

**Cultural Impact Assessment (CIA) undertaken by Poipoia Ltd on behalf of Ngā Hapū o Te Rūnanga o Tūpoho.**

<b>Recommendations</b>	<b>Aquifer Limited additional responses (avoid, remedy, or mitigate effects)</b>
<p>a) Any excess groundwater from the consent holders bore should not be allowed to flow to waste.</p>	<p><b><i>Noted and accepted</i></b></p> <p>Aquifer Limited would accept an approval subject to conditions as proposed by Wallbridge Gilbert Aztec (WGA) to monitor the water resource.</p> <p>The premises are connected to the Whanganui urban effluent waste system. Any waste would be disposed of to that system and not into the storm water system that leads to the Awa (river).</p> <p>The percentage of water required for manufacturing, is approximately 10%, of the total take sought. The bottling machinery is to be an enclosed system and the water used to rinse bottles is not waste it is a necessary component of the manufacturing process.</p> <p><b>Note:</b> CIA technical expert (WGA) concludes that the projected effects on the aquifer, Whanganui River and water quality will be less than minor. This conclusion is based on the depth of the bore with a thick overlying aquitard, distance from the coast and small size of the proposed take. In summary, the proposed take is small and will not have a significant impact on the resource. (Technical Review Report, Wallbridge Gilbert Aztec, 29 July 2019)</p>
<p>b) Regular groundwater level monitoring could be undertaken in bore 790160 to assess any effects of the take on long term groundwater levels in the deep aquifer.</p>	<p><b><i>Noted and accepted.</i></b></p> <p>This is consistent with the WGA recommendations. Aquifer Limited would accept an approval subject to conditions as proposed by Wallbridge Gilbert Aztec (WGA) to monitor the water resource, subject to the bore being safe and accessible for monitoring purposes. Bore 790160 is otherwise likely to be capped due to the aged state of the pipes. Harvesting would be from bore 790014.</p>
<p>c) Groundwater quality samples could be analysed from the onsite bore (790014).</p>	<p><b><i>Noted and accepted</i></b></p> <p><b><i>Technical Assessment</i></b> – This is consistent with the WGA recommendations. Aquifer Limited would accept an approval subject to conditions as proposed by Wallbridge Gilbert Aztec (WGA) to monitor the water resource.</p> <p>Aquifer Limited will have an audited and approved food safety system in place that will monitor and ensure efficient water use and water quality samples.</p>

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>d) Long term groundwater quality monitoring would indicate if any effects of seawater intrusion are occurring. As Horizons appears to have stopped groundwater level and water quality monitoring of the deep aquifer in this area, you could request that they restart this monitoring as part of the council’s State of the Environment monitoring.</p>	<p><b>Noted</b></p> <p><b>Technical Assessment</b> –Aquifer Limited would accept an approval subject to conditions as proposed by Wallbridge Gilbert Aztec (WGA) to monitor the water resource.</p> <p>A flow test of bore 790014 was undertaken. The stabilised rate of natural artesian flow is approximately nine times the average rate of abstraction proposed. Therefore, abstracting groundwater can be achieved at this bore via natural artesian flow of water without the need of adding pressure to the groundwater through mechanical pumps mitigating seawater intrusion occurring.</p> <p><i>Steven Collins, Groundwater scientist at Horizons has confirmed that “[HRC] do both groundwater level monitoring and groundwater quality monitoring around Whanganui.</i></p> <p><i>You can see <a href="#">here</a> where we do groundwater level monitoring, and the current status of those levels. We don’t have an equivalent for groundwater quality, but in Whanganui, we do quarterly monitoring at 209005 and 698011 (both water level bores).”</i></p> <p><i>Note: The key information provided by Stephen via the link embedded in his response above, is also included in this document as Appendix One.</i></p> <p>Aquifer Limited has supported a joint letter requesting that the Council confirm what monitoring is being undertaken as part of the State of the Environment reporting. The applicant defers to the expertise of HRC in assuming that when the regional council concludes that water allocation and water takes will have a less than minor effect on the environment that this a scientific conclusion based on technical assessment provided by WSP and WGA and supported by groundwater monitoring database. The decision by HRC about the extent of ground water monitoring is beyond the control of the applicant.</p>

