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**The Assessment Manager, Infrastructure
City of Gold Coast
PO Box 5042
GCMC 9729**

Submission

This submission relates to the following application:

MCU201800495
Property Number: 125748
Lot 36 RP139816
Division 9, Numinbah

263 Repeater Station Road, Springbrook

Submitter details

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250 Repeater Station Road
Springbrook QLD 4213

Contents

Summary

A. The Essence

B. Basis of this objection

1. The proposed use has been wrongly assessed with respect to the City Plan
2. The proposed use conflicts with the City Plan
 - (a) The proposed use conflicts with the Rural Zone Code
 - (i) The proposed use will not directly support the rural community
 - (ii) The proposed use poses a threat to matters of environmental significance
 - (iii) The proposed use will conflict with the landscape character
 - (iv) The proposed use will conflict with the rural amenity
 - (v) The proposed use will conflict with the purpose of the Rural Landscape and Environment Precinct
 - (b) The proposed use conflicts with the General Development Provisions Code
 - (c) The proposed use conflicts with the Strategic Framework of the City Plan
3. Impact on groundwater
4. Traffic issues

C. Chronicle of events

D. References

Summary

1. The application has been incorrectly defined and assessed

- City Council officers clearly erred in advising that the proposed use was undefined within the City Plan. It unequivocally meets the definition of Extractive Industry included in the Definitions section of the City Plan, i.e. “Premises used for the extraction and/or processing of extractive resources and associated activities, including their transportation to market.” Extracted groundwater for commercial sale is unquestionably an extractive resource.
- The proposed use is not included in listed uses under the Rural Zone Code. That makes it an unlisted use but not an undefined use. It is clearly a defined use under the City Plan. Hence, the proposed use has been wrongly assessed.
- The result of this incorrect interpretation of the City Plan is that the whole application is based on the assumption that the proposed use could be approved as an undefined use. The fact, testable in court, is that the proposed use, being by definition ‘Extractive industry’, is not allowed in the Rural Zone.

2. The proposed use conflicts with the City Plan.

- Commercial groundwater extraction in the Rural Zone is in conflict with the City Plan which never envisaged such a use in this zone. It is clearly an Extractive Industry.
- The application prepared by Michel Group Services fails to include the associated movement of 16 heavy vehicles per day in and out of the property as part of the proposed use. The proposed use, taken as a whole, will clearly impact the landscape character and rural amenity and is therefore not compatible with the Rural Zone Code.
- The associated movement of 16 heavy vehicles per day in and out of the property, which is within the ‘Rural landscape and environment precinct’, will clearly cause a loss of scenic amenity values of this hinterland ridgeline and is in conflict with the Rural Zone Code.
- The proposed development does not conform to Rural Activity Code 9.3.17. It does not conform to the overall purpose of Code 9.3.17.2 being to “provide a level of amenity reflective of rural areas and to protect the environment” and to “provide a reasonable level of amenity for the surrounding area.” As owners of the two properties directly opposite the proposed site, purchased specifically to protect their outstanding World Heritage values, we contend that the daily movement of 16 heavy vehicles in and out of the property will in no way “provide a reasonable level of amenity for the surrounding area”.

3. The proposed use will significantly increase the risk of a serious collision on Repeater Station Road

- Given blind corners and frequent low visibility due to cloud immersion on this narrow section of Repeater Station Road, used largely by visitors likely to be unfamiliar with the road, 16 heavy vehicle movements a day significantly increases the risk of a serious collision.
- This particular section of Repeater Station Road is not currently used to any significant extent by heavy vehicles. Survey data provided in the Traffic Impact Assessment did not record any heavy vehicles over two full days of recording.

4. The proposed additional extraction from this aquifer has the potential to impact on matters of environmental significance

- The extraction of groundwater at this site, adding to existing extraction from the same aquifer, has the potential to impact on matters of environmental significance (World

Heritage area, protected areas, biodiversity areas, Hinterland to Coastal Corridors, Hinterland Core Habitat System) and thus conflicts with the Rural Zone Code (Rural landscape and environment precinct).

- The proposed bore site is less than 400 metres from the Springbrook National Park section of Gondwana Rainforests of Australia World Heritage Area.
- The aquifer from which water will be pumped feeds major attractions in the World Heritage Area including Twin Falls and Natural Bridge.
- The application does not consider the likely impacts of climate change. Predicted changes for the World Heritage Area include an increase in average annual temperature, an increase in the number of hot days, a drop in average annual rainfall with increasingly severe dry seasons and extreme weather events, increasing annual moisture seasonality, higher evaporative demand and increasingly severe and frequent droughts and fires (Australian National University 2009). Another predicted change is a lifting in the cloud base.
- Of particular concern is the potential impact on springs and streams during extended dry periods. For example, rainfall from July through September 2017 was just 48 mm. Streams such as Cave Creek and Boy-Ull Creek would have been wholly dependent on groundwater discharge from the aquifer. During such a period, the proposed extraction could be as much as 17 million litres (8 large tankers per day).
- There is the potential for impacts on endangered plant species including the highly significant *Eucryphia jinksii*. This tree species is recorded at lower elevation below the escarpment approximately 1.3 km west of the bore site and likely to be within the drawdown zone.

5. The proposed use conflicts with Gold Coast City Council policy

- Approval of this proposal, which would generate close to 50 million half-litre plastic bottles of water annually, would fly in the face of the Council's "Choose tap" campaign.

A. The Essence

Site at 18 August 2014

Commercial Groundwater Extraction would not have been approved by Council as the property lies within the Rural Landscape and Environment Precinct which excludes vegetation clearing for rural activities.



