IN THE MATTER OF	The Resource Management Act 1991
AND	
IN THE MATTER OF	Consent review of Water Permit CRC224627 under section 128(1)(b)
BETWEEN	**GREENSTREET IRRIGATION SOCIETY LIMITED** **Consent Holder**
AND	**CANTERBURY REGIONAL COUNCIL** **Consent Authority**

REPORT AND DECISION OF HEARING COMMISSIONERS

Sharon McGarry and Hoani Langsbury

24 February 2023

Heard on the 24 November 2022

At the Hotel Ashburton, Racecourse Road, Ashburton.

Representations and Appearances

Consent Holder:

Mr Ben Williams, Counsel (Chapman Tripp)

Mr Darryl Butterick, Scheme Chairman, Greenstreet Irrigation Society Limited

Mr Lyndon Webb, Shareholder and Board Member, Greenstreet Irrigation Society Limited

Dr Helen Rutter, Senior Groundwater Hydrologist (Aqualinc Research Limited)

Mr Matt Bubb, Business Manager (Aqualinc Research Limited)

Mr Mark Taylor, Ecological Consultant (Aquatic Ecology Limited)

Submitters

New Zealand Fish and Game Council – Mr Mark Webb

Forest & Bird – Ms Nicky Snoyink

Section 42A Reporting Officers:

Ms Gillian Ensor, Environmental Consultant (Enviser Limited)

Technical Advisors

- **Mr Brydon Hughes**, Hydrogeological Consultant (LWP Limited)
- **Ms Jeanine Topélen**, Senior Scientist – Hydrology (Canterbury Regional Council)
- **Dr Richard Allibone**, Principal Ecologist (Water Ways Consulting)
- **Mr John Henry**, Cultural Consultant and Kaitiaki (Arowhenua Rūnanga)

It is the decision of the Canterbury Regional Council, pursuant to section 131 and 104, and subject to Part 2 of the Resource Management Act 1991, to:

i) REFUSE the alternative minimum flow conditions proposed by the Consent Holder; and

II) GRANT Water Permit CRC200238 subject to the CRC consent review changes to the conditions of existing Water Permit CRC224627 set out in Appendix 1 of this decision, with the new conditions shown with underlining.

BACKGROUND AND PROCEDURAL MATTERS

1. This is the report and decision of independent Hearing Commissioners Ms Sharon McGarry (Chair) and Mr Hoani Lansbury. We were delegated powers and functions[1] by the Canterbury Regional Council (**CRC** or 'the Council') to hear and decide a consent review of Water Permit CRC224627 held by Greenstreet Irrigation Society Limited ('the Consent Holder') pursuant to section 128(1)(b) of the Resource Management Act 1991 (**RMA** or 'the Act').

2. Notice of the consent review was served on the Consent Holders on 18 July 2019. The review proposed to insert a new minimum flow condition for O'Shea Creek and the Ashburton River based on the Canterbury Land and Water Regional Plan (**LWRP**), which will apply from 1 July 2023.

3. The Consent Holder was invited to propose alternative new conditions.[2] The Consent Holder proposed alternative minimum flow conditions on 22 June 2022.[3]

4. The Consent Holder's alternative minimum flow conditions ('alternative minimum flow proposal') were publicly notified on 9 July 2022. Twelve submissions were received within the submission period; with five submissions opposed and seven in support. Six submissions indicated that they wished to be heard.

5. Prior to the hearing, a report was produced pursuant to section 42A of the Act by CRC's Reporting Officer Ms Gillian Ensor, an Environmental Consultant for Enviser Ltd. This 's42A Report' included technical review of the application and written reports by Ms Jeanine Topélen, Senior Scientist for CRC (Appendix 2), Mr Brydon Hughes, Hydrogeological Consultant for LWP Ltd (Appendix 3), Dr Richard Allibone, Principal Ecologist for Water Ways Consulting (Appendix 4) and Mr John Henry, a Cultural Consultant and Kaitiaki for Arowhenua Rūnanga (Appendix 5). It also included a set of new recommended conditions (Appendix 6), a memorandum from Wynn Williams in relation to legal interpretation of section 131 of the Act (Appendix 7) and the memorandum from Aqualinc dated 22 June 2022.

6. The s42A Report provided an analysis of the matters requiring consideration and recommended the resource consent review should be granted subject to the minimum flow conditions proposed to implement the LWRP. The s42A Report, the Consent Holder's expert evidence and submitters' expert evidence was pre-circulated prior to the hearing[4]. This evidence was pre-read by us and was 'taken as read' at the hearing.

7. The hearing commenced at 9.00 am on 24 November 2022 and was adjourned at 4.15 pm the same day to enable the provision of the Consent Holder's written right of reply.

8. We undertook a site visit on 25 November 2022.

[1] Under section 34A of the Resource Management Act 1991
[2] In accordance with section 129(1)(d).
[3] Memorandum from Mr Matt Bubb and Dr Helen Rutter, Aqualinc dated 22 June 2022.
[4] In accordance with section 103B of the Act

9. Mr Williams sought an extension to the timeframe to provide a written right of reply until 27 January 2023 due to the Christmas period and availability issues. We agreed to this request and received the written right of reply on 30 January 2023.

10. We closed the hearing on 13 February 2023.

WATER PERMIT CRC224627

11. The Consent Holder was granted a suite of resource consents in 1993 to operate the Greenstreet Irrigation Scheme, which are set out in Table 1 of the s42A Report. The consents authorise the damming, diversion, taking and discharge of water from the South Branch of the Hakatere/Ashburton River into O'Shea Creek to augment the flow for irrigation use; the damming and taking of water from O'Shea Creek and Snowden Creek for irrigation use; the discharge of water from the Scheme race into Greenstreet Creek; damming and taking water from Spring Creek One and Spring Creek Two for irrigation; and three consents to take and use groundwater for irrigation. Water Permit CRC202476 was granted to take and use groundwater to enable the 'swapping' of surface water takes to deep groundwater under the provisions of the LWRP to address adverse environmental effects.

12. Water Permit CRC224627 authorises the take and use water from an instream pond at the confluence of O'Shea's and Snowden's Creeks, at a rate not exceeding 1,200 litres per second (**l/s**) for irrigation within the Scheme command area. The Greenstreet Irrigation Scheme covers an area of approximately 2,700 hectares (**ha**) between the North and South Branches of the Hakatere/Ashburton River. Approximately 640 ha of land is irrigated by border-dyke method from the water dammed in the instream pond, with the remainder of the land within the Scheme area irrigated with water source from groundwater. Water Permit CRC224627 and all other the consents held for the Scheme expire on 30 June 2028.

13. The s42A Report stated the consent authorises:

    a. *The taking of water from O'Shea Creek and Snowden's Creek, at or about map reference K36:9839-1431, at a rate not exceeding 1,200 l/s.*
    b. *The taking of water is limited to no more than 2,169,000 cubic metres in any 28 consecutive days;*
    c. *The combined annual volume of water that can be taken under this consent and consents CRC010181 (Greenstreet Creek), CRC921547H (Spring Creek 1, now CRC200241) and CRC921547J (Spring Creek 2, now CRC200242) is 13,061,251 cubic metres;*
    d. *Water can be used for irrigation;*
    e. *The taking of water must cease when the flow in the Ashburton River, at the State Highway 1 Bridge recorder site, falls below the following flow rates:*

Month	***Jan***	***Feb***	***Mar***	***Apr-Jul***	***Aug***	***Sept***	***Oct***	***Nov***	***Dec***
Flow (m^3/s)	*4.5*	*3.5*	*3.5*	*5.0*	*6.5*	*8.0*	*8.0*	*6.5*	*5.0*

f. The taking of water must be reduced to 50% of the allocation when the flow in the Ashburton River, at the State Highway 1 Bridge recorder site, falls below the following flow rates:

Month	***Jan***	***Feb***	***Mar***	***Apr-Jul***	***Aug***	***Sept***	***Oct***	***Nov***	***Dec***
Flow (m^3/s)	*5.0*	*4.0*	*4.0*	*5.5*	*7.0*	*8.5*	*8.5*	*7.0*	*5.5*

g. The hours and rate of take are to be measured and recorded in a daily log and a copy of the records provided to the CRC annually.

h. A residual flow in O'Shea Creek, of 50 l/s, immediately downstream of the intake, must be maintained.

HAKATERE/ASHBURTON RIVER CATCHMENT RESOURCE CONSENT REVIEW 2019

14. The CRC has undertaken reviews of approximately 90 resource consents in the Hakatere/Ashburton River catchment to implement the LWRP minimum flow regime set out in Table 13(b), to be met from 1 July 2023, and water metering and telemetry provisions.

15. Background to the review process and the work undertaken by the CRC in the 18 months prior to the review was set out in the s42A Report. Copies of the notice of review letters and information for consent holders were appended to the s42A Report.

16. Policy 13.4.9 of the LWRP provides for the consent review process prior to 1 July 2023 as the best method to ensure equity in the catchment in achieving the outcomes of the Ashburton Water Zone Committee's Zone Implementation Programme 2011 (**ZIP**)[5] and the objectives in the LWRP. It is acknowledged that the benefits to the environment envisaged by the LWRP will only be realised when all resource consents for all surface water takes and hydraulically connected groundwater takes are subject to the LWRP minimum flows.

17. The CRC has been working on the consent review process with the Ashburton Water Zone Committee to ensure the review meets the outcomes of the LWRP and to engage with consent holders and the community throughout the review process. Consent holders affected by the consent review were served formal written notice and received an information booklet[6] summarising CRC's assessment of the impact of the minimum flow changes for each of the eight surface water abstraction zones in the Hakatere/Ashburton River catchment.

[5] Under the Canterbury Water Management Strategy.

[6] '*Hakatere/Ashburton River catchment resource consent review 2019: Information for consent holders: Impacts of the consent reviews on water availability*.'

18. To date 70 consent reviews have been decided, with 63 consents issued with the LWRP minimum flows and seven issued without. Three consents have been surrendered and fifteen reviews are yet to be decided (including this consent review).

19. In the O'Shea Creek sub-catchment, six consent reviews have been issued with the LWRP minimum flows, effective from 1 July 2023. In the North Branch sub-catchment, 19 consent reviews have been issued with the LWRP minimum flows for that sub- catchment.

20. Two new conditions are proposed by the CRC for water metering requirements for open channel intakes. The imposition of these new conditions is accepted by the Consent Holder. The CRC has proposed minor amendments to these conditions since notification to incorporate amendments to the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020.