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>e) We recommend that the Applicant understand and recognise the history and context of the Te Awa Tupua Act, as informing the meaning and interpretation of expectations in the legislation.</p>	<p><b>Noted and accepted</b></p> <p><b>Legal Assessment</b> –Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>Aquifer Limited <b>has continued to work with Te Runanga o Tupoho and their Working Group for more than two years. In this time, the understanding and expectations in relation to implementation of Te Awa Tupua 2017 have evolved and been more clearly defined. The applicant and their key adviser have been taken on a journey of cultural learning to better understand and appreciate the pathway and significance for tangata whenua in achieving Te Awa Tupua Act 2017. The most recent responses to the CIA recommendations, provided here, further reflects a deeper appreciation and understanding of Tupua te Kawa (intrinsic principles). This is particularly highlighted with reference to Te Mana o te wai, the circular economy and how the applicant and advisers have worked with iwi and hapū to ensure that Tupua te kawa is addressed appropriately in the project.</b></p> <p>The applicant wishes to continue <b>working with ngā hapū</b> to sustain and benefit the River with the implementation of this water take activity.</p>
<p>f) We recommend that the Applicant revise its AEE to account for the matters raised in this legal assessment. That involves: Assessing the activity by reference to cultural effects as required by the RMA. Ensuring that the Te Pā Auroa Framework is a relevant consideration in the assessment of the activity, which will include fully engaging with the status of Te Awa Tupa and Tupua te Kawa. Having particular regard to the status of Te Awa Tupua and Tupua te Kawa.<sup>1</sup></p>	<p><b>Noted and accepted</b></p> <p><b>The application was revised to account for the matters raised in November 2019. Refer to the application amended 1 Nov 2019.</b></p> <p><b>Legal Assessment</b> – Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>Under the Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 Aquifer Limited acknowledges that <i>‘Te Awa Tupua is a spiritual and physical entity that supports and sustains both the life and natural resources within the Whanganui River and the health and well-being of the iwi, hapū, and other communities of the River’.</i></p> <p>Aquifer limited <b>continues</b> to work with iwi and hapu to ensure that Te Awa Tupua and Tupua te kawa is addressed appropriately <b>throughout implementation of the project.</b> The applicant</p>

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<sup>1</sup> Te Awa Tupua Act, section 15(3).

acknowledges that the principles need to be applied in an ongoing manner and will continue to liaise with iwi to sustain and benefit the River with the implementation of this water take activity.

Examples of how Tupua te Kawa has been considered include:

**Community Wellbeing - Employment & Economic:**

Aquifer Limited anticipates initially employing 3 staff which is anticipated to increase to 10 staff within 3 years. The proposal would provide new job opportunities for local residents which would also be open to and could potentially be filled by hapū with appropriate skills. Aquifer Limited propose adopting affirmative action in the recruitment process i.e. taking proactive steps, such as in the recruitment and search process, to ensure equal access to employment and promotional opportunities.

This new business will generate additional indirect employment, such as a regular demand for truck deliveries. This will contribute positively to the local economy, which in turn provides opportunities for hapū and others to obtain employment and prosperity. It is intended that use of the rail siding at Eastown will be utilised and this will further provide employment and local economic opportunities.

**Community Wellbeing - Education:**

Aquifer Limited proposes establishing professional links with the local secondary schools and exploring workplace experiences for school leavers.

Establishment of a potential education scholarship fund for existing employees once the business is functioning availing of educational courses relevant to the workplace setting.

Aquifer Limited would be open to providing public education about the facility, operations, and natural resource as appropriate.

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>g) Reconsider the effects of the activity, and the need to avoid, remedy, or mitigate effects, by reference to the matters raised.</p>	<p><b>Noted and accepted.</b></p> <p><b>Legal Assessment</b> –. Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>The applicant <b>has refined the proposal following engagement and will liaise</b> with iwi and hapū to sustain and benefit the River <b>throughout establishment</b> of this water take activity.</p>
<p>h) That the application is opposed based on the working groups fear that inadequate data sets are being utilised to make decisions on cumulative impacts of multiple water takes.</p>	<p><b>Noted.</b></p> <p><b>Technical Assessment</b> – recommendation H relates to ground water level and water quality monitoring. Aquifer Limited would accept an approval subject to conditions as proposed by Wallbridge Gilbert Aztec (WGA) to monitor the water resource.</p> <p><b>Note:</b></p> <p>CIA technical expert (WGA) concludes that the projected effects on the aquifer, Whanganui River and water quality will be less than minor. This conclusion is based on the depth of the bore with a thick overlying aquitard, distance from the coast and small size of the proposed take. In summary, the proposed take is small and will not have a significant impact on the resource. (Technical Review Report, Wallbridge Gilbert Aztec, 29 July 2019)</p>
<p>i) and q)</p> <p>If, in spite of the opposition of the Tangata Whenua Working Group, this consent is approved, all consent monitoring outlined by WGA be adopted.</p>	<p><b>Noted and accepted.</b></p> <p><b>Technical Assessment</b> -Aquifer Limited would accept an approval subject to conditions as proposed by Wallbridge Gilbert Aztec (WGA) to monitor the water resource</p> <p>Refer to recommendations A to D, H, and I responses in this document.</p>
<p>j) and r)</p> <p>If, in spite of the opposition of the Tangata Whenua Working Group, this consent is approved, a cultural monitor appointed by the Tangata Whenua Working Group by the applicant and at the applicants cost, is part of all monitoring and the subsequent data must be shared with the Councils and the working group.</p>	<p><b>Noted and accepted.</b></p> <p><b>Legal Assessment</b> –Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River. The discussions to date about a regular process for monitoring the water take and impacts on the sustainability of River including associated costs, is welcomed and accepted.</p>