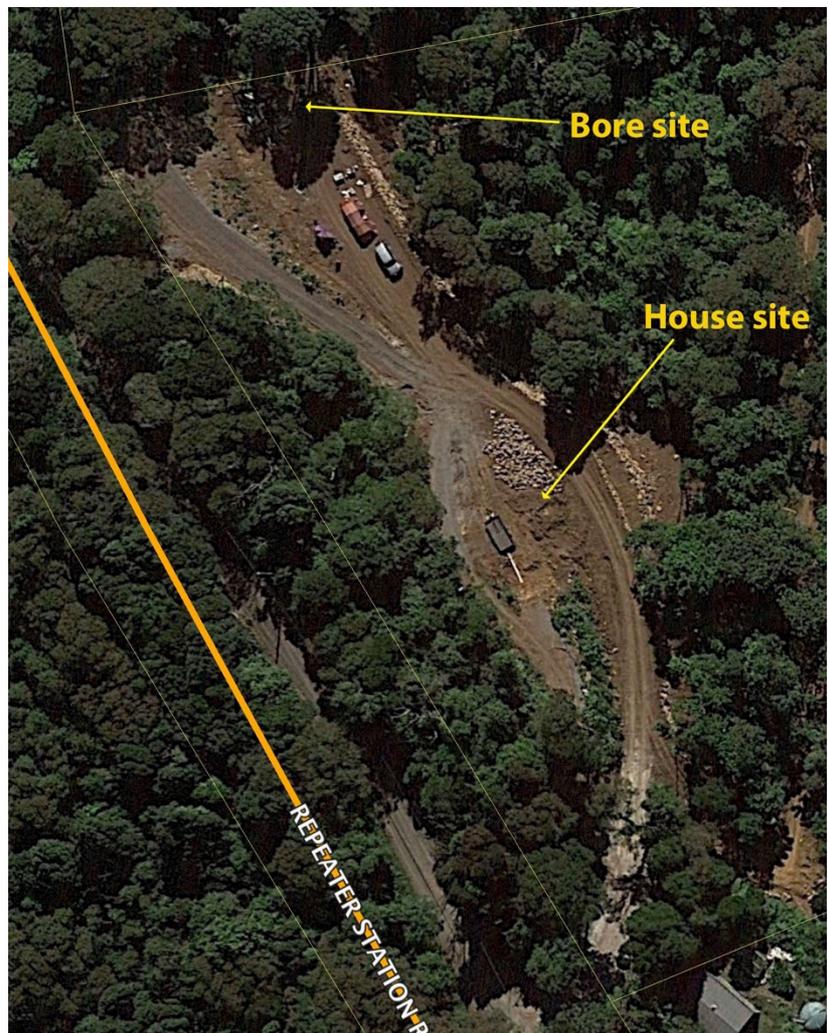
Site at 15 May 2016

Site already prepared for MCU Commercial Groundwater Extraction application made 27 April 2018. Preparation works carried out under MCU201601209 for Detached Dwelling and Treeworks.

Some clearing was illegally carried out before the MCU was approved. GCCC issued show cause notice.

The report by Rytenskild Traffic Engineering states "The proposed driveway arrangement is in place, together with a shed that will be used for the proposed operation." Clearing/widening of the southern exit continues (ground observations to 10 November 2018).

Rytenskild recommended some trees be removed. The owner has already removed some of these trees without approval.



B. Basis of this objection

1. The proposed use has been wrongly assessed with respect to the City Plan

The proposed use has been wrongly considered an undefined use. It is not listed in acceptable uses in the Rural Zone Code and can be considered an unlisted use, but it is not an undefined use.

The use exactly meets the definition of ‘Extractive industry’ included in the Definitions section of the City Plan, i.e. “Premises used for the extraction and/or processing of extractive resources and associated activities, including their transportation to market.” Whereas ‘extractive resources’ is not defined in the City Plan, Part 1.2 of the Plan makes the following statement

A term used in the City Plan has the meaning assigned to that term by one of the following:

- (a) the *Planning Act 2016* (the Act);
- (b) the *Planning Regulation 2017* (the Regulation), other than the regulated requirements;
- (c) the definitions in Schedule 1 of the City Plan;
- (d) the *Acts Interpretation Act 1954*;
- (e) the ordinary meaning where that term is not defined in any of the above.

As the term extractive resource is not defined in (a) to (d) above, it therefore must be interpreted as having the ordinary meaning. Groundwater extracted for commercial sale is clearly an extractive resource. Hence the proposed use must be assessed as ‘Extractive industry’.

We note that the City Plan definition of ‘Extractive industry’ is general and unrelated to a zone.

The result of this incorrect interpretation of the City Plan is that the whole application is based on the assumption that the proposed use could be approved as an undefined use. The fact, testable in court, is that the proposed use, being by definition ‘Extractive industry’, is not allowed in the Rural Zone.

This should logically be the end of this submission. However, we will consider other aspects of the application and further detail conflict of the proposed use with the City Plan.

2. The proposed use conflicts with the City Plan

(a) The proposed use conflicts with the Rural Zone Code

(i) The proposed use will not directly support the rural community

The Rural Zone Code 6.2.20.2 (2)(a)(iii) provides that land uses “may include a range of small-scale, compatible non-rural activities where they provide goods and services that directly support the rural community.”

Whereas the Planning Report Section 3 and the Response to Information Request note that sale of water will be to local residents and larger commercial entities, the sale to local residents is not reflected in other parts of the application where it is stated that sale will be to spring water suppliers.