21. The new minimum flow condition proposed by the CRC to replace Conditions 4 and 5 of Water Permit CRC224627, to implement the LWRP minimum flows in the review notice are as follows:

> *Notwithstanding any other flow restriction contained within the conditions of this consent from July 1 2023:*
>
> *a. Whenever the flow in O'Shea Creek, is at or below 450 litres per second, there shall be no taking of water in termsof this permit during the next succeeding day.*
>
> *b. Whenever the flow in the mainstem of the Ashburton River is:*
>
> *i. at or below 7,275 litres per second, the taking of water shall be subject to areduction of take during the next succeeding day as set in Table 1 below.*
>
> *ii. at or below 6,000 litres per second, there shall be no taking of water interms of this permit during the next succeeding day.*
>
> *c. For the purposes of this condition:*
>
> *i. the flow in O'Shea Creek shall be the mean flow as estimated by the Canterbury Regional Council at the bywash to North Ashburton at approximately map reference Topo50 BY20:885-527, for the 24 hour period ending at noon on any one day.*
>
> *ii. the flow in the mainstem of the Ashburton River shall be the mean flow as estimated by the Canterbury Regional Council in the Ashburton River at the State Highway 1 Bridge recorder site located at map reference Topo50 BY21:999-351, for the 24 hour period ending at noon on any one day.*

Table 1	
Flow in River (litres per second)	*Reduction in rate of take*
At or below 7,275	*25 %*
At or below 6,850	*50 %*
At or below 6,425	*75 %*

> ***Advice Note:*** *The environmental flow regime specified in this condition takes effect from the 1st of July 2023. Until such time, the consent holder is subject to anyexisting restrictions on their consent that relates to minimum flow restrictions. As of 1 July 2023, those conditions shall cease to apply and instead the abstraction will be managed on this flow regime. The allocation limits in this consent are not altered by this condition.*
>
> ***Advice Note 2:*** *The minimum flow restrictions in clause (a) and (b) of this conditionboth apply. The consent holder must not take water when either of the minimum flow restrictions are triggered.*

22. The minor amendments to the recommended conditions to reference the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020 and improve clarity were shown in red in the version appended to the s42A. We accept these updated the proposed new conditions and do not change the intent of the conditions.

ALTERNATIVE NEW MINIMUM FLOW CONDITIONS PROPOSED BY CONSENT HOLDERS

23. The Consent Holder proposes the following alternative minimum flow conditions:

    a. *The taking of water will cease when the flow in O'Shea Creek is at or below 50 l/s (the CRC proposes 450 litres per second (l/s); AND*
    b. *When water is flowing in the North Branch Ashburton River at Digby's Bridge, the taking of water will be subject to full and partial restrictions when the flow in the Ashburton River is at or below 6,000 l/s and 7,275 l/s respectively (the flow rates are the same as proposed by the CRC, but the CRC minimum flows are not tied to whether or not there is water flowing at Digby's Bridge); OR*
    c. *When there is no water flowing in the North Branch Ashburton River at Digby's Bridge, the taking of water is subject to the full and partial restrictions currently on the consent (which are different to the minimum flows in the LWRP and proposed by the CRC).*

24. In summary, the Aqualinc Memorandum stated that imposing the LWRP minimum flows would not lead to the best outcome for the health of the Hakatere/Ashburton River or O'Shea Creek based on an ecological survey by Aquatic Ecology Ltd in 2021 on the lower part of O'Shea Creek. It noted that adoption of the LWRP minimum flows would 'force' the Scheme to take more water from the South Branch, which would not be discharged into the North Branch and would be 'lost' to surface water system. It stated that the alternative minimum flow conditions would have no impact on existing minimum flow conditions tied to the mainstem at State Highway 1, but recognised there would be an impact on other consents tied to low flows on O'Shea Creek.

25. The Consent Holder explained in reply evidence how the flow in the North Branch at Digby's Bridge could be monitored and how compliance would be achieved by using time stamped photographic or video evidence provided to the CRC.

26. The s42A Report stated that the CRC had not provided an assessment of the effects of the proposed alternative new minimum flow or an assessment of the alternative minimum flow against the relevant LWRP provisions. It acknowledged that there is no requirement under the Act for the Consent Holders to provide such assessments or any mechanism for a consent authority to request them.

27. The Aqualinc Memorandum also stated that the alternative Scheme proposal included the surrender of the consent CRC200240 to take up to 990 l/s of water from the South Branch. However, it was confirmed at the hearing that there was no proposal to surrender the consent for the Consent Holder's take from the South Branch.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

28. A description of the affected environment was set out in the s42A Report. This should be read in conjunction with this decision. The s42A Report referred to the decision makers' report and recommendation on the LWRP and the Ashburton Zone Implementation Programme (**ZIP**).

29. The consent site is within the Ashburton Water Zone under the LWRP. Section 13 of the LWRP includes an overview of the natural and physical resources and the communities within the catchment. The LWRP acknowledges surface water and groundwater quality in the catchment is degraded. The lower reaches of the Hakatere/Ashburton River and its mouth/hāpua are adversely affected by water quality and quantity stressors.

30. Surface water and groundwater is deemed to be overallocated under the limits of the LWRP. The LWRP provides for the imposition of minimum flow conditions on surface water and hydraulically connected groundwater takes through consent reviews. The current consent review process acknowledges this does not address the overallocation of water resources in the catchment.

31. We note the submissions of Mr Williams that focussing on minimum flows without addressing surface water overallocation will not achieve the outcomes of the LWRP. We agree but accept that consent reviews to impose the LWRP minimum flows are a step in the right direction and that other steps to address overallocation are also required under the LWRP.

32. We adopt[7] the summary of the affected environment based on the advice of the CRC technical experts for the purpose of our assessment. We accept the hydrology of the Hakatere/Ashburton River is complex, driven by a combination of rainfed rivers and streams, spring fed stream and connected groundwater bodies.

33. We accept the expert evidence of Ms Topélen and Mr Hughes regarding the affected environment set out in the s42A Report that:

> *'During times of drought, the North Ashburton River ceases to flow in its mid and lower reaches about the location of the O'Shea Creek confluence. Downstream of SH72, surface flow is lost (referred to as a losing reach). Downstream of Shearers Road, between Digby's Bridge and the confluence with the South Branch Ashburton River, there is an increase in flow (gaining reach). Part of that increase is due to the inflow from spring fed creeks within the lower Greenstreet area, and from the*

[7] In accordance with section 113(3).

> *discharge from the scheme race. In the losing reach,* ***it is possible that much of the flow losses recharge the deeper aquifers and are permanently lost from the river****.*
>
> *[…]*
>
> *Approximately 700 metres downstream of the Scheme intake and pond O'Shea Creek discharges into the North Ashburton River. There is* ***limited flow variability in the reach downstream of the pond****, due to the flow being maintained in that reach by the instream dam which is maintained by the Scheme. The estimated 7 day mean annual low flow (7dMALF) for O'Shea Creek is between* ***455 l/s and 515 l/s***
>
> *[…]*
>
> *The groundwater system in the Scheme's area comprises three separate water bearing layers that are 'perched' on low permeability aquitards. Groundwater mounding occurs on the aquitards in the Greenstreet area creating a* ***hydraulic gradient running obliquely to the topographic gradient.***
>
> *Piezometric contours imply groundwater generally flows from the North Ashburton River toward the South Ashburton River, above Ashburton Forks. Some of these flow losses are intercepted by the headwaters of O'Shea Creek, which flows back into the North Ashburton River.* ***The contours also show a general flow of groundwater in an easterly direction from the North Ashburton River. Any sub-surface flow beneath the gravels is lost to the north of the river as general groundwater and is not retained within the river channel****.*
>
> *The North Branch Ashburton River becomes disconnected from the underlying water table and experiences seasonal drying during the summer.* ***The extent and duration of the drying varies seasonally in response to changes in river flow and groundwater conditions****.*
>
> *There are numerous springs in the O'Shea Creek catchment which are likely to originate from groundwater sourced from flow loss from Taylor's Stream and the North Branch upstream of Thompsons Track.'*[8] [**our emphasis**]

34. The Hakatere/Ashburton River and its tributaries support high indigenous ecological values, a sports fishery and recreational values. It has a high abundance of rare and threatened river nesting birds, threatened fish species, diverse native fish species and important mahinga kai species, such as tuna/eels and kanakana/lamprey. The evidence of Dr Allibone highlights the freshwater ecological values of the Hakatere/Ashburton River and the importance of O'Shea Creek as a spring fed creek for providing refuge habitat for mainstem species when the North Branch is dry.

35. The Hakatere/Ashburton River is a Statutory Acknowledgement Area under the Ngāi Tahu Claims Settlement Act 1998. Three Rūnanga consider the Ashburton Water Zone part of their takiwā – Arowhenua, Taumutu and Ngāi Tūāhuriri. The evidence of Mr Henry describes the cultural values of the catchment and their importance.

[8] S42A Report paragraph 48, page 19

36. The catchment is in the Department of Conservation (**DOC**) conservancy area of Ruapakupa and the Hakatere/Ashburton River is a DOC site of special wildlife significance, land of national significance and a recommended area of protection. The surface waterbodies in the catchment provide habitat for rare birds, fish, plants and other species, as well as supporting a wide range of recreation values.

SUBMISSIONS

37. The submissions were accurately summarised in paragraphs 74-80 of the s42A Report and should be read in conjunction with this decision.

38. All five submissions opposed to the alternative minimum flow conditions seek imposition of the LWRP minimum flows, as proposed through the CRC review process.

39. Seven submissions supporting the proposed alternative minimum flow conditions based on better outcomes for the health of the river, better water availability for the Scheme and benefits to other consent holders.

THE HEARING

Consent Holder's Case

40. **Mr Ben Williams,** Counsel for the Greenstreet Irrigation Society Ltd, provided written legal submissions setting out the decision and whether a better outcome for O'Shea Creek and the South Branch would be achieved under the alternative proposal or the CRC minimum flows. He submitted the LWRP is 'not an expert witness' and that it is not appropriate to 'blindly apply' all minimum flow restrictions to the 'detriment of the awa'. He addressed the statutory test under section 131 of the RMA and section 104, relevant provisions of the higher order documents, actual and potential effects on the environment, the consent viability assessment, previous use of the consent, issues with the LWRP minimum flows and potential precedent issues. He concluded the alternative minimum flow proposal would better achieve the outcomes envisaged by the LWRP and would be more consistent with Te Mana o Te Wai, as well as better enabling the consented activity. Appended to his legal submissions was 'Annexure 1: Ashburton Flow (with reference to Galloway)'.

