Request for Planning Proposal

Proposal to Enable Commercial Water Extraction for Bottling

'Lochiel' Tarwoona Road, Camp Creek

PREPARED FOR

Lochiel Projects Pty Ltd

May 2017

KSTP | KELLIE SHAPLAND TOWN PLANNING

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1. Introduction & Context

1.1. Brief & Background

This Planning Proposal request relates to part of the property known as 'Lochiel' located at 1586 Tarwoona Road, Camp Creek. The land is zoned RU1 Primary Production under the Inverell Local Environmental Plan (LEP) 2012. The owner of the land, Lochiel Projects Pty Ltd, propose to extract water from the land for the purpose of human consumption and transport it to a factory elsewhere to be bottled. The amount of water extracted would be in accordance with already maximum licenced limits. This use is currently not authorised in the RU1 zone under the provisions of the Inverell LEP 2012.

The purpose of this planning proposal request is to demonstrate the appropriateness of a site-specific amendment to the Inverell LEP 2012, to enable the proposal to be undertaken with development consent. Kellie Shapland Town Planning (KSTP) has been briefed by the owner of the land, Lochiel Projects Pty Ltd, to prepare this request.

Analysis has confirmed that the groundwater passes all appropriate tests in terms of health requirements. Further, the water is defined a 'mineral water' that is unlikely to require any significant pre-bottling treatment.

This request has been prepared in accordance with the requirements of *'A guide to preparing planning proposals'*, (Department of Planning and Environment, 2016).

Section 1 of this report provides a background to the site and subject proposal. The Planning Proposal request is contained in Section 2.

1.2. Planning Controls - Permissibility

Prior to the gazettal of the Inverell LEP 2012 on 7 December 2012, the extraction of water and its associated bottling fell under the definition of a "rural industry" which was a use that was permitted with development consent under the Inverell LEP 1988 in the 1 (a) Rural (Agricultural) Zone.

Inverell LEP 2012 contains an amended definition of 'rural industry'' which is:

> ***rural industry*** *means the handling, treating, production, processing, storage or packing of animal or plant agricultural products for commercial purposes, and includes any of the following:*
>
> *(a) agricultural produce industries,*
> *(b) livestock processing industries,*
> *(c) composting facilities and works (including the production of mushroom substrate),*
> *(d) sawmill or log processing works,*
> *(e) stock and sale yards,*
> *(f) the regular servicing or repairing of plant or equipment used for the purposes of a rural enterprise.*

This definition no longer covers the extraction of water and associated processing.

Other definitions which are associated with agricultural and extractive land uses include:

> ***agricultural produce industry*** *means a building or place used for the handling, treating, processing or packing, for commercial purposes, of produce from agriculture (including dairy products, seeds, fruit, vegetables or other plant material), and includes wineries, flour mills, cotton seed oil plants, cotton gins, feed mills, cheese and butter factories, and juicing or canning plants, but does not include a livestock processing industry.*

agriculture *means any of the following:*

(a) aquaculture,
(b) extensive agriculture,
(c) intensive livestock agriculture,
(d) intensive plant agriculture.

extensive agriculture *means any of the following:*

(a) the production of crops or fodder (including irrigated pasture and fodder crops) for commercial purposes,
(b) the grazing of livestock for commercial purposes,
(c) bee keeping,
(d) a dairy (pasture-based).

extractive industry *means the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include turf farming.*

extractive material *means sand, soil, gravel, rock or similar substances that are not minerals within the meaning of the Mining Act 1992.*

Water extraction for commercial bottling purposes (which may be either on-site or off-site) does not strictly fall within any of these definitions and therefore this land use may be considered as a "commercial premises", which is prohibited in the RU1 Primary Production zone.

The Lochiel property is zoned RU1 Primary Production, therefore, water extraction for bottling is a prohibited land use. Consequently, Lochiel Projects Pty Ltd, requests that Inverell Shire Council initiate a Planning Proposal to amend the Inverell LEP 2012 to enable water extraction from the subject land for commercial bottling purposes.

This Planning Proposal request evaluates the strategic justification for the proposed amendment.

1.3. Property Description

The 'Lochiel' property comprises five (5) parcels of land which straddle Tarwoona Road. These parcels are described as Lots 2, 12, 13, 17 & 18 DP 750074 and have a combined site area of 887.3 hectares. The location of these lots is illustrated on Figures 1 and 2.

A subdivision application has been approved which alters the boundaries between the lots and consolidates the five (5) lots into two (2) for land management purposes. The subdivision will create one (1) lot north-eastern side of Tarwoona Road, and the other on the south-western side of the road. These lots are described as:

- Proposed Lot 1 in the subdivision of Lots 2, 12, 13, 17 & 18 DP 750074 having an area 425.7 hectares, and
- Proposed Lot 2 in the subdivision of Lots 2, 12, 13, 17 & 18 DP 750074 having an area 461.6 hectares.

The subdivision layout is illustrated on Figure 3. At the time of preparing this report, the subdivision plan has not been registered.

The Planning Proposal request relates to proposed Lot 1.

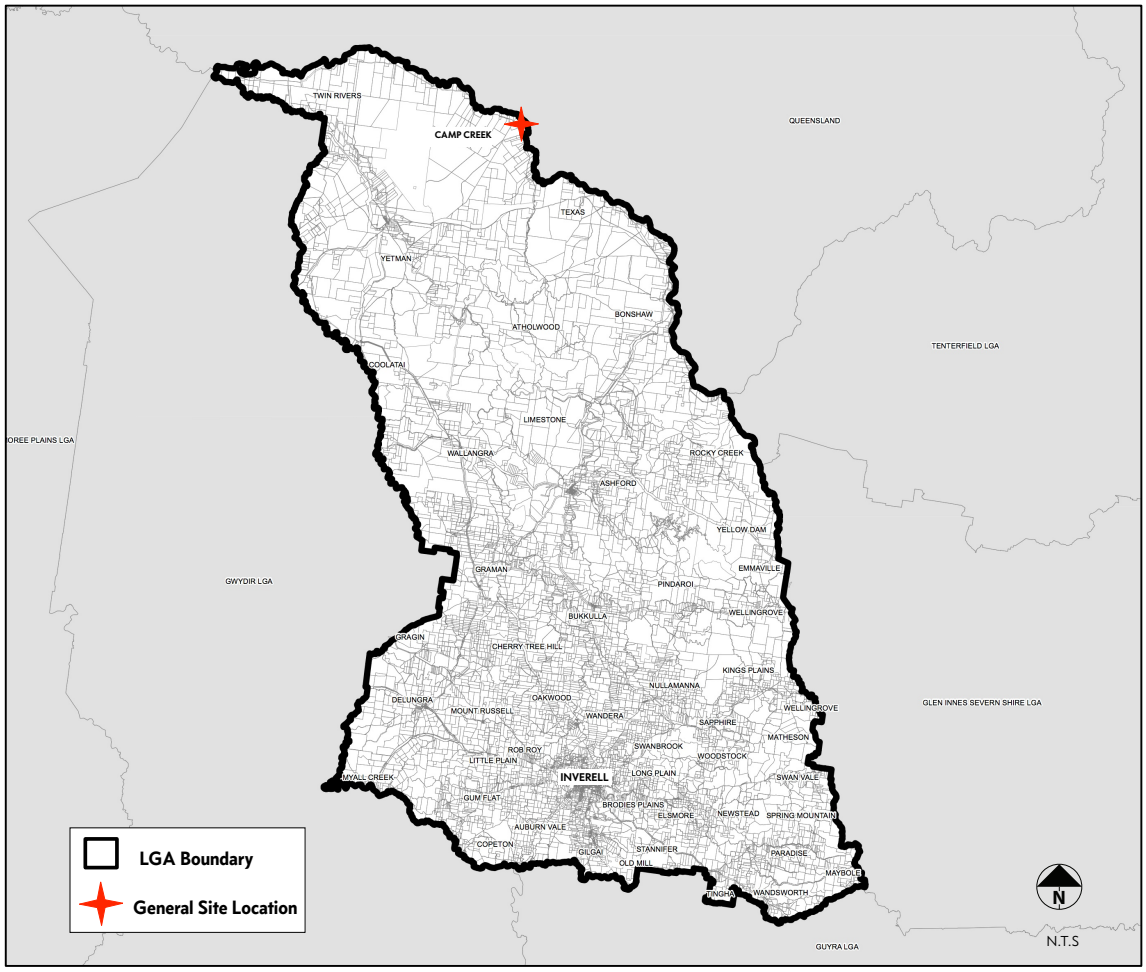


Figure 1 – Site Location

Source: Inverell LEP 2012

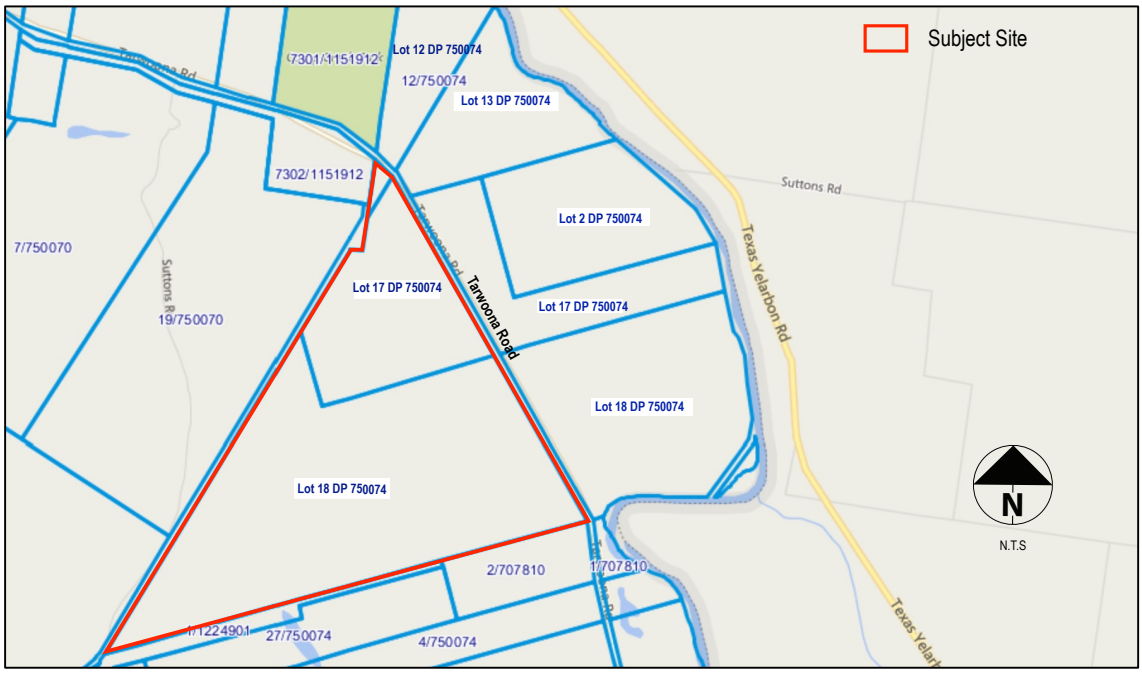


Figure 2 – Cadastral Details

Source: wwwinverell.nsw.gov.au

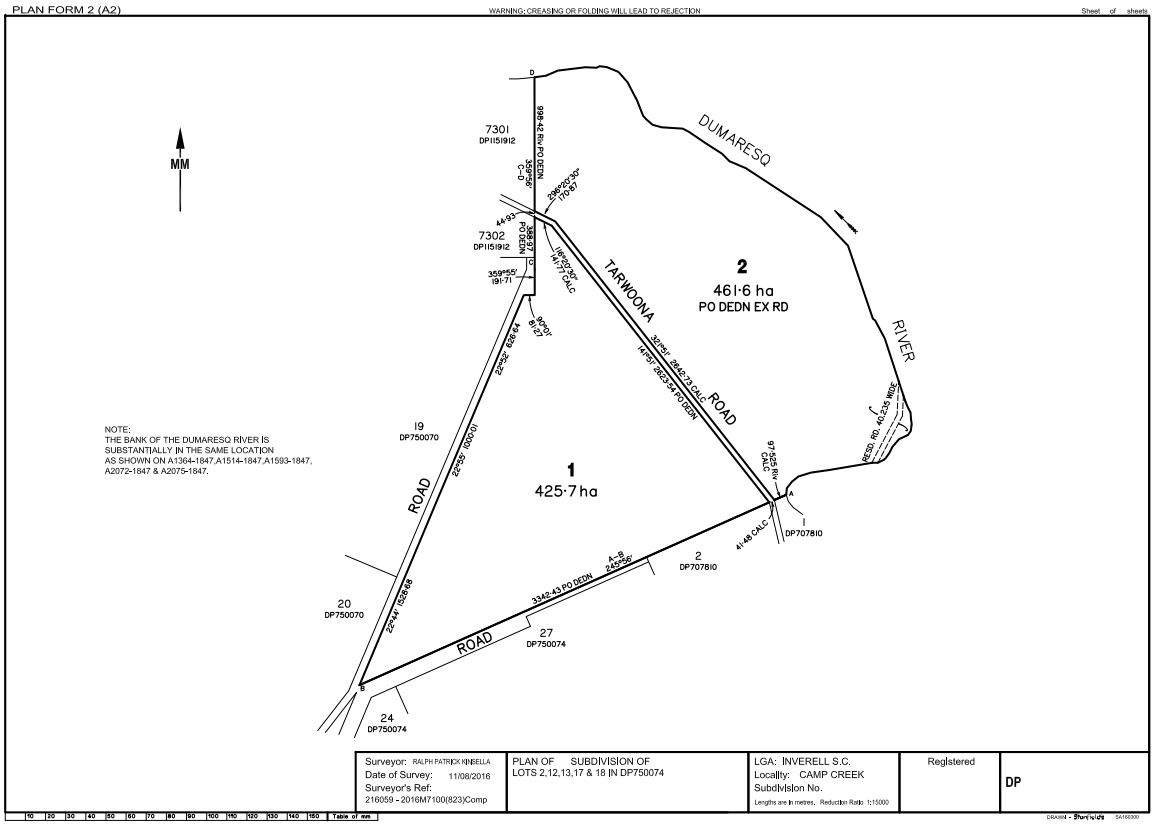


Figure 3 – Subdivision Plan *Source: SKM Consultants*

1.4. The Water Resource

The owner presently holds Water Access Licence (WAL) No. 30993 for extracting groundwater from the site for irrigation purposes on Lots 2, 12, 13, 17 & 18 DP 750074. The amount of groundwater that can be extracted under this licence is 511 ML per annum. A copy of this licence is contained in Attachment A.

