

Decision Report

Creswell NZ Limited
Otakiri Springs Water Bottling Plant Expansion

Applications
to
Whakatane District Council
Bay of Plenty Regional Council

11 June 2018

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1 Introduction

[001] Creswell NZ Limited (Creswell or the applicant), a subsidiary company established in October 2016 by the Chinese water bottling supplier Nongfu Spring Co Ltd (Nongfu), has sought a range of authorisations to expand the existing Otakiri Springs Water Bottling Plant (Otakiri Springs) situated at 57 Johnson Road in Otakiri in the Bay of Plenty Region. Otakiri Springs holds an existing land use consent from the Whakatane District Council (WDC) for the water bottling plant, and Robertson Farms holds an existing water permit from the Bay of Plenty Regional Council (BOPRC) for the abstraction of groundwater for water bottling, frost protection and irrigation purposes. Nongfu Spring have a sale and purchase agreement with Otakiri Springs Ltd and Robertson Farms, which includes the transfer of the existing land use consent with ownership of the land.

2 Appointments

[002] The WDC and the BOPRC, acting under section 34A of the Resource Management Act 1991, appointed independent hearing commissioners Rob van Voorthuysen¹ and Antoine Coffin² to hear and decide the application.

3 Description of the proposal

[003] The history of the existing site and the nature of the current applications were comprehensively described in the applicant's AEE documents, their s92 responses and further information reports,³ the BOPRC and WDC Section 42A Reports, and the applicant's evidence.⁴ We recommend that readers of this decision refer to those documents for a fulsome description of the proposal and its background.

[004] However, by way of brief overview, the original nature of the proposal⁵ can be described as follows.

[005] Nongfu operate 18 water bottling plants in China. They now wish to utilise Otakiri Springs' existing brand and access to high quality water, combining this with the company's manufacturing and distribution capability, to grow Creswell into a significant water bottling and distribution business, supplying the New Zealand and international markets, including but not limited to China.⁶

[006] The subject site is 6.3ha in area and is located within the Rural Plains Zone of the operative Whakatane District Plan (WDP). The generally flat site encompasses the existing Otakiri Springs water bottling plant and a 5.5 ha kiwifruit orchard. It is bounded by shelter belts of large mature trees. The existing bottling line will be upgraded from 8,000 bottles of water per hour to 10,000 bottles per hour. Two new

¹ Commissioner van Voorthuysen is an experienced independent commissioner, having sat on over 260 hearings throughout New Zealand since 1998. He has qualifications in natural resources engineering and public policy and was a full member of the New Zealand Planning Institute (NZPI) from 1998 to 2016.

² Commissioner Coffin is an independent Maori Commissioner specialising in matters involving Māori heritage, engagement with Māori, freshwater and wastewater.

³ Variation to Consent Conditions 61 4817 and New Land Use Consents for the Expansion of the Otakiri Springs Water Bottling Plant, Beca Limited, 22 September 2017 (WDC application); Otakiri Springs Water Bottling Plant Expansion Resource Consent Application and AEE, Beca Limited, 31 July 2017 (BOPRC application); Land Use Consent 57 Johnston Road, Otakiri – Request for Further Information, Beca, 12 October 2017 (WDC s92 response); RM17-0424-AP: Creswell NZ Limited s92 further information response, Beca, 19 October 2017 (BOPRC s92 response); Geotechnical Stopbank Assessment Report By-Law Authority and Whakatane District Council Resource Consent Application – Geotechnical Conditions Otakiri Springs Water Bottling Plant Proposed Expansion, Beca, 7 March 2018 (Geotech report) ; Otakiri Springs water bottling plant expansion, Ecological impact assessment, Boffa Miskell, 19 February 2018 (Boffa Miskell Report).

⁴ EIC Michael Gleissner, EIC Hamish Joyce and EIC Malory Osmond.

⁵ In Reply the applicant offered to amend certain operating parameters for the water bottling plant. We discuss that later in this report.

⁶ EIC Michael Gleissner, paragraph 7.

high-speed bottling lines will each produce 72,000 bottles per hour. A new two storey building with a floor area of approximately 16,800m² and a maximum height of 12.6m will house the new production lines, warehousing for inwards and outwards goods, and an office block with a reception room and staff café.

- [007] A truck unloading canopy and finished goods container loading area will be located on the southern side of the building. A container laydown area will be located in the south western corner of the site, with containers stacked a maximum of three high (up to 8.4m in height) when they are empty and two high (up to 5.6m in height) when they are full. A carpark with 74 car parking spaces is proposed on the eastern side of the building. A stormwater system will comprise perimeter planted swales directed to stormwater detention ponds. The ponds will discharge to Hallett Drain which runs along Johnson Road. Process water⁷ will also be discharged into Hallett Drain. A sanitary wastewater treatment plant and disposal field will be located on the western side of the building adjacent to the Tarawera River stopbank. A fire pump room, fire water tank and LPG tank for the LPG boiler⁸ will also be located on the western and northern areas of the site. Around 50 large specimen trees will be planted within the site and a 2.4m high noise attenuation fence is proposed between the southern, eastern and western boundaries and the container hard stand area.
- [008] The anticipated construction time is 30 months. An initial five to six months are required to complete the Johnson Road/Hallett Road/SH34 upgrade works prior to commencing site earthworks. That will be followed by five to six months of earthworks, ten months of building construction and two months for the completion of equipment installation and site finishes. These estimated durations may change as a result of the final design, procurement and construction process.⁹
- [009] The site's existing water abstraction consent is for 1,358m³/day or 15.7 L/s (water bottling and irrigation).¹⁰ This is proposed to be increased to 5,000m³/day or 58 L/s. The increase in abstraction sought is therefore 42.3 L/s. The water will be abstracted from a recently drilled 240m deep well (PW2) and the 230m deep existing bore (well No 932) will be used for backup. Both wells draw from the Awaiti Canal Aquifer.
- [010] The applicant has recently pump tested well PW2.¹¹ It is highly productive and was tested at up to 100 L/s short term, with sustained flow of 80 L/s for 7 days resulting in 6.3m of drawdown. The groundwater quality meets the Drinking Water Standards New Zealand guidelines.
- [011] The bottled water will be containerised and predominantly trucked to the Port of Tauranga. It was initially proposed that there would be up to 184 truck movements¹² to and from the site each day between 9.00am and 7.00pm, six days a week. This compares to up to 8 truck movements per day from the existing operation. To accommodate the increased truck movements the applicant proposes increasing the width of Johnson and Hallett Roads between the site and SH34 to 7.5m with a realigned centreline; building a shared path next to Hallett and Johnson Roads from the site to SH34 for pedestrians, cyclists and horse riders; widening the Hallett

⁷ Reject water from the plant's membrane filtration system and some treated clean in place (CIP) process water.

⁸ Steam is required for the plastic blow moulding machine. The gas fired boiler will have a 16m high stack designed to comply with the permitted activity requirements of Rule 4 of the Bay of Plenty Regional Air Plan.

⁹ EIC Hamish Joyce, paragraphs 79, 82 and 103.

¹⁰ Existing consent 20595 allows 2.74L/s for irrigation (158m³/day) and 13.9L/s (1200m³/day) for water bottling. The existing consent also provides 44 L/s (1,580m³/day) for frost protection however we understand that would only be exercised occasionally.

¹¹ The final screened interval was 210m BGL to 228m BGL with an interscreen casing extending from 210m BGL up to 190m BGL.

¹² 92 trucks arriving and departing the site each day.

Road/SH34 intersection; and upgrading the pavement of Johnson and Hallett Roads to accommodate the trucks.

[012] The applicant expects that 60 full time employees will be required when the development is completed.

3.1 Management Plans

[013] From the application documents it is evident that the applicant proposes to prepare and rely on a number of management plans that would be certified by the councils at a later date. These include:

- Construction Management Plan;
- Contaminated Site Management Plan;
- Construction Noise Management Plan;
- Construction Vibration Management Plan;
- Erosion and Sediment Control Plan;
- Construction Traffic Management Plan;
- Spill Containment and Management Plan;
- Landscape Management Plan; and
- Hallett Drain Monitoring Plan.

[014] In our view management plans are an appropriate mechanism to ensure that conditions of consent are complied with and they avoid the necessity for excessive detail in the consent conditions, particularly with regard to the detail of how certain construction works or mitigation actions will occur. The caveat is that each suite of management plan conditions should specify the purpose or objective of the plan, which conditions it is designed to assist with implementing, the minimum contents of the plan, how it is to be prepared and who should be involved in that process. The conditions should also specify that each management plan is to be submitted to the appropriate council and thereafter certified. A process must be set out for reviewing or amending the plans. If there is conflict between the management plan and the conditions, then the conditions must prevail.

[015] We asked the applicant if the conditions they proposed met those requirements. In response the applicant's planners¹³ proposed a number of amendments to the conditions they had originally recommended.¹⁴ We have borne these requirements in mind when considering the applications before us.

4 Applications lodged

[016] As noted above a number of authorisations are required from the BOPRC and WDC.

4.1 BOPRC

[017] The authorisations required from the BOPRC as stated in the BOPRC S42A report are:

- a) A water permit under section 14(2)(a) of the Resource Management Act 1991 and Rule 16.8.5(f) of the Regional Plan for the Tarawera River Catchment, Rule 43 of the Bay of Plenty Regional Natural Resources Plan (RNRP)¹⁵ and Rule WQ R11 of Proposed Plan Change 9 to the Bay of Plenty Regional

¹³ Mallory Osmond and Keith Frentz.

¹⁴ Document titled "Creswell NZ Ltd witnesses' responses to the Chair's questions received on 19/4/18".

¹⁵ Prior to 17 September 2017 this plan was known as the Regional Water and Land Plan. There are overlaps between the RNRP and the Regional Plan for the Tarawera River Catchment. The BOPRC intends to merge these two plans, but in the meantime the requirements of both plans must be met.

Water and Land Plan to undertake a discretionary activity to **Take and Use Groundwater from a Bore**

- b) A land use consent under section 9(2)(a) of the Resource Management Act 1991 and Rule 1C of the Bay of Plenty Regional Water and Land Plan¹⁶ to undertake a discretionary activity being to **Carry out Earthworks**
- c) A discharge permit under section 15(1)(a) of the Resource Management Act 1991, Rule 15.8.4(m)(b) of the Regional Plan for the Tarawera River Catchment and Rule 37 of the Bay of Plenty Regional Water and Land Plan¹⁷ to undertake a discretionary activity being to Temporarily **Discharge Sediment Contaminated Stormwater to Water**;
- d) A discharge permit under section 15(1)(a) of the Resource Management Act 1991, Rule 15.8.4(m)(b) of the Regional Plan for the Tarawera River Catchment and Rule 37 of the Bay of Plenty Regional Water and Land Plan¹⁸ to undertake a discretionary activity being to **Discharge Treated Process Wastewater and Stormwater to Water**;
- e) A discharge permit under section 15(1)(b) of the Resource Management Act 1991 and Rule 16.8.5(a) of the Regional Plan for the Tarawera River Catchment, Rule 37 of the Bay of Plenty Regional Water and Land Plan¹⁹ to undertake a discretionary activity being to **Discharge Septic Tank Treated Wastewater to Land**.²⁰

[018] The proposal includes the construction of a stormwater discharge outlet in the bed of Hallett Drain. We understand that to be a permitted activity under Rule BW R6 (Rule 53) of the RNRP and Rule 12.2.5(b) of the TRCP.

[019] The wastewater disposal field (being situated within 60m of the toe of the Tarawera River stopbank) and the stormwater outlet structure in Hallett Drain trigger the need for separate approvals from the BOPRC under clauses 3.4(h) and 9.1(b) respectively of that council's Floodway and Drainage Bylaw 2008. We understand that at the time of the hearing those approvals were being processed by BOPRC staff²¹ under delegated authority. Ms Cranswick advised us²² that Mr Waugh had advised her that "... *both Engineering and Rivers and Drainage are satisfied that the Hallett Road Drain connection and geotechnical matters have been addressed by investigation and proposed design criteria.*" On that basis we are satisfied that there are no matters relating to those other approvals that we need to concern ourselves with.

4.2 WDC

[020] The authorisations required from the WDC are:

- Change of consent conditions for the existing land use consent (61/4/817) (a discretionary activity under s127(3)(a) of the RMA);
- Land use consent for the disturbance of contaminated soil under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) (2011) (a restricted discretionary activity under regulation 10(1));

¹⁶ Rule LM R1(c) (Rule 1) of the RNRP.

¹⁷ Rule DW R8 (Rule 37) of the RNRP.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ms Cranswick has advised that the proposed discharge for sanitary wastewater to land falls outside of the Operative On-site Effluent Treatment Regional Plan (OSETP) as the activity as proposed cannot meet the requirements of Schedule 2 of the OSETP due to the discharge being in excess of 2,000 litres (2 cubic metres) per day. We accept that advice, noting it makes no difference to the consent category either way.

²¹ Roger Waugh, Programme Leader, Rivers and Drainage, BOPRC.

²² The Hearing Committee, Responses to Questions from Commissioner van Voorthuysen, Jo Cranswick, 26 April 2018, page 1.

- Land use consent to enable excavation within 60m of the toe of the Tarawera River stopbank (a discretionary activity under WDP Rule 3.4.1.1 as this is an innominate activity in the WDP Activity Status Table).

[021] There was debate regarding whether the primary activity (the expansion of the existing water bottling operation) should be considered a consent change application under s127 of the RMA or as a new activity. We do not find that to be a matter requiring our assessment. An application was made under s127, the WDC accepted that application and proceeded to process it on that basis and that is what is now before us to determine.

[022] There was also some debate regarding the definition of the water bottling operation, namely whether or not it was a “primary productive use” under the WDP. That definition reads:

Primary productive use means rural land use activities that rely on the productive capacity of land or have a functional need for a rural location such as agriculture, pastoral **farming**, dairying, poultry **farming**, pig **farming**, horticulture, forestry, quarrying and mining.

[023] We understand that matter was of interest to some parties because the site resides within the Rural Plains Zone and Objective Rur1 and Policies 1 and 2 of ‘Chapter 7 Rural’ of the WDP state respectively:

To sustain the productive potential of rural land and provide for rural production activities.

To protect land in the Rural Plains Zone, which includes versatile land, for primary productive use and to maintain the productive land resources for future generations.

To provide for the growth and efficient operation of primary productive use and rural production activities in the Rural Zones.

[024] The applicant contended that the water bottling operation was a “primary productive use” and was therefore anticipated within the Rural Plains Zone whereas some submitters contended otherwise.

[025] We do not consider water bottling in general to be a “primary productive use” because it does not rely on the “productive capacity of the land” and it can be located anywhere in the District that overlies a productive aquifer.

[026] Having said that, we accept, as was noted by counsel for the applicant, that this is an application to amend the conditions of an existing land use consent to enable the expansion of an existing activity.²³ In that regard, this particular water bottling activity has a functional need to be located on this particular site, but that in itself does not qualify it as a “primary productive use”. The water bottling activity does not appear to be otherwise defined in the WDP²⁴ and so we simply need to assess it on its merits against the relevant provisions of the WDP and the higher order instruments. We assess and have regard to the WDP objectives and policies in sections 6.1.17 and 6.7 of this report, amongst others.

²³ Opening Legal Submissions on behalf of Creswell NZ Limited, 30 April 2018, paragraph 41.

²⁴ We note that the activity is clearly not an ‘industrial activity’, ‘commercial’ activity or ‘retail activity’ as far as those terms are defined in the WDP.

5 Process issues

5.1 Notification, submissions and written approvals

[027] Following assessment by an independent commissioner,²⁵ the applications to the WDC were limited notified to:

- Persons with property on Johnson Road (with the exception of Donald Charles and James Lawrence Robertson of 57 Johnson Road) and Hallett Road (between the railway crossing and the end of Hallett Road near the Tarawera River);
- Persons at 165 and 167 Moody Road;
- Ngāti Awa, Ngāti Tūwharetoa, Ngāti Rangitihī and Ngāti Mākino;
- BOPRC (with respect to stopbank management);
- WDC (with respect to the Johnson Road water supply);
- KiwiRail; and
- The New Zealand Transport Agency.

[028] In response 14 submissions were received. Ten submissions were in opposition, one was in support and three were either neutral or unclear.

[029] A submission was received from Ralph McCorkindale who was not one of the parties upon whom the WDC served notice. Mr McCorkindale is the father of a submitter, Sarah van der Boom. We record that Mr McCorkindale's submission is not a valid submission.²⁶

[030] The applications to the BOPRC were publicly notified. By the close of the submission period 120 submissions were received in time and thereafter five late submissions were accepted by the Council, making 125 submissions in total.²⁷ 72 submissions were in support or conditional support of the application and 53 were in opposition.

[031] The nature and content of the submissions were summarised in the two officer's reports.²⁸ They were also summarised in the evidence of Keith Frenz²⁹ and Mallory Osmond³⁰. We adopt³¹ those summaries but do not repeat them here for the sake of brevity.

[032] Written approval was obtained from James Robertson and Donald Robertson who are the current owners of the land where the works will be located.

[033] No pre-hearing meeting was held.

5.2 Officer's recommendations

[034] In the initial section 42A reports, neither the WDC reporting officer, Ann Nicholas, or the BOPRC reporting officer, Jo Cranswick, made a recommendation to us regarding the granting or declining of the applications. At the conclusion of the hearing Ms Nicholas recommended declining the s127 application because she considered there were local adverse effects on adjacent and nearby residents which together

²⁵ Dr Phil Mitchell in "Decision Regarding Notification of the Applications" dated 15 November 2017.