41. **Mr Darryl Butterick**, a farmer in the Greenstreet area, and Director and Chairman of the Greenstreet Irrigation Society, presented a written statement in support of the alternative minimum flow proposal. He described his farming experience, biodiversity and enhancement efforts, the unique spring fed creeks in the area, and the impact of last year's floods financially, physically and mentally. He urged us to consider the additional financial impact of the consent review on top of the impacts of the floods.

42. **Mr Lyndon Webb**, a resident of Greenstreet since 1954, and Shareholder and Board Member for the Greenstreet Scheme, attended the hearing in support of the Consent Holder and the alternative minimum flow proposal. He provided a written statement outlining background to the Scheme and O'Shea Creek, the cost of drilling deep bores and moving to spray irrigation, the history of the North Branch going dry, changes in natural

flows from land drainage, and his frustration with the consent review. He expressed frustration with the view of the CRC staff and submitters that it was better for the Scheme to take more water from the South Branch when this would flow into a dry North Branch and be lost to the river. Appended to his statement was a map titled 'Greenstreet Plan'.

43. **Dr Helen Rutter**, a Senior Groundwater Hydrologist with Aqualinc Research Limited, provided a written statement of evidence reviewing available data and commenting on the evidence of Mr Hughes. Based on piezometric contours, she considered it was unlikely the additional minimum flow (400 l/s) from O'Shea Creek to the North Branch would impact surface flow in the main stem of the river. She noted that at times when the North Branch was dry at Digby's Bridge and there were flows of 600-800 l/s from O'Shea Creek there was little or no flow at further downstream of the confluence. She considered this illustrated the limited contribution of flows from O'Shea Creek to help maintain flows at the SH1 monitoring site. She stated that leaving water in the South Branch rather than increasing flows in O'Shea Creek would have some impact on flows within the South Branch and a beneficial effect on the reliability of other water users.

44. **Mr Matt Bubb**, Business Manager for Consents and Compliance at Aqualinc Research Ltd, provided a written statement of evidence addressing background to the review, proposed conditions, written approvals, environmental effects of the options, what happens to water discharged to the dry North Branch, impacts of the Scheme, the effect of taking additional water from the South Branch, the advantages of each proposal, planning matters, consent viability issues, comments on the s42A Report and comments on submissions. He concluded that imposing the LWRP minimum flows would lead to 400 l/s of water being taken from the South Branch to 'artificially maintain' a minimum flow in O'Shea Creek of 450 l/s below the intake pond. He considered that when the North Branch was dry this water would recharge groundwater and be lost to the Hakatere/Ashburton River catchment. He concluded the LWRP minimum flow was not acceptable with reference to the planning, statutory and Iwi Management documents. He considered the alternative minimum flow proposal would prevent the taking of water from the South Branch to artificially maintain a minimum flow and would result in a better outcome for the environment and improved reliability of supply for the Consent Holder. He acknowledged there would be a 'small impact' on the reliability of supply for consent holders tied to the North Branch minimum flows, but that this needed to be weighed against the potential benefits for the river. Appended to his statement were the proposed alternative consent conditions (Appendix A) and copies of the written approvals obtained (Appendix B).

45. Mr Bubb provided rebuttal evidence (dated 27 January 2023) with the Applicant's right of reply providing further information on the frequency of take from the South Branch under the LWRP minimum flows; the additional abstraction volumes needed from the South Branch to maintain a low flow in O'Shea Creek to account for race losses; and the annual volume of water abstracted from the South Branch to maintain the minimum flow. He concluded that this showed that after 1 July 2023, supplementary water would be typically required to be taken from the South Branch to operate the Scheme. He considered the 'theory' that the South Branch minimum flow regime would look after the health of the river (including maintaining an open river mouth) ignored the need to phase out over-allocation. He re-iterated his evidence relating to how an application for a new take from the South Branch would be viewed and that it would be a prohibited activity and contrary

to the direction of the LWRP. He addressed impacts on the Spreadeagle Dairies surface water take, mounding of groundwater when the North Branch is dry, recharge of groundwater to the north outside the Ashburton River catchment, and downstream effects. He considered Ms Ensor had not taken account of his evidence and the downstream benefits of the Greenstreet Irrigation Scheme, including the Greenstreet Creek being 'kept alive'. He considered the wetlands within the Scheme must be protected and that reducing the reliability of supply would be counter to this requirement. He noted time stamped photographic or video evidence would be used to show times of no surface flow at Digby's Bridge.

46. **Mr Mark Taylor**, an Ecological Consultant with Aquatic Ecology Ltd, co-authored a report on stream ecology and hydraulics in O'Shea Creek (AEL Report No. 188, May 2021) and provided a written statement of evidence. The AEL Report assessed the change in habitat in the lower part of O'Shea Creek using a physical habitat model made by NIWA in 2003 and survey work undertaken in 2021. Mr Taylor considered that flows of 400-450 l/s in O'Shea Creek would be detrimental to Canterbury galaxias species and upland bully habitat; and that brown trout habitat would increase at the expense of native fish. He contended '*…that flows of 400-450 l/s in this small waterway are wholly unsuitable and excessive for the instream biota of O'Shea Creek, even the specific function of trout passage*.'[9] He argued that O'Shea Creek would be better as a rearing area for rare native fish which are suited to small streams and shallow habitat than permanent habitat for trout. He considered it was unknown whether the increased discharge from O'Shea Creek would increase native fish habitat in the North Branch. He noted that a NIWA survey of O'Shea Creek for the CRC in 1998 (at a flow of 28 l/s) suggested O'Shea Creek to be a retreat for trout when the North Branch dried and provides a rearing or 'bolt-hole' function at the existing low controlled flow, as well as suitable flows for small native fish and koura. He considered a Mean Annual Low Flow (**MALF**) of 455 l/s seemed high compared to the catchment area of O'Shea Creek and noted he disagreed with the CRC evidence regarding the catchment because there was too much uncertainty about the catchment area to use MALF in the consideration of minimum flows.

47. Mr Taylor provided a lengthy statement of rebuttal evidence with the Applicant's right of reply responding to Mr Webb's and Dr Allibone's evidence. He maintained the view that only adult trout would benefit from higher flows and that existing rich fauna of invertebrates in O'Shea Creek would be compromised by 'augmented' high flows. He considered the issue was the amount of flow that should be directed along the watercourse. He considered the existing flow regime was keeping the creek clean and in high health. He considered the hydrograph presented at the hearing showed sufficient ecological flushing to improve invertebrate habitat and maintain a healthy waterway. He highlighted the macroinvertebrate community index (**MCI**) was rated as 'good' and was close to 'excellent'; and the fish abundance was 'moderate'. He stated it was almost certain that increased flows to enhance large trout habitat would reduce the abundance of mahinga kai species and be contrary to the NPS-FM; and that 'artificial augmentation of the O'Shea Creek baseflow' would diminish values of Te Mana o te Wai. He considered a seven day MALF of 450 l/s was not consistent with the environmental outcomes required under the NPS-FM and its derivation remained uncertain. He considered the rational for creating

[9] Evidence Mark Taylor (undated), pg. 5.

a substantial attractant flow was flawed given trout already access the channel; fish will instinctively swim downstream where they are likely to be trapped in pools; and it is futile to attract fish into a refuge with unsuitable physical habitat for most fauna.

Submitters

48. **Forest & Bird** was represented at the hearing via internet connection by Ms Nicky Snoyink. Ms Snoyink outlined the involvement of the local branch of Forest & Bird in the collaborative approach to development of the LWRP and the Ashburton ZIP. She highlighted the need to tackle the biodiversity loss and climate change crisis. She noted support for the outcomes anticipated through implementation of the LWRP and highlighted the minimum flow levels to be imposed were a step in the right direction, albeit a compromise to ultimately achieving a minimum flow of 10 cubic metres per second (**m^3/s**) at the SH1 Bridge. She considered the alternative minimum flow proposal would undermine the staged targets agreed to in the collaborative process. She supported the conclusions of the s42A Report and the recommendation to impose the LWRP minimum flows.

49. **Central South Island Region, Fish and Game New Zealand** ('Fish and Game') was represented at the hearing by Mr Mark Webb, who is employed as a Fish and Game Officer. Mr Webb's written statement of evidence outlined the statutory functions of Fish and Game, the significant values of the Hakatere/Ashburton River and hapua/mouth, fish screening/bypass needed, and the relief sought. He highlighted the importance of O'Shea Creek as a refuge for fish passage when flows in the North Branch dry up. He considered a minimum flow of 450 l/s would provide more water to sustain flows in the North Branch and would provide more habitat in O'Shea Creek for fish displaced from the North Branch and seeking refuge. He highlighted the AEL Report by Mr Taylor predicted significant gains in habitat availability at 450 l/s (compared to 80 l/s) for all invertebrates. He noted a minimum flow of 450 l/s would likely show less sediment deposition, less filamentous algae growth and less emergent macrophyte growth, which would provide for more invertebrate habitat. He agreed with the conclusions of the s42A Report that a minimum flow of 50 l/s compared to the LWRP 450 l/s would have adverse effects on the extent and duration of drying in the North Branch above Digby's Bridge. He considered a dry riverbed was no justification for a reduced minimum flow provision. He noted higher flows were critical to instream and ecosystem health and that the LWRP flow regime and implementation were debated and determined through the LWRP development process. He highlighted the surface water takes from O'Shea Creek contribute to over-allocation in the catchment and the lack of action by the Consent Holder to address this since implementation of the LWRP. For these reasons, he requested that the alternative minimum flow proposal be declined.

Section 42A Report

50. **Ms Gillian Ensor**, an Environmental Consultant with Enviser Limited prepared the s42A Report and attended the hearing with the CRC expert reviewers. The s42A Report concluded the proposed alternative minimum flow was inconsistent with the relevant provisions of the NPSFM, the RPS and LWRP; would result in adverse effects on the ecological environment, other water users and cultural values; and would not achieve the

purpose of the RMA, as defined in section 5. The Report recommended that the consent review be granted with the imposition of the LWRP minimum flows.