The owner is in the process of amending the licence to subdivide it into two (2) WAL's, one having 411ML extraction limit and the other for 100ML per annum. The 100ML WAL would be utilised for the proposed commercial water extraction facility and the 411 licence would be retained for irrigation purposes.

Water quality from the aquifer has been assessed and the results presented in the report titled *Review of Mineral Water Quality and Hydrogeological Setting (Hydroilex Pty Ltd, 23 January 2017).* A copy of the report is provided in Attachment B.

The following summarises the results of the hydrochemical review of the water quality, and geological setting of the site.

1. *The groundwater passes all appropriate tests in terms of health requirements.*

2. *Trace metals, radionuclides, and pesticides concentrations are well below health concentration thresholds.*

3. *The water is clearly defined as a 'mineral water', rather than a 'spring water'.*

4. *The water has an exceptional taste, and is unlikely to require any significant pre-bottling treatment.*

5. *The aquifer is associated with a deep thick alluvial channel related to the palaeo drainage of the Dumaresq River.*

6. *The groundwater allocation is very large, and subject to NOW and Council endorsements, it is considered that a large assignment of water will be possible for an 'industrial' purpose, subject to meeting all compliances.*

7. *The detailed analyses will provide the necessary supporting chemistry which will assist in taking the project to a pre-market stage.*

Therefore, from the analysis contained in this report it can be concluded that that the extraction of groundwater from the aquifer for the proposed use is appropriate in terms of water quality and quantity.

1.5. Development Proposal

Lochiel Pty Ltd proposes to carry out the following development on Proposed Lot 1:

- Drill a new bore;
- Take a maximum of 100 ML per annum of water from that bore for the purpose of human consumption, and
- Transport the water taken from the bore by trucks to a bottling plant which would be built in a nearby town.

The 100ML per annum of water would be taken from the existing licenced allocation.

To facilitate the proposal, the Inverell LEP 2012 needs to be amended and the necessary development consent obtained. Following this, the 100ML WAL would be amended from extraction for irrigation purposes to extraction for human consumption.

1.6. Consultation

The owners' solicitor has consulted Inverell Shire Council advising that the owner wishes to carry out the development specified in Section 1.5.

Council, by way of letter dated 15 March 2017, advised that they are unable to specifically characterise the development as a type which is permitted in the RU1 zone. Council, in principle, is willing to consider a development of this nature, however, the proponent would need to further consider the matter of permissibility from a planning perspective, and whether a Planning Proposal would be required to the ILEP 2012.

As set out in Section 1.2, it is considered that an amendment to the ILEP 2012 is required to facilitate the proposal.

1.7. Site Improvements & Constraints

Proposed Lot 1 contains the existing licenced bore but is otherwise vacant land.

Services: Electricity and telephone services are available.

Access: Access is via Tarwoona Road and no additional access points would be necessary to facilitate the proposal.

Flora and fauna: The subject land has been highly modified by agricultural practices. Some areas of vegetation remain however these would not be affected by the proposal. This issue would be addressed further as part of the future development application for the water extraction facility but is not considered to be a constraint to the planning proposal proceeding.

Bushfire: The subject land has areas mapped as bush fire prone. This constraint would not preclude the proposal but would be referred to the NSW Rural Fire Service for comment.

1.8. Justification for the Water Extraction Proposal

The proposal is considered justified as:

- It represents a viable alternative rural land use, using an annual water extraction rate that is within the licenced maximum.
- The proposal would result in an economic use of rural land.
- The water can be extracted at a rate that doesn't adversely affect agricultural water supply.
- The water supply is of a high quality for drinking.
- The water can be transported from the site in bulk so impacts on local roads are minimised.

Development issues that are likely to be raised with such a proposal can be adequately addressed at development application stage. However, an amendment to the Inverell LEP 2012 is necessary to facilitate such a proposal. The strategic merit of such a request, and further justification for the proposal is addressed in Section 2 'The Planning Proposal Request'.

2. The Planning Proposal Request

PART 1- OBJECTIVES AND INTENDED OUTCOMES

This planning proposal will permit the extraction of water from the property for commercial bottling purposes.

This Planning Proposal seeks a site-specific amendment to the Inverell Local Environmental Plan 2012 in relation to land described as Proposal Lot 1 in the subdivision of Lots 2, 12,13,17 & 18 DP 750074 (No. 1586) Tarwoona Road, Camp Creek.

PART 2 – EXPLANATION OF PROVISIONS

It is proposed to enable the intended outcome through the following amendments to the Inverell LEP 2012:

- Amendment to the map pursuant to Clause 2.5 (Additional Permitted Land Uses Map) to identify land subject to this Planning Proposal, and
- Inclusion of an additional item in Schedule 1, generally in the following terms:

Item 1: Use of certain land at Tarwoona Road, Camp Creek:

(1) This clause applies to Lot x DP xx located at Tarwoona Road, Camp Creek, identified as "1" on the Additional Permitted Uses Map (Note: Lot and DP number to be inserted following the registration of the subdivision plan).

(2) Development for the purpose of a water bottling facility is permitted with development consent.

(3) Development consent may only be issued if the consent authority is satisfied that development will not have an adverse impact on natural water systems or the potential agricultural use of the land.

(4) Despite any other provision of this Plan, development may be carried out with development consent for the construction of a pipe or similar structure on any land for the purposes of conveying groundwater to a water bottling facility.

***water bottling facility** means a building or place at which groundwater from land in Zone RU2 Rural Landscape is extracted, handled, treated, processed, stored or packed for commercial purposes.*

The intended outcome, being the proposed amendment to Inverell LEP 2012, will enable development of the subject land for the purpose of a water bottling facility, notwithstanding the prohibition of the use in the RU1 Primary Production Zone.

PART 3 – JUSTIFICATION

This part of the planning proposal is split into the following sections:

Section A	Need for the planning proposal
Section B	Relationship to strategic planning framework
Section C	Environmental, social and economic impact

Section D State and Commonwealth interests

Information provided under each section is presented as a response to questions listed in the Department of Planning and Environment's document '*A guide to preparing planning proposals*'.

Section A – Need for the planning proposal

Question1 - Is the planning proposal a result of any strategic study or report?

No, the planning proposal request is being made by the owner, but would facilitate desirable outcomes that are put forward in various planning policies and strategic plans described in Section B.

There is no local or state strategic study or report that specifically references the subject site. Relationship and consistency of this Planning Proposal with the wider strategic planning framework is also discussed within Section B of this Part of the document.

Question 2 -Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

A planning proposal is considered to be the most appropriate means of enabling the extraction of water for commercial purposes from the subject land (defined as a 'water bottling facility').

The intended outcome of this Planning Proposal can only be achieved through a site-specific amendment to the Inverell LEP 2012 to permit a water bottling facility, with consent.

A general amendment could be made to the Inverell LEP 2012 to permit a water bottling facility, with consent in the RU1 zone, however this has wider implications and in this regard the proposal is justified as the amount of water being extracted is within the existing license maximum, without significant impacts of other land users (refer Attachment B).

Section B – Relationship to strategic planning framework

Question 3 - Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy or district plan or strategy (including any exhibited draft plans or strategies)?

The Planning Proposal is consistent with the Draft New England North Western Regional Growth Plan. The draft plan was exhibited from 19 December 2016 until 20 Feb 2017. It is currently being reviewed.

Question 4 - Is the planning proposal consistent with the local Council's Community Strategic Plan, or other local strategic plan?

Council has adopted the Inverell Strategic Plan 2009 – 2029. The Strategic Plan provides information on the aspirational goals (defined 'Destinations') for the Community, including the organisation's Mission and the Purpose.

The proposal is generally consistent with the relevant 'Destinations' identified in the table below.

Destination	Comment
A recognised leader in the broader context	Consistent. The proposal will facilitate the broadening of the Shires economic base which is important for enhancing Inverells position in the Region.
A community that is healthy educated and sustainable	The proposal is not inconsistent with this destination
An environment that is protected and sustained	Consistent. The proposal would utilise water resources that have already been approved for extraction, without affecting the agricultural resource supply (refer to Attachment B)
A strong local economy	The proposal provides an opportunity to expand the Shires economic base.
The community is supported by sustainable services and infrastructure.	Consistent. The proposal would not impact on local government services and the future development application would address impact on infrastructure.

Question 5 - Is the planning proposal consistent with the applicable State Environmental Planning Policies (SEPP's) ?

An assessment of relevant SEPP's is as contained in Attachment C. The proposal is not inconsistent with any provisions.

Question 6 - Is the planning proposal consistent with the applicable Ministerial Directions (s117 Directions)?

The following 117 Directions, discussed further in Attachment D, apply to the subject site:

- 1.2 Rural Zones;
- 1.5 Rural Lands;
- 2.3 Heritage Conservation;
- 3.3 Home Occupations
- 4.3 Flood Prone Land;
- 4.4 Planning for Bushfire Protection;
- 6.1 Approval and Referral Requirements, and
- 6.3 Site Specific Provisions.

No inconsistencies are considered sufficient to prevent the planning proposal from proceeding.

Section C – Environmental, social and economic impact

Question 7 - Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The subject land has been modified by agricultural practices. Some areas of vegetation remain on the site however these would not be impacted by the proposal.

No impact on critical habitat, threatened species, populations or ecological communities or their habitats is anticipated. This issue would need to be further addressed at Development Application stage.

Question 8 - Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

Water supply

The impact on water reserves and supply, and the associated impact on agriculture is the primary consideration. The report contained in Attachment B indicates that a large water supply exists. The amount of water to be extracted is within the existing licenced limit.

Aboriginal Heritage

A search of the Aboriginal cultural heritage mapping and database indicated that there are no Aboriginal objects or places registered with the Office of the Environment and Heritage as Registered AHIMS (Aboriginal Heritage Information Management System) Sites.

A copy of the AHIMS search record is attached (refer Attachment E).

European Heritage

The heritage database provided under Schedule 5 of the Inverell LEP 2012 indicated that no items of non-Indigenous/European heritage significance are known within or immediately adjoining the subject site. No impacts are anticipated.

Contamination

The testing undertaken indicates that the water is suitable for human consumption with little, or no treatment.

Traffic

The development application for the proposal will address this issue in detail, however it is expected that the transportation of water from the site in bulk is similar to an agricultural use of the land and the surrounding road infrastructure is suitable for the proposal.

Question 9 - How has the planning proposal adequately addressed any social and economic effects?

The Planning Proposal is not expected to generate any significant adverse social or economic impacts. The proposal will enable development of rural land for an alternative use to broaden the economic base of the region.

Section D – State and Commonwealth Interests

Question 10 - Is there adequate public infrastructure for the planning proposal?