²⁶ Mr McCorkindale did not appear at the hearing. He pre-circulated a document titled "Post Submission Points Arising". We did not read that document or have any regard to its contents.

²⁷ One submission (from the WDC) has since been withdrawn.

²⁸ WDC Officer's report, section 8.4; BOPRC Officer's report, sections 5.7.1 to 5.7.3.

²⁹ EIC Keith Frenz, paragraph 155.

³⁰ EIC Mallory Osmond, page 7.

³¹ As provided for by section 113(3)(b) of the RMA.

were likely to result in a significant change to the character and amenity values of the rural environment of Hallett Road west of the State Highway and Johnson Road, and those adverse effects could not be adequately mitigated through the imposition of conditions of consent.

[035] Ms Nicholas recommended granting the land use consent for the disturbance of contaminated soil under the NESCS and the land use consent to enable excavation within 60m of the toe of the Tarawera River stopbank under WDP Rule 3.4.1.1.

[036] At the conclusion of the hearing Ms Cranswick recommended granting the BOPRC applications subject to the imposition of conditions of consent.

5.3 Hearing and site visit

[037] We held a hearing in Whakatane from Monday 30 April to Wednesday 2 May 2018.

[038] The applicants' evidence was pre-circulated in conformance with section 103B of the RMA. At the hearing the applicant's counsel Mr Randal tabled and read opening legal submissions. The applicant's Reply submissions were provided in writing on Friday 18 May 2018.

[039] Copies of the legal submissions, statements of evidence, our written questions and the answers provided to them, are held by the Councils. We do not summarise all of the matters covered here, but we refer to or quote from that material as appropriate in the remainder of this report. We took our own notes of any answers given to verbal questions that we posed to counsel, witnesses and the reporting officers.

[040] We conducted a site visit on the afternoon of Monday 30 April 2018 accompanied by the current owners of the site, James and Donald Robertson.

[041] We closed the hearing on Wednesday 23 May 2018, having concluded that we required no further information from any of the parties.

6 Section 104 and 104B matters

[042] We now address the relevant aspects of the application in terms of section 104 and 104B of the RMA.

6.1 Actual and potential effects on the environment

[043] Having reviewed the documentation and the issues of concern to the submitters we find that there are numerous matters that we need to assess. We now address these in turn.

6.1.1 Ground water abstraction

[044] As we noted in section 3 of this report, in order to meet their intended water bottling needs the applicant seeks consent to abstract up to 5,000m³/day or 58 L/s of groundwater from the Awaiti Canal Aquifer. In practical terms we consider this to be an increase of around 41 L/s over and above what is currently authorised for abstraction from the 230m deep existing bore (well No 932) under existing consent 20595.³² The allowable annual volume of abstraction for water bottling is proposed to be increased to 1.1 million cubic meters, averaging 3,000m³ per day over the course of each year.

³² In terms of water bottling (13.9 L/s) and irrigation (2.74 L/s) only and ignoring the existing frost protection take (44 L/s) which would only be exercised sporadically.

- [045] There are three matters that we need to consider when assessing the groundwater abstraction application. The first is whether the amount of water sought is reasonable and justifiable. The second is whether or not the proposed rate of take is sustainable. That is determined by referring to the allocable flow for the Awaitei Canal Aquifer set in the Regional Natural Resources Plan by Change 9 to the Regional Water and Land Plan. The third matter is whether the proposed take will adversely affect other existing groundwater wells or surface features such as streams and wetlands.
- [046] In terms of the first matter, we are satisfied that the applicant has justified the amount of water required to operate the two new 72,000 bottle per hour lines and the upgraded existing line in accordance with Policy 73 of the RNRP. The BOPRC Application and the evidence of Mr Joyce³³ described how a rate of abstraction (188m³/hour) is required for the three bottling lines (including various filters), for utilities and for amenities. The 188m³/hour equates to around 4,500m³/day. However, the applicant has allowed for a 10% contingency of around 500m³/day, giving a peak daily water take of 5,000m³/day.
- [047] The BOPRC Section 42A Report noted that a water use efficiency assessment had been undertaken and included in section 4.4.1 of the application document. That assessment demonstrated that the volumes of water proposed to be taken would be used with very little waste or losses. The reporting officer agreed with the applicant's assessment that the proposed water use was an efficient use of the water resource.³⁴
- [048] The 10% contingency was of concern to some submitters. However, we note that the annual volume of take is limited to 1,100,000 m³/year and it is the annual volume that is important for groundwater management purposes. Also, on average over a year the volume of take will be 3,000 m³/day.
- [049] Regarding the second assessment matter, we note that WQ Policy 5 of Proposed Plan Change 9 to the RNRP sets an allocable volume for aquifers in the region based on 35% of the estimated aquifer recharge. The BOPRC report titled "Assessment of water availability and estimates of current allocation levels, Version 1.1, October 2016, Region-wide Water Quantity Proposed Plan Change 9" documents the existing groundwater allocation compared to the allocable flow.
- [050] Some submitters questioned the veracity of the 2016 report. The BOPRC Section 42A Report addressed that concern, its author seeking comment on the 2016 report from Raoul Fernandes.³⁵ Mr Fernandes concluded:³⁶
- In my opinion the approach and methodology used in this report is scientifically acceptable and is a reasonable methodology to use. The figures derived in this report are conservative and the best available information that we have at this stage.
- [051] We find there is no valid evidential basis for disputing the veracity of the 2016 report. Out of interest, we note that the applicant considers the allocable volumes set out in the 2016 report to be conservative (low) because they do not account for groundwater inflows.³⁷

³³ EIC Hamish Joyce, paragraphs 49 to 57.

³⁴ Combined Report, page 417.

³⁵ Science Team Leader, Bay of Plenty Regional Council.

³⁶ Combined Report, page 366.

³⁷ EIC Mike Goff, paragraph 27.

- [052] The Awaiti Canal aquifer resides in the Rangitaiki Water Management Area. 'Table 2 – Groundwater allocation' of the 2016 report³⁸ records that as at October 2016 the annual average recharge for that aquifer was 764 L/s. The allocable flow is 267.4 L/s. The applicant notes that the existing allocation is now around 208 L/s³⁹ and that figure was confirmed by Ms Cranswick⁴⁰ to include the current existing resource consent for the site (consent 20595) for water bottling, irrigation and frost protection.
- [053] On that basis there is leaves around 59 L/s available for allocation.
- [054] As we noted at the start of this section of our report, we consider that in practical terms the increase in abstraction sought over and above what is currently authorised for abstraction from the 230m deep existing bore (well No 932) under existing consent 20595 is around 41 L/s. That represents around 71% of the remaining available allocable rate of flow determined by the 2016 report.
- [055] Looking at this another way, the BOPRC Section 42A Report⁴¹ concluded that the total annual allocable volume of abstraction from the Awaiti Canal aquifer was 8,432,726m³. We understand that the unallocated volume is around 1,873,238m³. The applicant seeks an annual volume of 1,100,000m³ or 59% of that allocable volume.
- [056] On either basis the proposed abstraction is clearly sustainable.
- [057] We note that the BOPRC reporting officer concluded:⁴²

I consider that the comments provided by Mr Fernandes and an assessment of the proposed water take against Policy WQ P5 demonstrate the proposed water take is sustainable. The inclusion of a maximum annual allocation of 1,100,000m³ per year of groundwater in any resource consent conditions will mitigate any potential effects of the take on the availability for other users to access groundwater and limit the applicant to only a volume deemed sufficient to meet their needs.

- [058] We now consider potential adverse effects on other groundwater bores and surface features.⁴³ As we noted in section 3 of this decision report, the applicant has recently drilled, and pump tested, a second 240m deep production well (PW2) located just to the west of the existing water bottling building. A report on that well and the associated pump test⁴⁴ was provided as part of the applicant's s92 response to the BOPRC⁴⁵ and discussed in the evidence of Mike Goff.⁴⁶ The report noted that in the vicinity of the new well, the Otakiri Canal Aquifer contained water of generally good quality under significant hydraulic (artesian) head. At the time that well PW2 was tested the artesian head was 18.8m above ground level.

³⁸ Page 35.

³⁹ EIC Malory Osmond, para 108.

⁴⁰ The Hearing Committee, Responses to Questions from Commissioner van Voorthuysen, Jo Cranswick, 26 April 2018, page 2.

⁴¹ Combined Report, Page 367.

⁴² Ibid.

⁴³ Surface features include rivers, streams, springs and wetlands. Other non-aquatic surface features (such as terrestrial heritage sites) of concern to some submitters, including Ngāti Awa, are not relevant as they cannot be affected by deep groundwater takes.

⁴⁴ Aa step drawdown test and a 7-day constant rate test. Water levels or water pressure were measured in 5 wells other than the production well.

⁴⁵ Well PW-2 Completion and Testing Report with an Assessment of Environmental Effects, Beca Limited, 18 October 2017.

⁴⁶ Mr Goff co-authored the report.

- [059] The pump test report advised that the new bore PW2 was highly productive and was tested at up to 100 L/s short term, with sustained flow for 7 days at 80 L/s resulting in 6.3m of drawdown. Water levels in PW2 stabilised quickly within 2 hours of initiation of the constant rate test and did not vary by more than about 0.1m by the end of that test. The well recovered quickly, with over 90% recovery occurring within 2 minutes of cessation of discharge.⁴⁷
- [060] The pump test report advised that no significant effect on the water table⁴⁸ was observed during testing and any long-term effect on the water table or the nearby Tarawera River was expected to be negligible. Using the aquifer parameters estimated from the pump testing, and for various pumping durations up to the requested 25 year (9,125 days) consent duration, the report estimated⁴⁹ the drawdown in nearby deep wells⁵⁰ if PW2 was pumped at either the average annual rate of 34.9 L/s or at the design peak rate of 58 L/s. At 58 L/s and over 25 years the drawdown in those wells was between 0.6m and 0.7m. We note that to be a negligible adverse effect considering the artesian pressure in the aquifer.
- [061] If a more conservative aquifer transmissivity is used (based on the calibration of a groundwater flow model), at 58 L/s and over 25 years the drawdown in those wells was estimated to be between 5.3m and 4.3m. We agree that even those levels of drawdown are not likely to affect the ability of the existing wells to take water considering the artesian head in the aquifer.⁵¹
- [062] As referred to above, the applicant also produced a calibrated 3-dimensional subsurface groundwater model from existing bore logs using software called Leapfrog® Geo 3.1.⁵² and Visual MODFLOW4.6.0.168.⁵³ The model was used to calculate drawdown after one year of pumping at 58 L/s. Using conservatively low aquifer transmissivity parameters, the model predicted that a measurable extent of drawdown (taken as 0.5 m) could extend for 1.5 km from well PW2, with a long term drawdown of 2.4m at well No. 2513 (WDC) and 2.2m at well No. 11233 (Schuitt).⁵⁴ Wells shallower than 100m (namely those screened in the overlying aquifers) were not expected to see any drawdown from the pumping of PW2.⁵⁵ The report, and the evidence of Mr Goff, concluded that, given that the artesian water level in the deep wells is some 15m to 18m above the ground surface, the degree of modelled drawdown would be unlikely to impact on the ability of existing wells to provide water. We agree.
- [063] With regard to potential impacts on surface features (wetlands and streams), Mr Goff provided supplementary evidence regarding the alleged 'leaky nature' of the aquifer (which was of concern to some submitters). He advised that the term "leakance" means the vertical hydraulic conductivity of the aquifer confining unit. Leakance estimated from the flow testing was 0.0005 meaning that a 100m thick confining layer would have a vertical hydraulic conductivity of about 0.05m/day. Given the low drawdown in the aquifer adjacent to the confining layer and the lack of any response in the water table during pump testing, the effect of leakance was considered to be negligible with respect to any effect on the water table, surface water or wetlands.

⁴⁷ Ibid, Sections 4.3 and 5.1.2

⁴⁸ The water table is the shallow groundwater occurring within several metres of the ground surface.

⁴⁹ Table 6-2 titled Estimated Drawdown Based on Annual and Long Term take Scenarios.

⁵⁰ Roberston (932), WDC (2513), Schuitt (11233) and Purdy (2664).

⁵¹ Ibid, section 6.1, Table 6-3.

⁵² Ibid, Section 6.2.2.

⁵³ Ibid, Section 6.2.3.

⁵⁴ Ibid, Section 6.2.7.

⁵⁵ Ibid, Section 6.3.1.

Also, the aquifer is under significant upwards hydraulic pressure meaning that contaminants in the water table cannot migrate down into the pressurised aquifer.⁵⁶ We agree.

[064] In terms of other issues raised by submitters, the pump test report, and the evidence of Mr Goff, stated that saline intrusion was not likely to occur given the distance of the site from the coast (about 14 km) and the significant hydraulic head in areas down gradient of the site. Aquifer settlement and land subsidence were not likely to occur given the lithology of the aquifer rock formations and the significant positive artesian head present in the area.⁵⁷

[065] We note the evidence of Mr Quinao⁵⁸ for Ngati Tuwharetoa Holdings Limited (“NTHL”), a wholly-owned commercial subsidiary of Ngati Tuwharetoa (Bay of Plenty) Settlement Trust (“NTST”). NTHL is the company set up to hold and provide overall management of commercial assets on behalf of the Settlement Trust.⁵⁹ Mr Quinao likened the potential effects of the Creswell groundwater abstraction to the effects of abstractions from geothermal reservoirs (including the Kawerau geothermal reservoir with which he was familiar), particularly with regard to land subsidence and aquifer sustainability. We are not persuaded by his evidence. We are aware that subsidence induced by geothermal abstractions results from pressure (and/or temperature) reductions at significant depth where geothermal fluid is abstracted from resulting in depressurisation of a compressible body of overlying rock. Even then geothermal abstraction induced subsidence is measured in mm/year, occurs over a very wide area and is not generally discernible to the naked eye. Furthermore, geothermal abstractions generally mine the resource as reservoir pressure and temperate declines over time in response to geothermal production. That is not the case here where the welded Matahina Ignimbrite rock formation containing the Awaiti Canal aquifer is essentially incompressible⁶⁰ and the allocable volume of abstraction is a conservative estimate of aquifer recharge.

[066] The Section 42A Report advised⁶¹ that the applicant’s assessment of drawdown effects had been reviewed by Blair Thornburrow.⁶² He concluded that potential saline intrusion effects were considered less than minor and it was very unlikely that the proposed abstraction would result in any land subsidence effects. The reporting officer considered that any potential effects of the proposed abstraction on saline intrusion and land subsidence would be less than minor.

[067] Again, we agree with the applicant and the reporting officer.

[068] The Section 42A Report advised⁶³ that the applicant’s assessment of drawdown effects had also been reviewed by Mr Thornburrow. He concluded that negligible drawdown responses were predicted in the shallow bores. He considered that those levels of drawdown were less than minor, particularly in consideration of the significant available artesian pressures in the aquifer and the bore depths.

[069] On the evidence we conclude that the applicant’s new well PW2 is capable of providing the 58 L/s applied for over the consent duration sought (25 years) with

⁵⁶ Supplementary Statement of Evidence – Groundwater, Michael Goff. Paragraph 20.

⁵⁷ Ibid, Sections 6.3.2 and 6.3.3.

⁵⁸ EIC Jaime Jose Ditalo Quinao. Mr Quinao is a Chemical Engineer.

⁵⁹ EIC Spence McClintock, para 4.15.

⁶⁰ Supplementary Statement of Evidence – Groundwater, Michael Goff, paragraphs 26 and 27.

⁶¹ Combined report, page 418.

⁶² Mr Thornburrow is a groundwater scientist with Pattle Delamore Partners Ltd

⁶³ Combined report, page 417.

negligible adverse effects on existing wells (both deep and shallow), surface water resources,⁶⁴ saline intrusion and land subsidence. The increase in abstraction sought (over and above the existing authorised rate of abstraction for irrigation and water bottling at the site) is well within the allocable rate of flow set for the Awaiti Canal aquifer in the RNRP. The amount of water sought is reasonable and justifiable for the proposed end use.

[070] We find there is no technical reason for not granting the water abstraction consent sought by the applicant.

6.1.2 Proposed use of groundwater for water bottling

[071] A number of submitters opposed the use of groundwater for water bottling purposes. Some were concerned that the applicant's parent company was Chinese. Others were concerned that the bottled water would be exported for commercial gain with no 'royalties' being paid. We record our view that none of these matters are relevant considerations.

[072] Nothing in the RMA, the RPS or the RNRP dictates what abstracted water should be used for, provided that the rate of take sought is reasonable and justified for the proposed end use, the rate of take is sustainable (in terms of aquifer recharge), and adverse effects on other users and surface water resources are either minor or are otherwise avoided, remedied or mitigated. Nothing in the RMA, the RPS or the RNRP refers to the ethnicity of applicants (or their parent companies). Nor is there any preclusion of abstracted water being exported. There is no provision in the RMA, the RPS or the RNRP that would enable the setting of a royalty for groundwater and so we have no legal ability to even consider imposing one.