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>k) and s)</p> <p>If, in spite of the opposition of the Tangata Whenua Working Group, this consent is approved, a cultural health tool should be developed at the cost of the applicant to ensure the mauri of the ground water is measured and monitored over the period of the consent.</p>	<p><b>Noted and accepted.</b></p> <p><b>Legal Assessment</b> –Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River. <b>The applicant will apply a recognised mauri monitoring tool to the proposal. Given the technical assessments and data currently available it is anticipated that the mauri will be sustained although, for the water taken, it will move with water to the consumer of that water.</b></p>
<p>l) That the application is opposed based on its inconsistency with Te Mana o te Wai.</p>	<p><b>Noted</b></p> <p><b>Legal Assessment</b> – recommendation L recognises and reflect concerns about the potential cultural and physical impacts of the proposed water take on Te Awa Tupua and wider cultural values. Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>Aquifer Limited recognises and is working with Te Runanga o Tupoho and hapū to understand the principles of Te Mana o Te Wai and how best to implement and adhere to those principles through this water extraction process.</p> <p><b>Te Mana o Te Wai is embedded in the new National Policy Statement for Freshwater Management which became effective on 3<sup>rd</sup> September 2020.</b></p> <p><b>Te Mana o Te Wai essentially means that the intrinsic value of freshwater ecosystems is an end in and of itself. Waterways have their own mana, and they should be kept healthy for their own sake rather than for the sake of them being a resource to be exploited</b></p> <p><b>The concept of Te Mana o Te Wai is that the health of our people and communities relies on the health of our water. This is about putting the River first.</b></p> <p><b>Sustainability in this context may be viewed as a balance where if ‘water is taken’ then something needs to be returned’ to offset any effect on the sustainability of the River.</b></p> <p><b>CIA technical expert (WGA) concludes that the projected effects on the aquifer, Whanganui River and water quality will be less than minor. This conclusion is based on the depth of the bore with a thick overlying aquitard, distance from the coast and small size of the proposed take. In summary,</b></p>

the proposed take is small and will not have a significant impact on the resource. (Technical Review Report, Wallbridge Gilbert Aztec, 29 July 2019).

The technical assessments by WGA and WSP indicate effects that are less than minor. Thus the magnitude of any offset should also be relatively minor. Offsets proposed are:

- Providing water to marae in summer dry periods, if applicable.
- Avoiding use of plastics in processing – no plastic bottles/containers to be used. Processing will involve large scale rubber bladders and glass bottles.
- Establishing new jobs in the community that could be filled by hapū with appropriate skills.
- Adopting affirmative action in the recruitment process i.e. taking proactive steps, such as in the recruitment and search process, to ensure equal access to employment and promotional opportunities.
- Generating additional indirect employment, such as a regular demand for truck deliveries and services. This will contribute positively to the local economy, which in turn provides opportunities for hapū and others to obtain employment and prosperity. It is intended that use of the rail siding at Eastown will be utilised and this will further provide employment and local economic opportunities.
- Establishing professional links with the local secondary schools and exploring workplace experiences for school leavers.

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>m) If, in spite of the opposition of the Tangata Whenua Working Group, this consent is approved, the applicant should demonstrate how they are offsetting any environmental effects they are creating. This may take the form of their zero waste policy, how they are consistent with a circular economy model for their operations, and a cultural mitigation fund to enable environmental projects to occur that improve the taiao managed by the Tangata Whenua Working Group.</p>	<p><b>Noted</b></p> <p><b>Legal Assessment</b> –Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River including ways to offset any environmental effects created. The company is open to working together with iwi and hapu to sustain the taiao of their rohe.</p> <p>Aquifer Limited is focused on minimising the use of plastics. Glass bottles are proposed for small volume products and <b>rubber</b> bulk water containers <b>will avoid use of plastics</b>.</p> <p>Offsets proposed are:</p> <ul style="list-style-type: none"> <li>• Providing water to marae in summer dry periods, if applicable.</li> <li>• Avoiding use of plastics in processing – no plastic bottles/containers to be used. Processing will involve large scale rubber bladders and glass bottles.</li> <li>• Establishing new jobs in the community that could be filled by hapū with appropriate skills.</li> <li>• Adopting affirmative action in the recruitment process i.e. taking proactive steps, such as in the recruitment and search process, to ensure equal access to employment and promotional opportunities.</li> <li>• Generating additional indirect employment, such as a regular demand for truck deliveries. This will contribute positively to the local economy, which in turn provides opportunities for hapū and others to obtain employment and prosperity. It is intended that use of the rail siding at Eastown will be utilised and this will further provide employment and local economic opportunities.</li> <li>• Establishing professional links with the local secondary schools and exploring workplace experiences for school leavers.</li> </ul> <p><b>Note:</b></p> <p>CIA technical expert (WGA) concludes that the projected effects on the aquifer, Whanganui River and water quality will be less than minor. This conclusion is based on the depth of the bore with a thick overlying aquitard, distance from the coast and small size of the proposed take. In summary, the proposed take is small and will not have a significant impact on the resource. (Technical Review Report, Wallbridge Gilbert Aztec, 29 July 2019)</p>

### **Circular economy**

A Circular economy is one where the lifecycle of materials is maximised, usage optimised and at the end of life all materials are re-utilised.<sup>2</sup>

In a circular economy the lifecycles of materials are maximised. Their use is optimised. At the end of life all materials are reutilised. A circular economy is restorative by design. It is underpinned by the use of renewable energy. It is a sustainable, viable and low carbon alternative to the dominant 'take-make-waste' linear model.