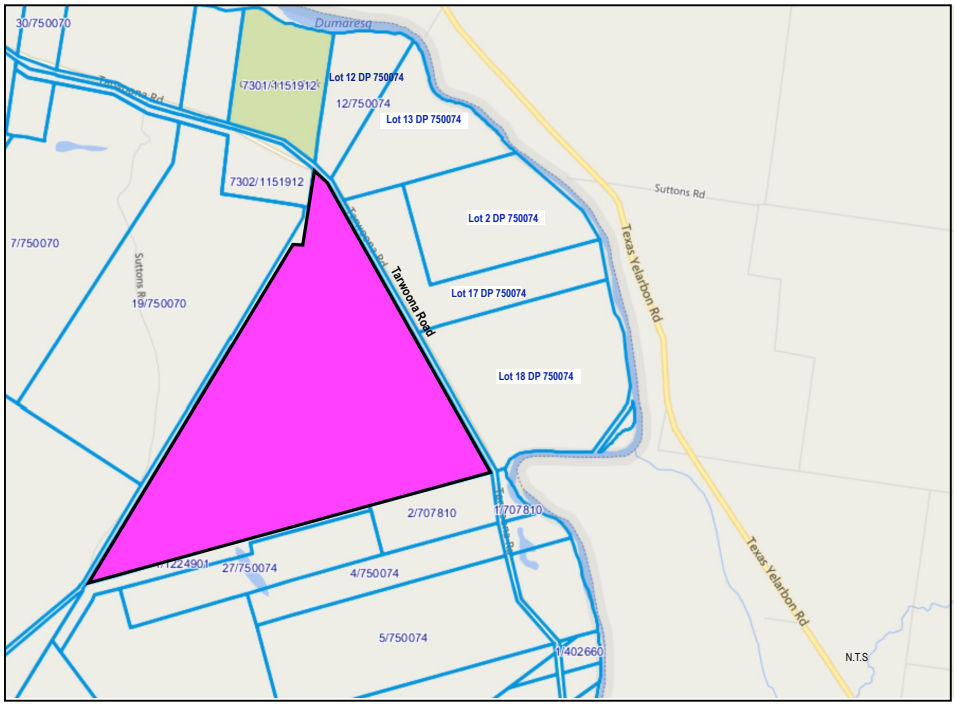
No significant infrastructure impacts are expected. As discussed above, traffic impacts are expected to be similar to an agricultural use of the land.

Question 11 - What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

Views of relevant government authorities would be sought by Council as part of the statutory planning proposal process.

PART 4 – MAPPING

Mapping would be undertaken by Inverell Shire Council as part of the Planning Proposal preparation process. This mapping could be based on the following:



Inverell Local Environmental Plan 2012

Additional Permitted Use

Refer to Schedule 1 Item 1

Proposed Changes to Inverell LEP 2012 : Permitted Uses Map

PART 5 – COMMUNITY CONSULTATION

This part of the planning proposal would be completed following receipt of the Department of Planning and Environment's Gateway determination.

This planning proposal is considered to be low impact and as such, it is proposed that this planning proposal be placed on public exhibition for a period of 14 days.

PART 6 – PROJECT TIMELINE

This section would be completed following the Gateway Determination.

SUMMARY AND CONCLUSIONS

The objective and intended outcome of this planning proposal is to enable the extraction of water for commercial bottling purposes ('water bottling facility') on land referred to as Proposed Lot 1 Tarwoona Road, Camp Creek.

The preferred method to achieve this outcome is an amendment to Schedule 1 of LEP 2012 allowing development of a water bottling facility despite the prohibition in the RU1 zone.

The proposal is justified as:

- It represents a viable alternative rural land use, using an annual water extraction rate that is within the licenced maximum.
- The proposal would result in an economic use of rural land.
- The water can be extracted at a rate that doesn't adversely affect agricultural water supply.
- The water supply is of a high quality for drinking.
- The water can be transported from the site in bulk so impacts on local roads are minimised.

The proposal represents a good economic use of the land and given that the water has already been approved for extraction, is unlikely to result in adverse impacts in terms of competition for this resource. The proposal is justified in terms of strategic planning policies.

Kellie Shapland Town Planning Pty Ltd
ATF Kellie Shapland Town Planning Trust ABN 64 117 972 983

PO Box 421, Murwillumbah NSW 2484
t: 0438 725 283
e: kellie@tweedtownplanner.com.au
w: www.tweedtownplanner.com.au

Usage Statement

This report was prepared for the purpose and exclusive use of Lochiel Projects Pty Ltd for the purpose of submitting a planning proposal request to Inverell Shire Council. It is not to be used for any other purpose or by any other person or corporation. Kellie Shapland Town Planning (KSTP) accepts no liability or responsibility for, or in respect of, any use of or reliance upon its report and its supporting information by any third party. This report is based on information made available by the client. The validity and comprehensiveness of supplied information has not been independently verified and, for the purposes of this report, it is assumed that the information provided to KSTP is both complete and accurate.

Document History

Version	**Purpose**	**Issue Date**	**To whom**
Draft v.1	Client Review	11.5.17	Garry Hill
Draft v.1	Client Review	19.5.17	Garry Hill
Final	Lodgement	25.5.17	ISC & Garry Hill

Attachment A

Water Extraction Licence No. 30993

Department of Primary Industries Water

Statement of Conditions

as at Wednesday, 23 March 2016

issued under Water Management Act 2000

WAL number	30993
Reference number	90AL827644

Contact for service of documents

Name	Lochiel Projects Pty Ltd
Address	Sellwood Hills Lot 4150 Wide Bay Highway KILKIVAN QLD 4600

All holders

Name(s)	Lochiel Projects Pty Ltd

Licence details

Water source	NSW BORDER RIVERS UPSTREAM KEETAH BRIDGE ALLUVIAL GROUNDWATER SOURCE
Water sharing plan	NSW BORDER RIVERS UNREGULATED AND ALLUVIAL WATER SOURCES
Management zone	
Category	AQUIFER
Share component	511 units
Nominated work(s)	90CA827645
Tenure type	Continuing

Information about a water licence or approval

Use this tool to search for information about water licences and approvals issued under the *Water Act 1912* or *Water Management Act 2000*.

Select the type of licence or approval and enter the licence or approval number:

- **Water access licence (WAL):** a WAL number starts with the letters 'WAL' followed by several numbers; a WAL also has a reference number that starts with a two digit number, followed by 'AL' and then several numbers.
- **1912 water licence:** a water licence number starts with a two digit number, followed by a two letter code and then several numbers. Note: a PT reference number cannot be entered.
- **Approval:** an approval number starts with a two digit number, followed by a two letter code (WA, UA, CA or FW) and then several numbers.

Search for information about either a:

◉ **Water access licence (WAL) issued under the *Water Management Act 2000***

Water Access Licence (WAL) Number WAL 30993

A WAL number starts with the letters 'WAL' followed by several numbers

Can't find your WAL number? Do you have a reference number? A reference number starts with a two digit number, followed by 'AL' and then several numbers. Use the following tool to find your WAL by entering your reference number. Enter the reference number to find the WAL number.

Notes:

The search results will list the conditions imposed on the water access licence. Any approved water supply work/s nominated on the water access licence are identified by the approval number/s for the work/s.

The information about a water access licence provided in the search results is a summary and may not always be up to date. If you require full and up to date details about a particular water access licence (including current holders, share and extraction component details, encumbrances and notations) you should search the Water Access Licence Register administered by Land and Property Information.

○ Approval issued under the *Water Management Act 2000*

Find out if a *Water Act 1912* licence has been converted

○ Water licence conversion status

«Previous Search Print Export

Search Results

Category [Subcategory]	Status	Water Source	Tenure Type	Management Zone	Share Components (units or ML)
Aquifer	Current	Nsw Border Rivers Upstream Keetah Bridge Alluvial Groundwater Source	Continuing		511.00

Extraction Times or Rates

Subject to conditions water may be taken at any time or rate

Nominated Work Approval(s)

90CA827645

- Conditions

Plan Conditions

Water sharing plan	NSW Border Rivers Unregulated and Alluvial Water Sources
	Take of water
MW0605-00001	Water must be taken in compliance with the conditions of the approval for the nominated work on this access licence through which water is to be taken.
MW0603-00001	The total volume of water taken under this access licence in any water year must not exceed a volume equal to: A. the sum of water in the account from the available water determination for the current year, plus B. the net amount of water assigned to or from the account under a water allocation assignment, plus C. any water re-credited by the Minister to the account.
	Monitoring and recording
MW2338-00001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.

MW0606-00001	The volume of water taken in the water year must be recorded in the logbook at the end of each water year. The maximum volume of water permitted to be taken in that water year must also be recorded in the logbook.
MW2339-00001	A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.
	Reporting
MW0051-00002	Once the licence holder becomes aware of a breach of any condition on this access licence, the licence holder must notify the Minister as soon as practicable. The Minister must be notified by: A. email: water.enquiries@dpi.nsw.gov.au, or B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.

Other Conditions

NIL

Information about a water licence or approval

Use this tool to search for information about water licences and approvals issued under the *Water Act 1912* or *Water Management Act 2000*.

Select the type of licence or approval and enter the licence or approval number:

- **Water access licence (WAL):** a WAL number starts with the letters 'WAL' followed by several numbers; a WAL also has a reference number that starts with a two digit number, followed by 'AL' and then several numbers.
- **1912 water licence:** a water licence number starts with a two digit number, followed by a two letter code and then several numbers. Note: a PT reference number cannot be entered.
- **Approval:** an approval number starts with a two digit number, followed by a two letter code (WA, UA, CA or FW) and then several numbers.

Search for information about either a:

○ Water access licence (WAL) issued under the *Water Management Act 2000*

◉ **Approval issued under the *Water Management Act 2000***

Approval Number 90 CA 827645

Notes: The search results will list the conditions imposed on the approval and also list the number/s of any water access licence/s that nominate the water supply works associated with the approval.

This search tool does not include information about controlled activity approvals. Information publicly available from a register of controlled activity approvals is available at our local offices.

Find out if a *Water Act 1912* licence has been converted

○ Water licence conversion status

«Previous Search Print Export

Search Results

Kind of Approval	Issue Date	Expiry Date	Approval Number	Status	Water Source
Water Supply Works And Water Use	01-JUN-2012	31-MAY-2025	90CA827645	Current	Nsw Border Rivers Upstream Keetah Bridge Alluvial Groundwater Source

Work Type	Description	No of Works	Location (Lot/DP)
Extraction Works Gw	Artesian Bore	1	Lot 2, DP 750074

Use Purpose(s)	Location(s)
Irrigation	Lot 12, DP 750074 Lot 13, DP 750074 Lot 17, DP 750074 Lot 18, DP 750074 Lot 2, DP 750074

Water Access Licences nominating these works

Reference Number	WAL Number
90AL827644	30993

- Conditions

Plan Conditions

Water sharing plan	**NSW Border Rivers Unregulated and Alluvial Water Sources**
	Water management works
MW0097-00001	If contaminated water is found above the production aquifer during the construction of the water supply work authorised by this approval, the licensed driller must: A. notify the relevant licensor in writing within 48 hours of becoming aware of the contaminated water, and B. adhere to the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time.
MW0044-00001	A. When a water supply work authorised by this approval is to be abandoned or replaced, the approval holder must contact the relevant licensor in writing to verify whether the work must be decommissioned. B. The work is to be decommissioned, unless the approval holder receives notice from the Minister not to do so. C. When decommissioning the work the approval holder must: i. comply with the minimum requirements for decommissioning bores prescribed in the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time, and ii. notify the relevant licensor in writing within sixty (60) days of decommissioning that the work has been decommissioned.

MW0039-00001	The water supply work authorised by this approval must be constructed in accordance with the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time.
	Monitoring and recording
MW0484-00001	Before water is taken through the water supply work authorised by this approval, confirmation must be recorded in the logbook that cease to take conditions do not apply and water may be taken. The method of confirming that water may be taken, such as visual inspection, internet search, must also be recorded in the logbook. If water may be taken, the: A. date, and B. time of the confirmation, and C. flow rate or water level at the reference point in the water source must be recorded in the logbook.
MW2336-00001	The purpose or purposes for which water is taken, as well as details of the type of crop, area cropped, and dates of planting and harvesting, must be recorded in the logbook each time water is taken.
MW0384-00001	The following information must be recorded in the logbook for each period of time that water is taken: A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and B. the access licence number under which the water is taken, and C. the approval number under which the water is taken, and D. the volume of water taken for domestic consumption and/or stock watering.
MW0482-00001	Where a water meter is installed on a water supply work authorised by this approval, the meter reading must be recorded in the logbook before taking water. This reading must be recorded every time water is to be taken.
MW0385-00001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.
	Reporting
MW0383-00001	A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.
MW0051-00001	Once the approval holder becomes aware of a breach of any condition on this approval, the approval holder must notify the Minister as soon as practicable. The Minister must be notified by: A. email: water.enquiries@dpi.nsw.gov.au, or B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.
Other Conditions	
	Water management works
DK1363-00001	The approval holder must not construct or install works used for the purpose of conveying, distributing or storing water from the works authorised by this approval, that obstruct the reasonable passage of floodwaters flowing in, to, or from a river or lake.
DK1202-00001	The approval holder must allow the relevant licensor or any person authorised by it, full and free access to the approved works, either during or after construction, for the purpose of carrying out inspection or test of the approved works and its fittings and must carry out any work or alterations deemed necessary by the department for the protection or proper maintenance of the approved works, or the control of the water extracted and for the protection of the quality and the prevention from pollution or contamination of sub-surface water.