[073] Some submitters were concerned about the preclusion of alternative uses of the abstracted water, or what might otherwise be known as 'opportunity costs'. We do not consider that to be a matter relevant to our consideration of the applications. The amount of water sought is within the allocable volume allowed for in the relevant regional plan. The issue of competing demands for, or alternative uses of, that water does not therefore arise. Even if we are wrong about that, we accept the evidence of Mr Cox who concluded that it is not clear that there are alternative uses for the water that will be bottled when the applicant's proposal is completed and nor is it clear whether the amount of water that will be bottled would be adequate for alternative uses.⁶⁵

[074] While not wanting to belittle the concerns of the submitters who raised these issues, given that we have no legal ability to address their concerns, we do not dwell on them any further in this decision report. In that regard, we accept the submissions of Mr Randal that bottling water is a commonplace and entirely legitimate enterprise, and it is the effects of a water take on the environment that are relevant to consider, and not the end-use to which the water is put.⁶⁶

6.1.3 Discharges to Hallett Drain

[075] Treated process water (reject streams of water from the membrane filtration processes and clean in place (CIP) process wastewater) and stormwater is proposed to be discharged into Hallett Drain. This was of concern to a number of submitters.

⁶⁴ Including the the wetland system at Te Kohika Swamp Pa.

⁶⁵ EIC, Mark Cox, paragraph 25.

⁶⁶ Opening Legal Submissions on behalf of Creswell NZ Limited, 30 April 2018, paragraph 72.

- [076] The process wastewater will be discharged to Hallett Drain through a common outfall with the stormwater, but it will not be discharged into the stormwater detention ponds. It will be discharged at a rate of approximately 450m³/day under peak operating conditions and 250m³/day on average.⁶⁷ Stormwater will be discharged from the site at no more than pre-development levels and then only when the on-site stormwater detention pond capacity is exceeded (see section 6.1.4 of this report).
- [077] The applicant commissioned an ecological impact assessment of the proposed discharges⁶⁸ which was also discussed in the evidence of Kieran Millar.⁶⁹ The assessment utilised five months of drain water quality monitoring data from late 2017, fish records from the New Zealand Freshwater Fish Database, a site visit in January 2018 which involved recording stream channel morphology and habitat diversity, sampling macroinvertebrates, collecting spot water quality measurements and surveying fish.
- [078] The assessment noted that native species were mostly absent from the riparian margins and the Drain had undergone extensive alteration (straightening). The Drain contained marginal fish and macroinvertebrate habitat with minimal habitat features (i.e. woody debris and some aquatic vegetation) and a mostly uniform flow (i.e. run with no pools or riffles). Macrophytes were present sporadically including willow weed and duckweed. The Drain substrate consisted of silt that was anaerobic over most of the assessed reach. Water depths varied between 0.1m and 0.4m at the time of the site visit.
- [079] The water quality results showed that the nutrient levels were above the applicable guidelines (for the parameters where guidelines are available). The macroinvertebrate community index (MCI) and quantitative macroinvertebrate community index (QMCI) scores were both indicative of poor water and/or habitat quality. The aquatic system was assessed as being of low ecological quality and of low ecological habitat value.
- [080] The assessment considered potential adverse effects resulting from earthworks, vegetation clearance, instream works and the discharge of stormwater and process water. In regard to earthworks it was concluded that effects on aquatic ecological values would be negligible provided the erosion and sediment measures were robust. Habitat loss on the western bank and bed of Hallett Drain to allow the stormwater outlet pipe to be installed is a permitted activity (as noted earlier) but in any case, it would be negligible due to the small scale of vegetation loss and poor-quality habitat.
- [081] In terms of the discharge of process water⁷⁰ and stormwater, the assessment focused on phosphorous (given the applicant's intention to contain and dispose of any nitric acid contaminated CIP water). The assessment concluded that because Hallett Drain consisted largely of robust taxa, was relatively isolated from other waterways and given the high level of nutrient inputs already present (being a rural catchment), it would be difficult to determine how limiting phosphorus was to the Drain and the level of impact additional phosphorus would have on instream values. It was noted that in any case there was little sensitive ecology within the Drain that could be adversely affected by increased macrophyte or algal growth that might

⁶⁷ EIC Malory Osmond, para 51.

⁶⁸ Otakiri Springs water bottling plant expansion, Ecological impact assessment, Boffa Miskell, 19 February 2018 (Boffa Miskell Report).

⁶⁹ Mr Millar was the author of the February 2018 assessment report.

⁷⁰ The membrane reject water, including the bleed of spent CIP wastewater, will be discharged by pipeline to the outlet connection of the stormwater pond leading to the Hallett Drain. The process wastewater will not discharge into the stormwater pond system. EIC Rob Fullerton, paragraph 72.

result from increased phosphorous levels. The assessment concluded there were unlikely to be any adverse effects on the Tarawera River as phosphorus discharged from the site would likely be sequestered by plants or waterway sediments before the Tarawera River confluence was reached 15km downstream.

- [082] The evidence of Mr Fullerton compared the estimated process wastewater quality discharged to Hallett Drain (based on the membrane reject of 25%, which is the default operating condition,⁷¹ and including the daily blend of 8.5m³ spent CIP) with the ANZECC water quality guideline values for (lowland rivers) and the NPSFM Grade A attribute values. That assessment verified that only total phosphorous was of concern, being above the ANZECC guideline.⁷²
- [083] In order to determine the effect of phosphorous (and the other contaminants discharged), Mr Fullerton suggested that a monitoring programme should include monthly sampling of the process water discharges⁷³ to the Drain as well as concurrent monthly sampling of the water in the stormwater detention pond⁷⁴ (irrespective of a discharge to the outfall). He suggested the sampling should occur at the culvert under Johnson Road as a convenient point at which the process wastewater and the Drain water would be fully mixed.⁷⁵ He also suggested that monthly sampling of Hallett Drain should occur upstream, at the culvert and at two further downstream points for 12 months. We understand the intention of that would be to allow discharge limits to be set. Mr Millar also suggested monthly monitoring for three quality parameters⁷⁶, as well Drain sediments, instream plant (macrophyte and algae) growth and instream plant (macrophyte and algae) cover / abundance / density along a transect across the Drain.⁷⁷
- [084] We note that Mr Millar supported the annual invertebrate surveys upstream and downstream of the discharge to Hallett Drain recommended by BOPRC scientist Paul Scholes.⁷⁸ However, he did not consider that a fish survey would be useful in identifying if there had been a discernible change as a result of the discharge. The reason being that fish are mobile creatures their absence / presence during a fish survey would not be to be a robust measure that the discharge was or was not having a discernible effect.⁷⁹ Mr Scholes subsequently advised that having read the applicant's evidence he agreed that fish surveys were not necessary.⁸⁰ We agree.
- [085] We have had regard to the evidence of Mr Fullerton and Mr Millar when determining the final nature of a necessary monitoring programme.
- [086] The Boffa assessment was reviewed by Mr Scholes. He appeared to concur with the assessment's conclusions.⁸¹ However, he recommended the imposition of conservative discharge standards (or triggers) on the process water discharge for ammoniacal nitrogen, nitrate nitrogen and pH based on his broader knowledge of the catchment which would, in his opinion, at least maintain the water quality and protect

⁷¹ The process discharge water quality values differ from the table submitted in the BOPRC Application as the membrane reject has been increased from 10% to 25%.

⁷² EIC Rob Fullerton, paragraphs 79 and 86 and the associated table.

⁷³ Sampling for TN, TP, cBOD5 and pH.

⁷⁴ Sampling for the same parameters as the process water plus TSS and DRP.

⁷⁵ EIC Rob Fullerton, paragraphs 97 to 101.

⁷⁶ TP, DRP and chlorophyll a.

⁷⁷ EIC Kieran Millar, paragraph 49(d)

⁷⁸ Mr Scholes is the BOPRC Science Team leader – Water Quality.

⁷⁹ EIC Kieran Millar, paragraphs 56 to 58.

⁸⁰ The Hearing Committee, Responses to Questions from Commissioner van Voorthuysen, Jo Cranswick, 26 April 2018, page 4.

⁸¹ Combined report, page 381.

the instream ecology in Hallett Drain in the absence of baseline monitoring. A breach of the trigger levels would require the consent holder to undertake a review of the process water discharge and stormwater pond conditions and propose mitigation measure to address any exceedance of those trigger levels. We consider that to be a prudent approach and note that the trigger levels can be reviewed under s127 of the RMA once sufficient monitoring data from Hallett Drain is available.

[087] We are satisfied that subject to the imposition of suitable monitoring and discharge trigger level conditions, potential adverse effects on Hallett Drain and Tarawera River water quality and aquatic ecology will be appropriately avoided or mitigated.

6.1.4 Flooding from stormwater

[088] There was some concern from some submitters that the proposed discharge of site stormwater to Hallett Drain could exacerbate flooding in the area. However, the BOPRC has required that on-site stormwater detention must be provided to prevent an increase in runoff from the site in a 72-hour 100 year AEP 2117 climate change adjusted storm event. Additionally, the peak rate of instantaneous discharge from the site (namely from the stormwater detention pond) cannot exceed the existing peak discharge rate in a 72-hour 100 year AEP. That equates to a maximum discharge rate of 31 L/s.

[089] The total amount of storage volume required to achieve the above result is 8,550m³. This is significantly larger than the initially proposed volume of the stormwater settling pond which has a volume of around 3,600m³. The applicant intends to provide the additional storage (around 4,950m³) through the use of additional on-site ponds or underground storage tanks.⁸²

[090] We note that the BOPRC endorsed the above approach. Mr Blackwood⁸³ advised the applicant that based on the respective proportions of roof, pavement and grass applied in the stormwater runoff calculations he agreed that the proposed storage required of 8,550m³ would mitigate the 72-hour 1% AEP storm with climate change to 2117.⁸⁴

[091] We are satisfied that the above outcomes, which can be imposed in consent conditions, will avoid any risk of increased flooding arising from stormwater discharges associated with the proposal.

6.1.5 On-site Wastewater System

[092] As described in the BOPRC Application and the evidence of Rob Fullerton, as part of the bottling plant expansion it is proposed that an onsite wastewater treatment and effluent disposal system is installed. The wastewater from the site includes on-site toilets, lunchroom facilities, wash basins, showers and a small laundry facility. The proposed treatment system is a Hynds On-Site MBR plant (or suitable equivalent) that is compliant with the standards AS/NZS 1547:2012, AS/NZS 1546.3:2008 (septic tanks) and 1546.1:2008 (aerated wastewater treatment systems). The treated wastewater will be discharged to land through a low-pressure effluent disposal (LPED) system. The treatment and disposal system has been designed for a capacity for 70 people, with a per capita wastewater volume of 60 L/day/person and 1,000 L/day for

⁸² EIC Jandre van Zyl, para 37.

⁸³ Peter Blackwood is the BOPRC Principal Technical Engineer.

⁸⁴ Email from Peter Blackwood to Jo Cranswick dated 29 November 2017, Combined Report, page 1078.

the laundry facility. A 20% contingency has been included in the per capita flow rate.⁸⁵ The design daily wastewater volume is 5.2m³ per day.⁸⁶

- [093] The Section 42A report noted that the soil loading rate (from the LPED system) would be 11.3mm per day whereas according to Table L1 of the standard AS/NZS 1547:2012, the recommended maximum design loading rate to the type of soil at the site (Category 4 for conservativeness) for secondary treated effluent is 30mm per day.⁸⁷ We note that the applicant's proposal is therefore very conservative. The reporting officer considered that any adverse environmental effects of the proposed discharge of onsite treated wastewater on land and soil would be acceptable. We agree.
- [094] Some submitters were concerned that the proposed on-site effluent wastewater discharge could have an adverse effect on either groundwater or the Tarawera River. The land disposal field will be located 40m away from the river.
- [095] The applicant undertook an assessment of the proposal against the Environmental Science and Research Limited (ESR) Guidelines for separation distances based on virus transport between on-site domestic wastewater systems and wells. That assessment and the evidence of Mr Fullerton concluded that separation distance to existing bores in the area was satisfactory.⁸⁸ We received no evidence to the contrary.
- [096] In terms of potential adverse effects on the Tarawera River, the applicant advised that if secondary treated effluent from the on-site wastewater treatment system were to enter the Tarawera River (undiluted and with no additional natural treatment) the result would be a negligible change in instream biochemical oxygen demand (BOD) and total nitrogen (TN) concentrations. The overall potential effect on the Tarawera River was expected to be negligible and it was unlikely that a change in river water concentrations of BOD and nitrogen would be measurable after reasonable mixing had occurred.⁸⁹
- [097] We note the evidence of Susan Aitken⁹⁰ advised that under extreme (100-year return) Tarawera River flood conditions the site groundwater levels would temporarily rise in response to the rising river and may rise to the elevation of the effluent distribution field discharge level. Ms Aitken considered that under those extreme conditions it was likely the plant operations would be reduced or stopped with workers evacuated or not in attendance at work, in which case the flows to the effluent distribution field would be substantially reduced. In addition, the effluent treatment system has a 24-hour storage capacity. The combined effect would provide adequate temporary containment of effluent until groundwater levels lowered in response to the receding river level and normal discharge of treated effluent could resume. We accept that evidence.
- [098] The applicant's assessment was reviewed by Mr Scholes.⁹¹ He concluded that the applicant's assumption that, after reasonable mixing, no increase in nitrogen concentration would be perceptible in the Tarawera River seemed reasonable given the projected loadings from the effluent treatment system. He also considered that if

⁸⁵ WDC Application, section 3.7, page 17.

⁸⁶ EIC, Rob Fullerton, paragraph 24.

⁸⁷ Combined Report, section 7.4.1, pages 368 and 369.

⁸⁸ Ibid, page 370.

⁸⁹ BOPRC s92 response, page 7.

⁹⁰ EIC Susan Aitken, paragraph 18.

⁹¹ As noted earlier, Mr Scholes is the BOPRC Science Team leader – Water Quality.

viruses were to be transported to the river they would be in low number (less than log 2), and there would be rapid dilution and UV inactivation within the river. As dilution would be in the order of greater than 10,000-fold (5.2 m³/day of effluent discharge compared to a median Tarawera River flow of 2,067,000m³/day), it was likely that any risk of viral infection would be minimal.

- [099] Some submitters were concerned that the treated wastewater could enter the site's proposed stormwater swale. Mr Fullerton advised that the stormwater swale at the perimeter of the site adjacent to the wastewater effluent disposal field had been relocated from the position shown in the BOPRC Application and it now did not extend as far as the effluent disposal field, terminating approximately 10m to the south west. The swale invert depth at this point is 0.5m below ground level (10.5mRL), whereas the typical level of the groundwater under the disposal field, including water mounding from the discharge, is 1.3m lower (9.2mRL). The risk of treated effluent discharge reaching the swale was therefore low, which in turn meant there was a minimal, if any, potential for discharge of treated wastewater into the stormwater system.⁹² Again, we accept that undisputed evidence.
- [100] In light of all of the above the BOPRC reporting officer considered that any adverse environmental effects of the proposed discharge of on-site treated wastewater on groundwater or surface water would be avoided or mitigated.⁹³ We agree.

6.1.6 Earthworks, erosion and sediment control

- [101] In order to level the site to create the building platform, external hardstand areas, access roads and suitable drainage, the applicant now estimates earthworks volumes to be in the order of approximately 25,000m³ cut to waste over an area of 6.2ha. The volume has increased from that estimated in the AEE (which was 19,000m³) due to the volume of the stormwater ponds increasing in response to feedback from BOPRC. Imported fill will raise the developed areas of the site by 0.20m to 0.65m above the existing ground level.⁹⁴
- [102] The applicant provided an erosion and sediment control plan (ESCP) in Appendix K of the application documentation lodged with the BOPRC. The ESCP detailed the use of clean and dirty water diversion channels, earth bunds, a sediment retention pond, silt fencing and management procedures for the site. In order to control dust, a water truck or portable water sprays utilising the water supply from the existing bore(s) onsite will be used to apply water to exposed areas. We note that these are all standard and well proven management techniques for large scale earthworks.
- [103] The information in the application was expanded upon in response to a s92 request for further information from the BOPRC. The applicant's ESCP and further information was reviewed by Mr Nell, a consulting engineer engaged by the BOPRC, and he concluded that the control measures were in accordance with the Environment Bay of Plenty Guideline No. 2010/01 - "Erosion and Sediment Control Guidelines for Land Disturbing Activities" (ESC Guidelines).
- [104] Accordingly, the BOPRC reporting officer concluded that provided the earthworks were undertaken as outlined in the applicant's proposed methodology, including the proposed design of erosion and sediment controls, any adverse effects resulting from

⁹² EIC Rob Fullerton, paragraph 41.

⁹³ Combined Report, section 7.4.2, page 371.

⁹⁴ EIC Jandre van Zyl, paragraphs 16, 17 and 19.

erosion, sedimentation or windblown dust would be avoided or mitigated.⁹⁵ We agree and note we received no expert evidence to the contrary.