The low carbon circular economy offers a truly sustainable alternative to the dominant economic model of 'take, make and waste'.<sup>3</sup>

The proposed activity will support a circular economy in a number of ways including:

- Reuse and re-purpose of an existing building and facilities including loading bays. This site has been unoccupied for more than a decade with no other prospect of reuse;
- Reuse and re-purpose of an existing water bore and infrastructure into the building;
- Avoidance of plastic products is a significant shift to minimising waste and protecting our waterways and wildlife more generally. Use of rubber bladders and bottles which are fully reusable is consistent with a sustainable circular economy.
- In relation to office activities the company has opportunities to reduce its carbon footprint, by minimising printing, employing locals and encouraging walking and cycling to work.
- Landscaping of the site will in time provide enhance amenity values and safety in the area.

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<sup>2</sup> Sustainable Business Network <https://sustainable.org.nz/the-circular-economy-model-office-guide/>

<sup>3</sup>Sustainable Business Network <https://www.circulareconomy.org.nz/>

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>n) If, in spite of the opposition of the Tangata Whenua Working Group, this consent is approved, the applicant should retain 20% of their water take for the health of the wai, that is they would have the consented take but not use this take to create a reserve buffer for the aquifer and this could not be used for any other purpose.</p>	<p><b>Noted</b></p> <p><b>Legal Assessment</b> – recommendation N recognises and reflect concerns about the potential cultural and physical impacts of the proposed water take on Te Awa Tupua and wider cultural values. Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>Aquifer Limited <b>will</b> utilise only the water necessary as the business establishes and incrementally reaches the target of 885m3 per week, over a 2-3 year period. This allows for the monitoring process to reinforce the evidence currently available which record less than minor effects.</p> <p>This recommendation conflicts with the Horizons Regional Council requirements to allocate water efficiently so that the applicant can only request to take a volume of water resource justified as necessary.</p> <p>This recommendation raises issues beyond the control or influence of the applicant. It requires HRC to manage allocation of water by ensuring that some water is held as a reserve buffer.</p> <p>It is the applicant’s understanding that this is broadly what HRC do currently. This water-take request is within the allowable volume for the wider Whanganui Groundwater Management Zone. The volume to be extracted is a fraction of the permitted allocation standard. Those allocation limits are defined according to HRC’s understanding of the ability of the wider regional water network to sustain water takes.</p>
<p>o) That the application is opposed based on its inconsistency with Te Mana o te Wai and the recommendations that have been provided by the Waitangi Tribunal Stage 2 Report.</p>	<p><b>Noted</b></p> <p><b>Legal Assessment</b> – recommendation O recognises and reflect concerns about the potential cultural and physical impacts of the proposed water take on Te Awa Tupua and wider cultural values. Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>Aquifer Limited recognises and is working with Te Runanga o Tupoho and hapū to understand the principles of Te Mana o Te Wai and how best to implement and adhere to those principles through this water extraction process.</p> <p><b>Refer to the response to recommendation I which identifies how Te Mana o te Wai is incorporated.</b></p>

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>p) That the application is opposed based on its impact on the mouri of the wai and on the mixing of the mouri of waters if water is exported outside of the rohe.</p>	<p><b>Noted</b></p> <p><b>Legal Assessment</b> – recommendation recognises and reflect concerns about the potential cultural and physical impacts of the proposed water take on Te Awa Tupua and wider cultural values. Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>The proposed water take will not involve deliberate mixing or diversion of water to other water sources. The water is from one aquifer source and will be extracted from the system. The extraction of water will not adversely affect or damage the quality or health of the wider environment. This water take is provided for within the Whanganui Groundwater Management Zone and the volume to be extracted is a fraction of the permitted allocation standard.</p>
<p>q) Repeat of recommendation I above</p>	
<p>r) Repeat of recommendation J above</p>	
<p>s) Repeat of recommendation k above</p>	
<p>t) That the application is opposed based on its impact on the mouri of our Taiao as a result of increased waste in the form of plastic.</p>	<p><b>Noted.</b></p> <p><b>Legal Assessment</b> Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>Aquifer Limited is focused on <b>avoiding</b> the use of plastics. Glass bottles are proposed for small volume products and <b>rubber</b> bulk water containers will <b>avoid the need to use plastics</b>.</p> <p>Aquifer Limited will have an audited and approved food safety system in place that will monitor and ensure efficient safe products are produced.</p>

Recommendations	Aquifer Limited additional responses (avoid, remedy, or mitigate effects)
<p>u) If, in spite of the opposition of the Tangata Whenua Working Group, this consent is approved, all materials used in extracting, packaging and transporting the final product must adhere to a zero waste framework and demonstrate how the operations will be consistent with a circular economy framework. Monitoring of the applicant against these subsequent measures and indicators will be carried out at the cost of the applicant by a cultural monitor appointed by the Tangata Whenua Working Group.</p>	<p><b><i>Noted and accepted.</i></b></p> <p><b><i>Legal Assessment</i></b> - Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.</p> <p>Aquifer Limited is committed to its fundamental objective as a responsible local grown business to provide and protect an adequate water supply and system, which includes wastewater collection and treatment, of the highest quality, while meeting or exceeding all regulatory requirements as economically as possible and in an environmentally-sound manner, for the growing residential, commercial and industrial local economic needs.</p> <p>Refer to responses to recommendation m which identifies how the activity will be consistent with a circular economy and striving towards a zero waste operation. It is noted that these are beyond the scope to be considered by the regional council.</p>