Attachment B

Review of Mineral Water Quality and Hydrogeological Setting
(Hydroilex Pty Ltd, January 2017)

HYDROILEX

Groundwater Geosciences

REPORT

REVIEW OF MINERAL WATER QUALITY & HYDROGEOLOGICAL SETTING

LOCHIEL BORE, NORTHERN NSW

LOT 18 DP750074

1586 TARWOONA ROAD, CAMP CREEK 4385

PREPARED FOR:	**LOCHIEL PROJECTS PTY LTD**
REPORT NUMBER:	**HG.17.01.7 NW**
DATE:	**23 JANUARY 2017**

HYDROILEX PTY LTD

GROUNDWATER GEOLOGY ENVIRONMENTAL GEOTHERMAL

ACN 003.372.834 ABN 57 003 372 834

38 GIBBS STREET, MIRANDA, NSW, 2228

Tel: 02 95401029 Fax: 02 95401002

www.hydroilex.com.au

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DISTRIBUTION & REPORT STATUS

Report Title:	Review of Mineral Water Quality and Hydrogeological Setting – Lochiel Bore, Northern NSW	
Client:	Lochiel Projects P/L	
Report Number:	HG.17.01.07NW	
Author:	John Lee (Principal Geoscientist & Director)	
Reviewed:	Rohan Last (Hydrogeologist)	
Issued:	24 January 2017	
Status:	Revision 1	
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	NOW	-
	File	1

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1.0 INTRODUCTION

A programme of aquifer sampling was conducted on 28 November 2016 which involved a comprehensive sampling of groundwater abstracted from the 'Lochiel' irrigation bore.

The purpose of the detailed water analysis was for several reasons:

1. To analyse a comprehensive suite of analytes to satisfy Australian Drinking Water Standards, the Australian Bottled Water Institute, and a 'Chinese Mineral Water Standard'.
2. To confirm that the water meets the quality standards of those schedules, and to prepare a comparative reference.
3. To confirm that the water does not possess any trace pesticides.
4. To confirm that the water is 'low' in iron and manganese.
5. To verify that there are no traces of 'waste water' or effluent.
6. To confirm that the water does not carry any micro-biological contamination.
7. To demonstrate that the aquifer has the capacity to produce a high quality product in large volumes.

The testing, sampling and delivery from the site to the laboratory was conducted in a manner and time frame which complies with the analytical standard required. Samples were lodged at an *ALS* laboratory in Brisbane. The collection of samples was taken from the bore in a sterile environment after the bore had been pumping for several days at a high rate.

The testing programme followed a review of the water chemistry and recommendation set out in a prior *Hydroilex* report (HG16.4.4NW).

The site location of the adjacent properties 'Lochiel' and 'Avondale' are shown in **Figure 1**, with greater detail and Bore Identification in **Figure 2**. The nearest commercial centre, at Texas is located 300km southwest of Brisbane.

The subject analyses in this report deal with the 'Lochiel Electric Bore', registered as GW900918, located in Lot 18 DP 750074. The bore is currently licensed for 'irrigation' purposes, where there is an allocation of 511ML (refer to WAL30993), consistent with License 90AL827644.

2.0 HYDROGEOLOGICAL SETTING

The site of the bore is located within an alluvial sequence of sands and gravels associated with the Dumaresq River, part of the upper reaches of the Darling River, which locally defines the boundary between New South Wales and Queensland.

The Lochiel Bore was constructed in 1995 as a steel-cased 97m deep bore, with the main alluvial aquifer zone at 76 – 95m. Basement volcanics were intersected at 95m depth.

The alluvial aquifer is recognised as part of an extensive deep (but narrow) alluvial system, which is confined mainly in relative proximity to the river. The region is managed by the NSW

Office of Water (*NOW*) as the *Border Rivers Water Management Area* (**Figure 5**), of which the Border River Alluvium is part.

A Water Sharing Plan for the *NSW Border Rivers Unregulated and Alluvial Water Sources* was commenced on 1 June 2012, and managed as the *NSW Border Rivers Upstream Keetah Bridge Alluvial Groundwater Source.* The location of the water source is shown in **Figure 6**.

The regional geological setting of area is shown in **Figure 4**. The extensive alluvial cover is identified between Jurassic sediments to the west, and granites to the south, and deformed Carboniferous-aged rocks to the east.

The region has an annual rainfall of approximately 660mm. Aquifer recharge is principally from meteoric water within the upper reaches of the catchment, as shown in **Figure 5**. Based on the available information, the aquifer from which the Lochiel Bore extracts water, is an extensive resource. The large groundwater entitlement held by Lochiel Projects Pty Ltd is consistent with the deemed capacity of the resource.

3.0 MINERAL WATER CHEMISTRY

Water analyses are provided in summary form in **Table 1**, with certified results in **Appendix 1**.

Table 1 has provided comparative standards for a suite of metals, compounds, and pesticides. The comparative standards are:

- Australian Bottled Water Institute (ABWI) – Model Code 2014
- Australian Drinking Water Guidelines ADWG) – updated March 2014
- National Standard of Peoples Republic of China (CS)

The following is noted in respect of these standards:

1. The *ADWG* is the most appropriate standard, and the analyses passed in every respect, satisfying all health and aesthetic limits.
2. The *ABWI* concentration limits are similar to those of the ADWG, with some additional limits that reflect sanitation that would be appropriate after transporting or bottling the product.
3. The *CS* qualification considers the 'passing' within limits in groups of analytes. The water qualifies within those constraints.

3.1 SUMMARY OF MAIN RESULTS

1. The water has the following character (refer to **Table 1**):

pH	8.01
TDS	417 mg/L
Hardness	117 mg/L
Bicarbonate	221 mg/L
Fluoride	0.6 mg/L
Chloride	92 mg/L
Sulphate	13 mg/L
Calcium	27 mg/L
Magnesium	12 mg/L
Sodium	103 mg/L
Iron	<0.05 mg/L
Manganese	0.170 mg/L
Dissolved metals	all very 'low levels'
Nitrates	very 'low'

2. A comprehensive analytical suite for organochlorine and organophosphorus pesticides did not detect any traces of those compounds above the limits of detection of the analytical methods (refer to **Table 1B**).

3. Radionuclide concentrations are very low, and well below health limits.

4. There are no traces of any microbiological contamination.

5. The water can be classified a *bicarbonate-sodium* water.

4.0 SUMMARY

The following summarises the results of the hydrochemical review of the water quality, and geological setting of the site, defined as the 'Lochiel Bore':

1. The groundwater passes all appropriate tests in terms of health requirements.

2. Trace metals, radionuclides, and pesticides concentrations are well below health concentration thresholds.

3. The water is clearly defined as a 'mineral water', rather than a 'spring water'.

4. The water has an exceptional taste, and is unlikely to require any significant pre-bottling treatment.

5. The aquifer is associated with a deep thick alluvial channel related to the palaeo drainage of the Dumaresq River.

6. The groundwater allocation is very large, and subject to *NOW* and Council endorsements, it is considered that a large assignment of water will be possible for an 'industrial' purpose, subject to meeting all compliances.

7. The detailed analyses will provide the necessary supporting chemistry which will assist in taking the project to a pre-market stage.

5.0 REFERENCES

Australian Bottled Water Institute Inc. (2014) Model Code.

Australian Government, 2015. Australian Drinking Water Guidelines 6. National Water Quality Management Strategy. Natural Resource Management Ministerial Council. National Health and Medical Research Council.

National Standard of Peoples Republic of China – potable Natural Mineral Water GB8537-200x

Hydroilex 2015. Review of 'Lochiel' and 'Avondale' Groundwater Quality (Hydroilex Report HG16.4.4 NW)

Table 1A 'Lochiel', Electric Bore - Water Analyses Nov. 2016

Mineral Water Standards Comparison

	Test	Units	Sample 28.11.16 Electric Bore	ABWI Limit[1]	ADWG[2]	Pass/Fail ADWG	Chinese Standard (CS)[3]	Pass/Fail CS	Comments wrt ADWG
MAIN CHEMISTRY	pH	pH units	**8.01**	3.5-8.5*	++	Pass	-		6.5-8.5 aesthetic
	Sp.Conductance (EC)	uS/cm	**736**	++	++	Pass	-		
	T Diss Salt (c) - TDS	mg/L	**417**	>250 for mineral water*	++	Pass	>1000	Fail	600 aesthetic
	Colour	PCU	**3**	<5*	++	Pass	<15	Pass	
	Turbidity	NTU	**1.3**	<0.5*	5	Pass	<5	Pass	
	Total Hardness	mg/L	**117**	++	200	Pass	-		Good quality
DISSOLVED MAJOR CATIONS & ANIONS	Bicarbonate	mg/L	**221**	++	++	Pass	-		
	Carbonate	mg/L	**0**	++	++	Pass	-		
	Fluoride	mg/L	**0.6**	1.0	1.5	Pass	(<1.5)	(Pass)	
	Chloride	mg/L	**92**	250*	250	Pass	-		*
	Sulphate	mg/L	**13**	250*	250	Pass	-		*
	Diss Calcium	mg/L	**27**	++	++	Pass	-		
	Diss Magnesium	mg/L	**12**	++	++	Pass	-		
	Diss Potassium	mg/L	**4**	++	++	Pass	-		
	Diss Sodium	mg/L	**103**	++	++	Pass	-		* 180 aesthetic
DISSOLVED METALS	Aluminium	mg/L	**<0.01**	++	++	Pass	-		0.02 aesthetic
	Antimony	mg/L	**<0.001**	0.006	0.003	Pass	(<0.005)	(Pass)	
	Arsenic	mg/L	**<0.001**	0.01	0.01	Pass	(<0.01)	(Pass)	
	Barium	mg/L	**0.211**	1	2	Pass	(<0.7)	(Pass)	
	Berryllium	mg/L	**<0.001**	++	0.06	Pass	-		
	Boron	mg/L	**0.08**	++	4	Pass	(<5)	(Pass)	
	Bromine	mg/L	**0.5**	(0.01 bromate)	<0.5 (0.02 bromate)	*Pass*	(<0.01) bromate		reaction from ozone
	Cadmium	mg/L	**<0.0001**	0.003	0.002	Pass	(<0.003)	(Pass)	
	Cobalt	mg/L	**<0.001**	++	++	Pass	-		
	Chromium	mg/L	**<0.001**	0.05	0.05	Pass	(<0.05)	(Pass)	
	Copper	mg/L	**<0.001**	1	2	Pass	<1	(Pass)	*
	Iodine	mg/L	**0.1**	++	++ (<0.5 iodide)	Pass	>0.2 iodide	Fail?	
	Iron	mg/L	**<0.05**	0.3	++	Pass	-		0.3 aethetic
	Lead	mg/L	**<0.001**	0.005	0.01	Pass	(<0.01)	(Pass)	
	Lithium	mg/L	**0.002**	++	++	Pass	>0.20	Fail	
	Manganese	mg/L	**0.170**	0.05	0.5	Pass	(<0.04)	(Pass)	0.1 aesthetic
	Molybdenum	mg/L	**0.002**	++	0.05	Pass	-		
	Mercury	mg/L	**<0.0001**	0.0005	0.001	Pass	(<0.001)	(Pass)	
	Nickel	mg/L	**<0.001**	0.1	0.02	Pass	(<0.02)	(Pass)	
	Selenium	mg/L	**<0.01**	0.01	0.01	Pass	>0.01 (<0.05)	Fail (Pass)	
	Silver	mg/L	**<0.001**	0.025	0.1	Pass	(<0.05)	(Pass)	
	Strontium	mg/L	**0.434**	++	++	Pass	>0.20	Pass	
	Vanadium	mg/L	**<0.01**	++	++	Pass	-		
	Zinc	mg/L	**<0.005**	5	3	Pass	>0.20	Fail	
COMPOUNDS	Ammonia as N	mg/L	**0.15**	++	++	Pass	-		0.5 aesthetic
	Cyanide	mg/L	**<0.004**	0.1	0.08	Pass	((<0.10))	((Pass))	
	Silica (reactive)	mg/L	**15.6**	++	++	Pass	>25	Fail	80 aesthetic
	Nitrate (as N)	mg/L	**<0.01**	50 (as NO3)	50 (as NO3)	Pass	(<45)	(Pass)	
	Nitrite (as N)	mg/L N	**<0.01**	3 (as NO2)	3 (as NO2)	Pass	((<0.1))	((Pass))	
	Phosphorous (reacive)	mg/L P	**0.08**	++	++	Pass	-		
	Sulphide	mg/L S2	**<0.01**	0.05	++	Pass	-		
	Free CO2	mg/L	**4**	++	++	Pass	>250	?	after bottling?
	Total CO2	mg/L	**199**	++	++	Pass			
Radio-nucleides	Gross alpha	Bq/L	**<0.05**	<0.5	++	Pass	Total <1.5	Pass	
	Gross beta	Bq/L	**0.16**	<1.85	++	Pass			
MICRO ORGANISMS									
	Faecal Coliforms	CFU/100mL	**<1**	0	0	Pass			
	E.coli	CFU/100mL	**<1**	0	0	Pass			
	Coliforms	CFU/100mL	**<1**	0	0	Pass			
	Heteromorphic Plate Count	CFU/mL (22^0C)	**<1**			Pass			
	Heteromorphic Plate Count	CFU/mL (36^0C)	**-2**			Pass			