Sale of water to local residents is likely to be minimal. Springbrook residents have rainwater tanks or bores and would only need delivery of water in exceptionally dry periods. Local supply would be a minor part of the business if it occurred at all. Further, water supplied for drinking would require processing to meet drinking water standards. We understand that would not be possible under this application.

It can be concluded that water supply to local residents will be a very minor part of the proposal and therefore it does not meet the code requirement of providing goods and services that directly support the rural community.

(ii) The proposed use poses a threat to matters of environmental significance

This is covered in detail under 3. Impact on groundwater.

(iii) *The proposed use will conflict with the landscape character*

The Rural Zone Code 6.2.20.2 (2)(a)(iii) provides that land uses “may include a range of small-scale, compatible non-rural activities where they provide goods and services that ... do not conflict with the landscape character.”.

The applicant, through Michel Services Group, repeatedly argues no impact of the proposed use as the structures will not be visible from the road. That completely ignores the most obvious impact of the associated 16 heavy vehicle movements in and out of the property each day. That would unquestionably impact on the landscape character of the area. That section of Repeater Station Road will become an industrial site.

(iv) *The proposed use will conflict with the rural amenity*

The Rural Zone Code 6.2.20.2 (2)(a)(iii) provides that land uses “may include a range of small-scale, compatible non-rural activities where they provide goods and services that ... do not conflict with .. rural amenity..”.

Again, the applicant argues the proposed use will not impact rural amenity because it will not be visible from the street. The associated 16 heavy vehicle movements in and out of the property each day will significantly impact on the rural amenity.

(v) *The proposed use will conflict with the purpose of the Rural Landscape and Environment Precinct*

The property also lies within the Rural Landscape and Environment Precinct. The relevant code requires that “Land uses do not impact on matters of environmental significance, landscape and scenic amenity values of the land”. The code also aims to protect the “natural landscape .. particularly on the Hinterland ranges .. which contributes to the city’s distinct form, visual attractiveness and role as a major tourist destination.” Code part 6.2.20-2 PO5 requires that activities do not result in “loss of the scenic amenity values of hinterland ridgelines”. Prior to the unauthorised vegetation clearing on the property, the landscape character was one of old-growth forest. The clearing adds to cumulative impacts on the landscape character of this area, in particular canopy integrity essential to viability of rare, threatened and phylogenetically significant species contributing to Outstanding Universal Value of the World Heritage precinct.

We contend that 16 heavy vehicle movements in and out of the property on the road to a major tourist destination, Best of All Lookout, in a World Heritage Area would significantly impact on the landscape and scenic amenity values and the visual attractiveness of a popular tourist destination.

As discussed below, we also contend that the proposal runs the risk, during extended dry periods, of depleting the water source for other major tourist destinations, Twin Falls and Natural Bridge.

(b) *The proposed use conflicts with the General Development Provisions Code*

The site of the proposed development is plainly not an appropriate location for extractive industry.

The General Development Provisions Code PO13 requires that “Development is designed to ..complement the character ... of the local area.” An extractive industry is the antithesis of the character of the area, not only because of the commercial water extraction itself but also because of the very visible presence of heavy vehicles making 16 trips per day on the road to a major tourist attraction in the Gondwana Rainforests of Australia World Heritage Area. The property and its road frontage will effectively be turned into an industrial site.

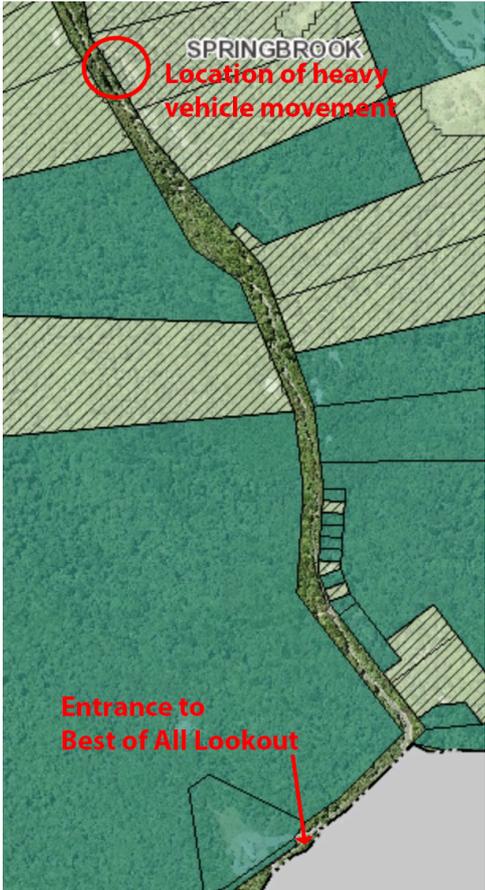
The General Development Provisions Code PO2 requires that proposed development prevents loss of amenity and threats to health and safety, having regard to, *inter alia*, traffic and visual amenity. We contend that there will be significant impacts on safety (See 4. Traffic issues.) and visual amenity (See B2(a)(iv).)

(c) *The proposed use conflicts with the Strategic Framework of the City Plan*

Specific Outcome 3.8.2.1(2) within Element — Landscape Character requires that “The city’s natural, non-urbanised appearance is protected for its contribution to the city’s outstanding scenic amenity, image and role as a major tourist destination.”

The application claims that “the use will not impact upon the existing scenic amenity of Repeater Station Road” again considering only the on-site buildings associated with extraction and not the associated

transport. Sixteen heavy vehicle movements per day in and out of the property will clearly impact on the scenic amenity and the image of Springbrook as a tourist destination and a World Heritage site.