6.1.7 Stopbank integrity

- [105] A number of submitters expressed concern about the effect of the proposal on the stability of the Tarawera River stopbank adjacent to the site. In some cases those concerns were heightened by the recent failure of a stopbank at Edgecumbe.
- [106] As discussed above, the proposal includes a surface stormwater swale and a treated effluent disposal field within 60m of the landward side of the stopbank. Work within this area will also involve removing some 300mm of topsoil and backfilling to 500-800mm for the internal road and hardstand.
- [107] Under Rule 18.2.2 of the WDP the removal of soil from within 20-60m of the toe of the Tarawera River stopbank is only permitted subject to compliance with listed conditions, which include the written approval of the BOPRC. As that approval had not been obtained at the time of application the activity is a discretionary activity under Rule 3.4.1.1 of the WDP.
- [108] The WDC Section 42A Report identified two criteria in the WDP (Chapter 3 section 3.7.43) for our consideration.⁹⁶ We have regard to those criteria, noting that they relevantly relate to any increased risk associated with a natural hazard event that may arise from undertaking earthworks, including undermining the integrity of a stopbank.
- [109] Additionally, the proposed works encroach the 60m buffer identified in clause 9.1(b) of the Bay of Plenty Regional Council Floodway and Drainage Bylaw 2008, therefore require approval under that Bylaw. As discussed earlier in this report, approval under the Bylaw is being sought separately by the applicant.
- [110] To address the submitter's concerns the applicant undertook an assessment of stopbank security.⁹⁷
- [111] That assessment noted that geotechnical drilling and in-situ testing during the site investigations had informed the formation of 2-dimensional (2D) computer models created to run various simulations for seepage and stopbank slope stability using industry accepted software programmes SEEP/w and SLOPE/w respectively. A preliminary hydrograph for the site suggested that a 100-year ARI flood would produce a river level of around 10.5 to 11mRL. Flood durations were typically relatively slow, commonly rising to peak in two days and receding 500mm in five days, then continuing to recede beyond 25 days.
- [112] The modelling indicated that stopbank stability was not adversely affected by the presence of the effluent disposal field, with the factor of safety⁹⁸ against failure ranging from 3.9 to 5.7 when the field was in operation. The lowest factor of safety was expected to occur during 100-year flood event when there was the potential for a seepage face to develop on the eastern slope of the stopbank. The presence of the

⁹⁵ Combined Report, section 7.5.2, page 374 and 6.5.3, page 374.

⁹⁶ Combined Report, page 23.

⁹⁷ File Note from Breda Savoldelli (BECA Ltd) titled "Stopbank Security Assessment – Otakiri Springs Proposed Plant Expansion" dated 27 February 2018, Combined Report, page 297.

⁹⁸ In slope stability studies, the FOS is the ratio of resisting forces (shear strength of soil) to the disturbing forces (weight of soil, surcharge load and seepage pressures). The FOS should be greater than 1.0. A FOS of 3 or more indicates a very stable situation. EIC Susan Aitken, paragraphs 40 and 41.

stormwater swale, however, helped to remove the flood waters and that improved the stopbank stability. It was concluded that the stopbank was robust and slope failure resulting from the proposed site development was unlikely.⁹⁹

- [113] The applicant also undertook a separate geotechnical stopbank assessment.¹⁰⁰ That assessment, and the evidence of its author Susan Aitken, concluded that under normal seasonal conditions, the existing stability of the stopbank had a factor of safety in excess of 3.0 for a significant slope failure through the crest and beyond the toe towards the site. The effect of the temporary and permanent earthworks (the swale and effluent disposal field) under all normal and extreme flood conditions also resulted in factors of safety in excess of 3.0.
- [114] We received no expert evidence to the contrary and so we accept the evidence of Ms Savoldelli and Ms Aitken.
- [115] The WDC Section 42A Report noted that the geotechnical stopbank assessment had been peer-reviewed and no specific outstanding concerns were raised. The WDC reporting officer recommended that consent be granted under Rule 18.2.2 of the WDP. We have no evidential basis for disagreeing with that recommendation.
- [116] Regarding the necessary BOPRC Bylaw approval, we simply note (as was pointed out by the BOPRC reporting officer)¹⁰¹ works within 60m of the stopbank cannot proceed until the applicant has obtained that approval.

6.1.8 Contaminated soil

- [117] The applicant has sought consent under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil) Regulations 2011 (NESCS). Consent is required under the NESCS due to the proposed activity being unlikely to meet the permitted activity thresholds in NESCS regulation 8(3) regarding soil disturbance and duration of earthworks.¹⁰²
- [118] A Detailed Site Investigation (DSI) was undertaken in September 2017 and included as Appendix J in the application to the WDC. The DSI and the evidence of its author Emma Lewis identified that an orchard was established on the subject site in the early to mid-1980s and the water bottling plant was established in its current location in the early 1990s. A variety of old equipment is now stored directly on the ground including some old fuel/oil barrels and an empty above ground diesel storage tank.
- [119] Soil investigations within the kiwifruit orchard, as well as around the diesel storage tank, revealed concentrations of arsenic, cadmium, copper and zinc detected at levels above the adopted background range indicating that the soils have been impacted by pesticide applications associated with the orchard. Elevated arsenic was identified within the orchard at one location above the adopted human health and environmental criteria, although not by an order of magnitude above that criteria. Ms Lewis considered that the level of arsenic at the site did not constitute a risk to human health.¹⁰³ The reason being that the main exposure pathway to the elevated arsenic was dermal contact and ingestion by construction workers, but Ms Lewis

⁹⁹ Ibid, section 4.2, page 15, Combined Document, page 311.

¹⁰⁰ Geotechnical Stopbank Assessment Report By-Law Authority and Whakatane District Council Resource Consent Application – Geotechnical Conditions, Otakiri Springs Water Bottling Plant proposed Expansion, prepared by Sue Aitken at BECA Ltd, 7 March 2018.

¹⁰¹ Combined Report, section 7.5.5, page 375.

¹⁰² EIC Emma Lewis, paragraph 60.

¹⁰³ EIC Emma Lewis, paragraph 30.

considered that risk to be low and that it could be managed through the implementation of a robust contaminated site management plan (CSMP) as was usual in situations like this.¹⁰⁴

- [120] The DSI also concluded that the contaminant concentrations did not pose a risk to the physical environment. In that regard Ms Lewis advised that, based on the experience gained from her investigations of over a dozen orchard sites, the contamination observed at this site was in the lowest range of that typically observed. She did not consider the site to be contaminated and the soils did not contain contaminants that were toxic or hazardous.¹⁰⁵ The level of contamination was not at concentrations above NESCS SCSs for 'residential' or 'rural/lifestyle block' land uses, which allowed for home-grown produce consumption (10% and 25% respectively).¹⁰⁶
- [121] Nevertheless, to manage any potential discharges to air and water during earthworks, a CSMP will be implemented by the applicant. A CSMP was included as Appendix K to the application to the WDC.¹⁰⁷
- [122] The DSI and CSMP were reviewed by Emma Joss¹⁰⁸ who advised that the DSI and CSMP were prepared by a suitably qualified and experienced practitioner (SQEP) in general accordance with the Ministry for the Environment's contaminated land management guidelines No. 1 and No. 5.¹⁰⁹ The WDC reporting officer recommended granting the land use consent required under the NESCS and proposed conditions of consent to ensure that the contaminated soil is managed in accordance with the application and the CSMP.
- [123] We find that to be appropriate.

6.1.9 Loss of horticultural landuse

- [124] The WDC reporting officer noted that the site is currently predominantly used for growing kiwifruit and has no apparent constraints for horticultural use. The applicant's proposal will result in the loss of the existing horticultural activity and she considered that to be inconsistent with the WDP's requirement to protect versatile land. In that regard Ms Nicholas brought to our attention a number of criteria in Chapter 3 (3.7.27) of the WDP, including how the proposal facilitates or sustains the use and inherent versatility of high quality soils and the loss of future productive rural land use options.
- [125] This matter was addressed by the applicant. Mr Gleissner¹¹⁰ advised that the dry matter yields from the kiwifruit orchard are substantially below the Eastpack production average, due to the low Cation Exchange Capacity of the site's soils, despite many years of chicken manure and compost being applied to the land. The site is also within a frost belt, and even with frost protection the orchard's fruit set is less than optimum. Mr Gleissner advised that the existing kiwifruit orchard site would struggle, in the next five years, to be a viable operation.
- [126] On the evidence, and having regard to the provisions of the WDP, we find that the site may not actually contain high quality soils and on that basis the loss of 5.5ha of

¹⁰⁴ Ibid, paragraph 44.

¹⁰⁵ Ibid, paragraph 50.

¹⁰⁶ Ibid, paragraph 51.

¹⁰⁷ WDC Application, section 3.9, page 18 and BOPRC Section 42A Report, section 7.5.1, Combined Report page 372.

¹⁰⁸ Ms Joss is the Senior Regulatory Project Officer – Contaminated Land and Waste, BOPRC.

¹⁰⁹ BOPRC Section 42A Report, section 7.5.1, Combined Report page 372.

¹¹⁰ EIC Michael Gleissner, paragraphs 124 to 132.

existing kiwifruit orchard (and the preclusion of future primary production land uses) is not of sufficient weight to warrant declining the s127 application.

6.1.10 Hazardous substances

- [127] The application noted,¹¹¹ and the evidence of Mr Joyce¹¹² further explained, that a range of hazardous substances will be stored on the site.¹¹³ It was also stated that all storage, transport and use of hazardous substances would be undertaken in accordance with the Hazardous Substances and New Organisms Act 1996 (HSNO Act). However, while routine measures such as separation distances, controlled zones, ventilation, fire walls, fire safety measures, secondary containment and bunding would be utilised where necessary, the precise details around the storage of hazardous substances had not been finalised and therefore an accurate effects ratio was unable to be calculated to determine what activity status (under the WDP) would apply to the substances being stored. Consequently, the applicant proposed that a land use consent would be sought for any ratios above the permitted activity thresholds in the WDP at the time building consent was sought.
- [128] The WDC Section 42A Report noted that a future application would be made in relation to the use and storage of hazardous substances on the site.¹¹⁴ We understand that is acceptable to the WDC, subject to making it clear in consent conditions that the storage and use of hazardous substances that are not permitted under the WDC Plan would not be authorised under the changed land use consent for the site.¹¹⁵
- [129] We are satisfied that potential adverse effects arising from the storage of hazardous substances will be dealt with through a subsequent consent process, if consent for that activity is required. If consent is not required then the permitted activity standards of the WDP would be met, which we note is also a suitable outcome.

6.1.11 Bulk and location

- [130] The proposal involves at least 69% building and hard surface site coverage. The proposed main building will in places be no more than 12m from the site boundary, a maximum of 12.9m in height¹¹⁶ and 16,800m² in area. In other words, it is a very large building that will be located very close to the site boundaries. However, we accept that while the proposal increases the area and height of the built form on the site, the new buildings will be, as a minimum, no closer to the boundaries (apart from the southern boundary) than the existing building and will be set further back from the road. The existing hedges around the site will screen and filter views into the site.¹¹⁷
- [131] We discuss visual effects next, and apart from those potential effects we record that the proposed bulk and location of the proposed new building (together with its ancillary buildings and container storage) does not of itself militate against granting the s127 application.

¹¹¹ WDC Application, page 19.

¹¹² EIC Hamish Joyce, paragraphs 33 to

¹¹³ Nitric acid, hydrochloric acid (as an alternate to nitric acid), sodium hypochlorite, sodium hydroxide, peracetic acid, sodium bisulphate, LPG and diesel.

¹¹⁴ Combined Report, para 6.12, page 6.

¹¹⁵ Application to Whakatane District Council for Land Use Consent – Creswell New Zealand Limited, Response to Questions from Commissioner Van Voorthuysen to Whakatane District Council, page 1.

¹¹⁶ The boiler chimney will be at least 15.9m high to comply with the Regional Air Plan.

¹¹⁷ WDC Application, page 29.

6.1.12 Landscape and visual effects

- [132] A number of submitters were concerned about the adverse effects of the proposal on the existing rural landscape and visual amenity of the area.
- [133] As we outlined in sections 3 and 6.1.11 of this decision report, the Creswell proposal includes the construction of a large new building with a floor area of 16,800m² and a maximum height of 12.9m above ground level. It will be painted a 'recessive colour'. The building will be located more than 60m from Johnson Road behind the existing water bottling plant. Containers will be stacked up to three high outside the building on its southwest side (to a maximum height of 8.4m) and a 2.4m high noise attenuation fence will be built on part of the boundary.
- [134] We note that the site is not located in, nor is it adjacent to, an outstanding natural feature or landscape (ONF/L) or an area of outstanding natural character area (ONC) identified in the WDP.¹¹⁸
- [135] The applicant commissioned a landscape and visual effects assessment of the proposal.¹¹⁹ That LVA and the evidence of Susan McManaway concluded that the proposed new building was large, but it was consistent with the working rural character of the rural plains. The building would change the character of the immediate site, but not that of the surrounding rural landscape. Other smaller ancillary buildings (such as a pump station and fire water tank) would visually blend into the bulk of the proposed larger building.
- [136] Any views of the new building from motorists on Johnson Rd, Hallett Rd, Moody Rd; and from nearby residences (to the north and east on Johnson Rd, to the south on Hallett Rd, and to the southwest on Moody Rd);¹²⁰ would largely be screened or heavily filtered due to the proposed noise attenuation wall, the existing evergreen perimeter hedges¹²¹ comprising a double row of trees,¹²² other intervening external vegetation, and the proposed planting of around 50 large specimen trees¹²³ that would grow up to 15m tall,¹²⁴ which would also soften and help to accommodate the scale of the building. The photo montages in the LVA and the evidence of Ms McManaway provided visual confirmation of the above conclusions, as did our own site visit.
- [137] We note that construction activities at the site will also largely be screened from view by the existing large hedges.
- [138] The WDC Section 42A Report identified eleven criteria in the WDP (Chapter 3 section 3.7.1) for our consideration.¹²⁵ We have regard to those criteria, noting that they primarily relate to the compatibility of the proposal with the existing landscape character of the locality and its amenity values. The WDC reporting officer concluded that the landscape and visual effects of the proposal would be incompatible with the scale and character of the rural environment. Her conclusion was based on the change from a predominantly horticultural activity to a predominantly built industrial-

¹¹⁸ EIC Susan McManaway, paragraphs 36 and 39.

¹¹⁹ Otakiri Water Bottling Plant, Landscape and Visual Assessment (LVA), Beca Limited, 21 September 2017 (forming Appendix H to the application document lodged with the WDC) prepared by Susan McManaway.

¹²⁰ The residential dwellings on Johnson Rd, Hallett Rd and Moody Rd are between 75m and 185m distant from the site. The LVA (section 4.4) assessed effects on visual amenity from all of the residences as being very low.

¹²¹ Which will be trimmed and maintained at 10m high – EIC Susan McManaway, paragraph 115.

¹²² The existing tree species are mainly Casuarina and Cryptomeria.

¹²³ The proposed specimen tree species are poplar, alder, liriodendron, liquid amber or plane trees.

¹²⁴ A plan of the proposed mitigation planting was included as Appendix 1 to the LVA.

¹²⁵ Combined Report, page 18.

type activity comprising a large building, ancillary buildings and structures, and stacked containers. She was not convinced that the recessive colours of the building and its screening would enable the building to blend into the landscape as stated by the applicant.

- [139] We confirmed that the reporting officer's opinion was not informed by independent expert advice.¹²⁶ On purely landscape and visual matters we prefer the applicant's qualified expert evidence. We discuss effects on rural amenity in section 6.1.17 of this report.
- [140] On the evidence, we find that the proposal will have minor adverse effects on the landscape and the visual amenity currently enjoyed by nearby residences and road users, due almost entirely to the existing large hedges situated around the perimeter of the site, and the applicant's intention to retain and maintain those hedges (namely to fill any gaps with new plantings) and to paint the new building in 'recessive colours', being either green or brown. In that regard, to further assist with integrating the entire proposal into the landscape, we find that the existing water bottling plant buildings should be painted the same color as the proposed new building.
- [141] We consider that these mitigating factors must be secured by the imposition of robust conditions of consent.

6.1.13 Lighting

- [142] Outdoor lighting will be required for security and health and safety reasons. It will be oriented within the site, directed downwards and inwards to reduce potential effects on the night sky and the surrounding area, and provided in accordance with the lighting and glare requirements of the WDP. The application stated, and the evidence of Mr Joyce¹²⁷ confirmed, that the lighting should not cause an appreciable level of discomfort or distraction to any person or adjoining dwellings.¹²⁸
- [143] We discuss further reductions in container area and truck movement operating hours offered by the applicant in Reply in section 6.1.15 of this report. A consequence is the external lighting limitations in the container area will begin earlier (8pm on weekdays and 5pm on weekends). We note that to be beneficial.
- [144] There will only be limited requirements for construction equipment lighting, other than for short periods at the start and end of each working day (7.30am and 6.00pm, Monday to Saturday) during winter and when poor visibility days require it.¹²⁹
- [145] The WDC Section 42A Report identified two criteria in the WDP (Chapter 3 section 3.7.28) for our consideration.¹³⁰ We have regard to those criteria, noting that they primarily relate to whether light adversely affects the use and enjoyment of adjoining properties. The reporting officer accepted that the proposal would comply with the standards in the WDP in relation to lighting and glare, and that adverse effects from lighting were likely to be minor.¹³¹
- [146] We accept that the proposed adverse effects from lighting will be no more than minor, provided that the requirements of the WDP are met and robust consent conditions

¹²⁶ Application to Whakatane District Council for Land Use Consent – Creswell New Zealand Limited, Response to Questions from Commissioner Van Voorthuysen to Whakatane District Council, page 1.

¹²⁷ EIC Hamish Joyce, paragraphs 45 to 48.

¹²⁸ Application to WDC, section 5.7.

¹²⁹ Ibid, paragraph 95.

¹³⁰ Combined Report, page 21.

¹³¹ Ibid.

are imposed to that end. In that regard the applicant has offered a condition limiting lighting outside of the main building between 10pm and 7am to domestic-level lighting at the Gate House and low-level (domestic-scale) way-finding lights from the car park and localised, sensor-based lighting for outside utility areas that may need to be attended to on occasion.¹³² We find that to be appropriate.

6.1.14 Noise

[147] A number of submitters were concerned about the potential for noise from the proposal to disturb the existing rural amenity of the area.