**Summary**

The CIA was commissioned by Aquifer Limited to support Ngā Hapū o Te Rūnanga o Tūpoho in providing the applicant and Horizons Regional Council with a clear position on the activity and provide recommendations to avoid, remedy or mitigate the impacts identified.

From Aquifer Limited’s perspective, the purpose of commissioning the CIA was to assist and appreciate the metaphysical elements of the Whanganui River from the mountains to the sea that may be affected by the proposed activity as required by Te Awa Tupua Act 2017.

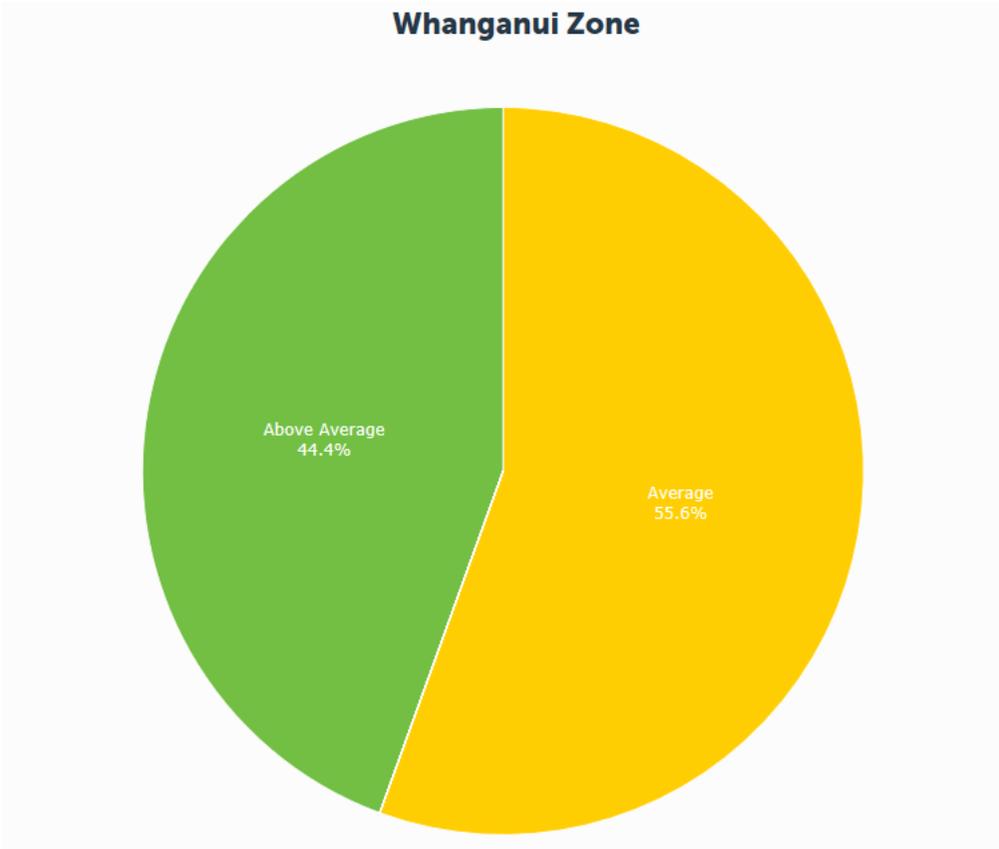
Aquifer Limited acknowledges the concern of iwi and hapū of the Whanganui River and respects the need to consider the potential impacts on the River.

Aquifer Limited continues to seek guidance from iwi and hapū in this regard.

Aquifer Limited has worked with the Te Rūnanga o Tūpoho Working Group to address each of the recommendations above.