Note: mg/L = milligrams per litre

++ no health-based guideline is necessary

\- no standard

Note: 1. **CS** Requires at least one (1) pass in 'boundary condition' - the 'Lochiel' water passes 1 out of 8 tests (blue print)

1. Australian Bottled Water Institute (Model Code, 2014)
2. Australian Drinking Water Guidelines, (updated March 2015) for Health
3. National Standard of People's Republic of China GB8537-200x

Table 1B 'Lochiel', Electric Bore - Water Analyses Nov. 2016

Mineral Water Standards Comparison

	Test	Units	Sample 28.11.16	ABWI Limit[1]	FSANZ limit[2]	NHMRC1996[3]	Typical[4]	Comments
			Electric Bore			'Health'		
ORGANOCHLORINE PESTICIDES (OC)								
	alpha-BHC	ug/L	<0.5					
	Hexachlorobenzene (HCB)	ug/L	<0.5					
	beta-BHC	ug/L	<0.5					
	gamma-BHC	ug/L	<0.5					
	delta-BH	ug/L	<0.5					
	Heptachlor	ug/L	<0.5					
	Aldrin	ug/L	<0.5					
	Heptachlor epoxide	ug/L	<0.5					
	trans-Chlordane	ug/L	<0.5					
	alpha-Endosulfan	ug/L	<0.5					
	cis-Chlordane	ug/L	<0.5					
	Dieldrin	ug/L	<0.5					
	4.4`-DDE	ug/L	<0.5					
	Endrin	ug/L	<0.5					
	beta-Endosulfan	ug/L	<0.5					
	4.4`-DDD	ug/L	<0.5					
	Endrin aldehyde	ug/L	<0.5					
	Endosulfan sulfate	ug/L	<0.5					
	4.4`-DDT	ug/L	<2					
	Endrin ketone	ug/L	<0.5					
	Methoxychlor	ug/L	<2					
	Total Chlordane (sum)	ug/L	<0.5					
	Sum of DDD + DDE + DDT	ug/L	<0.5					
	^ Sum of Aldrin + Dieldrin	ug/L	<0.5					
ORGANOPHOSPHORuS PESTICIDES (OP)	Dichlorvos	ug/L	<0.5					
	Demeton-S-methyl	ug/L	<0.5					
	Monocrotophos	ug/L	<2					
	Dimethoate	ug/L	<0.5					
	Diazinon	ug/L	<0.5					
	Chlorpyrifos-methyl	ug/L	<0.5					
	Parathion-methyl	ug/L	<2					
	Malathion	ug/L	<0.5					
	Fenthion	ug/L	<0.5					
	Chlorpyrifos	ug/L	<0.5					
	Parathion	ug/L	<2					
	Pirimphos-ethyl	ug/L	<0.5					
	Chlorfenvinphos	ug/L	<0.5					
	Bromophos-ethyl	ug/L	<0.5					
	Fenamiphos	ug/L	<0.5					
	Prothiofos	ug/L	<0.5					
	Ethion	ug/L	<0.5					
	Carbophenothion	ug/L	<0.5					
	Azinphos Methyl	ug/L	<0.5					
GLYPHOS PATE & AMPA		ug/L	<0.5					
	Glyphosphate	ug/L	<1					
	AMPA	ug/L	<1					

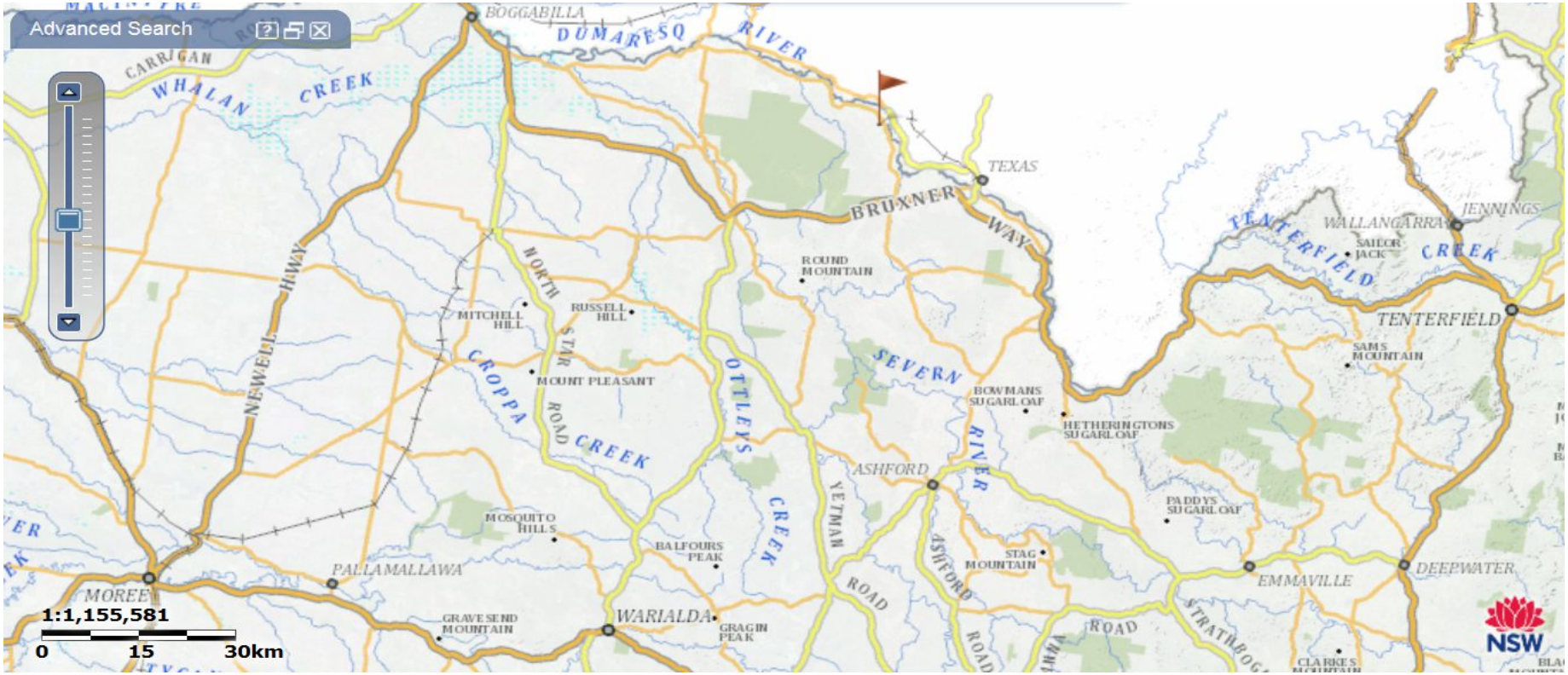
ALL SPECIES BELOW LIMITS OF ANALYTICAL DETECTION

1. Australian Bottled Water Institute (Model Code, June 2004)
2. Food Standards Australia and New Zealand (Standard 2.6.2)
3. NHMRC 1996 National Health and Medical Association
4. 'Typical Mount Franklin' - Bottled Water

Note: mg/L Milligrams per litre
ug/L micrograms per litre

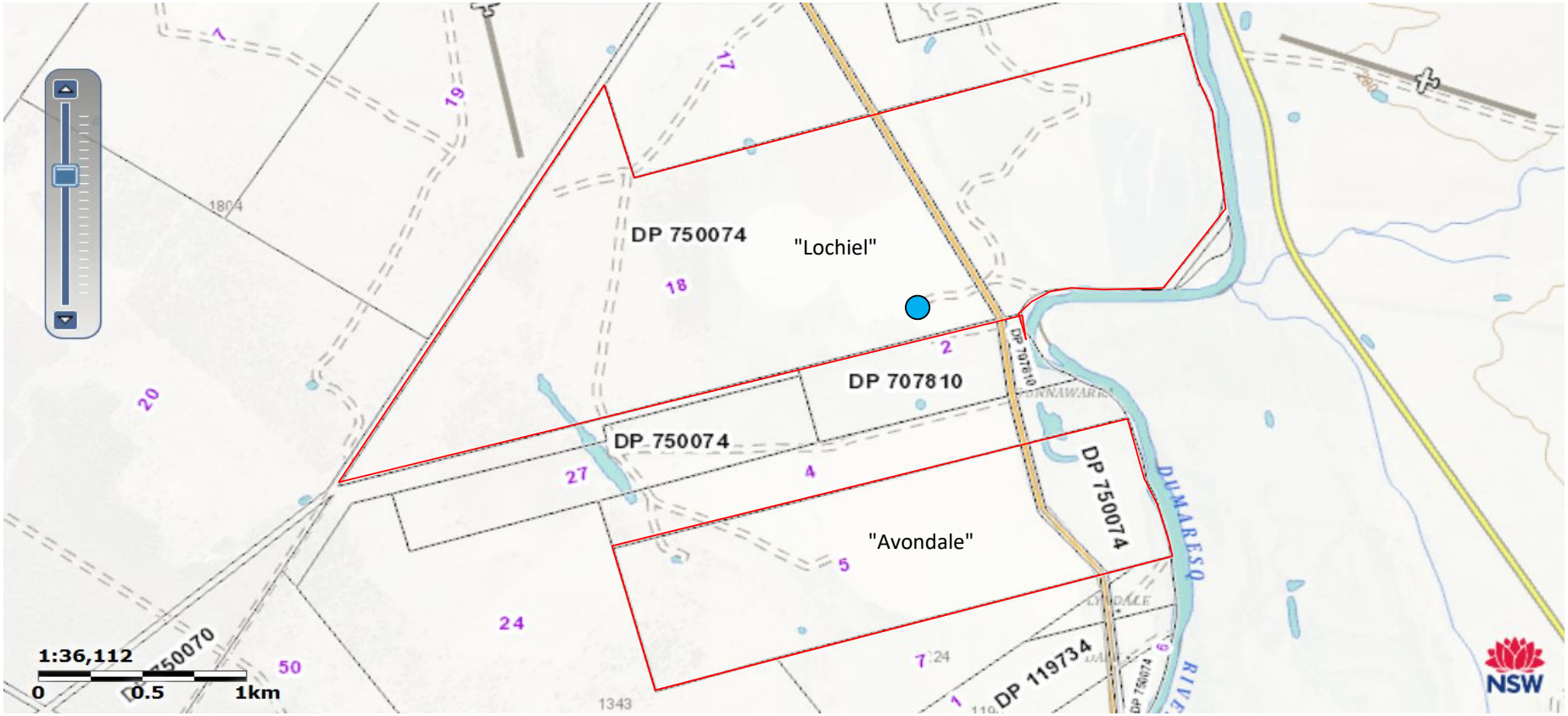
++ no health-based guideline is necessary
** The ABWI limit is listed in the lowest limit of either ABWI and FSANZ
* Aesthetic , non health related