[148] The applicant proposes to adopt the noise limits in the WDP which are more stringent than the existing land use consent's day time noise limits by approximately 2 or 3 dB. The proposed noise limits, when measured within the notional boundary of any rural dwelling, are:

Monday to Sunday 7am to 10pm	50dB LA _{eq}
At all other times	40dB LA _{eq}
	70dB LA _{max}

[149] The applicant commissioned an Assessment of Noise Effects (ANE) from Hegley Acoustic Consultants.¹³³ The ANE and the evidence of Mr Hegley noted that the proposal is similar to the water bottling activities already occurring on site, with the main change with respect to noise being the increased scale of the proposed activity. Potential noise levels were modelled using the Brüel & Kjær Predictor v11.10 programme in accordance with the requirements of ISO 9613-1/2 Acoustics – Attenuation of Sound during Propagation Outdoors.

[150] The ANE and the evidence of Mr Hegley concluded that for daytime operational noise,¹³⁴ if the building was designed with acoustic requirements in mind and a noise attenuation barrier¹³⁵ was used to screen the closer houses to the south and south west, then when the proposed upgraded bottling plant was operating at maximum production capacity, and with all of the access doors on the southern side of the building open, the noise experienced by the neighbours would be well within both the proposed daytime and night time noise limits. As the daytime noise limits are lower than the existing consent condition, that was suggested to result in a positive effect for the neighbours, as their potential noise exposure would be reduced as a result of the proposed development.

[151] In terms of night time noise, the ANE advised that the typical New Zealand house achieves a minimum of 15dB sound reduction from the outside to the inside with windows open for ventilation giving a level of 45dB LA_{eq} outside to satisfy the WHO Guidelines for undisturbed sleep. The proposed night time noise limit (40dB LA_{eq}) therefore provides a factor of safety. The ANE predicted that with no outside activity on the site,¹³⁶ noise levels would be at or below the existing noise environment, resulting in no adverse noise effects for the neighbours.

[152] In terms of construction noise, the applicant proposes to comply with Rule 11.2.6.2 of the WDP which in turn requires construction noise to comply with the requirements of

¹³² EIC Hamish Joyce, paragraph 99.

¹³³ Nongfu Springs Water Bottling Plant, Assessment of Noise Effects, Hegley Acoustic Consultants, 20 September 2018

¹³⁴ Including forklifts loading/unloading trucks and trucks travelling around the new building and the combi lift for container stacking operating.

¹³⁵ With a surface density of at least 10kg/m², such as 20mm timber.

¹³⁶ No night time work was initially proposed outside of the building between 10:00pm and 7:00am with the only outside activity being staff vehicles and security operations.

NZS 6803:1999 Acoustics – Construction Noise. We note that to be a standard approach for major construction projects. The ANE and the evidence of Mr Hegley assessed likely machinery to be used during construction and predicted that the noise level at the closer dwellings would be up to 61dBA L_{eq} during the daytime. That would drop to typically 50 – 55dBA once the noisier earthworks had been completed. Those levels were well within the applicable long duration noise limit of 70dBA L_{eq} limit set by NZS6803 for the 7:30am – 6:00pm Monday to Saturday period. The ANE noted that by complying with the L_{eq} level the L_{max} limit in NZS6803 would also be complied with.

- [153] We understand that following consultation with the neighbours the applicant has now adopted a reduced construction noise standard 55dB L_{Aeq} and 75dB L_{Amax} for the period of noon to 6pm on Saturday.¹³⁷
- [154] In Reply the applicant confirmed a commitment made during the hearing to extend the proposed noise wall so that it also runs along part of the eastern side of the site between the internal road and the stormwater pond. We note that will provide additional noise mitigation (both from the plant itself and from activities in the container area) for properties to the east and south-east of the site, along Johnson Road and near the intersection with Hallett Road. It will also assist with screening the noise of truck movements to and from the site's entrance from the properties to the south-west of the site (the properties along Hallett Road).
- [155] A further analysis undertaken by Mr Hegley¹³⁸ considered the effect of the extended wall, together with the noise effects of four operators outside in the area on the northern side of the site adjacent to the contractor parking area, the switch room and LPG storage tank. He concluded that would result in material improvements (in terms of noise from the operations on site) during the daytime for two submitters, Kelvin McCartie (29 Johnson Road) and Lesley McKeown (58 Johnson Road), as well as the properties at 46A Johnson Road and 24 Johnson Road.
- [156] We discuss further reductions in container area and truck movement operating hours offered by the applicant in Reply in section 6.1.15 of this report. A consequence is a further beneficial reduction in container and truck noise.
- [157] The Section 42A Report identified nine criteria in the WDP (Chapter 3 section 3.7.10) for our consideration.¹³⁹ We have regard to those criteria, noting that they primarily relate to likely adverse impacts of noise generating activities and whether the noise generated would be of such a level as to create a threat to the health or well-being of persons living or working in the vicinity. The reporting officer advised that the applicant's noise assessment had been prepared by a suitably qualified and experienced acoustic consultant and it had identified that the noise levels arising from the proposal would be compliant with the levels set in the WDP. She accepted that any adverse effects from noise would be minor.¹⁴⁰
- [158] Based on the evidence, we are satisfied that that the potential adverse effects of noise emanating from the proposed new bottling plant, both in terms of construction noise and operational noise, will be no more than minor. We consider the effects of traffic noise in section 6.1.15 of this decision report.

¹³⁷ EIC Nevil Hegley, paragraph 12.

¹³⁸ Letter from Hegley Acoustic Consultants to Mallory Osmond dated 16 May 2018 attached as Appendix 1 to "Reply on behalf of Creswell, Buddle Findlay, 18 May 2018."

¹³⁹ Combined Report, page 20.

¹⁴⁰ Ibid.

6.1.15 Traffic

- [159] When the proposed second bottling line is commissioned there will be up to 184 additional truck movements on the road network per day.¹⁴¹ As well as that, there will be private vehicle movements associated with the estimated 60 employees travelling to and from the site for the proposed two 12-hour shifts, resulting in 120 staff vehicle movements each day. Johnson Road and Hallett Road are no-exit roads and so all of this traffic will travel south of the plant to and from SH34. The bottled water will mostly be trucked to the Port of Tauranga north on SH34 and westwards on SH2.
- [160] In the original application, the peak 184 truck movements would be spread over a 10-hour period (9:00am to 7:00pm) averaging about nine trucks or 18 trucks movements per hour. We note that equates to a truck travelling along Johnson and Hallett Roads around every 3 minutes on average.
- [161] A number of submitters were therefore understandably concerned about the potential adverse effects of these significant traffic volumes on the existing rural roading network and on the existing 'rural' amenity of the area.
- [162] The application document stated¹⁴² that the proposed site design complied with the parking, onsite maneuvering, access, and loading requirements in Chapter 13 (Transportation and Services) of the WDP. The reporting officer did not disagree with that. Consequently, we conclude that those potential adverse effects will be no more than minor and we have therefore focused on off-site effects.
- [163] The applicant undertook a Transport Assessment Report (TAR).¹⁴³ The TAR, and the evidence of the TAR's author Craig Richards, assessed the effect of the additional vehicle trips on the surrounding road network in terms of capacity, safety and pavement condition, including at several relevant intersections.¹⁴⁴ To mitigate potential adverse effects on pedestrians, cyclists and horse riders the TAR recommended, and the applicant has agreed to provide, a new 2m wide off-road shared path on the left hand side¹⁴⁵ of the road along the length of Hallett Road/Johnson Road from SH34 to the site.
- [164] To cater with the increased traffic generated by the proposal the TAR recommended, and the applicant has proposed, a number of roading mitigations:
- prior to the commencement of stage one of the expansion,¹⁴⁶ increasing the width of Johnson Road and Hallett Road between the site and SH34 to at least 7.5m¹⁴⁷ with a realigned centerline;
 - widening the Hallett Road / SH34 intersection to accommodate increased turning demands with a modified 'Diagram E' design (with additional widening and safety features) with appropriate road lighting to be agreed with the New Zealand Transport Authority (NZTA) and to provide a school bus drop off area;¹⁴⁸

¹⁴¹ Comprising 92 trucks in and 92 trucks out.

¹⁴² WDC Application, section 5.11.

¹⁴³ 57 Johnson Road Water Bottling Plant – Transport Assessment, Beca Limited, 20 September 2017 prepared by Craig Richards.

¹⁴⁴ The intersections at SH34/Hallett Road; Hallett Road and Johnson Road; Hallett Road Railway Crossing; and the State Highway 34/State Highway 2 Intersection.

¹⁴⁵ EIC Malory Osmond, para 67(f). The shared pathway has been relocated from the right hand side to the left hand side of Hallett and Johnson Roads to address neighbours' concerns for the safety of school children walking home after being dropped off by the school bus.

¹⁴⁶ EIC Malory Osmond, para 30

¹⁴⁷ Consisting of a 7m wide carriageway plus 250mm wide sealed shoulders on both sides of the road.

¹⁴⁸ A concept diagram based on Diagram E is provided in **Attachment CR1** of the EIC of Craig Richards.

- upgrading the pavement of Johnson and Hallett Roads to accommodate the continuous high volumes of extra heavy vehicles (the trucks), either when the road is widened or prior to the existing pavement reaching its effective life, to be agreed with WDC;
- developing and implementing a travel plan for staff aimed at reducing private vehicle use and mitigating against the risk of fatigued drivers; and
- requiring trucks associated with the proposal to travel at 40km/hr on Hallett and Johnson Roads.

[165] The applicant considers that the road improvements will have a minimal effect on driveways or property entranceways¹⁴⁹ and that the proposed mitigation measures set out above will improve the current transport infrastructure and ensure that any adverse effects on traffic movement, safety, sustainability and network capacity are remedied or mitigated to be less than minor.

[166] We note that the submission from the NZTA¹⁵⁰ requested that full intersection lighting should be provided at the Hallett Road / SH34 intersection, and that additionally the intersection should be monitored by the applicant to determine if additional mitigation works were required. We consider those requests to be reasonable and appropriate. NZTA submitted that potential noise and vibration effects had been addressed by the applicant proposing to restrict the hours operation (which we assume to refer to the hours of truck movements to and from the site) from 9am to 7pm Monday to Saturday.

[167] In their Reply,¹⁵¹ and in response to our queries, the applicant offered further restrictions on operating hours. On Saturdays, truck movements to and from the site would be restricted to a five-hour window between 9am and 2pm (previously 7pm).

[168] Activities in the container area would be further restricted as follows:

- (i) reduced weekday hours of 7am to 8pm (previously 10pm);
- (ii) reduced Saturday hours of 7am to 5pm (previously 10pm); and
- (iii) restricted to no more than 12 Sundays in each calendar year (previously every Sunday), with reduced hours for each of those days of 9am to 5pm (previously 7am to 10pm).

[169] The above reductions in operating hours are significant in our view.¹⁵² They result in 260 fewer hours of truck movements and 1464 fewer hours of container operations each year. That will markedly reduce adverse effects on affected neighbouring residences, notwithstanding that the applicant advises that as a result the daily peak of truck movements could peak at 202 compared to 184 as described in the application documents.¹⁵³

[170] We accept that any further reduction in operating hours would mean dropping to a five-day production operation with a resulting reduction of 10 to 12 employees from the 60 currently required. Given that would be a significant impact on the positive effects of the proposal, we do not think any further marginal reduction in traffic related adverse effects is warranted.

¹⁴⁹ EIC Jandre van Zyl, paragraph 48.

¹⁵⁰ NZTA did not wish to be heard.

¹⁵¹ Reply on behalf of Creswell, Buddle Findlay, 18 May 2018, paragraph 20.

¹⁵² We note that the reduced operating hours will necessitate a second truck loading bay on the site for finished goods, to keep the trucks turning over. (Reply, paragraph 27(c)). We are satisfied that is within the envelope of the original application for the reasons set out by the applicant (Reply, paragraphs 30 to 36).

¹⁵³ We agree that a difference of 18 truck movements, in addition to the previous maximum of 184 movements and averaged across a 10-hour period, is a negligible or minor increase that will not be noticeable (Reply, paragraph 35(c)).

- [171] The WDC Section 42A Report identified ten criteria in the WDP (Chapter 3 section 3.7.17) for our consideration.¹⁵⁴ We have had regard to those criteria, noting that they primarily relate to safety and the efficient operation of the roading network. The reporting officer advised that, subject to confirmation from the WDC Transportation Team,¹⁵⁵ she considered the proposed upgrades to the road network appropriately addressed road safety and capacity issues. She concurred with the conclusion of the AEE that the effects on road users would be less than minor.
- [172] Based on the evidence, we are satisfied that the potential adverse effects arising from the traffic generated by the proposal on the capacity, safety and pavement condition of the roading network will, when subject to appropriate and robust conditions of consent, be no more than minor.
- [173] The effects of traffic noise were assessed in the ANE¹⁵⁶ and the evidence of Mr Hegley discussed above. We understand and appreciate that a number of submitters were concerned about traffic noise. However, as the ANE noted, traffic noise on public roads is not controlled by any rule in the WDP or any other form of legislation. The ANE advised that the only guideline for traffic noise is contained within NZS 6806:2010 Acoustics - Road-traffic Noise - New and Altered Roads.
- [174] The ANE and the evidence of Mr Hegley stated that the design level in NZS6806 for an altered road with lower traffic flows is 64dB $L_{Aeq(24hr)}$ measured 1m from the façade of a dwelling. As we noted above, once the new water bottling plant is fully operational there could now be a peak of 202¹⁵⁷ truck movements a day together with 120 daily staff vehicle movements. The ANE advised that when considering that the closest house to Johnson Road was approximately 35m from the road, the noise exposure from that level of traffic would be approximately 49dB L_{Aeq} for the daytime period and that level would reduce further if a 24-hour period was adopted. Consequently, while individual trucks would be heard, by adopting the applicant's volunteered 60km/hr¹⁵⁸ speed limit for trucks and prohibiting the use of engine (Jacobs) brakes, the effects of truck noise would be well within what NZS6806 adopted as a reasonable noise limit for the neighbouring residences.¹⁵⁹ We heard no qualified evidence to the contrary.
- [175] We asked the applicant to provide further information on the seasonal nature of truck movements, given that the water take was expected to average 3000m³/year. The applicant advised in Reply¹⁶⁰ that as an average taken across the year, it was estimated that there would be between 140 and 160 truck movements per day, rather than the 202 maximum daily movements described above. This gives us further confidence that the likely magnitude of adverse effects discussed above is an upper envelope and the actual effects on any given day will be less.

¹⁵⁴ Combined Report, page 19.

¹⁵⁵ Ms Nicholas subsequently advised that the WDC Transportation Team had provided their response to her and did not identify any outstanding issues, however they did suggest some additional conditions of consent. Application to Whakatane District Council for Land Use Consent – Creswell New Zealand Limited, Response to Questions from Commissioner Van Voorthuysen to Whakatane District Council, page 1.

¹⁵⁶ Ibid, section 8.

¹⁵⁷ We note that Mr Hegley's assessment of traffic noise assumed there would be 150 trucks (300 movements) a day and so the potential increase in peak movements from 184 to 202 would not alter his conclusions.

¹⁵⁸ This was originally 40km/hour but based on the advice of Mr Hegley the applicant amended this to 60km/hour. There is no appreciable difference in noise effects between those speeds (there being a trade-off between noise level and duration of noise). Mr Hegley also noted that enabling the trucks to move faster lessened the duration of effect. Mr Frenz advised that the residents preferred a higher speed limit so as to not impede the flow of traffic..

¹⁵⁹ EIC Nevil Hegley, paragraph 76.

¹⁶⁰ Reply, paragraphs 37 to 40.

[176] Based on the evidence, we are satisfied that the potential adverse effects arising from traffic noise will, when subject to appropriate and robust conditions of consent, be no more than minor.

6.1.16 Railway level crossing

[177] The increased level of heavy vehicle traffic and water bottling plant staff light vehicles has the potential to impact on the safety of the existing railway line crossing on Hallett Road. This was an issue of concern to a number of submitters, including KiwiRail. In response the applicant undertook a Level Crossing Safety Impact Assessment (LCSIA).¹⁶¹ The LCSIA and the evidence of Mr Richards recommended eight 'treatments' or upgrades to the existing level crossing.¹⁶² We understand that if the upgrades are implemented the level of risk at the crossing will decrease from its existing level.¹⁶³ The applicant has agreed to implement in full the eight 'treatments' identified in the LCSIA¹⁶⁴ and to the imposition of consent conditions requiring that to occur.

[178] KiwiRail did not appear at the hearing, but tabled a letter stating that KiwiRail had approved the LCSIA and its findings and it was working with the applicant to develop a Project Agreement about the delivery of the LCSIA report's recommendations¹⁶⁵. On that basis we are satisfied that potential adverse effects on the existing level crossing can be adequately mitigated.

[179] We note that the WDC reporting officer similarly concluded that the traffic effects of the activity on the road and rail network would be less than minor, subject to compliance with appropriate conditions to achieve necessary upgrade works.¹⁶⁶

6.1.17 Rural amenity

[180] Several submitters were concerned about the potential adverse effects of the proposal on the existing rural amenity enjoyed by the neighborhood. These concerns were usefully summarised by the applicant¹⁶⁷ as follows:

- (i) stress and anxiety due to the plant operating in close proximity to properties;
- (ii) inconvenience and unhappiness due to heavy traffic volumes;
- (iii) a disruption of lifestyle, sleep and social enjoyment due to noise, truck movements, safety concerns, fumes and visual effects; and
- (iv) effects on a 'sense of community' and unhappiness due to a perceived disregard for community values, lifestyles and wellbeing.

