

NEIGHBOURING LANDHOLDER FACT SHEET

Gilgandra Shire Council is working to ensure long-term benefits are realised for our community from the Inland Rail project that exist far beyond the construction phase of the project. The availability of water for the project itself and the community in general is a common interest point and an area that Council identified it could play an important role. With financial support from Inland Rail, Council will investigate the availability of water from deep aquifers that limit competition with existing stock and domestic bores.

It is important to note the project is focused on investigating opportunities. The establishment of water bores and extraction of water can only proceed following the relevant approvals being obtained, licences being granted and viable water flows and volumes existing and being proven.

PROJECT BACKGROUND

Council has pursued this project for a number of reasons:

- The construction of Inland Rail has potential to require significant volumes of water and in Council's opinion, based on investigating other large infrastructure projects, real or perceived impacts on existing users of water can be better managed with local involvement.
- Desktop investigations indicate there are limited bores in the Gilgandra region that access artesian and sub artesian aquifers and there is an opportunity to explore this potential.

- Inland Rail is a nation building project that will have a construction phase of approximately 4 to 5 years in this region. With the project progressing, it is essential to gain as many legacy opportunities and the best outcome and infrastructure for our community. Greater long term water security for all residents of the Shire is viewed as a significant legacy outcome.

Inland Rail has provided funding support for this project which is being undertaken by Gilgandra Shire Council in line with Council's procurement processes. The simplest way to explain the arrangement is that Council has been supported to undertake the project and will report progress and outcomes back to Inland Rail.

Inland Rail have outlined their water strategy as per the Environmental Impact Statement (EIS) however, they should be viewed as the initial customer and funding body in this project. Inland Rail are aware of the project methodology and activities but it is important that questions be addressed to Gilgandra Shire Council as it is a Council led and endorsed project.

COMMUNITY INFRASTRUCTURE

These potential water bores would be made available to contractors building the Inland Rail on a cost recovery / full operational cost basis. Once the construction period is completed the bores would be community infrastructure to use for community purposes.

These uses include but are not limited to:

- Emergency water supply for firefighting.
- Water supply for Council to undertake road maintenance.
- Supplementary stock and domestic supply during drought or individual property issues such as equipment breakdown.
- Community facility improvement such as improved water supply at a hall or recreation area.

There is also potential to explore community water schemes, learning from examples that work successfully elsewhere.

TEST DRILL SITES

All proposed drill sites are in the road reserve and on public land.

SITE NO#	NAME	COORDINATES
1	Box Ridge Rd	E: 664550 N: 6539430
2	Curban Hall	E: 650667 N: 6509392
3	Wyuna Rd	E: 646982 N: 6507169
4	Old Mill Rd	E: 637063 N: 6464793

WATER BORE LEGACY PROJECT

COUNCIL CONTACT

Randall Medd -
Inland Rail Project Manager

P 02 6817 8800

PROJECT TIMELINES

- 2020/21 - Gilgandra Shire Council resolved to progress with the Water Bore Legacy Project and a Funding Agreement executed with Inland Rail.
- March 2021 - Quotation process to engage technical resources to advise Council and support the delivery of the project – awarded to Projence.
- June 2021 - Surveying, photography and environmental investigations commenced.
- August 2021 - Tender for Community Groundwater Test Bores released.
- October 2021 - The assessment of the financial implications of the project was required prior to proceeding with the awarding of drilling contractors.
- December 2021 - Tender awarded, at which point a drilling program will be known and a detailed works program can be communicated.
- February 2022 to May 2022 - Onsite work is likely to occur.

ADJOINING PROPERTIES AND COMMUNITY

This information has been initially provided to adjoining property owners within 200m of the proposed drilling locations. Some adjoining property owners will be involved in formal correspondence with Council as the project progresses past the test bore phase.

The wider community and neighbouring properties located further than 200m from the proposed drill sites will be able to see general updates about the project through Council's website and social media.

The proposed drill sites are located within the road reserve and site access will be restricted to authorised contractors and Council staff. Impact to traffic flows will be minimal and may just be temporary measures such as speed reduction past the site in accordance with the relevant Traffic Management Plans .

SHARING INFORMATION

In the areas where drilling is to be undertaken, there is limited data available regarding groundwater at the depths proposed.