FIGURES



N

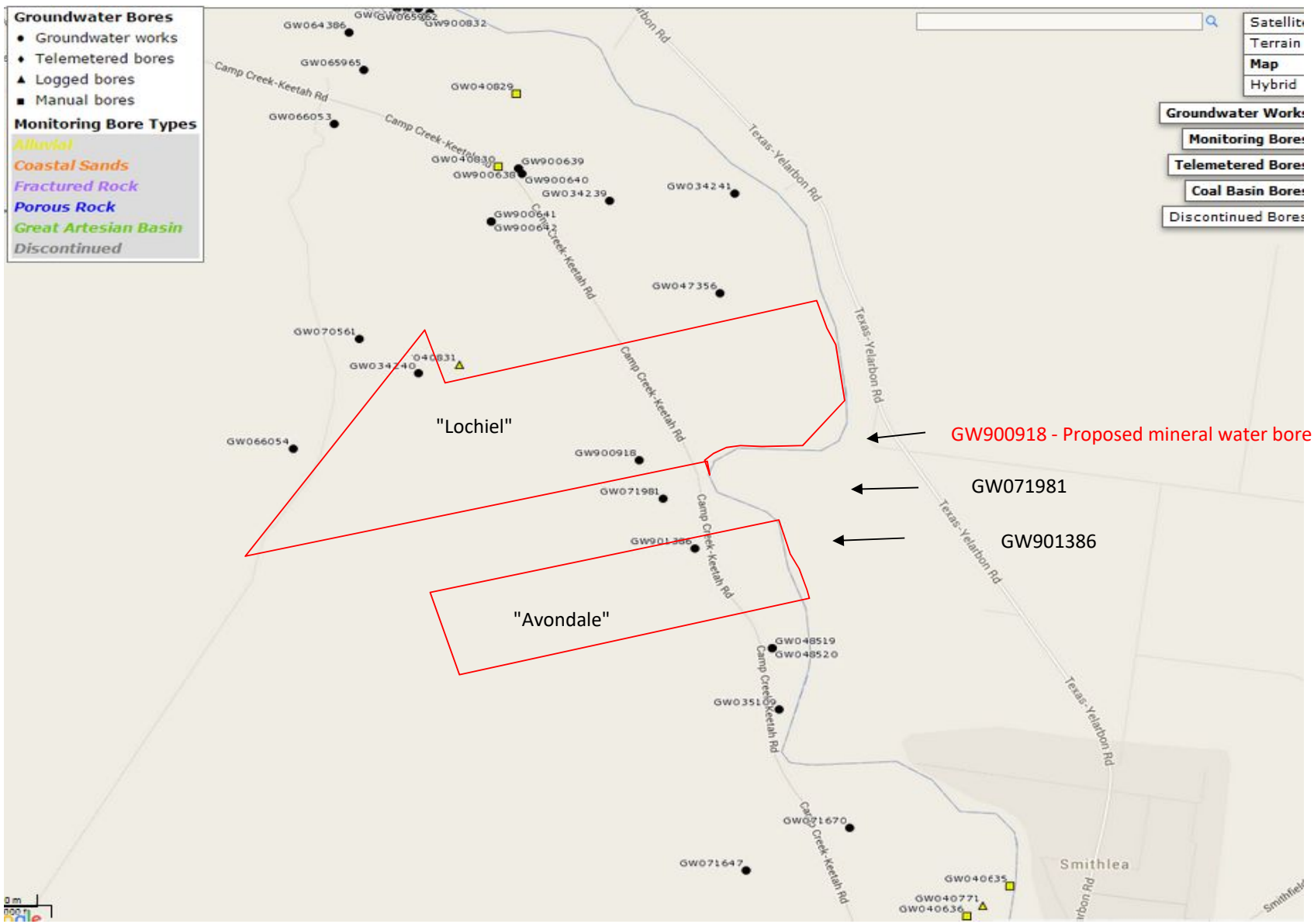
Hydroilex Pty Ltd www.hydroilex.com.au	UTM: - Date: January 2017 Drawn: RJL Approved: RJL	**Lochiel Projects P/L Proposed Mineral Water Project** **Site Location Map**	**Figure: 1**



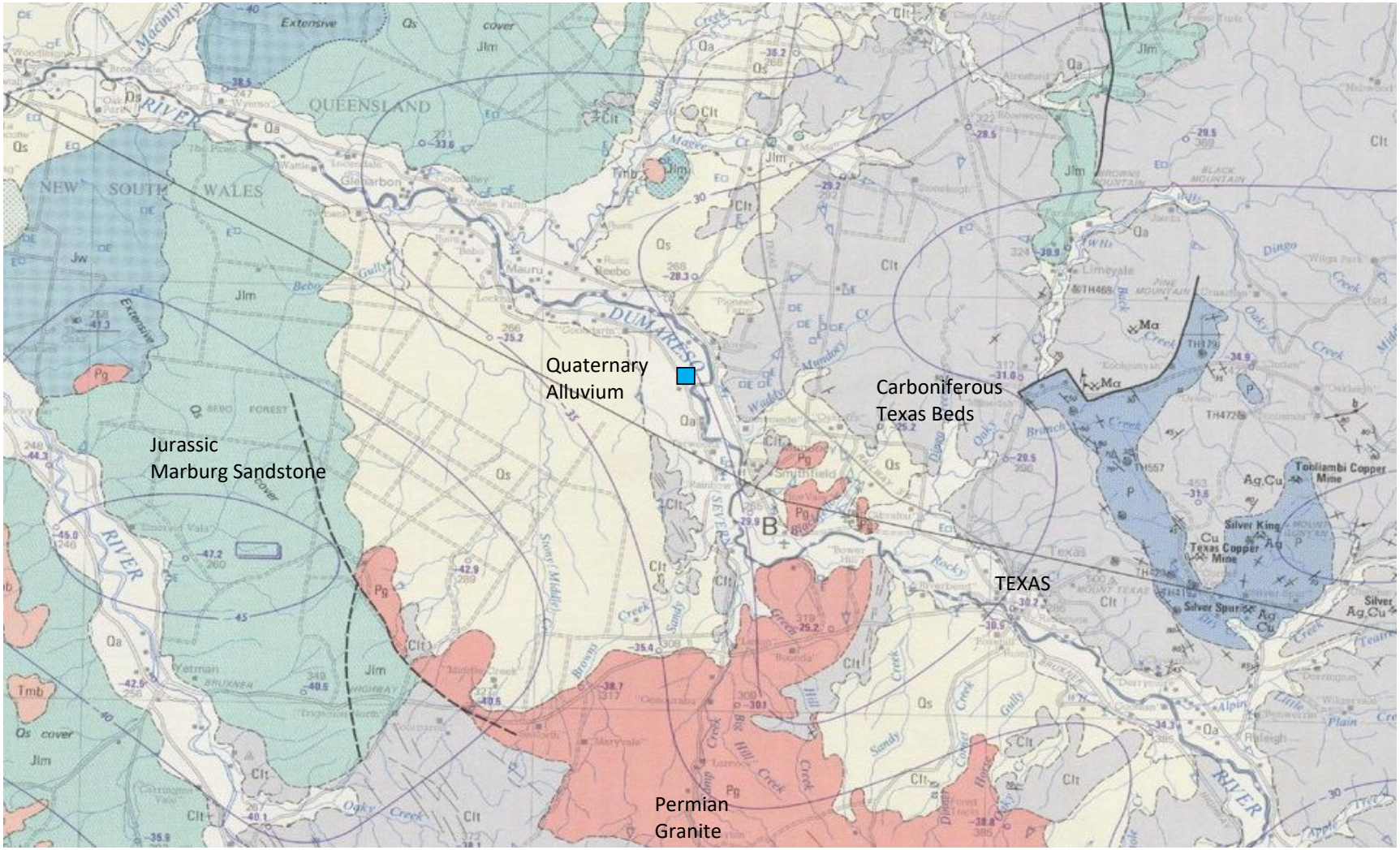
Bore Location

N

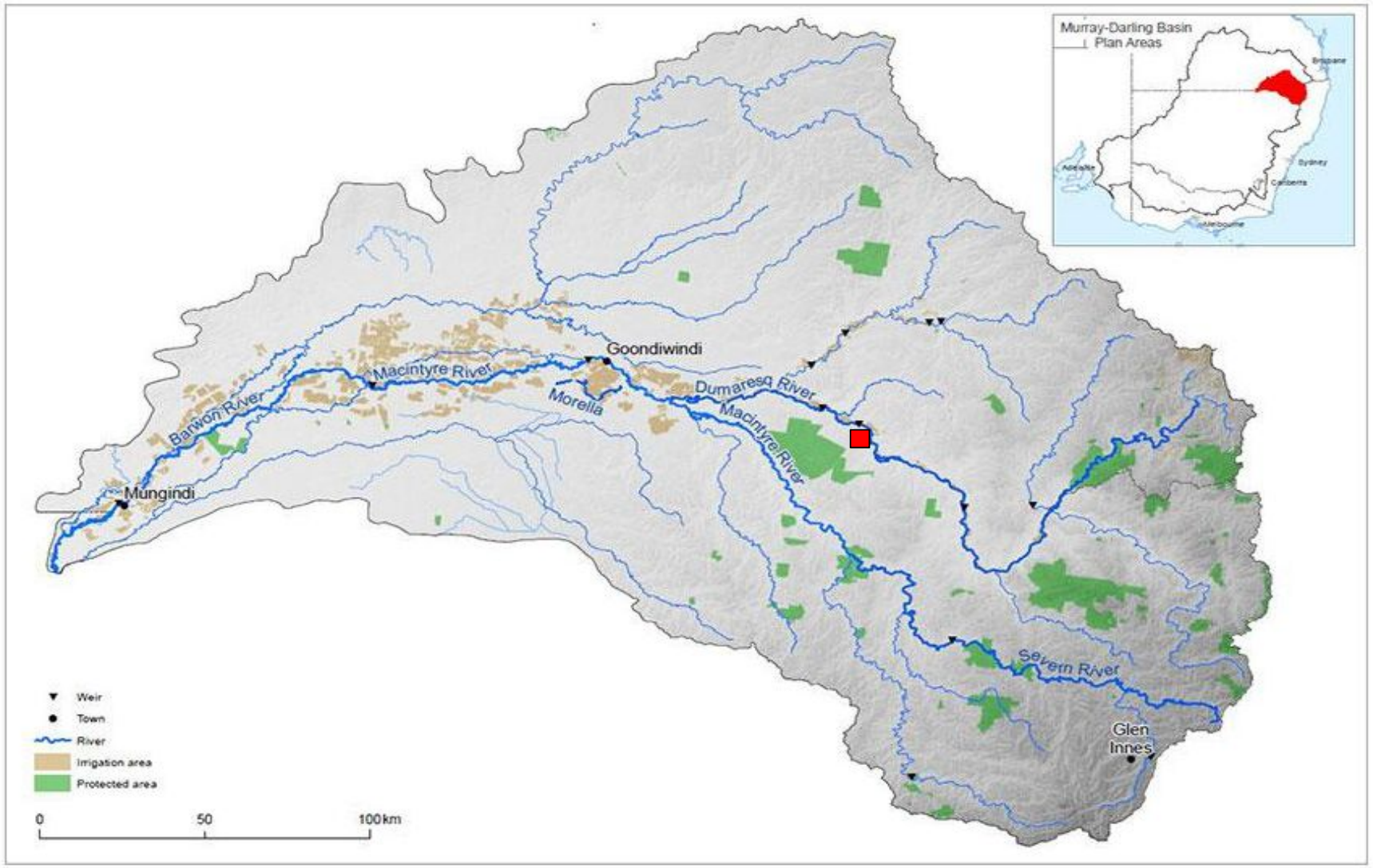
Hydroilex Pty Ltd www.hydroilex.com.au	UTM: - Date: January 2017 Drawn: RJL Approved: RJL	**Lochiel Projects P/L Proposed Mineral Water Project** **Cadastral Plan showing Bore Location**	**Figure: 2**



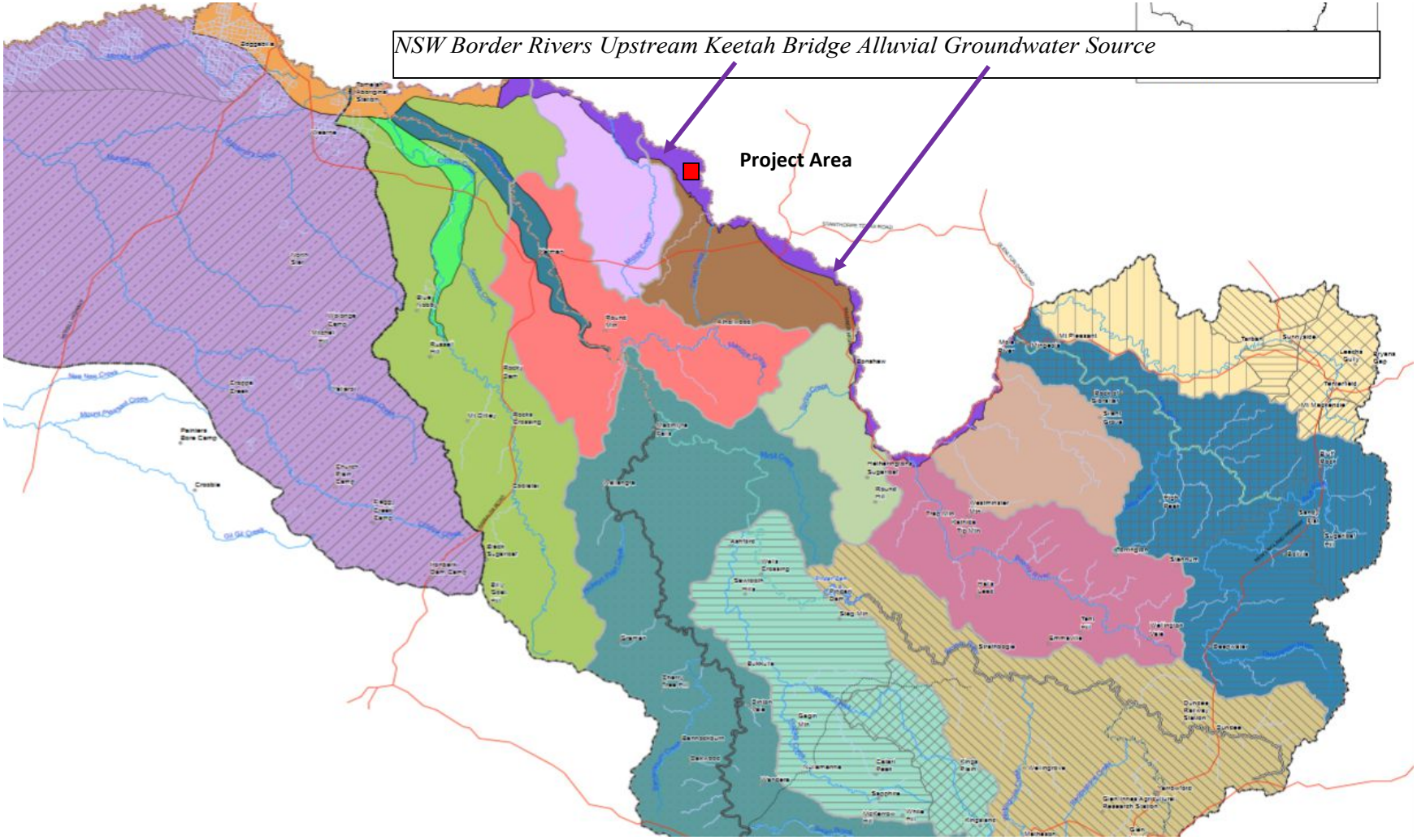
Hydroilex Pty Ltd www.hydroilex.com.au	UTM: - Date: January 2017 Drawn: RJL Approved: RJL	**Lochiel Projects P/L Proposed Mineral Water Project** **Location of Registered Bores**	**Figure: 3**