Dark green areas in this photo are conservation areas, mainly national park, illustrating the fact that the major land use in this locality is nature conservation. The two properties directly opposite the MCU property are private wildlife sanctuaries purchased by ARCS to protect their World Heritage values.

The application also states that “the use is consistent with other properties on Repeater Station Road”. That is presumably a reference to the two (or three) existing commercial water extraction sites. We contend that those properties are anomalous and should not be regarded as providing a precedent. Almost all other properties on Repeater Station Road are used for residential purposes or nature conservation. (The exceptions are a horse paddock and a few communications towers.)



This section of Repeater Station Road, just 1.3 km from Best of All Lookout, would be converted into an industrial site with 16 heavy vehicle movements per day.

3. Impact on groundwater

It is not entirely clear how much water is proposed to be removed daily.

Specified or implied in the specialists' report are the following recommendations:

- bore 1 and bore 2 be equipped to pump water but be used alternately to meet the required demand, and
- neither bore should be pumped at a rate >0.5 L/s.

We note that the specialists' report does not define an acceptable volume removal (e.g. L per day) just an acceptable pumping rate.

'Section 3.0 Proposal' specifies 8 truckloads per day. According to this section, size could range from 10,000 L to 28,000 L (10,000 L for a smaller truck purportedly supplying local residents and 19,000 to 28,000 L for a large truck).

Using that range, the volume of water proposed to be removed from the site could be between 80,000 L (minimum) and 224,000 L per day.

In 'Performance Solution' relating to 'Element 3.8.2 Environmental Health and Amenity', the proponent states "The pump will only be run between the hours of 6.30 am and 6.30 pm." In response to assessment Code 9.4.4.3, PO2, it is stated "The pump will only be run between the hours of 7 am and 6 pm."

Assuming that pumping will occur for 12 hours per day, and assuming the pumping rate is not more than the 0.5 L/s as advised by the specialist hydrogeologists, Douglas Partners, the maximum volume of water that can be extracted with (purportedly) "minimal impact on the groundwater system", is 21,600 L per day. The volume apparently proposed to be removed is between 7 and 10 times the maximum recommended by Douglas Partners.

The Response to Information Request refers to 60,000 L per day, i.e. be no more than 3 loads per day.

Whereas Council might consider approval with a condition on the volume to be extracted, that would be of great concern given the impact on the environment is unknown.

The report by Douglas Partners provides no confidence that the potential impact on the groundwater system has been adequately assessed.

The report rests heavily on long-term average rainfall. Given that the proposed groundwater extraction would be expected to occur year after year no matter what the annual rainfall might be, it would have been prudent to look at the range of annual rainfall and especially the minimal annual rainfall.

The long-term average annual rainfall is quoted by Douglas Partners as 3053.4 mm. But in 2002, the annual rainfall at Upper Springbrook was just 1569 mm. Other recent lower rainfall years were 2014 (1927 mm) and 2016 (2062 mm). Rainfall over the four months from May to August 2018 was 224 mm.

The test pumping done by Douglas Partners shows a fall in the aquifer level of 4.5 meters over 24 hours and a significant recovery over the following 2 hours. There was no attempt to mimic the pumping for 12 hours per day every day during an extended dry period.

Also, we find it surprising that the specialists did not consider the impacts of future climate change, given that the proposed extraction would continue "forever".

Predicted changes for the World Heritage Area include an increase in average annual temperature, an increase in the number of hot days, a drop in average annual rainfall with increasingly severe dry seasons and extreme weather events, increasing annual moisture seasonality, higher evaporative demand and increasingly severe and frequent droughts and fires (Australian National University 2009).

Of particular concern is the potential impact on springs and streams during extended dry periods. For example, rainfall from July through September 2017 was just 48 mm. Streams such as Cave Creek and Boy-Ull Creek would have been wholly dependent on groundwater discharge from the aquifer. During such a period, the proposed extraction could be as much as 16 million litres (8 large tankers per day). It is these extreme conditions/events compounded by several co-occurring stressors that have the most significant impact rather than considerations of just average annual rainfall as is the case for the hydrogeological specialists.

The application includes the statement “It is also important to note here that due to the depth of aquifer (84 m below the natural surface level) the terrestrial trees do not rely on it as a source of water, and therefore extraction of ground water will not impact upon said trees.” According to the specialists’ report, the aquifer is actually around 60 m below ground level at the bore site. However, at lower elevations on the property and beyond the property boundaries, the aquifer is closer to or at the surface where trees (as well as fauna such as frogs) may well depend on this source of water.