Another benefit of the project is that it is Council's intention and desire to share drilling data with the community. This data can be utilised by other landholders in the region, particularly those nearby to the drill sites to potentially inform decisions about future water drilling.

Information will be available on Council's website and social media page. Residents are welcome to contact Council to discuss their questions.

COUNCIL'S CONTRACTORS

Projence -

Dr Andrew Krause
Project Manager / Water Licensing

Andrew has worked throughout NSW for over 20 years providing strategic water management and supply solutions to intensive livestock, mining and infrastructure projects. He specialises water-related aspects of environmental assessment, with a particular emphasis on managing water availability risk.

Water Resources Drilling -

Greg Brereton
Drilling and Groundwater Specialist

Greg has unrivaled understanding of geological and groundwater conditions of the Orana Region developed during 14 years as Manager of the Department of Primary Industries groundwater drilling unit. In his current role as specialist groundwater consultant, he has taken the lead role in numerous drilling, aquifer pump testing and bore field assessments for a range of local NSW councils and commercial developments.

DRILLING CONTRACTOR

The drilling contractor has been selected. Contracts are currently being executed following the test bore approval. Work is expected to commence in February, weather and material availability permitting.

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INLAND RAIL GROUND WATER DEMAND

91 km length of the Narramine to Narrabri (N2N) Inland Rail will be constructed within the Gilgandra LGA. Up to an estimated 450 mega litres of non-potable construction water will be required annually during the construction period. Groundwater is the most viable non-potable option for supply in the Gilgandra LGA with very limited to no opportunities to utilise surface water.

Further information of Inland Rail water requirements for construction are contained in the EIS <https://www.planningportal.nsw.gov.au/major-projects/project/41351>

Accessing groundwater resources throughout NSW is controlled under the Water Management Act 2000 (WM Act). The State is divided into Water Sharing Plan (WSP) areas which contain individual groundwater sources holding known volumes of groundwater. Each groundwater source has a long-term average annual extraction limit (LTAAEL) which limits extractions to a sustainable level.

Gilgandra Shire Council has been advised the most viable groundwater source is the Southern Recharge Groundwater Source within the NSW Great Artesian Basin Groundwater Sources 2020 WSP. This is a deep aquifer system that has very few existing licensed boreholes which extend to the required depths of between 180 m and 260 m. Accessing groundwater at this depth range limits interaction with existing licensed users. The LTAAEL of the water source is 38.7 gigalitres per year, of which 28% is yet to be made available for licensed extraction. Importantly, over the past 10 years an average of 88% of the LTAAEL has remained unused (35.3 giga litres per year). In short, the Southern Recharge Groundwater

Source has significant annual volumes of unused groundwater and by comparison the Inland Rail demand is relatively low.

This LTAAEL availability from the Southern Recharge Groundwater Source also provides confidence in exploring future use opportunities with the community that there is water licences available, subject to approval

APPROVAL PROCESS FOR GROUNDWATER WORKS IN NSW

A Water Supply Work Approval (WSWA) must firstly be obtained to allow a drilled borehole to become a 'test' borehole, and also to allow for groundwater pumping tests to occur, during which drawdown (pressure reduction) is measured in the target aquifer. The drawdown observations are then input to an analytical model by a groundwater specialist to predict the region of drawdown around the borehole when it becomes operational. At this time, the drawdown impacts at all existing nearby licensed boreholes are also estimated.

The results of the model are then included in a separate WSWA application, this time applying for 'production' borehole status. State Government hydrogeologists at the Department of Planning, Industry and Environment – Water assess the application to ensure the LTAAEL is not exceeded, and aquifer pressure decline should not:

- cause any flowing bore to cease to flow
- be no more than 1 metre at any flowing water supply work, or
- be no more than 2 metres at any nonflowing water supply work

WATER ACCESS LICENCE AVAILABILITY

Gilgandra Shire Council will source licensed entitlement in the Southern Recharge Groundwater Source from the water market. The trading can be permanent in the form of share entitlement or by annual agreement in the form of an ongoing allocation assignment.

Inland Rail has progressed an assessment into the availability of groundwater in the water market via a public Expression of Interest process undertaken in early 2021. Council has discussed this process with Inland Rail and at this point, the proposed bores are not in locations where private landholders have expressed an interest. This was important, as to not directly compete with individuals who were seeking to take advantage of this opportunity to exercise their rights to sell their water entitlements for a period of time.

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