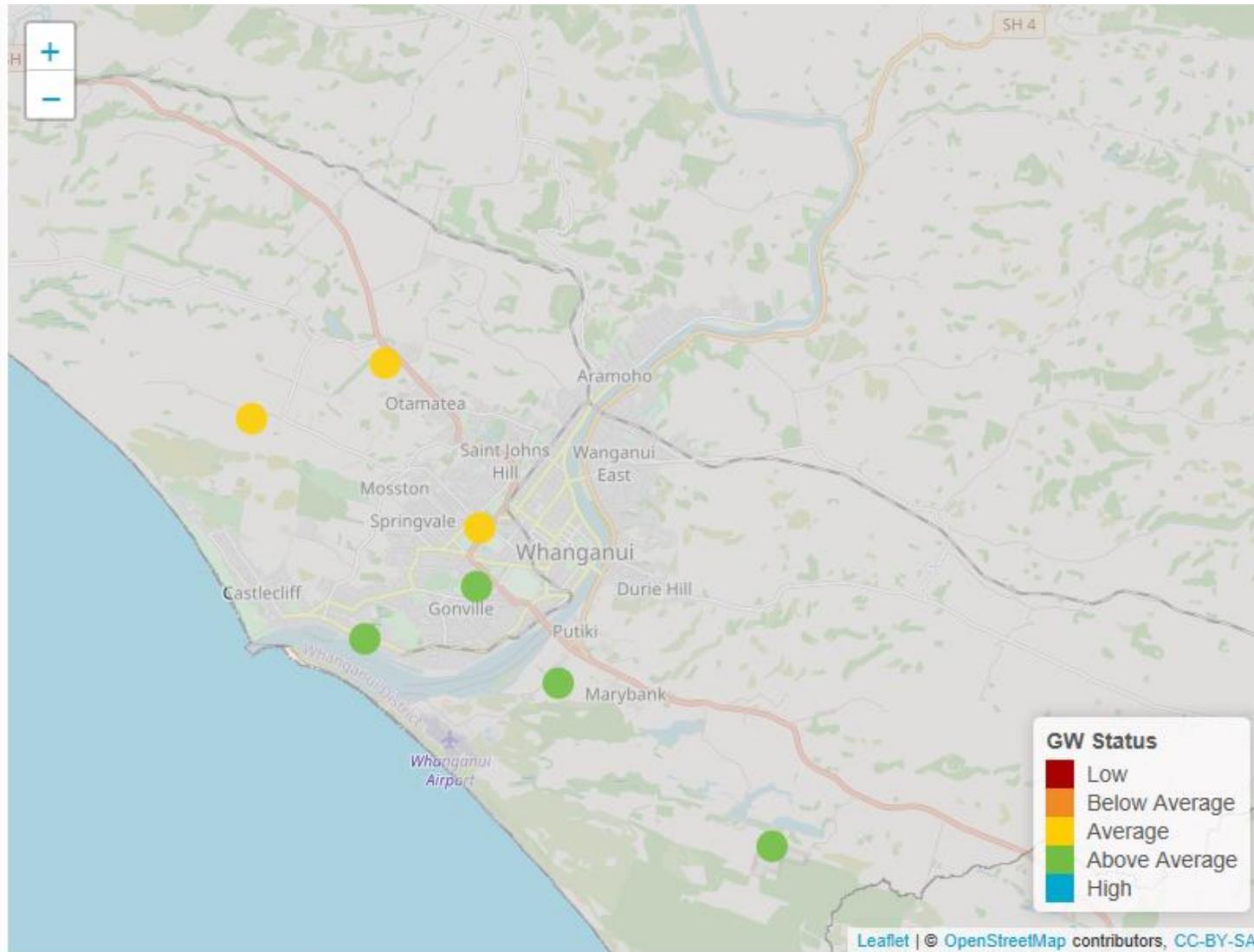
Aquifer Limited considers that the concerns held by Te Rūnanga o Tūpoho in relation to inadequate or insufficient groundwater monitoring by Horizons, is a matter that should not prevent the approval of this consent. The Council has obligations under the RMA to monitor groundwater quality and flows to ensure they are not adversely affected as a consequence of water take consents it approves. The applicant should at least be able to assume that the Council is fulfilling its RMA functions and not be held to account for proof of that.

**Appendix 1 – Horizons Regional Council - Groundwater monitoring 17 Sept 2020**



Site	GW_Level	Measurement_Date	Status
209005	51.076000	17 Sep 2020	Average
698011	49.129970	17 Sep 2020	Average
699013	48.105000	17 Sep 2020	Average
790007	5.507000	17 Sep 2020	Above Average
790041	26.824000	17 Sep 2020	Above Average
790065	8.473000	17 Sep 2020	Above Average
790087	6.897894	17 Sep 2020	Above Average
790095	10.149000	17 Sep 2020	Average
790127	40.380000	17 Sep 2020	Average