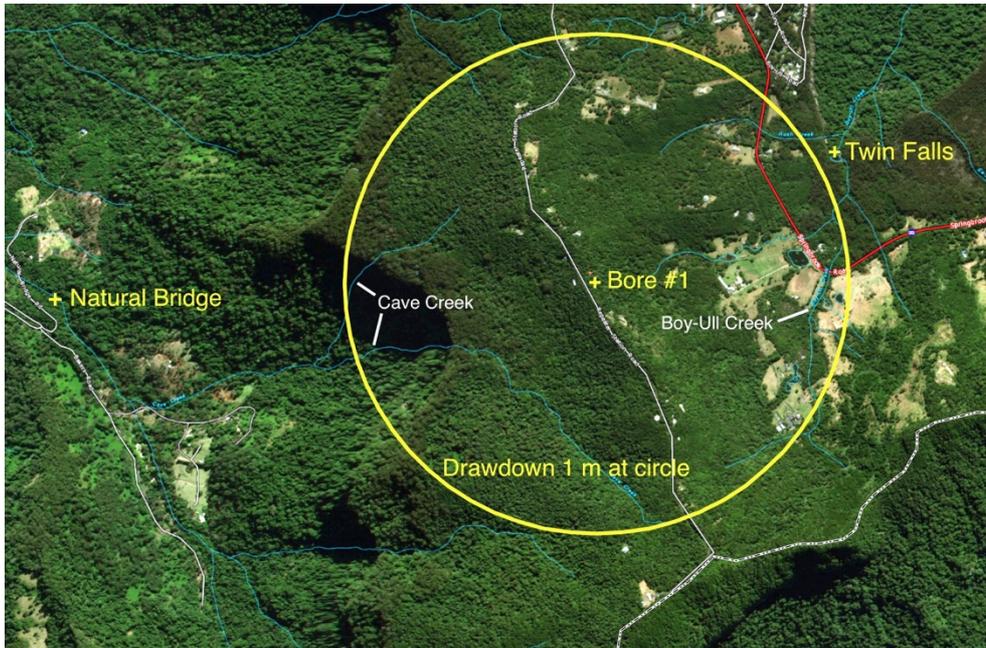
In the vicinity of the property there are springs occurring at an elevation of >900m. On the property itself, there are springs, intermittent streams and a permanent stream above 800m. These springs and streams indicate the presence of groundwater close to the surface at this elevation. There is the potential for groundwater extraction at the proposed site to affect this groundwater and hence ecosystem integrity.

Three frog species that contribute to World Heritage values, *Assa darlingtoni*, *Kyarranus loveridgei* and *Lechriodus fletcheri* are not dependent on streams but do depend on moist soil or ephemeral pools. They are likely to be impacted by any reduction in available moisture. *K. loveridgei* has been recorded on 263 Repeater Station Road.

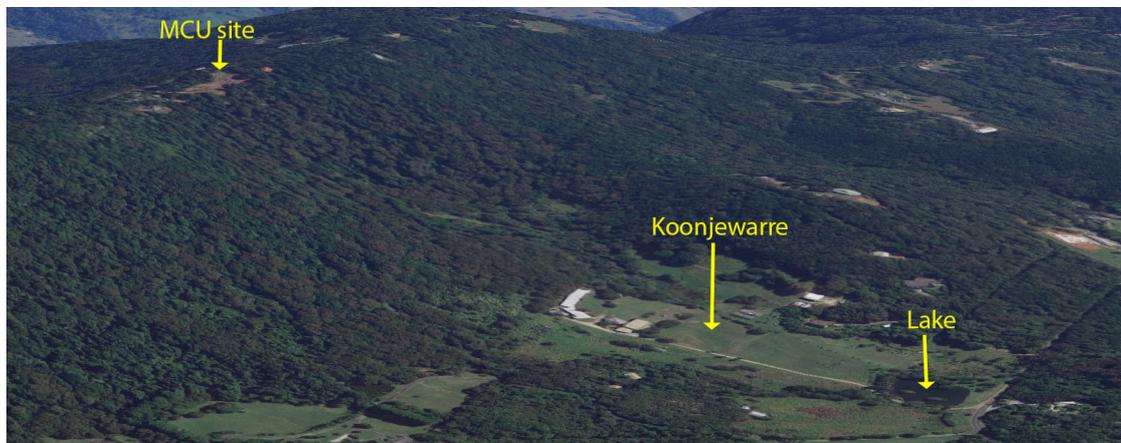
There is the potential for impacts on endangered plant species including the highly significant *Eucryphia jinksii*. This tree species is recorded at lower elevation below the escarpment approximately 1.3 km west of the bore site and likely to be within the drawdown zone. There is evidence that the main large canopy trees such as *Argyrodendron trifoliolatum*, essential for ecosystem integrity, are declining as a result of longer spells of drier microclimate and soils followed by high rainfall events accompanied by strong winds. Moreover, depletion of water levels of interconnected aquifers within the local fractured basalts has the potential for diminishing hydraulic redistribution by these large canopy species with flow-on impacts on other surrounding moisture-dependent species.

Douglas Partners assessed the impact of extraction on the aquifer by estimating the impact on flow into Little Nerang Dam. Not surprisingly, the impact was insignificant. What is required is information on the impact of extraction on the local environment gained through research into the ecophysiological responses of vegetation, in particular trees, to the extraction of groundwater in order to determine a baseline from which changes can be observed over time. Such research includes the use of dendrometers and sap flow meters, measurement of Leaf Area Index (LAI), comparison of the stable isotope composition of water in the xylem and the water table, determination of the root depth of trees with regards to the water table, and calculation of leaf water potential and water balance. Scientists would subsequently use a subset of these tools to monitor the ecophysiological responses of vegetation over time, often many years.

Douglas Partners provide a chart of drawdown versus distance from the bore. Their report includes an image with a circle showing the approximate extent of drawdown to 1.5 metres. The image below shows the approximate extent of drawdown to 1 metre. Clearly, the image is indicative only as the drawdown extent would not be circular.



Australian Rainforest Conservation Society (ARCS) owns the group accommodation business, Koonjewarre, which operates on the property adjoining the eastern boundary of 263 Repeater Station Road. A feature of the property is a lake on a tributary of Boy-Ull Creek fed by a spring which derives from the up-slope aquifer. The lake is a feature of our business and is used for canoeing activities for schools and other groups including State Emergency Services. There is the potential for the flow in this watercourse to be impacted by extraction from the aquifer by the applicant. This would significantly affect our business. All profits from the business are directed to rainforest restoration on areas adjoining the World Heritage Area on Springbrook Plateau.