51. Ms Ensor spoke to her s42A Report and responded to the evidence presented at the hearing. She noted that there was a lot of work with the Ashburton District Council (**ADC**) and RDR in relation to the 'package' of actions in the LWRP referred to by Mr Williams. She provided a copy of a letter from ADC to the CRC's Ashburton Consents Review Steering Group (dated 22 June 2022) outlining progress made towards rationalisation of the stockwater race network. She highlighted the intention of the consent review was to naturalise the low flow conditions in O'Shea Creek and prioritise the life supporting capacity of the waterway. She accepted the evidence that the consent to take water from the South Branch would be used more to enable water to be abstracted and highlighted that this would not be taken to augment natural flows in O'Shea Creek. She noted the claimed positive effects downstream of the border dyke irrigation area had not been ignored and were a consequence of the Scheme operation. She considered the consequences of leaving more surface water in the river through reducing abstraction had been considered in the development of the LWRP. She confirmed that having heard the evidence presented, she remained of the view the alternative minimum flow proposal should be refused.

52. **Ms Jeanine Topélen**, Senior Scientist – Hydrology for CRC, provided a report addressing the existing environment, the impact of the LWRP minimum flows, an assessment of the Consent Holder's hydrology information, and the effects of the proposed alternative minimum flow on hydrology and water availability for the Consent Holders and other water users. She highlighted water use in the Hakatere/Ashburton River catchment was high relative to the flow generated in the headwaters and that water levels and flows were declining affecting instream and out stream values and water availability. She noted her analyses showed prolonged periods of low flows of 50 l/s in the reach below the intake pond due to the Scheme's water abstraction and the condition requiring a residual flow of 50 l/s downstream of the take. She highlighted the total consented allocation for surface water and hydraulically connected groundwater takes is 1,354 l/s from O'Shea Creek, which is more than double the 'A Permit' allocation limit in the LWRP of 556 l/s that will apply from 1 July 2023. She noted the subject consent authorises the take of up to 1,200 l/s, with six other consent holders holding additional takes from O'Shea Creek ranging from 14-42 l/s. She estimated the combine usage for all water abstractors (based on water use data) is 570 l/s or more, adjusted for the South Branch take. She estimated the Scheme's average water use from data for the take from O'Shea Creek is 630 l/s (Figure 8 of her evidence) which was more than the calculated seven day MALF of 455-515 l/s. She noted O'Shea Creek was a significant contributor to the downstream freshwater environment (surface water and groundwater). She stated Dr Rutter had not considered the wider freshwater system as a whole or the temporal aspect of overall flow and climate conditions. She concluded a minimum flow of 50 l/s instead of a minimum flow of 450 l/s will have adverse effects on the extent and duration of drying in the North Branch and continue to provide low and no flow variability O'Shea Creek below the take. She noted that under the alternative minimum flow proposal there would 'very rarely' be a flow of 450 l/s below the intake pond; and other consent holders abstracting from O'Shea Creek and the North Branch would be on restriction while the Consent Holder could continue to abstract. She highlighted that under the alternative proposed conditions, when the North Branch is dry

at Digby's Bridge, the Consent Holder would be able to abstract when flows are less than $6m^3/s$ at the SH1 Bridge, when all other water users would be subject to water restrictions.

53. **Mr Brydon Hughes**, a Principal Surface Water Scientist for CRC, provided a report addressing the hydrogeological setting, the information provided by the Consent Holder, effects of the alternative minimum flow proposal, and submissions. He noted groundwater flows in the vicinity of the North Branch were in an easterly direction reflecting a combination of topographic gradient and vertical infiltration of groundwater beyond the northern extent of the upper aquitard. He calculated groundwater velocity in the Greenstreet area to be in the order of 1.6 m/day. He noted the loss of flow in the reach above Digby's Bridge reflected the progressive disconnection of the water table from the stream bed as groundwater declines in the summer months. He considered much of the spring flow in O'Shea Creek was likely to originate from throughflow of groundwater sourced from flow loss from Taylors Stream and the North Branch upstream of Thompsons Track. He noted an addition 400 l/s from O'Shea Creek was a significant volume and would contribute to maintaining the water table and assist in re-establishing surface flows sooner, which would minimise the extent and duration of riverbed drying experienced over summer. He concluded the alternative minimum flow proposal would reduce the potential benefits to the hydrology and ecology of the North Branch and would maintain the status quo.

54. **Dr Richard Allibone**, a Principal Ecologist for Water Ways Consulting, provided a written statement of evidence addressing the aquatic environment and ecological values, the information provided by the Consent Holder, the effects of the alternative minimum flow on ecology and submissions. He highlighted the highly variable habitat of the North and South Branches due to floods and droughts and the importance of the more stable spring fed stream habitat which provide refuge for aquatic species and recolonisation of the mainstems after disturbance events. He noted the broad range of indigenous flora and fauna values supported within the Hakatere/Ashburton River catchment, including longfin and short fin eels/tuna, Canterbury galaxias species, upland bully and torrentfish. He highlighted the presence of eels/tuna in the North Branch indicated upstream migration of some fish occurred under present conditions, but that low abundance suggested recruitment was probably sporadic and relied on wetter summers. He considered the potential for upstream migration would be improved by maintain surface flow in the North Branch for a long as possible and providing more habitat opportunity in O'Shea Creek. He highlighted the location of O'Shea Creek near the upstream extent of the dry reach meant it was ideally located to provide habitat for fish moving upstream seeking refuge. He noted that the LWRP minimum flow for O'Shea Creek had been set below but close to the natural seven day MALF and would provide habitat similar to that at the natural low flow in O'Shea Creek. He raised concerns the habitat modelling undertaken in the AEL Report due to the need to 'ground truth' the old physical model, use of 80 l/s flow instead of the proposed 50 l/s, and the focus of the report on one subset of taxa. He highlighted that for the eight invertebrate taxa modelled, seven taxa had increased habitat at 450 l/s compared to that at 50 l/s. He concluded the 450 l/s minimum flow would significantly improve invertebrate habitat availability and have benefits for the macroinvertebrates in the North Branch.

55. **Mr John Henry**, Cultural Consultant and kaitiaki for Arowhenua Rūnanga, provided a statement of evidence outlining the importance of the Hakatere/Ashburton River

catchment to Nga Rūnanga; the once pristine springs, waterways and wetlands of the catchment and their utilisation for mahinga kai; the ongoing decline of freshwater quality and quantity in the catchment since its recognition as a Statutory Acknowledgement Area; the negative effect of the ongoing degradation on the physical and emotional state of Arowhenua whanau; and the ongoing loss of mahinga kai and taonga species at accelerating rates. He highlighted the Consent Holder had not provided any assessment of the effect of the alternative minimum flow proposal on cultural values. He noted his involvement on the Ashburton Zone Committee as a representative of Te Rūnanga o Arowhenua, and their aspirations for significant increases in flows through the LWRP minimum flows, as a first step in the right direction. He highlighted the clear direction of the Iwi Management Plan of Kāti Huirapa. He considered the Consent Holder's alternative minimum flows would put the aspirations of Arowhenua further out of reach. He highlighted the importance of the smaller waterways and wetlands for mahinga kai species and the decline in abundance of the tuna/eels. He considered the proposed 50 l/s minimum flow would limit the habitat and ecological values in the river and would not support the desire of mana whenua to see an increase in mahinga kai species.

Applicant's Right of Reply

56. Mr Williams provided a written right of reply (dated 27 January 2023) on behalf of the Consent Holder. He submitted the decision was in effect a conundrum or 'trade off' between fully implementing the LWRP regime, which would see more water 'lost' from the South Branch and the Ashburton River catchment; and the Consent Holder's preferred flow regime, which would see more water remaining in the South Branch and the Ashburton River catchment. He considered the Greenstreet position recognised and upheld the inherent values of both O'Shea Creek and the Ashburton River; and highlighted Mr Taylor's evidence that the existing flow regime was achieving a high level of ecological outcomes within O'Shea Creek. He submitted the LWRP minimum flow was developed without regard to the ecological values of O'Shea Creek and the reality the North Branch frequently goes dry; whereas the Greenstreet view was based on tributary specific technical information. He considered the Council's position was driven by ideology rather than ecology, and a desire to implement the LWRP without appreciation of what that means. He concluded the Greenstreet proposal better achieved the outcomes envisaged by the LWRP and was more consistent with Te Mana o Te Wai.

ASSESSMENT

57. In assessing the alternative conditions proposed by the Consent Holder in the consent review, we have considered the s42A Report and technical reviews, the pre-circulated evidence, and the evidence provided during and after the hearing adjournment. We have summarised this evidence above.

58. Our assessment is of the alternative minimum flow condition proposed by the Consent Holder under section 131 and section 104 of the Act and the effect of that change on the environment. We do not agree with Mr Taylor that the key question for us is what the appropriate minimum flow level is, but rather what the effect of the alternative minimum flow proposal on the affected environment is.

59. We accept that the new conditions proposed by CRC through the consent review process implement the provisions of the operative LWRP; and that these minimum flows and water metering provisions were assessed throughout the plan development and implementation process to give effect to the higher order planning documents and Part 2 of the Act. The methods to achieve the outcomes of the LWRP have been through an appropriate statutory process.

60. We are satisfied that the LWRP provisions have been determined to be the best methods to achieve the objectives and policies, and Part 2 of the Act. We accept that implementation of the LWRP minimum flows represent a step in the right direction to address environmental degradation and to give priority to the life sustaining capacity of the freshwater ecosystem. We acknowledge the LWRP is yet to be reviewed to give effect to the NPSFM 2020 and that such changes will are required to be notified by 2024.

61. We do not agree with Mr Williams that the LWRP minimum flows have been imposed 'blindly' to the detriment of freshwater ecosystems.

Statutory Considerations

62. Sections 129 and 130 of the Act set out the notice of review, public notification, submission and hearing process.

63. Section 130 sets out matters relating to public and limited notification and states that sections 96 to 102 and 95 to 95G shall, with all necessary modifications, apply in respect of a review of any resource consent.

64. Section 130(1) establishes that the notification provisions apply as if the notice of review were an application for a resource consent, and the consent holder were the applicant.

65. Section 130(3) states that sections 95 to 95G of the RMA (notification requirements) apply, with all necessary modifications, as if:
    (a) the review of consent conditions were an application for a resource consent for a discretionary activity; and
    (b) the references to a resource consent and to the activity were ***references only to the review of the consent conditions and to the effects of the change of conditions*** *respectively.* [Our emphasis]

66. Section 131 states when reviewing the conditions of a resource consent, the consent authority -
    (a) shall have regard to the matters in section 104 and to whether the activity allowed by consent will continue to be viable after the change; and […]
    (b) may have regard to the manner in which the consent has been used.