**Groundwater Zones Status**



Bore Monitoring - quarterly at sites 209005 at Seafield Rd and Site 698011 at

BORE 209005 – Site Overview

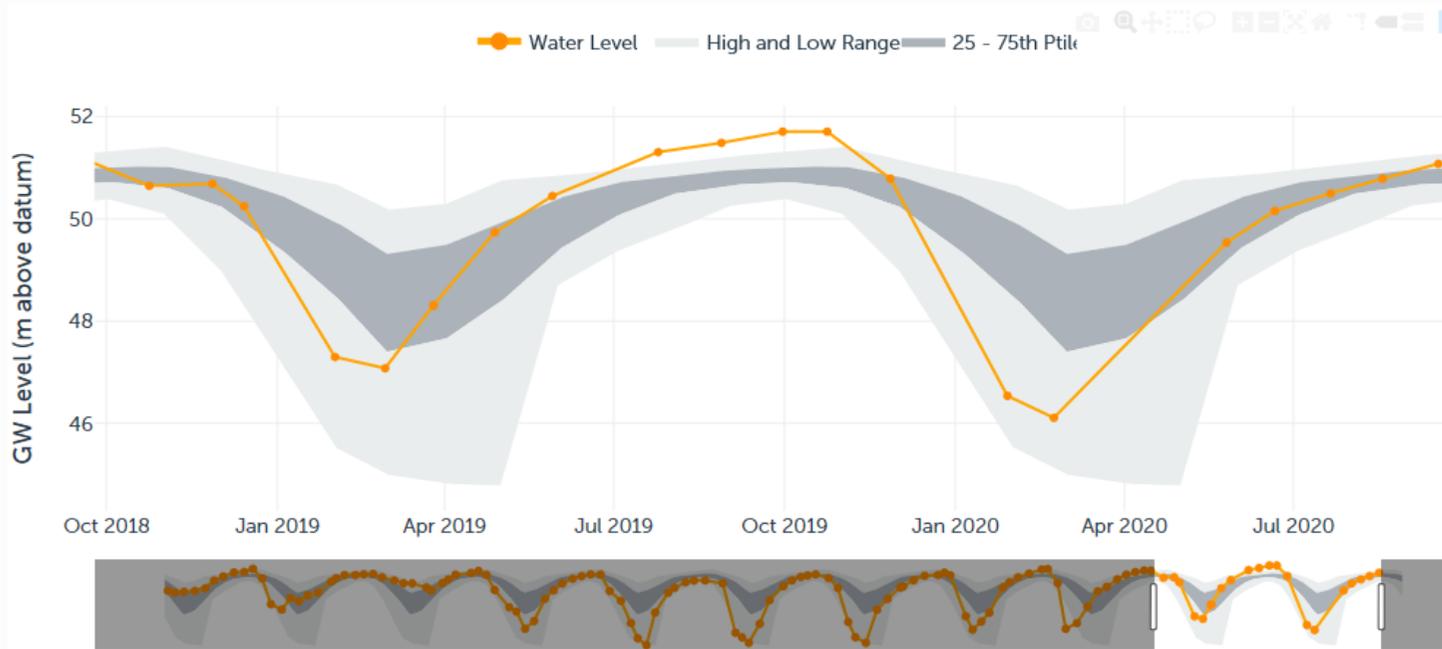
Hydrological status: Average

Most Recent WL: 51.076 (m above datum)