We can also provide some anecdotal evidence that groundwater extraction currently occurring on Repeater Station Road depletes the aquifer to the point where water ceases to be available at other sites. ARCS has management responsibility for a property at 74 Repeater Station Road which is at a lower altitude than the three existing extraction sites. Water is supplied to the buildings on that property from a bore pump which, given the location, derives water from the same aquifer as the commercial extraction sites further south on Repeater Station Road. In late 2017, we had to replace the bore pump to restore water supply to the property. However, when the new pump was installed, very little water could be pumped and it took several days for a reasonable volume of water to be obtained.

The application makes reference to the fact that commercial groundwater extraction has been approved at three other sites in Repeater Station Road. The reference is presumably making the point that commercial groundwater extraction is a legitimate activity in the area. But cumulative impacts need to be considered. Given that it is distinctly possible that existing commercial extraction is significantly affecting the aquifer, it would be irresponsible to add a third (or fourth) commercial extraction in the absence of definitive data on the impact on the environment.

The response to Council's information request states "there are similar uses located elsewhere along Repeater Station Road that have been operational for many years without issue". We provided anecdotal evidence above that suggests that there has been an issue.

The response states that a "private individual could take the same or greater amounts of water without any approvals or restrictions." The argument is hollow. No individual could possibly require 60,000–224,000 L per day. Further, water extracted for domestic purposes is returned to the environment following on site treatment.

Further still, if there were a significant drawdown from future bores, it would be prudent to allow for that prospect and ensure that groundwater is available for future additional household use and not used for "assisting the resident of the property into their retirement".

The response to Council's request for more information includes a response from the hydrogeologists, Douglas Partners. They argue that "Limiting drawdown to a property is not considered to be a relevant requirement in managing groundwater resources in the Springbrook area." We contend that it is a completely relevant requirement if the extraction causes an environmental impact beyond the boundary of the property, e.g. in the World Heritage Area. The City Plan requires such a consideration.

It is also noted that the highest pre-clearing density of modelled threatened flora and fauna habitat in Queensland is found at Springbrook (M.Laidlaw pers. comm, Department of Environment and Science 2018). This finding significantly elevates the importance of Springbrook, including the area relevant to the proposal, to the State's and Australia's threatened biodiversity.

Summary

Given that

- the recommendations of Douglas Partners are apparently based on long-term average annual rainfall which is twice the minimum annual rainfall over that period, and
- future climate change is predicted to lead to lower rainfall, increasingly severe dry seasons and generally drying conditions, and
- the proposal involves removal of around 7 to 10 times the maximum recommended by Douglas Partners, and
- there are already two (or three) commercial groundwater extractions drawing on the aquifer with some evidence that they are significantly depleting the aquifer,

It is reasonable to conclude that the proposal will have a significant impact on the groundwater system. That, in turn, could be expected to impact on the World Heritage Area part of which is only 400 metres from the bore site. The aquifer from which water will be pumped feeds Boy-Ull Creek (850 m from the bore) and a tributary of Boy-Ull Creek (200 m). Boy-Ull Creek feeds Twin Falls, a major attraction in this section of the World Heritage Area. The aquifer also feeds Cave Creek (480 m) which flows through Natural Bridge within the World Heritage Area. Natural Bridge is a highly visited site because of the presence of glowworms.

Studies on Tamborine Mountain showed that 72–80 % of stream flow was derived from groundwater discharge (Todd 2011).

Considering the likely impact on the groundwater system, it is clear that the application should be rejected. Indeed, applying the Precautionary Principle, the application *must* be rejected.

4. Traffic issues

Australian Rainforest Conservation Society (ARCS) has operated a field office at two locations on Repeater Station Road since 2008. Currently, our office is at 250 Repeater Station Road directly opposite 263 Repeater Station Road. Officers of ARCS have been driving on the relevant section of Repeater Station Road essentially daily for the past decade and are very familiar with the nature of the road. We know this section of the road as well as anyone.

The narrowness of the road and absence of centre line marking are likely factors contributing to the frequent experience of meeting an oncoming vehicle travelling near the centre of the road.

It is also noted that this section of the road, being above 800 metres elevation, is often submerged in cloud and visibility is low.

Of particular concern is the corner shown in the report by Rytenskild Traffic Engineering as ‘near 223’ (Note that the Rytenskild report shows two images at separate corners both labelled ‘near 223’.) The relevant image from the Rytenskild report is shown below.



This corner is blind and whereas a convex mirror is installed, the experience of ARCS officers is that the mirror is of no value.

The bitumen surface is 5.3 m wide at this corner. The trucks proposed to be used are described in the Rytenskild report as being 2.5 m wide. That leaves no room for error should a vehicle approaching this blind corner from the north meet a fully laden water truck coming from the south, or vice versa.

The Rytenskild report states “Whilst there are some sections of the road which narrow to less than the ideal width for two vehicles to pass, visibility is satisfactory and there is provision for two vehicles to pass at each end of these sections.” The corner illustrated above is a section of the road that is “less than ideal for two vehicles to pass” but where visibility is far from satisfactory. Further, the statement that two vehicles are able to pass at the end of these sections appears to suggest that one vehicle has to stop and wait until the other has passed through the narrow section. That would be completely inappropriate.

In the Response to Information Request, Michel Group Services state “The traffic reports notes (sic) that the road is already used by the same type of heavy vehicles proposed on a daily basis and that the proposed number of heavy vehicles to be used will not significantly impact upon current traffic operations.” The statement has no basis. The traffic report by Rytenskild Traffic Engineering provides the results of traffic survey which show no heavy vehicles during the full two-day survey period. The proposal represents a completely new and high-impact use of this road.