Hydroilex Pty Ltd www.hydroilex.com.au	UTM: - Date: January 2017 Drawn: RJL Approved: RJL	**Lochiel Projects P/L Proposed Mineral Water Project** **Regional Geological Setting**	**Figure: 4**



Hydroilex Pty Ltd www.hydroilex.com.au	UTM: - Date: January 2017 Drawn: RJL Approved: RJL	**Lochiel Projects P/L Proposed Mineral Water Project** **Location Map - Border Rivers Catchment - Water Management Area**	**Figure: 5**



Hydroilex Pty Ltd www.hydroilex.com.au	UTM: - Date: January 2017 Drawn: RJL Approved: RJL	**Lochiel Projects P/L Proposed Mineral Water Project** **Water Source Map**	**Figure: 6**

Appendix 1
Laboratory Certificates of Analysis

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EB1628141**	Page	: 1 of 8
Client	: **HYDROILEX**	Laboratory	: Environmental Division Brisbane
Contact	: John Lee	Contact	: Customer Services EB
Address	: 38 Gibss Street MIRANDA NSW 2228	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: +61 02 9540 1029	Telephone	: +61-7-3243 7222
Project	: Spring Water Analysis	Date Samples Received	: 28-Nov-2016 15:25
Order number	: ----	Date Analysis Commenced	: 28-Nov-2016
C-O-C number	: ----	Issue Date	: 11-Jan-2017 11:49
Sampler	: GARY HILL		
Site	: ----		
Quote number	: BN/384/16 V2		
No. of samples received	: 1		
No. of samples analysed	: 1		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Diana Mesa	2IC Organic Chemist	Brisbane Organics, Stafford, QLD
Greg Vogel	Laboratory Manager	Brisbane Inorganics, Stafford, QLD
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD
Lana Nguyen	Senior LCMS Chemist	Sydney Organics, Smithfield, NSW
Megan Brine	Microbiology and Phycology Team Leader	Brisbane Microbiological, Stafford, QLD
Tom Maloney	Nutrients Section Supervisor	Brisbane External Subcontracting, Stafford, QLD

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Microbiological Comment: HPC results are reported an approximate (~) when the count of colonies on the plate is outside the range of 10 - 300cfu, in accordance with ALS work instruction QWI-MIC/MW002.
- CFU = colony forming unit
- MF = membrane filtration
- Radiological work undertaken by ALS Laboratory Group (Ceska Lipa) under CAI accreditation No. L1163. Report No. $$. NATA and CAI accreditations' are both recognised under ILAC.
- MW002 is ALS's internal code and is equivalent to AS4276.3.1.
- MW006 is ALS's internal code and is equivalent to AS4276.7.
- MW007 is ALS's internal code and is equivalent to AS4276.5.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	ELECTRIC BORE "LOCHIEL"	----	----	----	----
			Client sampling date / time	28-Nov-2016 09:20	----	----	----	----
Compound	CAS Number	LOR	Unit	EB1628141-001	--------	--------	--------	--------
				Result	----	----	----	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**8.01**	----	----	----	----
EA010P: Conductivity by PC Titrator								
Electrical Conductivity @ 25°C	----	1	µS/cm	**736**	----	----	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**417**	----	----	----	----
EA020EC: Salinity								
Salinity	----	0.01	g/kg	**0.36**	----	----	----	----
EA041: Colour (True)								
Colour (True)	----	1	PCU	**3**	----	----	----	----
EA045: Turbidity								
Turbidity	----	0.1	NTU	**1.3**	----	----	----	----
EA065: Total Hardness as CaCO3								
Total Hardness as CaCO3	----	1	mg/L	**117**	----	----	----	----
EA165: CO2 - Free and Total								
Free Carbon Dioxide as CO2	85540-96-1	1	mg/L	**4**	----	----	----	----
Total Carbon Dioxide as CO2	85540-96-1	1	mg/L	**199**	----	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	----	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	----	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	**221**	----	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L	**221**	----	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	**13**	----	----	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	**92**	----	----	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	**27**	----	----	----	----
Magnesium	7439-95-4	1	mg/L	**12**	----	----	----	----
Sodium	7440-23-5	1	mg/L	**103**	----	----	----	----
Potassium	7440-09-7	1	mg/L	**4**	----	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	<0.01	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	ELECTRIC BORE "LOCHIEL"	----	----	----	----
				Client sampling date / time	28-Nov-2016 09:20	----	----	----	----
Compound	CAS Number	LOR	Unit		EB1628141-001	--------	--------	--------	--------
					Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS - Continued									
Boron	7440-42-8	0.05	mg/L		**0.08**	----	----	----	----
Barium	7440-39-3	0.001	mg/L		**0.211**	----	----	----	----
Beryllium	7440-41-7	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Manganese	7439-96-5	0.001	mg/L		**0.170**	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Selenium	7782-49-2	0.01	mg/L		<0.01	----	----	----	----
Vanadium	7440-62-2	0.01	mg/L		<0.01	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
Lithium	7439-93-2	0.001	mg/L		**0.002**	----	----	----	----
Strontium	7440-24-6	0.001	mg/L		**0.434**	----	----	----	----
Iron	7439-89-6	0.05	mg/L		<0.05	----	----	----	----
Bromine	7726-95-6	0.1	mg/L		**0.5**	----	----	----	----
Iodine	7553-56-2	0.1	mg/L		**0.1**	----	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	----	----	----	----
Antimony	7440-36-0	0.001	mg/L		<0.001	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Barium	7440-39-3	0.001	mg/L		**0.240**	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Manganese	7439-96-5	0.001	mg/L		**0.177**	----	----	----	----
Molybdenum	7439-98-7	0.001	mg/L		**0.002**	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Selenium	7782-49-2	0.01	mg/L		<0.01	----	----	----	----
Silver	7440-22-4	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
Boron	7440-42-8	0.05	mg/L		**0.08**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	ELECTRIC BORE "LOCHIEL"	----	----	----	----
				Client sampling date / time	28-Nov-2016 09:20	----	----	----	----
Compound	CAS Number	LOR	Unit		EB1628141-001	--------	--------	--------	--------
					Result	----	----	----	----
EG020T: Total Metals by ICP-MS - Continued									
Iron	7439-89-6	0.05	mg/L		**0.32**	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L		**15.6**	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	0.004	mg/L		<0.004	----	----	----	----
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L		**0.6**	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		**0.15**	----	----	----	----
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		<0.01	----	----	----	----
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L		**0.08**	----	----	----	----
EK085M: Sulfide as S2-									
Sulfide as S2-	18496-25-8	0.1	mg/L		<0.1	----	----	----	----
EN055: Ionic Balance									
Total Anions	----	0.01	meq/L		**7.28**	----	----	----	----
Total Cations	----	0.01	meq/L		**6.92**	----	----	----	----
Ionic Balance	----	0.01	%		**2.56**	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	ELECTRIC BORE "LOCHIEL"	----	----	----	----
				Client sampling date / time	28-Nov-2016 09:20	----	----	----	----
Compound	CAS Number	LOR	Unit		EB1628141-001	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	----	----	----	----
4.4`-DDT	50-29-3	2	µg/L		<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	----	----	----	----
Methoxychlor	72-43-5	2	µg/L		<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L		<0.5	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L		<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	----	----	----	----
Monocrotophos	6923-22-4	2	µg/L		<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	----	----	----	----
Parathion-methyl	298-00-0	2	µg/L		<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	----	----	----	----
Parathion	56-38-2	2	µg/L		<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	ELECTRIC BORE "LOCHIEL"	----	----	----	----
				Client sampling date / time	28-Nov-2016 09:20	----	----	----	----
Compound	CAS Number	LOR	Unit		EB1628141-001	--------	--------	--------	--------
					Result	----	----	----	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Prothiofos	34643-46-4	0.5	µg/L		<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L		<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	----	----	----	----
EP204: Glyphosate and AMPA									
Glyphosate	1071-83-6	1	µg/L		<1	----	----	----	----
AMPA	1066-51-9	1	µg/L		<1	----	----	----	----
MW002: Heterotrophic Plate Count									
Heterotrophic Plate Count (22°C)	----	1	CFU/mL		<1	----	----	----	----
Heterotrophic Plate Count (36°C)	----	1	CFU/mL		**~2**	----	----	----	----
MW006: Faecal Coliforms & E.coli by MF									
Faecal Coliforms	----	1	CFU/100mL		<1	----	----	----	----
Escherichia coli	----	1	CFU/100mL		<1	----	----	----	----
MW007: Coliforms by MF									
Coliforms	----	1	CFU/100mL		<1	----	----	----	----
Radionucleides / Activity									
Gross alpha	----	0.05	Bq/L		<0.05	----	----	----	----
Gross beta activity - 40K	----	0.1	Bq/L		**0.16**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		**105**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		**97.6**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	40	134
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	42	143

Attachment C

Consideration of State Environmental Planning Policies

Consideration of State Environmental Planning Policies Relative to the Planning Proposal Request for Lot 2 Tarwoona Road, Camp Creek

State Environmental Planning Policy (SEPP)	Applicable to Inverell LGA	Consistency	Reason for inconsistency/comment
SEPP No.1 - Development Standards	Yes	Not relevant	Not applicable
SEPP N0. 14 – Coastal Wetlands	No	Not applicable	Not applicable
SEPP No. 19 - Bushland in Urban Areas	No	Not applicable	Not applicable
SEPP No. 21- Caravan Parks	Yes	Not relevant to the planning proposal	Not applicable
SEPP No.26 – Littoral Rainforests	No	Not relevant	Not applicable
SEPP No. 30 - Intensive Agriculture	Yes	The proposal does not involve intensive agriculture	Not applicable
SEPP No. 33 – Hazardous and Offensive Development	Yes	Not relevant to the planning proposal	Not applicable
SEPP No. 36 - Manufactured Home Estates	Yes	Not relevant to the planning proposal	Not applicable
SEPP No 44 - Koala Habitat Protection	Yes	The land does not contain core koala habitat	Consistent
SEPP No. 47 – Moore Park Showground	No	Not applicable	Not applicable
SEPP No 50 - Canal Estate Development	Yes	Not relevant	Not applicable
SEPP No.52 - Farm Dams and Other Works in Land and Water Management Plan Areas	No	Not relevant	Not applicable
SEPP No. 55 - Remediation of Land	Yes	Consistent	The water has been tested and will be suitable for human consumption. This SEPP is to be further addressed at DA Stage.
SEPP No.62 - Sustainable Aquaculture	Yes	Not relevant to planning proposal	Not applicable
SEPP No.64 - Advertising and Signage	Yes	Not relevant to planning proposal	Not applicable
SEPP No 65 - Design Quality of Residential Flat Development	Yes	Not relevant to planning proposal	Not applicable
SEPP No 70 - Affordable Housing (Revised Schemes)	No	Not applicable	Not applicable
SEPP No 71 - Coastal Protection	No	Not applicable	Not applicable
SEPP (Affordable Rental Housing) 2009	No	Not relevant to planning proposal	Not applicable