67. Section 132(2) states that sections 106 to 116 and sections 120 and 121 apply, with all the modifications to a review under section 128 as if the review is an application for a resource consent and the consent holder were an applicant for a resource consent.

68. In terms of section 104(1), and subject to Part 2 of the Act, which contains the Act's purpose and principles, the consent authority must have regard to-

(a) Any actual and potential effects on the environment of allowing the activity;
(ab) Any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment offset or compensate for any adverse effects on the environment that will or may result from allowing the activity;
(b) Any relevant provisions of a national environmental standard, other regulations, a national policy statement, a New Zealand coastal policy statement, a regional policy statement or a proposed regional policy statement, a plan or proposed plan; and
(c) Any other matters the consent authority considers relevant and reasonably necessary to determine the application.

69. We consider each of these sections of the RMA below.

70. We note the written approval of the following consent holders who abstract water from O'Shea Creek:
a) Greentree Farms Limited (CRC200208 and CRC200211);
b) M. F. M. and A. B. Talbot and Whitehouse Ten Trustees Limited (CRC200275);
c) Wallaura Farm Limited (CRC200227 and CRC200260).

71. We have not had regard to any adverse effect of the alternative minimum flow proposal on these water users.

Section 104(1)(a) Actual and potential effects on the environment

Existing Environment

72. In making our assessment, we are required to consider the actual and potential effects of the alternative minimum flow conditions proposed by the Consent Holder on the existing environment. The 'existing environment' is that which exists at the time this determination is made and includes lawful existing activities, permitted activities and activities authorised by existing resource consents. This includes the consents held by the Consent Holder set out in Table 1 of the s42A Report and other existing consents held for surface water takes from O'Shea Creek.

73. For the purposes of our assessment, we must take account of the existing environment as it might be modified by the exercise of CRC20040 under the limits and standards imposed by consent conditions. The environmental effects of this surface water abstraction have been considered as part of the consent application process and are not relevant to our consideration here. How this consent has been exercised in the past and how it will be exercised in the future in accordance with the conditions of consent are operational matters and are outside the control of the regulatory authority.

74. We do not agree with Mr Bubb that the CRC consider taking more water from the South Branch was of '...*little consequence and that other matters are more important to O'Shea*

Creek, the North Branch and the overall river catchment'.[10] We consider the CRC has taken the correct approach in focussing their assessment on the environmental effects of the alternative minimum flow proposal on the downstream affected environment. The CRC accepts consent CRC200240 is part of the existing environment and that it is likely to be exercised more under the LWRP minimum flows to enable the Scheme to operate.

75. Mr Bubb considered the potential effects of taking more water from the South Branch would be 'significant' and would have negative impacts of the South Branch, mainstem and the mouth of the river. He stated there had been no assessment of taking the additional 400 l/s on the ecology of the river. Mr Taylor concluded the required additional water abstracted from the South Branch could have 'significant' impacts on both the native and acclimatised fisheries if it goes to ground and is lost to the local ecology.

76. The exercise of CRC200240 in accordance with the conditions imposed should not result in significant adverse effects on the Ashburton River. In exercising this consent, the Consent Holder has an overarching duty to avoid, remedy and mitigate significant adverse environmental effects.

77. We are extremely concerned by Mr Taylor's statement in the final paragraph of his rebuttal evidence that '*…retention of the existing flow regime means there is now requirement for a significant, and ecologically damaging, South Branch water take to provide a 7DMALF flow…*'. This is concerning and of no doubt was not the conclusions reach in considering assessment of environmental effect when CRC200240 was granted. If this view is accepted, the Council has the grounds to undertake an urgent review of the consent to take water from the South Branch to avoid significant adverse effects.

78. The following actual and potential effects on the environment were assessed in the s42A Report:
    (a) Effects on hydrology and other water users;
    (b) Effects on hydrogeology;
    (c) Effects on ecosystem health and biodiversity;
    (d) Adverse effects on cultural values; and
    (e) Positive effects.

79. We have considered all of these actual and potential effects in relation to the alternative minimum flows proposed through the consent review.

Positive Effects

80. We accept that the alternative minimum flow proposal would have significant positive economic and social effects on the Consent Holder by being less restrictive than the LWRP minimum flows.

81. Mr Bubb highlighted the recharge of the river and groundwater that occurs as drainage from the border dyke irrigation scheme; and the positive effect of this water on springs and creeks within the command area and downstream consent holders. He considered the

[10] Statement of Evidence of Matt Bubb dated 8 November 2022, page 15.

Greenstreet Creek would go dry if the Scheme did not supplement its flows and noted that consequential ecological losses would occur in downstream wetlands. He noted the adverse environmental effects from changing from border dyke irrigation to spray irrigation and the need for a full assessment of such as change.

82. Mr Williams also highlighted the alternative minimum flow proposal would minimise adverse effects on the South Branch by leaving more water in the river more often than would be the case if the LWRP minimum flows were imposed. He submitted this was certain given more water would be taken from the South Branch under CRC200240 to maintain a minimum flow of 450 l/s in O'Shea Creek below the intake pond. He submitted the alternative minimum flow proposal would therefore minimise the effects of the take from the South Branch and in part 'preserve the status quo' of keeping water in the South Branch.

83. We accept that imposing a minimum flow of 450 l/s below the intake pond on O'Shea Creek will likely change the use of the South Branch take under CRC200240, when flows in the mainstem allow. However, we also accept the take from the South Branch for the Scheme is consented and forms part of the existing environment. The conditions of that consent limit the activity and set minimum flow levels to protect the downstream environment. The Consent Holder can choose to exercise the consent however it wishes, as long as it is within the limits and standards imposed. While water use records indicate the Scheme is currently operated to minimise use of the take from the South Branch in preference to taking water from O'Shea Creek and Snowden Creek, this is an operational matter.

84. We consider any positive effects of operating the Greenstreet Scheme are relevant to the assessment of effects of that activity and have been considered as part of that the existing consents. However, the exercise of those consents and the method of irrigation are operational matters within the scope of the authorisations.

85. We do not consider we can give much weight to the 'positive effects' of not exercising consent CRC200240 or of mitigating potentially 'significant' adverse effects on the South Branch from the exercise of the consent.

Hydrogeology Effects

86. The interaction between surface water and groundwater in the catchment is complex, with a multi-layered groundwater zones. Drainage diverted surface water flows and irrigation has changed the extent and location of wetlands. The riverbed of the North Branch above Digby's Bridge is prone to drying from the bottom up, to as far as Thompsons Track. We note the evidence of Mr Bubb that the affected reach also dries from Thompsons Track downstream to Digby's Bridge.

87. We note there is agreement between the parties that the North Branch reach upstream of Digby's Bridge frequently goes dry during the summer months. However, there is disagreement as to the contribution of flows from O'Shea Creek and water abstraction to the frequency, extent and duration of dry conditions in this reach. The Consent Holder considers the reach is dry for most of the irrigation season regardless of their water take from O'Shea Creek, hence the proposal to enable irrigation to continue when the river is dry at Digby's Bridge, regardless of water flows in the Hakatere/Ashburton River at the SH1

Bridge. In contrast, the CRC consider O'Shea Creek flows (or lack of flow from abstraction) significantly contribute to the surface water and groundwater environments downstream and effects the frequency and duration of dry river bed events, and the extent of the reach affected.

88. Mr Bubb considered the additional 400 l/s of water discharge from O'Shea Creek under the LWRP minimum flow would be 'lost' to the Hakatere/Ashburton River catchment but acknowledged there would be some impact on how quickly surface water flow is regained.

89. Mr Hughes agreed with the Consent Holder's evidence that groundwater flow from the North Branch in the vicinity of the O'Shea Creek confluence occurs in an easterly direction and is unlikely to resurface in the lower reaches of the Hakatere/Ashburton River catchment. However, he noted the proportion of flow loss is unknown due to incomplete knowledge of the groundwater dynamics in the wider Greenstreet area.

90. Mr Hughes calculated an additional 400 l/s from O'Shea Creek would add a significant recharge volume (1.38 million m^3 over the 40 day low flow duration referred to in the 22 June 2022 Aqualinc Memorandum) to groundwater which would elevate the water table and extend the duration of flow downstream. He considered the additional water would reduce the magnitude of the flow needed in the North Branch (as given in evidence by Ms Topélen) to re-establish continuous flow downstream of the O'Shea Creek confluence.

91. We accept the evidence of Mr Hughes and Ms Topélen that surface water abstraction under the *status quo* of providing a minimum flow of 50 l/s to O'Shea Creek is contributing to the increased frequency, duration and extent of dry reaches in the North Branch than would otherwise occur naturally. We consider this adverse effect on downstream water flows would be significantly increased under the alternative minimum flow due to enabling ongoing irrigation when the river bed is dry at Digby's Bridge.

92. We note the evidence of Dr Rutter focussed on the contribution of the water left in the South Branch to flows at the SH1 Bridge and not the effect of a minimum flow of 50 l/s on surface flows in the North Branch.

93. The key argument made by the Consent Holder's experts is that water taken from the South Bank used to enable irrigation takes in O'Shea Creek to continue during low flow conditions would be 'lost' from the Ashburton River catchment.

94. We do not agree with the Consent Holder that water discharged from O'Shea Creek into a dry riverbed is 'lost' to the catchment. We accept the evidence that the discharge of water from O'Shea's Creek contributes to maintaining and recharging groundwater levels which minimises the frequency and duration of losing surface flow in the North Branch downstream of the confluence. We accept the CRC evidence that a minimum flow of 450 l/s is a crucial component of minimising the extent and duration of the drying reach and maintaining groundwater levels. Clearly, a contribution of 450 l/s is significantly greater that 50 l/s and is likely to be closer to natural low flow conditions based on the evidence of Ms Topélen.

95. We note Mr Taylor's evidence that the NIWA's REC2 shows the catchment area of O'Shea Creek is 7.22 square kilometres (**km^2**), compared to the CRC derived catchment area of 14 km^2; and that he considered there was too much uncertainty regarding the catchment area to use MALF for determining minimum flow requirements for O'Shea Creek. We accept there may be some uncertainty in terms of the catchment but do not accept a flow of 50 l/s is likely to be near natural low flow levels without abstraction for irrigation.

