation Area.

4.5 Information about regulatory approvals

Information about the status of other essential regulatory approvals required to commence operation under the licence.

Table 1: Status of regulatory approvals

Regulatory Approvals	Status
DWER – Application for a 5C licence to take groundwater	The development site currently holds a licence to abstract water from the Leederville Aquifer with a total allocation of 288.8 ML/a granted by DWER. The developer, Riverside, has transferred the Water Licence GWL 59907 (3) to the Water Corporation. This licence will be transferred back to Riverside or to Muceha Water by direction of Riverside when a 'Water Service Licence' has been obtained. The current licence has been renewed for ten years, with an expiration date of 07/08/2023.

4.5.1 Evidence of compliance with industry methods and standards

Evidence of compliance with relevant supply industry methods, quality standards and codes such as compliance with relevant consumer protection arrangements including:

(a) A description of how the applicant will manage customer accounts.

Muceha Water will issue bills to customers six times each year. Each customer will be provided with a unique reference number used for payment and enquiry purposes.

Payment will be accepted via direct debit, BPAY or electronic funds transfer. The owner of the property is liable for all water service and usage charges even if the property is rented/leased to a tenant.

(b) A description of customer information policies (eg tariffs, fees and charges), customer consultation processes, account enquiries processes, payment arrangements and hardship policies and procedures, complaints and dispute resolution processes, account termination procedures and customer performance measures.

Muceha Water has established a Customer Service Charter which sets out the services it provides, the customer's rights and responsibilities and Muceha Water's commitment in providing services to customers.

(c) A description of the customer information management systems used by the applicant, including any billing systems.

Customer information will be managed by a database, including location information management, billing information, customer preferred communication, and customer account history; including record of payments, delayed payments, queries and complaints.

Initially an internal database will be utilised, to be upgraded to utilise a proprietary system as needed.

- (d) **If the applicant proposes to provide water services to residential customers, a copy of the applicant’s proposed financial hardship policy.**

Muchea Water has established a Financial Hardship Policy for those customers experiencing genuine financial difficulties.

4.5.2 Commitment to become a member of approved scheme

Evidence of a commitment to remain or become a member of an approved Energy and Water Ombudsman Scheme and adhere to any decisions of an Energy and Water Ombudsman Scheme, where the applicant applies for:

Muchea Water is committed to becoming a member of the Water Services Ombudsman Scheme. Should Muchea Water’s application to become a water services provider be successful, Muchea Water will apply for membership of the scheme.

4.5.3 Other regulatory approvals

A description and written evidence of the status of applications for environmental, planning and health approvals, permits or licences. It is preferable that you progress these as far as possible prior to applying for a licence.

Water Licence (DWER): The development site currently holds a licence to abstract water from the Leederville Aquifer with a total allocation of 288,800 kL pa, granted by DWER. The developer, Riverside, has transferred the Water Licence GWL 59907(3) to the Water Corporation where it has been upgraded to a potable water supply licence. This licence will be transferred back to Riverside or Muchea Water (by direction from Riverside) when a Water Service Licence has been obtained by Muchea Water. The current licence has been renewed for ten years, with expiration on 07/08/2023. Table 2 shows the allocation licence information from the DWER database.

Table 2: Allocation licence information (licence and water availability Information, DWER)

Licence Information	
Licence Number	59907
Licence Type	Groundwater Licence
Issue Date	26/06/2011
Expiry Date	07/08/2023
Licence Allocation	288,800 kL
Parties	Water Corporation
Groundwater Area	Gingin
Groundwater Subarea	Cowalla Confined
Aquifer	Perth – Leederville – Parmelia
Licence Address	2 Reserve Road, Chittering

(In addition, Muchea Water holds rights to a further allocation of 362,900kL of water abstraction from the system which may also be utilised.) The aquifer is confined by an overlying impermeable layer, excluding surface water from the aquifer. The aquifer is regarded as having a very low vulnerability to contamination from agriculture, industrial and urban activity. In addition, water quality analysis performed on groundwater samples show the water has excellent quality. Most analytes are well below their respective drinking water quality criteria except iron and manganese, which exceed the aesthetic quality parameters, but do not represent a human health issue.

The relevant property developers are subject to a number of regulatory approvals outside of the water services licence application.

4.6 Public interest information

Information about relevant factors to support that grant of licence would not be contrary to the public interest.

- **Environmental considerations, including the value of ecologically sustainable development.**

The Water Services Licence is required to enable water supply to the approved Riverside Development and the proposed MEN on the eastern side of the Great Northern Highway. The residential allotment is part of the Shire of Chittering and the design of the developments follows the development planning scheme of the Shire, including ecologically sustainable design codes. Muchea Water is committed to providing the supply of potable water in accordance with its Environmental Policy.

The planning processes and approvals involve public consultation. The provision of a potable water scheme has been considered as part of those developments.

- **Public health considerations relating to the provision of reliable water services.**

The groundwater licence to supply these developments has been granted as a potable water supply given the low risks to public health. Muchea Water's Drinking Working Source Protection Plan for the site details the range of measures that will be implemented to ensure that the supply of potable water remains safe for human consumption.

Muchea Water is not aware of any information relating to its proposal which is contrary to the public interest.