The statistics record a vehicle travelling on this section every two minutes at peak times. As the road leads to the very popular Best of All Lookout, it is likely that most of these vehicles are carrying visitors unfamiliar with the road which will raise the risk of a collision, not to mention the fact that these visitors, on a scenic drive to a World Heritage Site would not be expecting to meet a 10-metre long fully-laden water truck coming towards them around a blind corner.

The Rytenskild report states “A detailed assessment of impacts upon Springbrook Road is not considered to be warranted” because it is a state-controlled road. However, the advice provided by Transport and Main Roads Department states “The frequency of heavy vehicles from the proposed operation poses increased safety risks and performance issues for state-controlled roads in the area.” The TMR advice refers to “a number of safety issues for heavy vehicles along these roads including:

- Limited horizontal sight distance and sight distances at intersections;
- Narrow lane and shoulder widths, in some cases no shoulders;
- Roadside hazards such as trees, steep embankments, culverts;

- Inadequate overtaking lengths and inadequate frequency of overtaking opportunities.

Conclusion

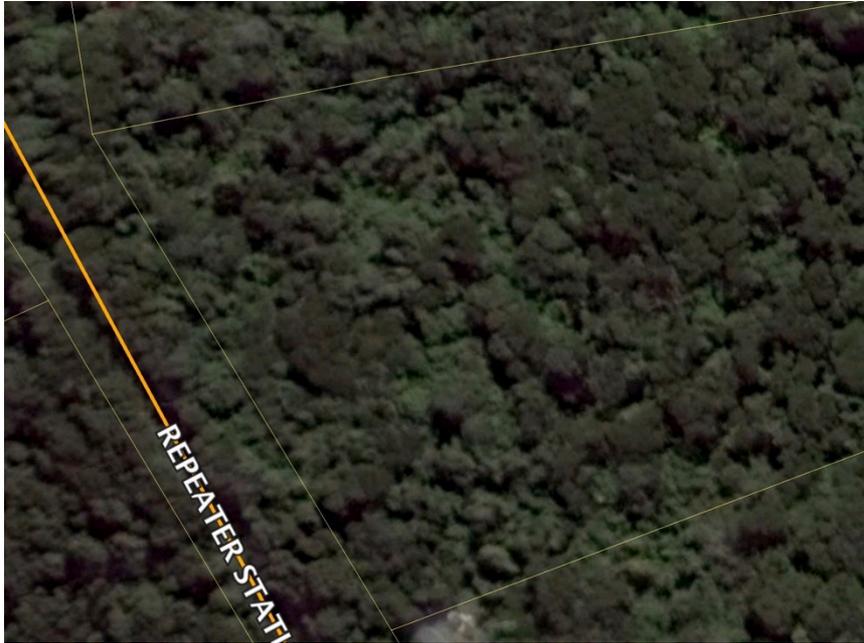
The Traffic Impact Assessment Report provides no convincing evidence to support the recommendation in favour of the proposed groundwater extraction operation. On the contrary, all evidence suggests that the proposed 16 heavy vehicle movements per day on this road present a significant risk that a serious, possibly fatal, collision will occur.

Therefore, the proposed development does not conform to the Transport Code requirement (PO20) that development is “designed to reduce impacts on the amenity, safety and operation of the road network through appropriate measures to ensure that the function and capacity of the road network is not compromised.”

B. Chronicle of events

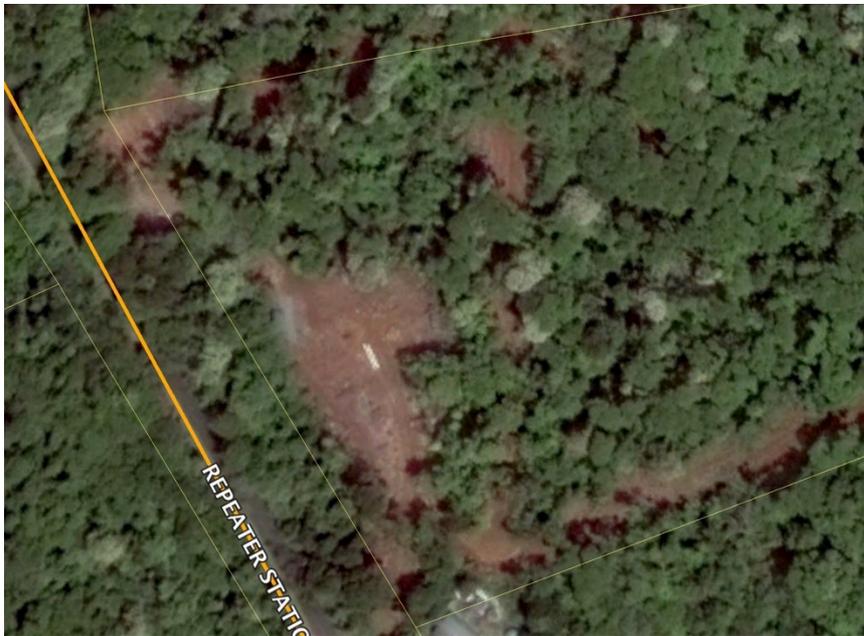
August 2014

The image below shows the property at 18 August 2014. While not apparent in this image, there was at this time an existing levelled house pad with access driveways. The frontage is 135 metres.



December 2014

The image below shows the property at 18 December 2014. Clearing of vegetation (including old-growth) and significant ground level change had been carried out without approval.