State Environmental Planning Policy (SEPP)	Applicable to Inverell LGA	Consistency	Reason for inconsistency/comment
SEPP (Building Sustainability Index: BASIX) 2004	Yes	Not relevant to planning proposal	Not applicable
SEPP (Exempt and Complying Development Codes) 2008	Yes	Consistent	Not applicable
SEPP (Housing for Seniors or People with a Disability) 2004	Yes but not applicable as it doesn't relate to a residential zone, or land adjacent to a residential zone	Consistent	Not applicable
SEPP (Infrastructure) 2007	Yes	Consistent	Not applicable
SEPP (Kosciuszko National Park – Alpine Resorts) 2007	No	Not applicable	Not applicable
SEPP (Mining, Petroleum Production and Extractive Industries) 2007	Yes	Consistent	Consistent. The proposal does not impact on the provisions of this plan.
SEPP (Miscellaneous Consent Provisions) 2007	Yes	Not relevant to proposal	Not applicable
SEPP (Rural Lands) 2008	Yes	Consistent	This SEPP identifies rural planning principles (clause 7) that must be taken into account when a Council prepares a planning proposal. These are brought into effect through a s117 Direction, which is discussed in a separate Table. The proposal is considered to be consistent with this policy.
SEPP (State and regional Development) 2011	Yes	Not relevant to proposal	Not applicable
SEPP (Sate Significant Precinct) 2005	Yes	Not relevant to proposal	Not applicable
SEPP (Western Sydney Employment Area) 2009	No	Not applicable	Not applicable
SEPP (Western Sydney Parklands) 2009	No	Not applicable	Not applicable

Attachment D

Consideration of Section 117 Directions

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
1. Employment & Resources		
1.1 Business and Industrial Zones	Applies when a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed business or industrial zone (including the alteration of any existing business or industrial zone boundary).	Not Applicable
1.2 Rural Zones	Applies when a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed rural zone (including the alteration of any existing rural zone boundary).	This planning proposal will not alter the zone of any rural land or impact on rural housing provisions. The planning proposal is consistent with this Direction.
1.3 Mining, Petroleum Production and Extractive Industries	Applies when a relevant planning authority prepares a planning proposal that would have the effect of: a) prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials, or b) restricting the potential development of resources of coal, other minerals, petroleum or extractive materials which are of State or regional significance by permitting a land use that is likely to be incompatible with such development.	Nothing in this planning proposal will prohibit or restrict exploration or mining. It will however facilitate the extraction of water from the property for bulk supply.
1.4 Oyster Aquaculture	Applies when a relevant planning authority prepares any planning proposal that proposes a change in land use which could result in impacts on a Priority Oyster Aquaculture Area.	Not applicable
1.5 Rural Lands	Applies when: (a) a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed rural or environment protection zone (including the alteration of any existing rural or environment protection zone boundary), or (b) a relevant planning authority prepares a planning proposal that changes the existing minimum lot size on land within a rural or environment protection zone.	This planning proposal will affect a single property which is zoned RU1. It is consistent with the Rural Planning Principles listed in State Environmental Planning Policy (Rural Lands) 2008 as follows: (a) the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas – the proposed amendment is not intended to undermine or create conflict with agriculture or other rural land uses, but rather facilitate other

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
	The planning proposal is to be consistent with the relevant sections of SEPP (Rural Lands) 2008.	economic activity in rural areas. (b) recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State – water extraction and bottling facilities have traditionally been undertaken in rural areas as rural industries. The proposal does not alter the nature and issues associated with agriculture but rather clarifies that this is a desirable consent use on the site. (c) social and economic benefits of rural land use and development – the use of rural land for commercial water extraction and the success that existing facilities have experienced in other areas demonstrates that this can have beneficial social and economic impacts. (d) in planning for rural lands, to balance the social, economic and environmental interests of the community – the nature of rural land use is changing and the socio-economic interests of the community will be best served by permitting both traditional and alternative forms of rural development. (e) the identification and protection of natural resources, having regard to maintaining biodiversity, the protection of native vegetation, the importance of water resources and avoiding constrained land – the future development application will require consideration of the physical environment in which the development will be located as well as its visual impact. (f) the provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities - the planning proposal does not involve

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
		rural housing however does have the potential to contribute to the welfare of rural communities by providing employment opportunities associated with the development of rural land. (g) the consideration of impacts on services and infrastructure and appropriate location when providing for rural housing –the proposal does not provide for rural housing. (h) ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General. This planning proposal is consistent with the draft New England North West Regional Plan.
2 Environment and Heritage		
2.1 Environment Protection Zones	A planning proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas. A planning proposal that applies to land within an environment protection zone or land otherwise identified for environment protection purposes in a LEP must not reduce the environmental protection standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with clause (5) of Direction 1.5 "Rural Lands".	The planning proposal does not alter or remove any environment protection zone.
2.2 Coastal Protection	The objective of this direction is to implement the principles in the NSW Coastal Policy and applies to the coastal zone, as defined in the CoastalProtection Act 1979.	Not applicable
2.3 Heritage Conservation	The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance and applies to all relevant planning authorities.	Inverell LEP 2012 currently contains provisions that are consistent with this Direction. This planning proposal will not alter those provisions.

Consideration of s117 Directions – Planning Proposal Request – Lot 2 Tarwoona Road, Camp Creek

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
2.4 Recreation Vehicle Areas	The objective of this direction is to protect sensitive land or land with significant conservation values from adverse impacts from recreation vehicles. This direction applies to all relevant planning authorities.	The proposal does not enable land to be developed for the purpose of a recreation vehicle area.
2.5 Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEP's	Does not apply to the Inverell Local Government Area.	Not Applicable
3. Housing, Infrastructure and Urban Development		
3.1 Residential Zones	This direction applies when a relevant planning authority prepares a planning proposal that will affect land within: (a) an existing or proposed residential zone (including the alteration of any existing residential zone boundary), (b) any other zone in which significant residential development is permitted or proposed to be permitted. The objective is to encourage a variety and choice of housing types, to make efficient use of existing infrastructure and services and to minimise the impact of residential development on the environment and resource lands.	Not Applicable.
3.2 Caravan Parks and Manufactured Home Estates	The objective of this direction is to provide for a variety of housing types, and to provide opportunities for caravan parks and manufactured home estates. This direction applies to all relevant planning authorities.	This proposal does not seek development for the purposes of a caravan park or manufactured homes estate.
3.3 Home Occupations	Planning proposals must permit home occupations to be carried out in dwelling-houses without the need for development consent.	This proposal does not alter home occupation provisions in the Inverell LEP 2012.
3.4 Integrating Land Use and Transport	Applies when a relevant planning authority prepares a planning proposal that will create, alter or remove a zone or a provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.	The planning proposal does not affect urban land.

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
3.5 Development Near Licensed Aerodrome	Applies when a relevant planning authority prepares a planning proposal that will create, alter or remove a zone or a provision relating to land in the vicinity of a licensed aerodrome.	The planning proposal does not create, alter or remove a zone or provision relating to a licensed aerodrome.
3.6 Shooting Ranges	This direction applies when a relevant planning authority proposes a planning proposal that will affect, create, alter or remove a zone or provision relating to land adjacent to and/or adjoining an existing shooting range.	Not applicable
4. Hazard and Risk		
4.1 Acid Sulfate Soils	Applies when a relevant planning authority prepares a planning proposal that will apply to land having a probability of containing acid sulfate soils as shown on the Acid Sulfate Soils Planning Maps.	Not applicable
4.2 Mine Subsidence and Unstable Land	The objective of this direction is to prevent damage to life,property and the environment on land identified as unstable or potentially subject to mine subsidence. This direction applies to land that: is within a MineSubsidence District proclaimed pursuant to section 15 of the Mine Subsidence Compensation Act 1961, or has beenidentified as unstable land.	This proposal does not impact on any mine subsidence area.
4.3 Flood Prone Land	Applies when a relevant planning authority prepares a planning proposal that creates, removes or alters a zone or a provision that affects flood prone land. A planning proposal must include provisions that give effect to and are consistent with the NSW Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005 (including the Guideline on Development Controls on Low Flood Risk Areas). A planning proposal must not rezone land within the flood planning areas from Special Use, Special Purpose, Recreation, Rural or Environment Protection Zones to a Residential, Business, Industrial, Special Use or Special Purpose Zone.	The planning proposal will not rezone any land. Inverell LEP 2012 already contains a flood planning clause that would apply to any development application that is on flood prone land.
4.4 Planning for Bushfire Protection	Applies when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to land mapped as bushfire prone land.	Part of the site is identified as bushfire prone land. This will be a consideration in the assessment of any development application for the water extraction facility.

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
	In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 56 of the Act, and prior to undertaking community consultation in satisfaction of section 57 of the Act, and take into account any comments so made.	
5. Regional Planning		
5.1 Implementation of Regional Strategies	Planning proposals must be consistent with a regional strategy released by the Minister for Planning.	This direction does not apply to the Inverell Local Government Area
5.2 Sydney Drinking Water Catchments	Applies when a relevant planning authority prepares a planning proposal that applies to the hydrological catchment.	The proposal is not within this catchment.
5.3 Farmland of State and Regional Significance on the NSW Far North Coast	Applies to certain local government areas when a relevant planning authority prepares a planning proposal for land mapped as: (a) State significant farmland, or (b) regionally significant farmland, or (c) significant non-contiguous farmland, The objective is to ensure that the best agricultural land will be available for current and future generations, to provide more certainty on the status of the best agricultural land, and to reduce landuse conflicts.	This direction does not apply to the Inverell Local Government Area, however Council will consider farmland issues when a development application is made.
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	Applies when a relevant planning authority prepares a planning proposal for land in the vicinity of the existing and/or proposed alignment of the Pacific Highway.	Not applicable
5.8 Second Sydney Airport: Badgerys Creek	The objective of this direction is to avoid incompatible development in the vicinity of any future second Sydney Airport at BadgerysCreek.	Not applicable
5.9 North West Rail Link Corridor Strategy	The objective of this direction is to promote transit-oriented development and manage growth around train stations and to ensure development is consistent with the Corridor Strategy and precinct Structure Plans	Not Applicable

Consideration of s117 Directions – Planning Proposal Request – Lot 2 Tarwoona Road, Camp Creek

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
5.10 Implementation of Regional Plans	Applies to land to which a Regional Plan has been released by the Minister for Planning	A Regional Plan has not been released for the Inverell Local Government Area.
6. Local Plan Making		
6.1 Approval and Referral Requirements	A planning proposal must: (a) minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority, and (b) not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of: (i) the appropriate Minister or public authority, and (ii) the Director-General of the Department of Planning and Environment (or an officer of the Department nominated by the Director-General), prior to undertaking community consultation in satisfaction of section 57 of the Act.	The planning proposal will not include provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority.
6.2 Reserving Land for Public Purposes	A planning proposal must not create, alter or reduce existing zonings or reservations of land for public purposes without the approval of the relevant public authority and the Director-General of the Department of Planning and Environment (or an officer of the Department nominated by the Director-General).	The planning proposal does not create, alter or reduce land reserved for a public purpose.
6.3 Site Specific Provisions	Applies when a relevant planning authority prepares a planning proposal that will allow a particular development to be carried out. The objective is to discourage unnecessarily restrictive site specific planning controls. This direction applies to all relevant planningauthorities.	The planning proposal seeks to permit development for the purpose of commercial water extraction on the subject site. The proposal is justified for the site. The planning proposal would not contain any schematic drawings. Justifiably inconsistent – provisions of the planning proposal are of minor significance.
7 Metropolitan Planning		

Consideration of s117 Directions – Planning Proposal Request – Lot 2 Tarwoona Road, Camp Creek

S.117 DIRECTION	APPLICATION	RELEVANCE TO THIS PLANNING PROPOSAL
7.1 The Metropolitan Strategy	This direction applies to Sydney metropolitan Councils only	Not Applicable
7.2 Implementation for Greater Macarthur Land Release Investigation	Does not apply to Inverell Local Government Area	Not applicable

Attachment E

Aboriginal Heritage Information Management System Search

May 2017

AHIMS Web Services (AWS)
Search Result

Purchase Order/Reference : PO Box 421 Murwillumbah N

Client Service ID : 279230

Kellie Shapland

PO Box 421
Murwillumbah New South Wales 2484

Attention: Kellie Shapland

Email: kellie@tweedtownplanner.com.au

Date: 03 May 2017

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 2, DP:DP750074 with a Buffer of 1000 meters, conducted by Kellie Shapland on 03 May 2017.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.

A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	**Aboriginal sites are recorded in or near the above location.**
0	**Aboriginal places have been declared in or near the above location. ***

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

3 Marist Place, Parramatta NSW 2150
Locked Bag 5020 Parramatta NSW 2220
Tel: (02) 9585 6380 Fax: (02) 9873 8599

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au