96. We accept that water diverted from the South Bank to enable water to be taken from O'Shea Creek thorough the exercise of CRC200240 will be 'lost' from the South Branch and downstream surface water flow in the mainstem, but note that when this occurs it will be discharge within the Greenstreet Scheme for irrigation purposes. This water will only be taken/diverted to 'augment flows' in O'Shea Creek to meet the minimum flow required to enable its abstraction for irrigation. There is no requirement for the Consent Holder to take water from the South Branch to 'artificially' raise natural flows in O'Shea Creek.

97. We find the alternative minimum flow proposal will allow the Consent Holder to continue to cause significant adverse hydrological effects on O'Shea Creek and the downstream environment by reducing natural water flows to extremely low levels for much of the irrigation season. It will also increase the adverse effects on downstream water flows over and above the existing minimum flow conditions, by allow water abstraction when there is no flow in the North Branch at Digby's Bridge by removing the requirement to restrict the take when minimum flow levels are reached at the SH1 Bridge. We find this is unacceptable and contrary to efforts towards to address existing environmental degradation within the catchment.

Ecosystem Health and Biodiversity

98. Spring fed streams naturally have less variable flows than the braided mainstems of the Hakatere/Ashburton River and provide important relatively stable habitat and refuge areas for aquatic organisms impacted by the highly variable flow conditions in mainstems. The CRC experts and submitters in opposition recognise the importance of O'Shea Creek and its location upstream of this drying reach (above Digby's Bridge) for fish to migrate into to seek refuge ahead of the extending drying reach.

99. O'Shea Creek has been significantly modified and the reach downstream of the intake pond currently experiences long periods of very low flow with a minimum flow of 50 l/s, as required by the existing consent conditions.

100. There is limited flow data for O'Shea Creek. However, Ms Topélen used water use records and available flow data to estimate the seven day MALF downstream of the intake pond as 455-515 l/s. Based on this evidence, we accept the LWRP minimum flow of 450 l/s is close to natural low flow levels.

101. The consented allocation for O'Shea Creek is 1,354 l/s, which is more than double the LWRP allocation limit of 560 l/s. Ms Topélen's review of the Scheme's water use data showed the average water use is about 520 l/s, which is approximately 100-110% of the estimated seven day MALF.

102. The AEL Report compared habitat availability for fish and invertebrate species found in the 2021 surveys of O'Shea Creek for flows of 80 l/s and 450 l/s. It predicts significant gains (up to four-fold increases) in habitat availability at 450 l/s for all the mayfly and caddisfly species, except one species that had the same habitat availability.

103. Mr Taylor considered the AEL Report and his assessment indicated 'higher flows' of 400-450 l/s in O'Shea Creek would be detrimental native fish species, at the expense of Brown trout, and that and that existing rich fauna of invertebrates in O'Shea Creek would be compromised by 'augmented' high flows. He considered the existing minimum flow was keeping the creek clean and in high health; and provided sufficient ecological flushing to improve invertebrate habitat and maintain a healthy waterway. He stated his preference was for a minimum flow not exceeding 150 l/s to maintain native and sports fish in the South Branch of the Ashburton River and O'Shea Creek.

104. Mr Taylor's evidence contrasted with that of Mr Webb and Dr Allibone, who considered ecological habitat and condition in lower O'Shea Creek was adversely impacted prolonged periods of only 50 l/s residual flow below the intake pond. Mr Webb and Dr Allibone consider Mr Taylor had taken a narrow focus on interpreting the available information to draw his conclusions and highlighted the significant aquatic habitat increase with more natural low flow levels.

105. In essence, Mr Taylor's evidence is that lower O'Shea Creek is in a healthy state and is better off with low flow levels of 50 l/s than 450 l/s. While we accept the lower O'Shea Creek retains significant ecological values and supports a range of important biodiversity, we consider this highlights the importance of the habitat as a refuge within the wider degraded freshwater ecosystem. We consider the AEL Report shows that for nearly all aquatic species present, habitat is significantly restricted at 80 l/s, let alone 50 l/s.

106. Dr Allibone highlighted the importance of the size of the flow from O'Shea Creek in attracting aquatic organisms upstream. He considered a flow of 450 l/s was significantly more to encourage fish passage into O'Shea Creek. He noted this was even more significant in light of the evidence it can also dry up from Thompsons Track downstream and result in the entrapment of aquatic organisms in the dry reach. He also highlighted the importance of maintaining surface flows in the North Branch for as long as possible and limiting the extent and duration of dry conditions. He considered there would be ecological benefits of more surface water flowing from O'Shea Creek from increased surface water and maintaining groundwater levels.

107. The Consent Holder provided no ecological assessment of reverting to the present minimum flow conditions when there is no flow (dry river bed) at Digby's Bridge (13.7 km downstream). We share Dr Allibone's concerns that there is no link to the protection of ecological values in O'Shea Creek when some of the North Branch reach downstream of O'Shea Creek dry. We consider the Consent Holder has not recognised the critical location of O'Shea Creek as a habitat refuge in dry periods and the importance of the flow volume as an attractant for fish and other aquatic invertebrates. The Consent Holder has also not

acknowledged that for most aquatic taxa, habitat will be very limited at 50 l/s for prolonged periods, particularly during summer an autumn.

108. We accept that direct surface water abstraction during periods of low flow is contributing to significant negative impacts on the habitat of aquatic invertebrates, indigenous fish, trout and riverine birds.

109. We find that the alternative minimum flow proposal is the status flow for minimum flow levels in O'Shea Creek and will not reduce adverse effects from water abstraction on O'Shea Creek and the North Branch, and would therefore not address the existing environmental degradation associated with existing aquatic habitat loss and restriction.

110. The proposed LWRP minimum flow conditions provide for significant improvements in low water flows from the status quo by increasing aquatic habitat availability in O'Shea Creek and the North Branch; and increasing groundwater levels to support downstream freshwater ecosystems. We find that the alternative minimum flow proposal will have adverse effects on the health of O'Shea Creek and the North Branch by continuing to provide insufficient low flows to protect aquatic habitat downstream of the intake pond.

Effects on Cultural Values and Relationships

111. Mana whenua did not submit on this application, however, their values and obligations associated with the Hakatere/Ashburton River were outlined for in the report prepared by Mr Henry, included in the s42A report.

112. Mr Henry's report referred to the Ngāi Tahu Claims Settlement Act 1998, Schedule 17, Statutory acknowledgement for Hakatere/Ashburton River, which is shown on Allocation Plan MD 116 (SO 19852).

113. The Hakatere/Ashburton River is significant to Arowhenua. He explained the Hakatere forms part of the interconnected network of traditional travel routes that provided direct access to the rich mahinga kai areas of the Otū Wharekai (Ashburton Lakes). From Otū Wharekai several nearby mountain passes were accessible to traverse the Southern Alps. The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the river, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

114. The Hakatere/Ashburton River catchment once contained pristine springs, waterways and wetlands that fed the expansive Hakatere and Whakanui Creek. These waterways were historically major kāinga mahinga kai (food gathering sites) for Canterbury Ngāi Tahu, who utilised them for hunting and gathering large quantities of food for whānau members throughout the year. The main foods taken from the river were tuna/eels, inanga/whitebait, waharoa/smelt and native fish species such as giant kōkopu. Rats, weka, kiwi and waterfowl such as pūtakitaki/paradise duck were also hunted along the river.

115. Mr Henry stated that 'Hakatere' literally translated meant fast flowing river; and that it supports a lot of native fish that benefit from fast flowing water. He noted that while the North Branch of the Hakatere is spoken about now as frequently being dry, it is spoken about by Arowhenua as a rich area for tuna/eels harvest.

116. In a mana whenua world view, the mauri of the Hakatere/Ashburton River represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.

117. Te Rūnanga o Te Ngāi Tahu Freshwater Policy Statement (**FPS**), Te Whakatau Kaupapa Resource Management Strategy, Mahaanui Iwi Management Plan 2013 and the Iwi Management Plan of Kāti Huirapa for the area Rakaia to Waitaki 1992 document Ngāi Tahu's aspirations which are relevant to the management of the Hakatere/Ashburton River catchment.

118. In Mr Henry's evidence and the position of Arowhenua is consistent with the evidence of Ms Topélen and Mr Hughes that groundwater levels and surface water flows have been significantly adversely affected by water abstraction. His evidence also aligns with Mr Allibone in that tuna/eels are nowhere near as plentiful as they were historically and that their presence in the area is a sign of their tenacity as a species. This is evident in the fact that mana whenua are no longer able to harvest tuna/eels in the way they used to from the Hakatere/Ashburton, including the North Branch.

119. Mr Henry requested that priority should be given to increased flows in the first instance, with these higher flows being a step in the right direction towards meeting the outcomes in the National Policy Statement for Freshwater Management 2020 (**NPS-FM**).

120. We accept the evidence of Mr Henry that the alternative minimum flow proposal does not give priority to the life sustaining capacity of the waterways. We find that the alternative minimum flow proposal will not address ongoing significant adverse effects on cultural values and relationships relating to the degraded state of the Hakatere/Ashburton Rivers and its tributaries.

121. We find that the alternative minimum flow does not address the cumulative effect of the surface water take on the significant cultural value and relationship tangata whenua have with the Hakatere/Ashburton River (from the mountains to the sea) or protection of the mana and mauri of the wai/water.

Other water users

122. The alternative minimum flow proposal would allow the Consent Holder to abstract water at a lower minimum flow than other water users. The exercise of the Consent Holder's take

at flows below 450 l/s below the intake pond would adversely affect the ability of Spreadeagle Dairies to use water from O'Shea Creek. Due to the large scale of the Consent Holder's take, in comparison to the flows in the creek, we find this would significantly adversely affect Spreadeagle's reliability of supply in the irrigation season.

123. The alternative minimum flow proposal would allow the Consent Holder to abstract water from O'Shea Creek when the minimum flow at the SH1 Bridge is at or below 6 m^3/s, when the North Branch at Digby's Bridge is dry. This will affect other consented water users who are subject to minimum flow regime at the SH1 Bridge from 1 July 2023 and those subject to a minimum flow of 450 l/s in O'Shea Creek. The Consent Holder will be able to take water from O'Shea Creek when all other water users are on restriction and the North Branch is dry at Digby's Bridge. We find this will adversely affect water users on the mainstem.

Section 104(1)(ab) Any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment offset or compensate for any adverse effects on the environment that will or may result from allowing the activity.

124. No relevant measures were identified by any party for our consideration under s104(1)(ab).

Section 104(1)(b) Relevant objectives and policies

125. An analysis of the relevant provisions of the Resource Management (National Standards for Freshwater) Regulations 2020 (**NESF**), National Policy Statement for Freshwater Management 2020 (**NPS-FM**), the Canterbury Regional Policy Statement (**RPS**), and the Canterbury Land and Water Regional Plan (**LWRP**) was provided in the s42A Report.