[181] On the evidence before us, and as set out in sections 6.1.12 to 6.1.15 of this report, we find that the effects under (ii) and (iii) are either minor or able to be mitigated by conditions of consent and are within the standards set by the WDP or applicable national standards and guidelines. In that regard we note that both the water bottling site and the nearby residential properties are located in the Rural Plains Zone. That is a working rural environment within which a reasonable degree of machinery noise, dust, and truck movements are to be expected.

¹⁶¹ Level Crossing Safety Impact Assessment (LCSIA) Hallett Road, Otakiri, Bay of Plenty, Beca Limited, 8 March 2018.

¹⁶² Ibid, Executive Summary, page ii.

¹⁶³ The road level crossing has an existing Level Crossing Safety Score (LCSS) of 23/60 (MEDIUM-LOW LCSS risk band) and the proposed design achieves a LCSS of 16/60 (LOW risk band).

¹⁶⁴ EIC Michael Gleissner, paragraph 87.

¹⁶⁵ Letter to Shari Kameta, RM17-0424 Creswell (sic) NZ Limited Resource Consent Joint Hearing 30 April-4 May: KiwiRail update, dated 30 April 2018.

¹⁶⁶ Combined Report, Page 20.

¹⁶⁷ EIC Michael Gleissner, paragraph 97.

- [182] Nevertheless, we acknowledge the concerns of the submitters that are summarised under (i) and (iv) above, and so we consequently asked the applicant to reconsider the proposed movement of heavy vehicles to and from the site on Saturdays and after normal working hours on week days. We also asked for an indication of what a 'typical' day of truck movements might look like given the projected average water take of 3,000m³/day. We discussed those matters in sections 6.1.13 to 6.1.15 of this report and we concluded that further mitigation (by way of a further reduction in operating hours) was not warranted.
- [183] We also note that in Reply the applicant observed that in the Rural Plains Zone of the WDP the objective¹⁶⁸ of maintaining or enhancing rural character focused on mitigating visual effects and maintaining natural light to dwellings. Otherwise, the WDP envisaged "significant" adverse effects being avoided, with others being mitigated (if not avoided or remedied).¹⁶⁹ We accept that the proposal meets those requirements.
- [184] We are satisfied that the applicant's amended proposal does not generate any significant adverse effects on rural amenity and that other adverse effects on rural amenity have been mitigated as much as is reasonable in the circumstances. Accordingly, we find that any residual adverse effects on rural amenity are not of sufficient weight to warrant to a decline of consent.

6.1.18 Heritage values

- [185] We considered whether the site has special heritage values and if known, recorded or scheduled sites of heritage value in the vicinity are affected by the application.
- [186] Several Māori submitters raised concerns that the Awaiti Canal Aquifer is of cultural significance and would be adversely affected by the water take and use. There was also concern that the hydrology of nearby culturally significant wetlands would be adversely affected and wāhi tapu such as Te Kohika Pā would 'dry out' as a result of reduced water tables caused by the taking of water from the aquifer.
- [187] The earthworks proposed on the site have the potential to disturb any present archaeological sites and sites of significance to Māori. Archaeological sites are defined as any place in New Zealand, including any building or structure (or part of a building or structure), that was associated with human activity that occurred before 1900 and provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand.¹⁷⁰
- [188] The application did not include an archaeological survey or assessment of the site. We note that the site has been modified in the past to establish a kiwi fruit orchard and earthworks have occurred to establish the building and plant associated with the existing bottling activity.
- [189] The presence of archaeological sites and other sites of significance including wāhi tapu may be known to local iwi and hapū, recorded in the New Zealand Archaeological Association site recording scheme, scheduled in district plans or identified in other documents such as iwi management plans.
- [190] We sought clarification from the applicant as to the presence of any recorded archaeological sites on the property and secondly, the likelihood of finding previously

¹⁶⁸ Objective Rur2 and Policies 1 and 3.

¹⁶⁹ Objective Rur3 and associated Policy 1.

¹⁷⁰ Heritage New Zealand Pouhere Taonga Act 2014, section 6(a)(i)&(ii)

unrecorded archaeological sites during earthworks. The applicant confirmed that there were no recorded archaeological sites¹⁷¹ at the property and there was no wāhi tapu identified on the property.¹⁷² No other sites of significance were identified by the Council officers or submitters.

- [191] It was relayed to us that during consultation with tangata whenua groups, the applicant had included a proposal to have an accidental discovery procedure as part of the conditions. We understand that was a matter of precaution and sensitivity to tangata whenua views regarding the importance of following protocols if koiwi (human remains), taonga (treasures) or archaeology were uncovered during earthworks. We note that the application included an accidental discovery protocol and related draft conditions.
- [192] As mentioned above, several Māori submitters including Te Rūnanga o Ngāti Awa and Tuwhakairiora O'Brien raised concerns that the Awaiti Canal Aquifer is of cultural significance and would be adversely affected by the water take and use. The Cultural Impact Assessment prepared by Te Rūnanga o Ngāti Awa stated that *'the groundwater system extends under lands in the Whakatane graben which is central to the Ngāti Awa takiwā. Ngāti Awa people continue to rely on fresh water to support their environmental, cultural, spiritual, economic and social wellbeing.'*¹⁷³ The CIA stated further that *'all of the sites in the Waahi Tapu Sites of Ngati Awa document within the groundwater system Bay of Plenty Regional Councils water availability report suggests is connected to Otakiri Springs and for which the summarised information identifies the places use of or reliance on fresh water, are identified in Appendix 5.'*¹⁷⁴
- [193] Appendix 5 of the CIA lists some 132 waahi tapu sites of Ngāti Awa. A review of the list reveals that the site types include (in order of frequency); some 44 pā, 20 landmarks or places, 6 cultivations and food gathering places, 4 ngawha or geothermal areas, 3 urupā, 3 puke (hills), and an assortment of small number of lakes, springs, ruataniwha (abodes of taniwha), former marae, kainga, rivers, streams, waterfalls, and battle sites.
- [194] The majority of these sites are related to occupation, use and settlement of Ngāti Awa ancestors as well as other related iwi and hapū. There are several water related sites including two springs; Te Waikoukou spring located west of Kawerau and Te Wai u o Tuwharetoa near the Tasman Pulp and Paper Mill. We have already concluded that the proposed abstraction will not have any adverse effects on surface water features (section 6.1.1 of this decision report).
- [195] Another site of interest is #398 Otākiri which is described as *'an area of particular significance to the Ngati Awa hapu of Te Tawera. The chief of this area was Iramoko, son of Iratumoana and Te Rangikeiwaho who would occasionally engage in that all too peculiar habit of cannibalism. Here he would rip and tear at the skin and flesh of his victims prior to consumption, hence the name Otakiritanga o nga kiri me nga kiko e Iramoko.'*¹⁷⁵ It appears that similar traditions related to this place and ancestors were relayed to us at the hearing in Te Reo Māori verbal evidence. We understand that Ngāti Awa witnesses named the spring subject to this application Te Punatapu o

¹⁷¹ New Zealand Archaeological Site Recording File.

¹⁷² Waahi tapu sites of Ngāti Awa, 2000.

¹⁷³ Te Rūnanga o Ngāti Awa. Cultural Effects Assessment of Otākiri Spring, April 2018, page 25

¹⁷⁴ Ibid.

¹⁷⁵ Ibid, Appendix 5, page 42

Iratumoana and Otakiritanga o te Toki o Iratumoana. That spring does not appear to be listed in Appendix 5 of Nga waahi tapu o Ngati Awa.

[196] Submitters for Ngāti Awa and others were particularly concerned about potential effects of the water take on nearby wetlands, in particular a reduction of the water table. We were unable to identify any technical evidence that supported this proposition, however we did confirm that the Tumurau wetlands are some two kilometres from the application site and Mr Goff¹⁷⁶ confirmed that the wetlands and the Otakiri aquifer are hydrologically separated.¹⁷⁷ He also confirmed that the Awaiti Canal Aquifer was not hydrological linked to the wetlands.

[197] Te Rūnanga o Ngāti Awa raised concerns in their submissions and CIA that the highly significant Te Kohika Pā would be affected by the water take.

Ngati Awa is also concerned at the potential for the hydrology in surface features like the wetland system at Te Kohika Swamp Pa to be altered to an extent that the remaining estimated 2/3rds of wooden artefacts that remain in situ at that recorded swamp pa may perish. Adverse effects there might also include saline intrusion which may also have an adverse effect on wooden artefacts in situ there, and on the ecology of the wetland system and its biodiversity.¹⁷⁸

[198] We confirmed that Te Kohika Pā is located some 11 kilometres from the application site. Based on the technical evidence of Mr Goff, we consider that any drying out of surface features at the Te Kohika Pā and nearby wetlands could not be attributed to the proposed take from the Awaiti Canal Aquifer.

[199] The Council officers and technical experts agree with this view.¹⁷⁹

[200] In conclusion, we find there is unlikely to be any effect on heritage values at the applicant's property. There are no recorded archaeological sites and no known wāhi tapu recorded at the property. Several iwi submitters recommended an accidental discovery protocol. We note that the WDC land use consent refers to an Accidental Discovery Protocol (conditions 31 and 32) and the BOPRC earthworks consent contains an Advice Note regarding the discovery of archaeological sites or koiwi and the procedures to be followed if that occurs. We find that to be appropriate.

6.1.19 Effects on Maori cultural values and interests

[201] The applications received submissions from Māori groups including tribal rūnanga, post settlement governance entities (PSGEs), land trusts and Māori community representatives.

[202] The applicant consulted relevant iwi authorities and Māori interest groups in preparation of the applications. It was evident to us during the hearing that the applicant showed a genuine openness to the participation of tangata whenua in the preparation of the applications, consideration of Māori values and interests and the implementation of consents, if granted.

[203] Interestingly, we note that no iwi or hapū parties submitted on the WDC consent applications, despite being notified of those applications by WDC.¹⁸⁰ Accordingly, we

¹⁷⁶ A hydrologist of some 30 years' experience in New Zealand and internationally.

¹⁷⁷ EIC Michael Goff, paragraphs 29-30

¹⁷⁸ Ngati Awa Cultural Impact Assessment, April 2018, page 28.

¹⁷⁹ EIC Michael Goff, paragraphs 69 to 70

¹⁸⁰ EIC Keith Frentz, paragraph 78.

focus our assessment on the potential effects of the consents required from the BOPRC.

- [204] The subject site is located to the east and immediately adjacent to the Tarawera River. This site is within the rohe (traditional area of interest) of several iwi and hapū including Ngāti Awa, Ngāti Rangitīhi, Ngāti Tuwharetoa ki Kawerau, Ngāti Makino¹⁸¹, Ngai Tamawera, and Te Tawera. Ngāti Awa and Ngāti Tūwharetoa have statutory acknowledgements on the Tarawera river which are recognised through their respective Settlement Acts.¹⁸² Ngāti Rangitīhi and Ngāti Awa also have relevant iwi planning documents prepared by iwi authorities. These documents are discussed in section 6.8 of this decision.
- [205] An important consideration for us was the spatial extent of the statutory acknowledgements for the Tarawera River. It was important to determine if the relevant values associated with the statutory acknowledgement may be taken into account due to the proximity of the application site to the Tarawera River and Hallet Drain which enters the Tarawera River downstream. The Ngati Tuwharetoa (Bay of Plenty) Claims Settlement Act 2005 Schedule 8 defines the statutory Tarawera River as the continuous or intermittent flowing body of freshwater and the bed of the river. It does not include any artificial watercourse, any part of the bed not owned by the Crown, any land which the waters of river do not cover at its fullest extent without overlapping its banks and any tributary flowing into the river.¹⁸³
- [206] Three cultural impact assessments of the application were prepared by iwi. The CIA prepared by Mr Christopher Clarke (Environmental Officer, Te Mana o Ngāti Rangitīhi Trust) concluded Te Mana o Ngāti Rangitīhi Trust supported the proposal and included an Accidental Discovery Protocol should any kōiwi or other taonga be unearthed during the exercise of any resource consent. CIAs were also prepared by Ngāti Tuwharetoa ki Kawerau and Te Runanga o Ngati Awa.
- [207] At the hearing Ngāti Awa witnesses spoke at length of their relationship with the Tarawera River, Putauaki (Mount Edgecumbe), Te Otakiritanga o te Toki a Iratumoana (the aquifer) and wider landscape. Much of the evidence was in te reo Māori and focused on the whakapapa (genealogy) of founding ancestors of Ngāti Awa in Whakatane. It was explained to us that the Awaiti Canal Aquifer is the abode of taniwha or spiritual guardians. These taniwha are the spiritual manifestation of founding ancestors of Ngāti Awa including but not limited to Irakewa (the father of Toroa). Much was made of the degradation and offense that would be caused by increasing the take of water for bottling and selling the water overseas. Very little if any mention in evidence was made of the existing three bottling plants, water bores for horticulture and other purposes and whether those takes also have adverse cultural effects. When asked about that, a Ngāti Awa representative Ms Beverley Hughes advised that all takes can affect the mauri of the aquifer.
- [208] When asked if water bottling affected the mauri of the aquifer more than other takes Ms Hughes said Ngāti Awa had not turned their mind to that and they would wish to consult wider with other iwi before forming a view. Similarly, when we asked if cultural offense would be caused if the bottled water was produced and sold in NZ instead of being sold in China Ms Hughes advised that she could not answer that question and to do so would also require further consideration and discussion with other iwi.

¹⁸¹ BOPRC Officers report, section 7.2, page 356.

¹⁸² Ibid, page 355.

¹⁸³ Ngati Tuwharetoa (Bay of Plenty) Claims Settlement Act 2005, Schedule 8

- [209] We acknowledge that the Ngāti Awa witnesses informed us that they had yet to consider the above matters and that this had been the first opportunity to be heard on a water bottling application as previous applications for water bottling consents were non-notified.
- [210] Nevertheless, we note that s6(e) of the RMA is concerned with the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga.¹⁸⁴ While s6 requires that these relationships be provided for, it is inherent in the concept that the weaker the relationship, the less it needs to be provided for.¹⁸⁵ Also, the recognition and provision required to be made pursuant to s6(e) should reflect a relationship established on evidence. This does not extend to providing for a relationship which is founded on a belief, no matter how genuinely that belief is held.¹⁸⁶
- [211] On the evidence before us, particularly the evidence showing that the proposed take will have no adverse effects on surface features or surface water bodies and the proposed rate of take is sustainable (see sections 6.1.1 and 6.1.18 of this decision report), we are not persuaded that the proposal to take water for water bottling purposes will have an adverse cultural effect of such significance that the applications should be declined.
- [212] In coming to that conclusion, we note that there is also strongly expressed support for the applications among the Māori community. As already mentioned, Ngati Rangitahi support the application, Mr O'Brien informed us that his hapū was split and we heard the submissions of Rihi Vercoe and Hemana Eruera who supported the application due to the economic benefits it would bring to the community.
- [213] In terms of s8 of the RMA, we sought the views of the Council officers, the applicant and Māori submitters regarding the relevant principles of the Treaty of Waitangi. At the end of the hearing we received a Council officer view of four of the Treaty principles (acting reasonably toward each other, informed decision-making, avoid impeding Crown redress, and actively protecting Māori interests). In that regard, we accept that the applicant has undertaken extensive consultation and has sought to identify effects on and concerns to tangata whenua. We acknowledge the considerable information that has been prepared by the applicant before and during the hearing, and the information provided by submitters, in particular Ngāti Awa. We sought clarification of the various settlement legislation which sets out the statutory rights and interests of the post-settlement iwi. We are satisfied that s8 matters have been adequately addressed.

6.2 National environment standards and other regulations

- [214] The NESCS is relevant and we dealt with that in section 6.1.8 of this report.
- [215] The NES for Sources of Human Drinking Water (NESDW) is potentially relevant. There are WDC water supply bores located immediately across Johnson Road from the site, but the WDC withdrew their submission on the application. The BOPRC application noted that the WDC bores are at a depth of over 220m and they draw water from the Awaiti Canal Aquifer which is characterised as 'leaky confined', having little if any interaction with surface water. The water quality in Hallett Drain, and therefore the proposed discharges to the Drain, were not expected to have any

¹⁸⁴ *Ngati Hopuku Ki Hokowhito v. Whakatane District Council* 9 ELRNZ 111 at [39].

¹⁸⁵ *Ibid*, at [45].

¹⁸⁶ *Heybridge Developments Limited v. Bay of Plenty Regional Council* 16 ELRNZ 593.

impact on the water quality of the WDC bores.¹⁸⁷ We heard no evidence to the contrary.

[216] We were not made aware of any surface water takes for drinking water that might be affected by the proposed discharges to Hallett Drain.

[217] The Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 apply to the proposed groundwater take and the applicant has proposed, and the reporting officer has recommended, conditions regarding metering and the submission of abstraction records to ensure compliance with that NES.

[218] No other relevant national environmental standards or regulations were brought to our attention and we are not aware of any.

6.3 National policy statements

[219] The NPS for Freshwater Management 2014 (NPSFM) is applicable. The applicant identified what it considered to be relevant provisions of the NPSFM.¹⁸⁸

[220] The applicant stated that the Awaiti Canal aquifer was not fully allocated or degraded, the proposed groundwater take was within the allocable limits set by the Proposed Plan Change 9 with remaining allocation available for future uses, and the take would not adversely affect the quality of the groundwater. As such, the significant values and life supporting capacity of the groundwater resource would be safeguarded. We agree and reached the same conclusion in section 6.1.1 of this report.

[221] The applicant also stated that the proposed mitigation measures, including the treatment of the wastewater, the setting of discharge limits and the monitoring of the stormwater and wastewater discharges, would ensure that the values and life supporting capacity of the Tarawera River and Hallett Drain would be safeguarded. We agree and reached the same conclusion in sections 6.1.3, 6.1.5 and 6.1.6 of this report.

