

ASSESSMENT OF POTENTIAL FOR BASIC LANDHOLDER RIGHTS BORES

1. INTRODUCTION

This report assesses the potential for establishing Basic Landholder Rights (BLR) bores in conjunction with a proposed rezoning of land located at 94 Canadian Lead Road, 2787 Henry Lawson Drive, and 2794 Henry Lawson Drive, Gulgong, NSW.

The proposed rezoning seeks to change the land use from RU1 Primary Production to R5 Large Lot Residential, with a reduction in the minimum lot size from 100 hectares to 10 hectares. The intent is to accommodate new rural dwellings, supporting the increasing demand for rural residential living in the area.

2. HARVESTABLE RIGHTS

The subject site is located within the central inland-draining catchments harvestable rights area, allowing up to 10% of the average annual regional rainfall runoff to be captured for various uses, including domestic consumption and stock watering. For a 10-hectare landholding, this would equate to a maximum of 0.7 megalitres (700,000 litres).

3. WATER SUPPLY WORK APPROVALS

Under Section 92 of the Water Management Act 2000, future lots will be able to apply for a bore and access groundwater under a domestic bore licence for domestic use and stock watering. Landholders must obtain approval to construct bores, wells, or spear points to access groundwater under these rights. Future lots will be applicable, and likely to be approved for a bore for domestic use and stock watering. The issuing of approvals for Basic Landholder (Domestic and Stock) Rights bores are governed by the relevant groundwater water sharing plan. The relevant plan is <u>Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources</u>. Part 9, clauses 40 and 43 outline the standoff conditions. If an application cannot meet a relevant standoff distance, it will be refused.

An assessment of Part 9, clauses 40 and 43 is provided below.

40 Rules for Water Supply Works Located Near Contamination Sources

- 1) A water supply work approval must not be granted or amended if, in the Minister's opinion, the water supply work is located
 - a) within 500 metres of a contamination source listed in Schedule 1, or
 - b) within 250 metres of the edge of a plume associated with a contamination source listed in Schedule 1, or
 - c) between 250 metres and 500 metres from the edge of a plume associated with a contamination source listed in Schedule 1, unless the Minister is satisfied that no change in groundwater level will occur within 250 metres of that plume.

Comment: Any future Water Supply Works will not be located within 500 metres of a contamination source listed in Schedule 1, or within 250 metres of the edge of a plume associated with a contamination source listed in Schedule 1, or between 250 metres and 500 metres from the edge of a plume associated with a contamination source listed in Schedule 1.

- 2) The location restrictions specified in subclause (1) do not apply to the granting or amending of a water supply work approval if the Minister is satisfied of any of the following
 - a) the location of the water supply work is adequate to protect the groundwater source, the environment and public health and safety,
 - b) the water supply work is for the purpose of monitoring, environmental remediation activities or emergency services.

Comment: Not applicable. Future Water Supply Works will not be located near contamination sources.



- 3) A water supply work approval for a water supply work located within 250 metres of an on-site sewage disposal system may only be granted or amended if the water supply work is
 - *a)* constructed with cement grout in the borehole annulus to a minimum depth of 20 metres from the ground surface, and
 - *b) in the Minister's opinion, located at a sufficient distance from the on-site sewage disposal system to prevent migration of septic contamination in the aquifer.*

Note. Borehole annulus is defined in the Dictionary.

Comment: Considering future lot sizes (10ha), future Water Supply Works are easily capable of being separated by more than 250 metres of an on-site sewage disposal system (existing or proposed). Nonetheless, should this not be possible, the future Water Supply Works can be constructed with cement grout in the borehole annulus to a minimum depth of 20 metres from the ground surface,

- 4) The Minister may modify the depth requirement in subclause (3)(a) if satisfied of any of the following
 - a) adequate arrangements are in place to protect the groundwater source, the environment and public health and safety,
 - b) the water supply work is for the purpose of monitoring and environmental remediation activities.