126. As outlined above, we accept that the LWRP provisions give effect to the NPSFM-2017 but are yet to be reviewed to give effect to the NPSFM-2020. We acknowledge that is up to the Consent Authority to *give effect* to the NPSFM-2020, by way of a notified plan change by the end of 2024. We are obliged to *have regard* to the objectives and policies of the NPSFM-2020 under section 104 and have focused our assessment on the direction of the NPSFM-2020 and the outcome sought by Te Mana o te Wai.

127. We have had regard to the requirement to manage the resource in a way that prioritises the health and well-being of waterbodies and freshwater ecosystems as a first priority, the health needs of people (drinking water) as a second priority, and the ability of people and communities to provide for their social, economic and cultural well-being as a third order priority.

128. We have had regard to the need to prevent any further degradation of freshwater, to make intermediate improvements to existing environmental degradation within the next five years, and to reverse past damage to bring waterways and ecosystems into a healthy state within a generation.

129. Mr Bubb highlighted Policy 6 of the NPSFM-2020 and loss of extent of natural inland wetlands and their values through the closure of the Scheme. He considered the LWRP

minimum flow of 450 l/s for O'Shea Creek is contrary to the requirements of the NPSFM-2020 because discharging to a dry river bed, with most of the water 'lost' to the river catchment, is not putting the health and wellbeing of the waterbody first. We disagree. As discussed above, we accept the evidence of Dr Allibone that this additional water will be of significant ecological benefits to O'Shea Creek and the North Branch by providing critical refuge habitat from flood and mitigating drying events in the North Branch. We acknowledge that changes to operation the Scheme will be required to adapt to the LWRP minimum flows but these changes and any resulting changes to the downstream receiving environment are operational matters within the scope of the existing consent limits.

130. We find that the alternative minimum flow proposal is inconsistent with the overall direction of the NPSFM-2020 by not providing for sufficient low flow conditions in O'Shea Creek to protect the health and life supporting capacity of the reach below the intake pond. A minimum flow level of 50 l/s is significantly below the natural low flow range and is not consistent with protecting the life supporting capacity of O'Shea Creek. It also does not prevent further cumulative effects on water flows or address the existing environmental degradation in the North Branch. While we accept the alternative minimum flow proposal would result in less actual use of the existing consent to take water from the South Branch, we accept that the minimum flows on the mainstem have been set to protect ecological values, at least as a first step.

131. Mr Williams submitted that the LWRP minimum flows are not fit for purpose and are inconsistent with the objectives of the plan and higher order planning documents. He considered the tributary flow regimes were informed by 'slicing the pie' rather than properly understanding tributary flows or optimising ecological outcomes or the well-being of water. He submitted the focus must therefore be on the wider policy position and not strict and literal implementation of Table 13(b) in every circumstance.

132. We have taken a wider policy position in our assessment of the alternative minimum flow proposal and have considered the evidence presented supporting the LWRP minimum flows. We consider the time for challenging the LWRP minimum flows was during the plan development process. We are satisfied that the flows were set to achieve the Ashburton Zone Committee's objectives and consequently the objectives of the LWRP and higher order statutory documents at the time the plan was made operative.

133. We note that the Ashburton River mainstem minimum flow of 6,000 l/s is considered to be the minimum flow necessary to keep the hāpua/mouth open, optimise trout habitat, and benefit native fish and bird habitat. We acknowledge that the LWRP anticipates that minimum flow levels in the mainstem will progressively increase over time to protect the life sustaining capacity of the river and freshwater ecosystems. We accept the mainstem minimum flows are intended to be imposed in conjunction with minimum flows on the main tributaries, as is the case here.

134. The LWRP does not give any of its single objectives (region wide) or policies (sub-regional) more importance than another. We consider the NPSFM-2020 supports priority to be given to the objectives and policies which seek to safeguard the life supporting capacity of ecosystems and ecosystem health.

135. The LWRP provisions have been developed and implemented through extensive public processes, with local representation, community involvement and collaborative participation. Through this process tangata whenua have been able to exercise their rangatiratanga, particularly with regard to their statutory acknowledgement areas. We consider the LWRP reflects the communities' values and aspirations. We accept the LWRP provisions set out a clear path to managing and staging improvements in both water quality and quantity, where it is degraded and overallocated. We are satisfied that resource users have had many years to anticipate implementation of these planning provisions, and to change and adapt their land use practices to meet the agreed flow regimes and water quality targets set in the LWRP.

136. We find that achievement of the key objectives of the LWRP for water quality and quantity, and the protection of the life sustaining capacity of freshwater is heavily reliant on setting and imposing appropriate minimum flows. Policies specifically direct that surface water bodies are managed to not alter natural hāpua opening, not render rivers unsuitable for recreation, maintain fish passage, not induce rivers to run dry, and maintain variable flow.

137. Section 13 of the LWRP, which is specific to the Ashburton sub-region, list the priority outcomes for the catchment as identified by the Ashburton Zone Committee as:
    (a) Improved and protected natural character and mauri of the river;
    (b) Ecosystem health and biodiversity are protected and improved;
    (c) Protected and improved water quality; and
    (d) Efficiently used, secure and reliable supply of water.

138. These outcomes are envisaged to be achieved for the river when the minimum flow regime in Table 13(b) is achieved by all consent holders. We acknowledge Mr William's submission that imposing minimum flows on surface water bodies is part of a 'package' of measures under the LWRP. The letter from ADC (29 June 2022) confirms that since 2001 the stockwater race network has reduced from approximately 4,000 km to 2,003 km (as at 30 June 2021), with further closures planned. We accept ADC's advice that ongoing rationalisation has been significant in meeting the reduction in community stockwater takes envisioned by Policy 13.4.1 of the LWRP (2,900 l/s by 1 July 2023) and that, despite meeting this policy target, there are likely to be further water take reductions driven by the imposition of fish screening conditions and alternative options to the open race network. We accept progress is being made to meet other key policies in addressing environmental degradation in this catchment.

139. We find that the alternative minimum flow proposal is inconsistent with Policy 13.4.8 and Policy 13.4.9.

140. Overall, we find that the alternative minimum flow proposal is inconsistent with the direction of these planning documents given the adverse effect on water flows and ecological values in O'Shea Creek and cumulative adverse effects on water flows in the North Branch and the freshwater catchment downstream.

Section 104(1)(c) Other matters

141. We note the relevance of the CWMS, Te Rūnanga o Te Ngāi Tahu Freshwater Policy Statement (**FPS**), Te Whakatau Kaupapa Resource Management Strategy for the Canterbury Region, Te Mahaanui Iwi Management Plan 2013 and the Iwi Management Plan of Kāti Huirapa for the area Rakaia to Waitaki 1992.

142. The CWMS provides a strategic collaborative framework to help manage the multiple demands on water resources and sets a vision and fundamental principles. It sets clear priorities for the use of water. It directs us to prioritise the health and life sustaining capacity of water before the use of water for irrigation. We find that maintaining the status quo of a minimum flow of only 50 l/s downstream of the intake pond is inconsistent with this strategic vision.

143. The common intent of the iwi management plans is clear in seeking that –
    (a) Ngāi Tahu rights and interests are provided for;
    (b) Ngā Rūnanga is engaged in processes related to land and water management;
    (c) Ki uta ki tai is thinking whole of catchment and intergenerational;
    (d) Water is taonga, it must be protected for its own values, then how it meets instream and other values; and
    (e) Water quantity must be improved to the level at which it can provide for its mauri.

144. The alternative minimum flow proposal will not provide for these matters or address significant cumulative adverse effects on the mana and mauri of the water. We find the alternative minimum flow proposal is inconsistent with the outcomes sought by the iwi management plans.

145. The LWRP minimum flows are more aligned with the common intent of the iwi management plans. We also acknowledge that engagement and collaboration with tangata whenua in the ZIP and LWRP planning process and subsequent implementation of the LWRP limits recognises their rangatiratanga and kaitiakitanga roles.

146. We agree with Mr Williams that the imposition of alternative minimum flow conditions would not of itself create a precedent given each case must be considered on its merits. However, we have considered the integrity of the LWRP and need for consistent administration of its provisions. We accept that to step away from the LWRP provisions, which have been developed over many years with the input of the community, tangata whenua and interested parties, would undermine confidence in the planning process. While this is not determinative in our overall decision, we consider the LWRP minimum flows provide the community with certainty of administration, confidence in the planning process and equity amongst resource users.

Viability of the consent after the change

147. There was very little focus at the hearing regarding the viability of the consent given the decision in relation to the Galloway consent review[11].

[11] Report and Decision of the Hearing Commissioners (15 July 2021) for Consent Review CRC200269 of Water Permit CRC952441 – C.D. and L.A. Galloway.

148. Whether the consent will continue to be viable is not determinative and could potentially undermine the purpose and intent of the review provisions of section 128(1)(b). We acknowledge the assessment of the viability of the consent must be approached through the lens of a section 128(1)(b) review, which is quite different to other reviews contemplated by section 128.

149. A section 128(1)(b) review should be considered within the context of the outcomes sought by the implementation of the plan and the recognition that cumulative effects can only be addressed through catchment wide limits.

150. Water will continue to be able to be taken, albeit on a significantly reduced number of days, with a significantly reduced reliability of supply. However, this will not prevent the activity for which consent was granted or the ability of the Consent Holder to adapt their irrigation system.

151. While we acknowledge that there is agreement that the availability of water will be significantly affected, we find the existing consent to take and use water for irrigation will still be able to be exercised with the LWRP minimum flows, albeit with much reduced availability. It is accepted that this loss in reliability may be offset by taking water from the South Branch, when not restricted by minimum flow conditions and that options exist to 'swap' the existing surface water take to groundwater take.

Manner in which the consent has been used

152. Consideration of the manner in which the consent is used is a discretionary consideration under section 131(1)(b) of the RMA. The manner in which the consent has been used has been one of a number of matters that we have considered in our assessment, but has not been determinative.