May 2015

On 21 May 2015, an application was made for Combined MCU Detached Dwelling with Operational Works to change ground level and clear vegetation.

Apparently, Council issued a show cause notice relating to the change in ground level and vegetation clearing that had already occurred. The cleared area shown in this photo amounts to around 1400 m².

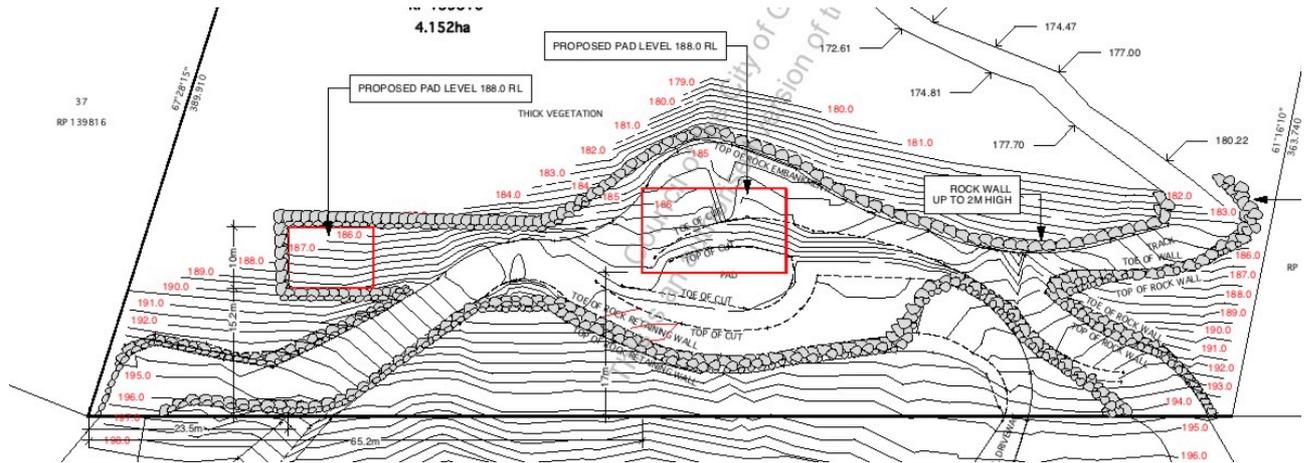
August 2016 — May 2018

On 25 August 2018, a second application was made for the MCU Detached Dwelling and associated work with the note that “this application is being lodged in response to a show cause notice with both the change to ground level and vegetation clearing primarily relating to existing works undertaken on site”.

According to the report provided by hydrogeologists Douglas Partners, a bore (Bore #1) was drilled on 15 January 2016 before the MCU was granted.

Approval was granted on 20 September 2016.

The image below shows the proposed location of the house, shed and rock wall.



The drawing shows the location of the shed at 23 metres from the northern boundary with the rock wall finishing 20 metres from the boundary. However, as can be seen from the image below, the rock wall continues to within a few metres of the boundary and clearing has been carried out all the way to the boundary.



The fact that the shed and rock wall have been constructed nearer to the boundary than shown on the plans is of no great significance in itself. However, the additional clearing happens to coincide with the location of the bore proposed to be used for commercial groundwater extraction. In other words, under the MCU for a Dwelling and Operational Works, the site has been prepared for the application to extract groundwater.

The significance of this is that in applying for approval to extract groundwater, the applicant was able to “tick all the boxes” and say no vegetation will be cleared and no earthworks are required.

According to the plans provided, the area to be occupied by the house, shed and carport is 278 m². The cleared area is around 2400 m². This supports the conclusion that the vegetation clearing carried out was not simply for residential purposes.

In further support of that conclusion, at the time the application for MCU for a Dwelling and Operational Works was made the applicant had already cleared around 1400 m² including access to the house site. The cleared area was more than enough for a residence and shed. The application for MCU for a Dwelling and Operational Works stated “A minimal area of the site is required to be cleared for access and building construction noting that the majority of clearing works have occurred already.” In fact, a further 1000 m² was cleared.

It is also clear that the on-site driveway construction has been designed for the proposed water trucks. The separate entry and exit and the nature and width of the road are totally unnecessary for residential purpose. Nor are they necessary for fire appliances as suggested in the Bushfire Risk Assessment report. The risk of bushfire on the site is negligible. As stated in the Bushfire Risk Assessment report “The vegetation of this entire area surrounding the proposed dwelling is classed as F17 and consists of (non combustible) wet tropical rain forest of differing species with moss and leaf litter ground cover. There is no classifiable vegetation within 100 metres of this site. The adjoining areas are also vegetated in wet tropical rainforest.”

It is clear that the access has been specifically designed to allow heavy vehicles, i.e. water trucks, to enter and exit without having to turn around and to meet the City Plan requirement that vehicles can enter and exit in forward gear.

September 2018

As detailed and shown in images in the application, bores have been installed, a shed and a pump shed constructed and truck loading area prepared. The site has been fully prepared for a water mining enterprise but no dwelling has been built nor any construction work started. Whereas three bores are mentioned in the application, the applicant has since drilled at least three more.

Conclusion

The applicant has carried out earthworks and vegetation clearing beyond that required for a residence and approved under the MCU. The extra clearing was essentially carried out without approval.

D. References

Australian National University 2009. Implications of Climate Change for Australia's World Heritage Properties: A preliminary assessment.

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Todd, A. 2011. Groundwater Investigation, Tamborine Mountain, South East Queensland. Institute for Sustainable Resources, Queensland University of Technology technical report to South East Queensland Catchments Ltd.