[222] The applicant considered that the values and interests of iwi and hapu identified through the CIA and consultation meetings had been considered. We agree. We discussed those matters in sections 6.1.18 and 6.1.19 of this report.

[223] The applicant concluded that the proposal was consistent with the NPSFM. We agree. In saying that we note that the BOPRC reporting officer did not separately assess the proposal against the NPSFM, stating instead that in accordance with section 42A(1B)(a) of the RMA, she agreed in part with the information and conclusions presented in the application document regarding the assessment against the relevant statutory documents.

6.4 New Zealand Coastal Policy Statement

[224] The New Zealand Coastal Policy Statement is not relevant.

6.5 Regional Policy Statement

[225] The Bay of Plenty Regional Policy Statement (RPS) became operative on 1 October 2014. The application documents¹⁸⁹ and the evidence of Mr Frenz¹⁹⁰ and

¹⁸⁷ BOPRC Application, section 8.2.1, page 61.

¹⁸⁸ BOPRC Application, section 8.2.1, pages 59 and 60. The provisions were Objectives A1, A2, A4, B1, B2, B3, B5, C1 and D1 and the EIC of Malory Osmond, Attachment MO2.

¹⁸⁹ WDC Application, section 7.6, Table 5, pages 86 to 87; BOPRC Application, section 8.3.1, Table 5, pages 61 to 64.

Ms Osmond¹⁹¹ assessed the relevant provisions of the RPS. We have read the provisions that were brought to our attention.

[226] The WDC reporting officer did not assess the RPS provisions, deferring to the BOPRC reporting officer. That latter officer stated that in accordance with section 42A(1B)(a) of the RMA, she agreed in part with the information and conclusions presented in the application document regarding the assessment against the relevant statutory documents.¹⁹²

[227] We note that, in general terms, and relevant to this proposal, the RPS provisions¹⁹³ require that kaitiakitanga is recognised; that the mauri of water and land is safeguarded and where it is degraded¹⁹⁴ it is enhanced over time; that the effects of land and soil disturbance are minimised; and that water is allocated and used efficiently. We addressed these matters in section 6.1 of this report. We are satisfied that the proposal is not contrary to the RPS provisions. In that regard we adopt the assessment of the RPS provisions prepared by the applicant and its planning witnesses.

6.6 Regional plans

[228] The relevant plans are the Regional Water and Land Plan, the Regional Plan for the Tarawera River Catchment (RPTRC) and the possibly the Bay of Plenty Regional On-Site Effluent Treatment Regional Plan. We note that those plans have recently been amalgamated into the operative Bay of Plenty Regional Natural Resources Plan 2017.

[229] We have read the relevant provisions of those plans. In general terms they encourage engagement with tangata whenua and a recognition of their values and interests; recognising and providing for the effects on the mauri of the receiving environment caused by the discharge of contaminants to water; maintaining or enhancing water quality; avoiding, remedying or mitigating adverse effects on groundwater and surface water, land, flooding, the life-supporting capacity of water and soil resources, the receiving environment and heritage values; meeting the Water Quality Classifications in the Regional Water and Land Plan (in this case Drain Water Quality); preventing the creation of contaminated sites; remedying or mitigating erosion and scour caused or exacerbated by stormwater discharges; and using groundwater efficiently and sustainably.

[230] The plans also seek to allow resource use and development where there are beneficial effects on the social, cultural and economic wellbeing of people and communities; and adverse effects on the environment are avoided, remedied or mitigated.¹⁹⁵

[231] The relevant provisions of the plans were comprehensively assessed by the applicant.¹⁹⁶ The applicant concluded that the proposal was consistent with those provisions, except for Objective 15.8.2 of the RPTRC which requires surface water quality to be enhanced and Policy 15.8.3(c) of that Plan which seeks to reduce the discharge of contaminants into drains on the Rangitaiki Plains.

¹⁹⁰ EIC Keith Frentz, paragraphs 134 to 138.

¹⁹¹ EIC Malory Osmond, paras 99 to 202. Ms Malory addressed the provisions by 'theme' rather than by instrument.

¹⁹² Combined Document, page 386.

¹⁹³ Those that go beyond what Part 2 of the RMA already covers.

¹⁹⁴ Or where it is necessary to meet the identified values associated with its required use and protection.

¹⁹⁵ See for example Regional Water and Land Plan Policy 32.

¹⁹⁶ BOPRC Application, section 8, pages 61 to 83 and particularly the EIC of Malory Osmond.

- [232] We agree with and adopt the applicant's assessment.
- [233] The BOPRC reporting officer stated that in accordance with section 42A(1B)(a) of the RMA, she agreed in part with the information and conclusions presented in the application document regarding the assessment against the relevant statutory documents.¹⁹⁷ The exception was the relevant kaitiakitanga provisions in the Bay of Plenty Regional Water and Land Plan and the provisions in the RPTRC. She assessed those provisions separately.¹⁹⁸
- [234] We also generally agree with and adopt the reporting officer's assessment.
- [235] In summary we conclude that the proposal is generally consistent with the provisions of the regional plans, other than for the objective and policy of the RPTRC discussed above. We have had regard to those particular plan provisions, as we are required to do under s104(1)(b)(vi) of the RMA. In saying that we note the findings of the High Court in *New Zealand Co-operative Dairy Co Ltd v Commerce Commission* where Wylie J commented:

We do not think there is any magic in the words "have regard to". They mean no more than they say. The tribunal may not ignore the statement. It must be given genuine attention and thought, and such weight as the tribunal considers appropriate. But having done that the tribunal is entitled to conclude it is not of sufficient significance either alone or together with other matters to outweigh other contrary considerations which it must take into account in accordance with its statutory function.

- [236] We conclude that the proposed discharge of stormwater and reject process water to Hallett Drain will at least maintain the poor existing water quality in that Drain¹⁹⁹ and that will in turn safeguard the life supporting capacity of that water while meeting the reasonable needs of people and communities. We consider that to be the relevant intent of Objective 15.8.2 of the RPTRC. We also note that the RPTRC aimed to improve the large industrial discharges occurring to the Tarawera River at the time the Plan was promulgated. In our view it would be disproportionately onerous (and physically impossible) to require all new discharges to enhance existing receiving water quality in the Tarawera River catchment, particularly stormwater and relatively benign process water discharges to a rural drain such as occurs here.
- [237] In that regard we also acknowledge the submissions of counsel for the applicant that it is unclear how the RPTRC provisions should apply to a newly proposed discharge, where there is no opportunity to reduce contaminants from an existing 'baseline' discharge.²⁰⁰
- [238] Subject to the imposition of suitable conditions of consent we find that the provisions of the regional plans do not warrant declining the applications to discharge contaminants to Hallett Drain.

6.7 Whakatane District Plan (WDP)

- [239] The WDP became operative in 21 June 2017. The WDC reporting officer Ms Nicholas and the applicant's planner Mr Frenz identified and assessed the application against the relevant provisions of the WDP.²⁰¹

¹⁹⁷ Combined Document, page 386.

¹⁹⁸ Ibid, pages 386 to 396.

¹⁹⁹ We note the discharge will meet the Drain Water Quality classification specified in Schedule 9 of the RNRP (former RWLP).

²⁰⁰ Opening Legal Submissions on behalf of Creswell NZ Limited, 30 April 2018, paragraph 153.

²⁰¹ WDC section 42A report, chapter 10, Combined Report pages 12-17.

- [240] The relevant objectives and policies of the WDP are set out in Appendix 1 to this decision report. They relate to rural character, rural production, enabling rural activities, managing effects of rural activities, health and safety, traffic safety, location and operation enabling social, economic and cultural wellbeing, health-safety-nuisance, road safety, access, managing contaminated soils, and economic development. Those matters for the most part are addressed in section 6.1 of this decision report.
- [241] The relevant matters of discretion in the WDP include; landscape and visual effects (3.7.1); noise effects (3.7.10); stormwater and sewage/effluent disposal (3.7.15); traffic effects (3.7.17); traffic flow generation (3.7.18); social, economic and cultural effects (3.7.19); risk management (3.7.22); amenity values and rural and urban character effects (3.7.28); and modifications to maximum height (3.7.39).²⁰² Again, these matters are addressed in section 6.1 of this decision report.
- [242] Mr Frentz acknowledged Ms Nicholas's comprehensive assessment of the relevant objectives and policies of the WDP, with two exceptions, these being the discussion of Strategic Objective 3, economic development, and all of the relevant criteria for assessment of Discretionary Activities in section 3.7 of the WDP. Those provisions are also set out or described in Appendix 1. We accept that WDP Strategic Objective 3 lends support to the proposal. We discussed the relevant section 3.7 assessment criteria in section 6.1 of this decision report.
- [243] The overall suitability of the site was raised by Ms Nicholas. She suggested that there was no 'specific functional requirement for the plant to expand on this site. We took that to mean that an industrial zone or commercial zone was considered more appropriate. Ms Nicholas clarified that her view was that access and minimising adverse effects on surrounding properties was relevant, but she maintained that the proposal could be sited anywhere where the aquifer is located.²⁰³ We discussed the need to locate above the aquifer in section 4.2 of this decision and access to the site and minimising adverse effects on surrounding properties is addressed in section 6.1.
- [244] Nevertheless, in terms of alternative locations, we note that Mr Frentz looked at the feasibility of locating the bottling plant off-site in an industrial area, such as is provided for in Kawerau or Edgecumbe. He noted that Kawerau is 12km from the subject site and the water would need to be piped along road reserves to a new plant in the Kawerau industrial area. By way of comparison, Mr Frentz noted that Tauranga City Council are currently planning for the construction of a new water supply pipeline from Waiari, east of Te Puke, to Poplar Lane in the Papamoa Hills. That pipeline is also 12km long and is estimated to cost approximately \$18M. Edgecumbe is closer, but his understanding is that there is limited industrial land available in that area. Mr Frentz's opinion, was there are no technical limitations to locating the plant at 57 Johnson Road and that furthermore there are very good reasons for not locating it off the site.²⁰⁴ We agree.

6.8 Iwi management plans

- [245] A number of relevant iwi management plans and other documents were brought to our attention and assessed by the applicant and the reporting officers. We consider those documents to be relevant under s104(1)(c) of the RMA and we note that Objective 5 of the Bay of Plenty Regional Water and Land Plan states that 'Water,

²⁰² EIC, Keith Frentz, paragraph 44.

²⁰³ Ann Nicholas, Response to Submissions, Section4, page 4.

²⁰⁴ EIC Keith Frentz, para 68-71

land and geothermal resource management decisions have regard to iwi resource management planning documents.’

- [246] There are two relevant iwi management plans lodged with the BOPRC; Ngati Rangitahi Iwi Environmental Management Plan – Te Mahere a Rohi mo Ngati Rangitahi and Waahi Tapu Sites of Ngāti Awa 2000. A further iwi planning document; Mataatua Declaration on Freshwater, may also be relevant.
- [247] The BOPRC reporting officer did not consider the application to be inconsistent with the Ngati Rangitahi document. We also note that Ngāti Rangitahi provided a CIA and they indicated they support the proposal.
- [248] Several submitters highlighted the relevance of information within the document ‘Waahi Tapu Sites of Ngāti Awa 2000’ and how it related to the importance of the puna (springs) and taniwha. At the hearing, we received submissions and verbal evidence regarding the puna (springs) and taniwha. Te Rūnanga o Ngāti Awa included in their CIA an appendix listing waahi tapu of Ngāti Awa, including a number of those sites previously recorded in 2000 document. We discussed these matters in sections 6.1.18 and 6.1.19 of this report. None of the identified sites are within the site of the application
- [249] The Mataatua Declaration on Freshwater 2012 is a document signed by Ngāti Awa and other iwi of the Mataatua confederation. It was lodged with the BOPRC in November 2017. It sets out principles regarding the access to and use of ancestral waters within the Bay of Plenty, and declares and affirms a desire and wish of signatories to continue to retain full exclusive and undisturbed possession of their ancestral waters.
- [250] We consider that the matters covered in the Declaration largely fall outside the scope or jurisdiction of this consenting process, however, there are relevant recommendations in it regarding:
- Recognising the rights of indigenous peoples to access and exercise their traditional practices and customs in the use of their ancestral and cultural water resources;
 - Recognising that the Crown is required to provide adequate volume, flow and quality in the water bodies that are necessary to sustain the life principle of all human and living beings; and
 - In giving effect to Article II of the Treaty of Waitangi the Crown ensures access to and use of water resources to its Treaty partners.
- [251] To the extent that those matters are specifically provided for in the statutory instruments, we have already addressed them in preceding sections of this decision report.

6.9 Sections 105 and 107

- [252] Section 105 of the RMA lists additional matters that we must have regard to and we have done so. The proposed discharge of treated wastewater to land is appropriate and is encouraged by the regional planning documents. Discharging wastewater to surface water is not appropriate from both a cultural and environmental perspective, and the distance to pipe the wastewater to the Kawerau Wastewater Treatment Plant is significant at almost 12km and that is not a practicable option.

- [253] As we discussed above, the applicant now intends to provide on-site storage to attenuate site stormwater discharges to no more than pre-development levels in events up to and including a 72-hour 100 year AEP 2117 climate change adjusted storm event. There are two practical receiving environments, being the Tarawera River to the west and Hallett Drain. Given the cultural and environmental values of the Tarawera River, discharging to it would be less desirable than discharging to Hallett Drain.
- [254] Section 107 requires that no discharge permit shall be granted that allows certain listed effects in the receiving waters. Mr Sholes considered this and advised that the nature of the process wastewater was such that it was unlikely to cause any oil or grease films, scums or foams. There would also be very little suspended material in the process wastewater and it would therefore not result in any conspicuous floatable or suspended materials discharged to the Drain. Visual clarity and colour were also not expected to be impacted. We heard no qualified evidence to the contrary.
- [255] We have already noted (section 6.1.3 of this report) that the discharges to the Drain are unlikely to adversely affect the depauperate aquatic ecology within it. We also note that when stormwater is discharging to the Drain it is highly likely to be running turbid, effectively masking any effects that the site discharge might have on colour and clarity.
- [256] We are satisfied that the requirements of s107 of the RMA can be met.

6.10 Other matters

- [257] No other relevant matters were brought to our attention and we are not aware of any.

6.11 Permitted baseline

- [258] When forming an opinion for the purposes of subsection 104(1)(a) of the RMA we may disregard an adverse effect of the activity on the environment if a national environmental standard or a plan permits an activity with that effect.²⁰⁵ We have not disregarded any effects associated with the applications.
- [259] While the WDP would enable some primary production related buildings to be erected on the site, we conclude that the non-primary production nature of the proposed water bottling activity and the large scale of the new building proposed (together with the storage of numerous shipping containers outside the building and the significant heavy vehicle movements proposed six days a week) negate the practical utility of any comparison with what might otherwise be allowed to occur on the site in association with a permitted primary production activity (such as horticulture or agriculture).

7 Part 2 matters

7.1 Positive effects

- [260] Granting the applications will yield positive effects, including an increase from the current ten employees to an expected 32 full time employees once Stage 1 of the proposal is completed, increasing to 60 full time employees once Stage 2 is completed. The evidence of Mr Gleissner helpfully included a detailed schedule of the specific jobs that will be on offer, thereby satisfactorily verifying the number of employees required in our view.²⁰⁶

²⁰⁵ Section 104(2) of the RMA.

²⁰⁶ EIC Michael Gleissner, paragraph 45 and his Attachment MG1.

[261] We understand that many of the employees may be local, particularly members of local Maori communities. Indirect (or flow on) benefits will accrue from the expenditure of the employee's wages in the community, together with the applicant's purchase of goods and services required to support the water bottling operation such as road haulage operators and other service providers and the potential establishment of an inland container terminal in Kawerau. These flow-on effects are likely to create an additional 85 FTEs across the region, with potentially up to 237 FTEs in total attributable to the expanded operation.²⁰⁷ We also accept that in the Kawerau District, the unemployment rate as at 2013 was four times the national rate. Kawerau and Te Teko are among the most deprived places in New Zealand, in a socio-economic sense²⁰⁸ and it is undeniable that the additional direct and indirect employment resulting from the proposal would be highly beneficial in that context.

[262] We acknowledge the positive effects of the proposal.

7.2 Part 2

[263] Following the High Court decision²⁰⁹ in *Davidson*, we have not separately referred to Part 2 matters²¹⁰ as the statutory instruments appropriately address those matters in our view and we do not find those instruments to be invalid, nor do they have incomplete coverage or uncertain meaning in terms of the issues relevant here.

[264] Nevertheless, we record that Part 2 matters were addressed in the application documents²¹¹ and the evidence of Mr Frenz²¹² and Ms Osmond.²¹³ We agree with and adopt those assessments and find that in overall terms the application is consistent with Part 2 of the Act.

8 Overall Consideration

[265] In the preceding sections of this decision report we have discussed the potential effects of the proposal and the requirements of the various statutory instruments. Our primary remaining concern related to the 'intangible' adverse effect of the proposal on the existing rural amenity of the Johnson Road / Hallett Road locality that was forcefully expressed to us by several submitters who appeared at the hearing.²¹⁴ Having said that, we note that the unchallenged expert evidence before us is that the potential adverse effects on 'tangible' aspects of amenity (noise, vibration, lighting, landscape and visual) are all either minor or can be mitigated by conditions of consent, as can potential effects on traffic safety and the safe and efficient operation of the roading network.