Start date: 30/11/1995

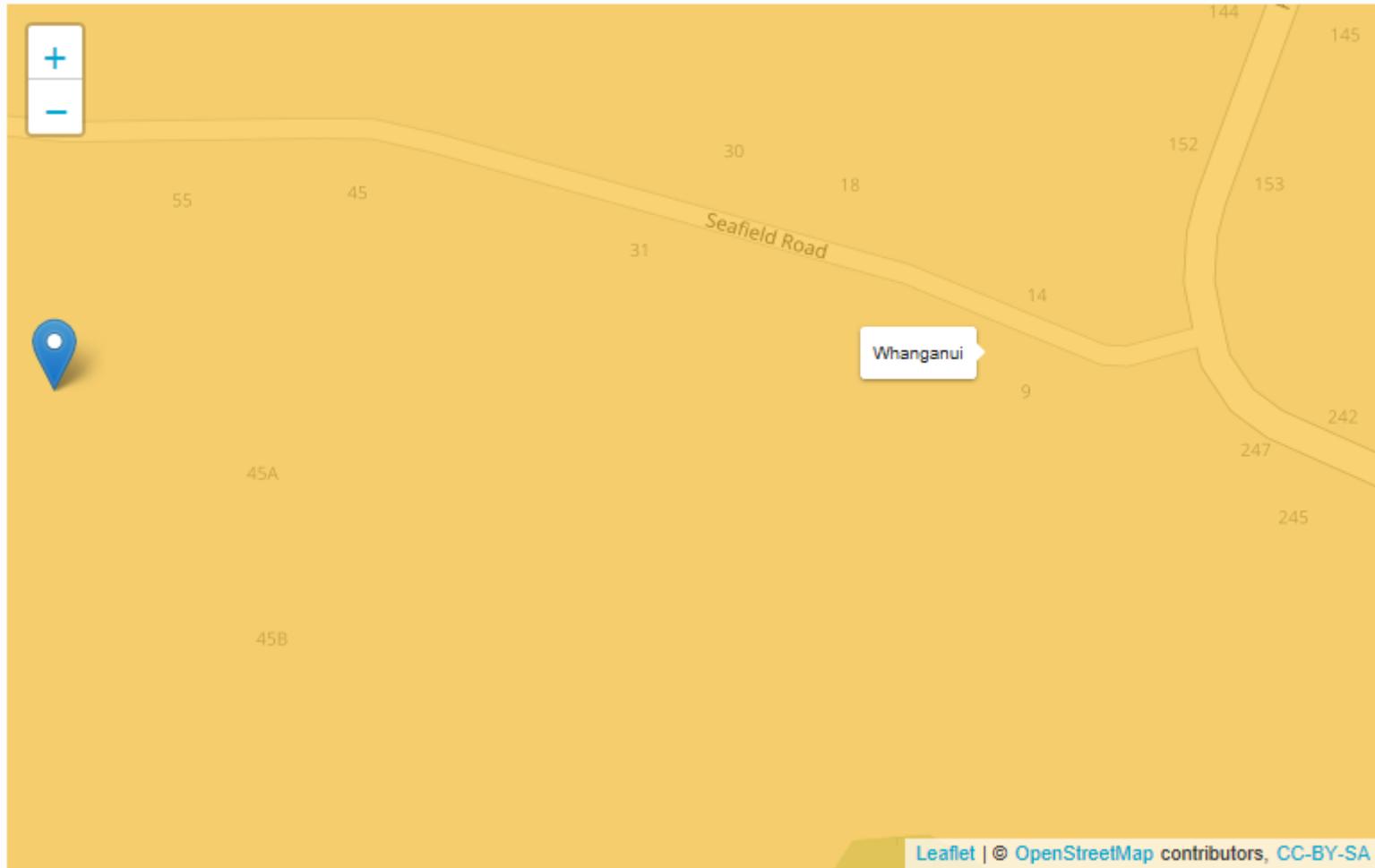
Management Zone: Whanganui

### Envelope Plot



Envelope plot statistics use all available data recorded between July 1990 and Jun 2016. Please note the length of data used will vary between sites.

## Map



**BORE 698011 – Site Overview**

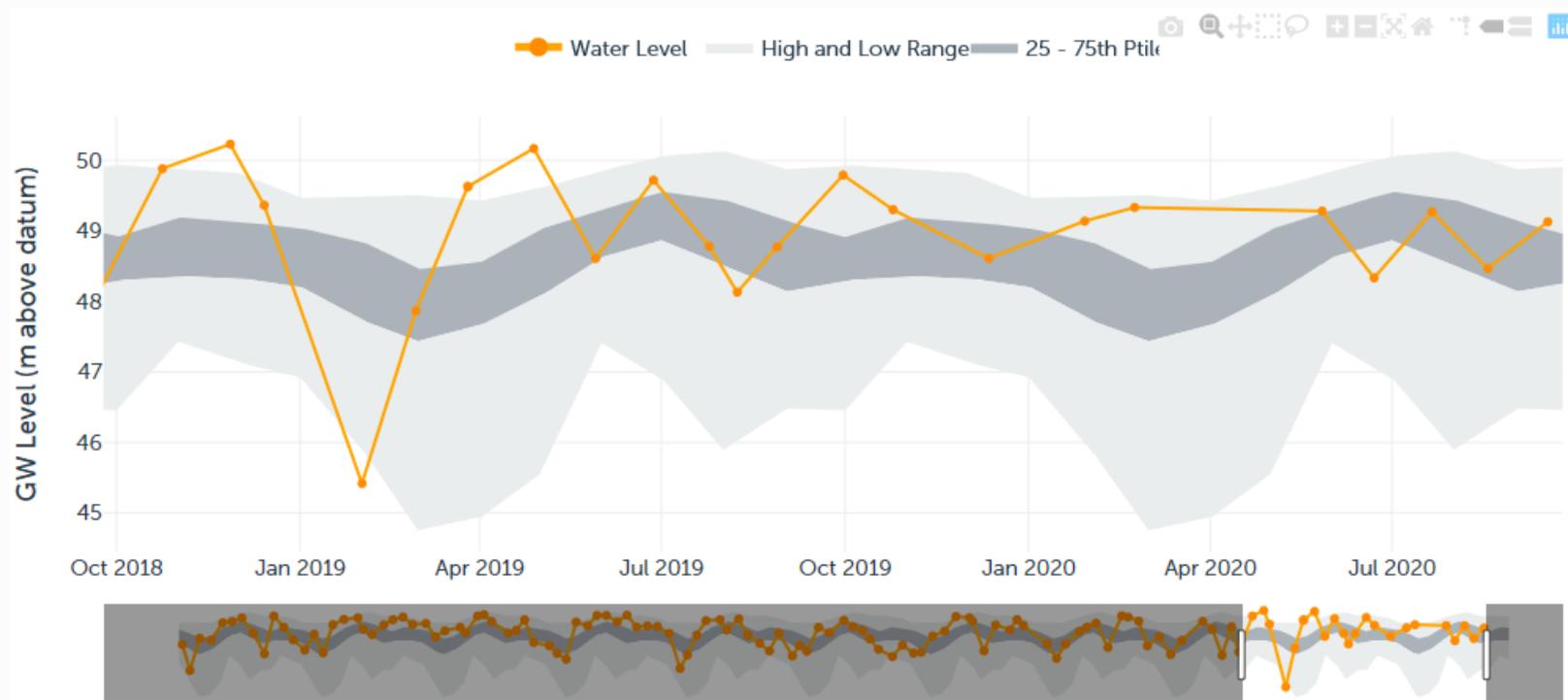
**Hydrological status: Average**

**Most Recent WL: 49.12997 (m above datum)**

**Start date: 06/07/1990      Current Measurement 17/09/2020**

**Management Zone: Whanganui**

### Envelope Plot



Envelope plot statistics use all available data recorded between July 1990 and Jun 2016. Please note the length of data used will vary between sites.

## Map