153. We note the analyses of Ms Topélen of the water use data.

154. We accept the Consent Holder's evidence that imposition of the LWRP minimum flows will change the manner in which this consent and the consent for taking water from the South Branch will be used in the future. We accept it is likely the Scheme will exercise its consent to take water from the South Branch more often, when SH1 minimum levels allow. This water will be taken to enable water to be taken from O'Shea Creek by compensating for the abstraction from water taken from the South Branch. The water take from the South Branch is not, as claimed by Mr Bubb, to 'artificially' increase low flows in O'Shea Creek, but rather to provide sufficient water for continued water abstraction when natural low flows in O'Shea are below the minimum flow of 450 l/s below the intake pond.

155. We note the s42A Report acknowledges the difficulty in reviewing this consent in isolation from the suite of associated consents held for operation of the Scheme. We also note the concerns raised regarding a lack of clarity as to how each property uses the water and use of the water for storage ponds and augmenting flow in the Greenstreet Creek. We expressed concern at the hearing that these matters need to be addressed and acknowledged these are not within the scope of the review. However, we consider this

lack of oversight and documentation needs to be addressed given the significance of the Scheme within the receiving environment.

Part 2 of the Act

156. The s42A Report noted that consideration of Part 2 of the Act is not prevented, but that it cannot be used to justify an application that is otherwise not supported by objectives and policies. It noted that the objectives and policies of the LWRP hold significant weight and will be largely determinative.

157. We agree that the provisions of the LWRP should be given significant weight. However, we consider that these should be read with regard of the clear priorities of the NPSFM-2020. We accept that the NPSFM-2020 gives effect to Part 2 of the Act.

158. We do not consider that reference to Part 2 would add anything to the evaluative assessment we have undertaken under sections 104.

Overall Conclusion

159. We conclude the Consent Holder's alternative minimum flow proposal will result in ongoing adverse cumulative effects on hydrology and ecology, as set out in the evidence of Ms Topélen and Dr Allibone.

160. We conclude that existing significant adverse effects on cultural values and relationships, as set out in the evidence of Mr Henry, would not be reduced and the mana and mauri of the river would not be improved by imposition of the alternative minimum flow.

161. We find that the alternative minimum flow puts the use of water for irrigation purposes before the health and wellbeing of the freshwater ecosystems and is therefore inconsistent with the direction of the NPSFM-2020 and the concept of Te Mana o Te Wai. We find that the alternative minimum flow is overall inconsistent with the key objectives and policies of the RPS and LWRP; and the common intent of the relevant iwi management plans.

162. We find there would be adverse effects on other water users (excluding those who have provided their written approval) who are or will be subject to the LWRP Table 13(b) minimum flows.

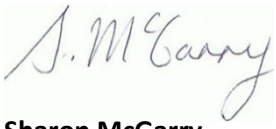
163. We conclude that the alternative minimum flow proposal represents a continuation of the status quo for the Scheme operation and for the health of O'Shea Creek and the North Branch.

164. On this basis, we conclude that imposition of the alternative minimum flow proposal is inconsistent with objectives and policies of the LWRP, RPS, NPSFM-2020 and the purpose and principles of sustainable management, as defined in section 5 of the Act.

Decision

165. **For the above reasons, it is the decision of the Canterbury Regional Council, pursuant to sections 131 and 104, and subject to Part 2 of the Resource Management Act 1991, to:**
   i) **REFUSE the alternative minimum flow condition proposed by the Consent Holder; and**
   ii) **GRANT the CRC proposed changes to the conditions of Water Permit CRC224627 set out in Appendix 1 of this decision, with three new Conditions 8, 9 and 10 shown with <u>underlining</u>.**

Dated at Christchurch this 24th day of February 2023



Sharon McGarry
Hearing Commissioner (Chair)

Hoani Langsbury
Hearing Commissioner

Appendix 1

Water Permit CRC200238
Conditions

1 Water shall only be taken from O'Sheas Creek and Snowdens Creek, at or about map reference, NZMS 260 K36:9839-1431, at a rate not exceeding 1,200 litres per second, with a volume not exceeding 2,169,600 cubic metres in any period of 28 consecutive days.

2 The combined volume of water taken for irrigation under this water permit, and water permits CRC010181, CRC921547H and CRC921547J, or any subsequent variations thereof, shall not exceed 14,629,799 cubic metres between 1 July and the following 30 June.

Advice Note: For the purposes of this consent, this condition restricts the volume of water able to be taken from the scheme distribution network and used for irrigation. This condition does not restrict the rate or volume of water able to be conveyed within the scheme's distribution network.

3 A fish screen shall be operated and maintained on the race intake so that fish are prevented from passing into the intake at all times to the satisfaction of the Canterbury Regional Council.

4 Minimum Flows:

The taking of water in terms of this permit shall cease whenever the flow (expressed in cubic metres per second) in the Ashburton River at the State Highway One Bridge recorder site (map reference NZMS 260 K37:087-989), as measured by the Canterbury Regional Council, falls below the following flows:

Jan: 4.5

Feb: 3.5

Mar: 3.5

Apr – Jul: 5.0

Aug: 6.5

Sep: 8.0

Oct: 8.0

Nov: 6.5

Dec: 5.0

The taking of water in terms of this permit shall be reduced to half the weekly allocation whenever the flow (expressed in cubic metres per second) in the Ashburton River at the

State Highway One Bridge recorder site (map reference NZMS 260 K37:087-989), as measured by the Canterbury Regional Council, falls below the following flows:

Jan: 5.0

Feb: 4.0

Mar: 4.0

Apr – Jul: 5.5

Aug: 7.0

Sep: 8.5

Oct: 8.5

Nov: 7.0

Dec: 5.5

5 The consent holder shall maintain a flow of 50 litres per second in O'Sheas Creek immediately below the intake during the exercise of this permit.

6 The hours and rate at which water is taken shall be measured to within an accuracy of 10 percent and recorded weekly in a log kept for that purpose, and a copy of the records submitted to the Canterbury Regional Council before 31 January each year, for the previous period August-December inclusive and before 31 May each year for the previous period January-April inclusive.

7 The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of this consent.

8 Notwithstanding any other flow restriction contained within the conditions of this consent, from 1 July 2023:

a. Whenever the flow in O'Shea Creek, is at or below 450 litres per second, there shall be no taking of water in terms of this permit during the next succeeding day.

b. Whenever the flow in the mainstem of the Ashburton River is:

i. at or below 7,275 litres per second, the taking of water shall be subject to a reduction of take during the next succeeding day as set in Table 1 below.

ii. at or below 6,000 litres per second, there shall be no taking of water in terms of this permit during the next succeeding day.

c. For the purposes of this condition:

i. the flow in O'Shea Creek shall be the mean flow as estimated by the Canterbury Regional Council at the bywash to North Ashburton at approximately map reference Topo50 BY20:885-527, for the 24 hour period ending at noon on any one day.

ii. the flow in the mainstem of the Ashburton River shall be the mean flow as estimated by the Canterbury Regional Council in the Ashburton River at the State Highway 1 Bridge recorder site located at map reference Topo50 BY21:999-351, for the 24 hour period ending at noon on any one day.

Table 1	
Flow in River (litres per second)	**Reduction in rate of take**
At or below 7,275	25 %
At or below 6,850	50 %
At or below 6,425	75%

***Advice Note**: The environmental flow regime specified in this condition takes effect from the 1st of July 2023. Until such time, the consent holder is subject to any existing restrictions on the consent that relates to minimum flow restrictions. As of 1 July 2023, Conditions (4) and (5) shall cease to apply and instead the abstraction will be subject to the minimum flow regime in Condition (8). The allocation limits in this consent are not altered by this condition.*

***Advice Note 2**: The minimum flow restrictions in clause (a) and (b) of this condition both apply. The consent holder must not take water when either of the minimum flow restrictions are triggered.*

9 Notwithstanding any other conditions on this consent, in addition to adhering to the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020, or any subsequent revision, the consent holder shall, no later than 1 July 2023:

a. Install, operate and maintain a flow and water level measurement device which will measure the rate at the abstraction point to demonstrate compliance with all consented rates and volumes.

b. install a data logger(s) to record the measurement with a time stamp a pulse from the flow measuring device; and

c. All flow and water level measurement and recording including equipment, systems and procedures shall be installed, operated and maintained at all times

in accordance with the National Environmental Monitoring Standards (or any updated versions):

i. in order to meet the accuracy set in the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2022; and

ii. the time stamp from the flow measuring device shall be at least once every 15 minutes; and

d. connect the measuring and recording device to a telemetry system which continually collects and stores the data; and

e. make the data available, as described in the "Environment Canterbury Data Management Guidelines", at all times to the Canterbury Regional Council; and

f. provide an end of year report containing modified use data for the preceding season with detailing reasons for the modifications, including by not limited to any changes to rating curves:

i. The report detailed in clause (e) of this condition shall be provided to the Canterbury Regional Council, attention: RMA Compliance and Enforcement Manager; no later than 31 July each year, and when requested in writing by the Canterbury Regional Council; and

g. The water measuring device described in clauses (a) and (b) shall be available for inspection at all times by the Canterbury Regional Council, including access to the data recorded in accordance with clause (c).

h. Archive and store the data and provide to the Canterbury Regional Council upon request.

Advice Note:
The following National Environmental Monitoring Standards can be located at: http://www.nems.org.nz/.

The Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020 can be located on the New Zealand Legislation website: http://www.legislation.govt.nz

Guidance on practices which are considered acceptable by the Canterbury Regional Council can be found in Environment Canterbury's report "Data Management Guidelines – Water Use" R17/23 6100, or any revision of that report, which is available on the Environment Canterbury website and stored at Environment Canterbury as (C19C/39863)

This condition is to ensure the consent holder has a telemetered water metering system in place for when the minimum flow regime takes effect on 1 July 2023. Should the consent holder already comply with this condition then no further work will be required. Where a consent does not currently require telemetry and none is installed, the consent holder has until 1 July 2023 to upgrade their system~~s~~.

10 Notwithstanding any other conditions on this consent, by no later than 1 July 2023 and in addition to adhering to the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020, or any subsequent revision, for verification of the measuring and recording device(s):

a. the consent holder shall provide an Open Channel and Partially Filled Pipe Installation and Commissioning Form to the Canterbury Regional Council, attention: RMA Compliance and Enforcement Manager, signed by a suitably qualified hydrologist.

b. The form in clause (a) of this condition shall be provided within one month of the installation of the measuring or recording device(s), or any subsequent replacement measuring or recording device(s), and

c. A review of the site shall be carried out every five years by a qualified hydrologist with their findings provided in the form in clause (a) of this condition, and at any time when requested by the Canterbury Regional Council.

Advice Note:

The installation and commissioning form is available on the Environment Canterbury website www.ecan.govt.nz