Comment: As discussed above, it is anticipated that the distance can be achieved of more than 250 metres of an on-site sewage disposal system (existing or proposed). Nonetheless (3)(a) provides that the future Water Supply Works can be constructed with cement grout in the borehole annulus to a minimum depth of 20 metres from the ground surface. (4)(a) is not relied upon, but rather provides further options to modify the depth requirement in subclause (3)(a) if adequate arrangements are in place to protect the groundwater source, the environment and public health and safety.

43 Rules for Water Supply Works Used Solely for Basic Landholder Rights

- 1) A water supply work approval for a water supply work used solely for basic landholder rights must not be granted or amended if, in the Minister's opinion, the water supply work is located within any of the following
 - a) 100 metres of a Government monitoring or observation bore,
 - b) 40 metres of the top of the high bank of a river,
 - c) 100 metres of a high priority groundwater-dependent ecosystem listed in Table A in Schedule 2,
 - *d)* 100 metres of a high priority karst environment groundwater-dependent ecosystem listed in Table B in Schedule 2,
 - e) 100 metres of any other high priority groundwater-dependent ecosystem shown on the High Priority Groundwater-Dependent Ecosystem Map but only if a high probability of groundwater dependence has been confirmed by the Department for the relevant ecosystem,
 - f) 100 metres of the edge of an escarpment that is a high priority groundwater-dependent ecosystem for the purposes of this Plan, where the location of the water supply work is above that escarpment,
 - g) 100 metres of a groundwater-dependent culturally significant area.

Comment: The proposed water supply work complies with all the distance requirements under 43, as the site is not in proximity to any restricted areas. Specifically:

- There is no Government monitoring or observation bore within 100 metres.
- There is no riverbank within 40 metres.



- There are no high priority groundwater-dependent ecosystems listed in Schedule 2 within 100 metres.
- There are no high priority karst environment groundwater-dependent ecosystems within 100 metres.
- There are no other high priority groundwater-dependent ecosystems, as confirmed by the Department, within 100 metres.
- There is no escarpment classified as a high priority groundwater-dependent ecosystem within 100 metres.
- There is no culturally significant groundwater-dependent area within 100 metres.

This confirms that none of these restrictions are applicable to the proposed site.



Figure 1 - Groundwater dependent ecosystems (GDEs), orange identified as medium (Source: WaterNSW, 2024)



Figure 2 - Bores in proximity to the subject area (Source: WaterNSW, 2024)



2) The location restrictions specified in subclause (1) do not apply to the granting or amending of a water supply work approval if the Minister is satisfied that the water supply work is a replacement groundwater work.

Comment: Not applicable.

3) The location restrictions specified in subclauses (1)(c)–(f) do not apply to the granting or amending of a water supply work approval if the Minister is satisfied that the location of the water supply work at a lesser distance would result in no more than minimal harm to any high priority groundwater-dependent ecosystem shown on the High Priority Groundwater-Dependent Ecosystem Map or identified in subclause (1)(c), (d) or (f).

Comment: Not applicable.

4) The location restriction specified in subclause (1)(g) does not apply to the granting or amending of a water supply work approval if the Minister is satisfied that the location of the water supply work at a lesser distance would result in no more than minimal harm to any groundwater-dependent culturally significant area.

Comment: Not applicable.

4. CONCLUSION

The proposed rezoning and subsequent development of the land at 94 Canadian Lead Road, 2787 Henry Lawson Drive, and 2794 Henry Lawson Drive, Gulgong, NSW, align with the regulatory requirements for Basic Landholder Rights bores under the Water Management Act 2000 and the Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources. The site's compliance with the relevant standoff distances, including those related to on-site sewage management systems, ensures that future water supply works can be approved without significant environmental or public health concerns.

The assessment confirms that the proposed development will not negatively impact groundwater sources or other environmental factors, including compliance with wastewater OSSMS restrictions by maintaining adequate separation distances or implementing necessary construction methods such as cement grouting.

As such, the proposed rezoning and subsequent bore installations are expected to proceed without significant obstacles, supporting the sustainable development of rural residential properties in the area.

Yours sincerely,

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