[266] We have also concluded that the requirements of the various statutory instruments are met, other than some objectives and policies of the WDP relating to the outcomes anticipated for the Rural Plains Zone (see section 6.1.9 of this decision report) within which the proposal is situated and some aspects of the RPTRC relating to discharges to Hallett Drain (see section 6.6 of this decision report). Having given regard to the offended provisions, they do not weigh against a grant of consent in our view.

²⁰⁷ EIC Mark Cox, paragraphs 38 and 42.

²⁰⁸ *Ibid*, paragraphs 26 to 29.

²⁰⁹ *RJ Davidson Family Trust v Marlborough District Council* [2017] NZHC 52.

²¹⁰ Other than section 6(e) which we discussed in section 6.1.19 of this report.

²¹¹ BOPRC Application, section 8.5, pages 84 to 86; WDC Application, section 7.9, pages 92 to 94.

²¹² EIC Keith Frenz, paragraphs 149 to 151.

²¹³ EIC Malory Osmond, paras 222 to 231.

²¹⁴ Including Maureen and Glen Fraser, Lesley McKeown, Vanessa Whyte, Ian Gray, Mike and Sarah van der Boom, and Deborah Southall.

[267] In terms of 'intangible' adverse effects on the rural amenity of the area, we find they primarily relate to the projected large volume of heavy vehicle movements that will occur on Johnson Road / Hallett Road. We discussed the further concessions made by the applicant regarding operating hours for truck movements and the outdoor container area in sections 6.1.13 to 6.1.17 of this report and we do not consider any further mitigation in that regard is necessary.

[268] In overall terms, we find that the purpose of the RMA will be better served by granting the applications than declining them.

9 Consent conditions

[269] The WDC reporting officer included draft conditions for our consideration. The BOPRC reporting officer did not, but we requested the BOPRC to provide draft conditions prior to the hearing as that would be of assistance to us. We received those draft conditions on 19 April 2018. Conditions were also recommended to us in the evidence of the applicant's planning witnesses Keith Frenz and Mallory Osmond.

9.1 BOPRC consents

[270] As we noted above, the BOPRC Section 42A report did not include any recommended conditions. Ms Cranswick subsequently circulated a suite of draft conditions that were based on the conditions recommended by the applicant's planner Ms Osmond.²¹⁵ By the conclusion of the hearing there was agreement between the applicant and the BOPRC reporting officer on a number of consent conditions. In Reply the applicant provided a final suite of conditions clearly identifying the areas of disagreement between Ms Osmond and Ms Cranswick. In this section of our report we assess the residual areas of disagreement.

Earthworks

[271] There were no residual matters of dispute requiring our assessment.

Take and use of groundwater

[272] We consider that an allowance should be made to enable the taking of water for dust suppression purposes.²¹⁶ The amount of water sought (up to 620 m³/day) is well within the likely peak abstraction rate for water bottling and so the effects of taking that water for dust suppression will be less than minor. It also avoids the applicant having to truck in water for that purpose.

[273] We have amended recommended Condition 5.2 (notification to the WDC of Creswell well purging) so that the obligation on the consent holder relates solely to notification, and not to an avoidance of adverse effects on the WDC wells as we did not consider that to be an enforceable requirement.

[274] The applicant offered (on an Augier basis) a review condition enabling a reduction in the rate or volume of take if significant adverse effects are observed in the Otakiri Aquifer and those effects are a result of and are attributable to the Creswell take. We have merged that offered condition with what was recommended Condition 8.1(a) which dealt with much the same matter.

²¹⁵ EIC Malory Osmond, Appendix A.

²¹⁶ Condition 3.4.

[275] We address consent duration below.

On site secondary treated wastewater discharge

[276] There were no residual matters of dispute requiring our assessment other than consent duration which we address below.

Treated stormwater and treated process wastewater discharge

[277] We accept that the discharge trigger level for total phosphorus²¹⁷ should be 1.0 g/m³. A level of 0.5 g/m³ as sought by the BOPRC reporting officers would close to the background levels found in Hallett Drain and would also be close to the estimated discharge concentration of 0.35 g/m³. Setting a level of 0.5 g/m³ could result in unnecessary compliance action, particularly if the total phosphorus in the bore water increases slightly with continuous operation, as we understand that there is some variation in the applicant's water samples taken to date.

[278] We consider that the applicant should be able to seek revised trigger levels for nitrate nitrogen and total phosphorus once 12 months of monitoring data is obtained for Hallett Drain. We have imposed conditions 8.5A and 8.5B accordingly. We have also added an advice note stating that if new trigger levels are certified by the BOPRC, then the Council may request that the consent holder applies for a change of consent conditions to reference the new trigger levels.

[279] We note that the process wastewater discharge will be continuous. However, we have amended condition 9.1 to acknowledge that when a monthly process wastewater discharge sample is taken there may be no stormwater discharge occurring. We see no need to specify that the stormwater discharge be collected within the first 30 minutes of a discharge commencing. We understand that such a requirement is generally imposed to capture the 'first flush' from an impervious area as that will contain the highest level of contaminants. However, in this case the stormwater discharge will occur from a large and well mixed settling basin.

[280] We have omitted the recommended conditions relating to the maintenance of the stormwater outfall because (as we noted in section 4.1 of this decision report) the outfall is a permitted activity under Rule BW R6 (Rule 53) of the RNRP and Rule 12.2.5(b) of the TRCP. Advice note 8 refers to non-compliance with those rules.

Temporary sediment contaminated stormwater discharge

[281] There were no residual matters of dispute requiring our assessment.

9.2 WDC consents

[282] Ms Nicholas recommended a suite of consent conditions in her Section 42A Report, based on (we understand) the recommended conditions set out in the WDC application. The applicant then recommended a revised suite of conditions in their pre-circulated evidence.²¹⁸ There was agreement between the applicant and Ms Nicholas on the majority of the recommended consent conditions, however Ms Nicholas provided us with a table of Mr Frentz's conditions with which she did not agree, including the reasons for that disagreement.²¹⁹ In Reply the applicant

²¹⁷ Condition 8.5

²¹⁸ EIC Keith Frentz, Appendix A.

²¹⁹ Application to Whakatane District Council for Land Use Consent – Creswell New Zealand Limited, Response to Questions from Commissioner Van Voorthuysen to Whakatane District Council, pages 2 and 3.

provided a final suite of conditions clearly identifying the areas of disagreement between Mr Frantz and Ms Nicholas.

[283] The final conditions we have imposed are set out in Appendix 2 of this report.

[284] In terms of those final conditions and substantive areas of remaining disagreement between Mr Frantz and Ms Nicholas, we find that:

- revisions to the proposal specified in the application document may be made as a result of detailed design;²²⁰
- road strengthening and upgrading of the pavement should be completed prior to any site construction works commencing unless agreed otherwise by the WDC;²²¹
- the consent holder should be able to seek amendments to the Landscape Management Plan²²²;
- the amended hours of operation should be specified;²²³
- that after 10pm at night staff should be able to manually attend to utility services;²²⁴
- the Construction Management Plan does not need to include reference to an ESCP as that is covered by the BOPRC consents; and
- the consent holder should be able to seek amendments to the various components of the Construction Management Plan.²²⁵

9.3 Consent duration

[285] Creswell has sought resource consents to take and discharge to water for a term of 25 years. Mr Gleissner²²⁶ explained how that length of term is important to the applicant as it will take five years for the proposed new water bottling plant to be fully operational and before Nongfu Spring starts to see a return on its significant \$50m investment. Counsel for the applicant submitted that any shorter term than 25 years for the water take permit, in particular, would compromise the viability of the proposal, discourage Creswell's investment of \$50 million in the district, and put at risk the associated job opportunities for local residents.²²⁷

[286] The BOPRC reporting officer considered a term of 17 years was a more reasonable term, was more closely aligned with Policy WQ 8B(i) of the RPS, and was consistent with the term granted in the WDC municipal supply resource consent for the Johnson Road bores (across the road from the Applicant's site). The RPS policy referred to reads:

Establishing and applying a consent term of no more than 15 years, unless:

- (i) The take and use of water is necessary to enable the use or development of regionally significant infrastructure;
- (ii) The take and use of water is for a non-typical activity such as dewatering and the access to, and use and development of mineral resources; or
- (iii) A longer term is demonstrated by the applicant to be appropriate in the circumstances;

²²⁰ Condition 1.

²²¹ Condition 5.

²²² Condition 20A.

²²³ Condition 22.

²²⁴ Condition 23.

²²⁵ Condition 37A.

²²⁶ EIC Michael Gleissner, paragraph 38.

²²⁷ Opening Legal Submissions on behalf of Creswell NZ Limited, 30 April 2018, paragraph 165.

- [287] We do not consider the term granted to Johnson Road bores to be relevant. Given the substantial size of the applicant's intended investment we find that we should err towards a longer duration so as to provide them with as 'much security as is consistent with sustainable management'.²²⁸ The groundwater take is clearly sustainable (see section 6.1.1 of this decision report) and, tellingly in our view, in answer to our query Ms Cranswick could not envisage any adverse effects occurring at year 17 that would lead to the groundwater take needing to cease at that time.
- [288] With regard to the statutory instruments, we note that Policy WQ P17(c)(iii) of Proposed Plan Change 9 mirrors Policy WQ 8B(i) of the RPS insofar as it also provides for a longer consent term (than 15 years) if the take and use of water is demonstrated by the applicant to be appropriate in the circumstances. We find that to be the case here.
- [289] We asked the applicant to address consent duration in their Reply. The applicant provided us with (on a confidential basis²²⁹) further financial information substantiating both the need for a 25 year consent duration to provide a rational return on investment, and an obligation to provide the number of new jobs detailed in the consent applications in order to satisfy Overseas Investment Office requirements. We also note that there will be a five-year lead-in time before the new water bottling plant is fully operational.
- [290] We are satisfied that a duration of 25 years is appropriate for the consents to take groundwater and to discharge to Hallett Drain.
- [291] We are also satisfied that a duration of five years is suitable for the earthworks consent and the associated consent for the temporary discharge of stormwater during the earthworks period, because (as noted by Ms Osmond) that will provide time for the detailed design to be completed and roading upgrade works to be undertaken. Five years also provides an allowance for any unforeseen delays.²³⁰ We note that the BOPRC reporting officer also considered a duration of 5 years to be appropriate and that it was consistent with other large scale earthworks consents granted in the region.
- [292] The applicant also sought a duration of 25 years for the on-site wastewater system. The reporting officer recommended a term of 12 years based on the type of system proposed by the applicant generally performing to specification for approximately ten years. The extra two years was to allow for site development. She noted that Policy 34 of BOPRC's Onsite Effluent Treatment (OSET) Plan recommends a term of generally 10 years. We accept the reporting officer's recommendation for a 12 year duration.
- [293] In terms of s113(1)(b) of the RMA, the reasons for imposing a duration shorter than that sought by the applicant for the on-site wastewater system are set out above.
- [294] In making our decisions on duration we have had regard to the fact that the applicant has accepted conditions of consent providing for annual s128 review opportunities, which importantly include a reduction in the rate or volume of groundwater take if necessary. That will enable any unforeseen adverse effects to be addressed.

²²⁸ *PVL Proteins v ARC*.

²²⁹ As enabled by section 42(6)(b)(v) of the RMA, on 23 May 2018 we made Orders under section 42(2)(b) and section 42(3)(b) of the RMA relating to that commercially sensitive information.

²³⁰ EIC Malory Osmond, para 294.

10 Determination

[295] Pursuant to the powers delegated to us by the Whakatane District Council and the Bay of Plenty Regional Council under section 34A of the Resource Management Act 1991, we record that having read the applicants' application documents, reports, further and supplementary information, evidence and legal submissions; the submissions and submitter evidence; the two officer's reports; and having considered the various requirements of the RMA, we find that:

- a) Based on the qualified expert evidence before us, the actual and potential adverse effects of the applications are either demonstrably minor or can be suitably avoided, remedied or mitigated by the imposition of consent conditions;
- b) The applications if granted will have positive effects, particularly in terms of the employment of local people including local Maori;
- c) Subject to the imposition of appropriate conditions of consent the application is generally consistent with the provisions of the relevant statutory instruments, and where it is not (having had regard to the specific district and regional plan provisions offended by the proposal as we are required to do under s104(1)(b)(vi)) we conclude that the purpose of the RMA would be best achieved by granting the applications sought.

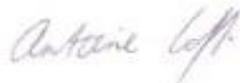
[296] We therefore grant the applications listed in section 4 of this report.

[297] The conditions of consent we have settled on are set out in Appendix 2.

Signed by the commissioners:



Rob van Voorthuysen (Chair)



Antoine Coffin
Dated: 11 June 2018

Appendix 1 Whakatane District Plan Provisions

Strategic Objective 4: The rural character of the District is retained and rural productive capacity is provided for.

- Policy 1: To ensure that rural zones continue to be utilised for rural production activities, while giving effect to national policy statements on renewable electricity generation and electricity transmission and national environmental standards for telecommunication facilities and electricity transmission.
- Policy 2: To enable primary productive use in the Rural Plains Zone and to protect land in that zone from further subdivision, development and activities that could detract from its primary production focus.
- Policy 6: To ensure that subdivision, use and development of rural areas does not compromise the efficient operation of rural production activities or result in reverse sensitivity effects on lawfully established activities.

Chapter 7

Objective Rur1: To sustain the productive potential of rural land and provide for rural production activities.

- Policy 1: To protect land in the Rural Plains Zone, which include versatile land, for primary productive use and to maintain the productive land resources for future generations.
- Policy 2: To provide for the growth and efficient operation of primary productive use and rural production activities in the Rural Zones.
- Policy 3: To require the sustainable use and development of rural land in a manner that does not reduce existing primary productive use or compromise existing and future primary production use options.

Objective Rur2: To maintain and where appropriate, enhance rural character.

- Policy 1: To avoid, remedy or mitigate the adverse visual effects of structures (including signs) in terms of location, size, height, bulk and materials.
- Policy 3: To maintain and, where appropriate, enhance rural amenity values including natural light and buffers to boundaries, within and around dwellings in the rural zones.

Objective Rur3: To ensure that development is located and operated to enable people and communities to provide for their social, economic and cultural well-being and for their health and safety, while ensuring that adverse effects including cumulative effects on the rural environment are avoided, remedied or mitigated.

- Policy 1: To enable rural activities such as farming, intensive farming, production forestry and mining to continue and prosper as part of the rural environment, whilst avoiding significant adverse and/or cumulative effects on the surrounding environment.

Objective Gen1: Maintain and enhance the health and safety of people and communities from nuisance effects and adverse effects on the environment.

- Policy 1: To avoid, remedy or mitigate the adverse effects of intrusive noise, odour, glare or vibration.

Chapter 13

Objective TS1 A safe, efficient, sustainable integrated land transport network.

- Policy 1: To consider benefits derived from improved transport infrastructure and connectivity and to ensure that any adverse effects on the physical transportation network resources are avoided, remedied or mitigated.
- Policy 2: To ensure that adverse effects on traffic movement, safety, sustainability, network capacity and the environment from the location, construction, maintenance and operation of activities are avoided, remedied or mitigated.
- Policy 3: To ensure the transportation mitigation meets the demands of the activity while maintaining the safe, sustainable and efficient function of the transport network.
- Policy 5: To ensure that activities do not adversely affect the function, including the safe and efficient operation, of the transport network.
- Policy 7: To provide a connected road, cyclist and pedestrian network and where necessary physically separate vehicle, cyclist and pedestrian movements.

Policy 8: To encourage an effective and efficient functioning of the transport network, ensuring that the ease of movement for pedestrians, cyclists, disabled people, the elderly, children, motor vehicles, and public transport is not unduly compromised.

Objective TS2: Roads that are safe for all road users and designed to the context of their environment.

Policy 1: To ensure that transportation networks are planned to respond to the land use context using design to encourage appropriate traffic speeds and provide amenity for all users.

Policy 2: To ensure that the street network enables traffic to flow freely and is appropriate for its purpose, and promotes safety of all users.

Policy 3: To encourage and facilitate sustainable modes of transport including walking, cycling and public transport.

Objective TS4: The safe movement of traffic and pedestrians entering, leaving and within sites.

Policy 2: To avoid poorly located and inadequately constructed access points on to roads and/or across rail lines.

Chapter 16

Objective HS2: Land affected by contaminants in soil is appropriately managed to minimise the risk to human health in accordance with the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES).

Policy 1: To require soil testing to confirm at the time of subdivision and development of sites that have a history of landuse that could have resulted in contamination of the soil that the land is fit for the intended use.

Policy 2: To ensure that any subdivision and development on contaminated land is managed so that significant risk to human health and the environment is avoided, remedied or mitigated.

Policy 3: To require management measures for contaminated land that provide for remediation, containment, disposal of contaminated soil, or other suitable measures so the level of contamination is appropriately managed for its current or proposed use.

Strategic Objective 3: Economic development and growth is stimulated by providing for a wide range of business activities.

Policy 1: To support the vibrancy and resilience of businesses in the District by providing for a range of activities in appropriate zones and retaining a high level of amenity and service.

Section 3.7 of the WDP provides a comprehensive list of criteria to be had regard to in the assessment of Discretionary Activities. Those relevant include:

- landscape and visual effects (3.7.1);
- noise effects (3.7.10);
- stormwater and sewage/effluent disposal (3.7.15);
- traffic effects (3.7.17);
- traffic flow generation (3.7.18);
- social, economic and cultural effects (3.7.19);
- risk management (3.7.22);
- amenity values and rural and urban character effects (3.7.28); and
- modifications to maximum height (3.7.39).

Appendix 2 – Consent conditions