

Proposed Plan Change 5A

**(Lindis: Integrated water management)
to the
Regional Plan: Water for Otago**

Decisions of Council and RMA section 32AA Further Evaluation

Otago Regional Council resolved to adopt the recommendations of the Hearing Committee on Proposed Plan Change 5A (Lindis: Integrated water management) at its meeting on Wednesday 10 August 2016, as follows:

That Council:

- 1. Adopt the recommendations of the Hearing Committee on Proposed Plan Change 5A (Lindis: Integrated water management) to the Regional Plan: Water for Otago with tabled amendments as its decision;*
- 2. Publicly notify its decisions on Proposed Plan Change 5A (Lindis: Integrated water management) to the Regional Plan: Water for Otago, on Saturday 13 August 2016; and*
- 3. Notify submitters of its decision.*

All references to the recommendations of the Hearing Committee must now be read as being the decisions of Council in the following report.

This report presents the recommendations of the Hearing Committee on submissions and further submissions to Proposed Plan Change 5A (Lindis: Integrated water management) to the Regional Plan: Water for Otago and a Further Evaluation under Section 32AA of the Resource Management Act 1991.

Hearings Committee:

Commissioner Gretchen Robertson - Chairperson



Commissioner Clive Geddes



Commissioner Richard Allibone



Dated 3 August 2016

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Abbreviations

| | |
|---------------------|---|
| Deemed permit | Refers to water permits under s413 (1)(c) of the Resource Management Act 1991, which are due to expire on 1 October 2021. Includes mining privileges within the meaning of s2 of the Water and Soil Conservation Amendment Act 1971 and rights granted or authorised under the Water and Soil Conservation Act 1967 in substitution for a mining privilege. |
| L/s | Litres per second |
| MALF | 7-day mean annual low flow |
| MAR | Mean annual recharge |
| Mm ³ /yr | Million cubic metres per year |
| NPSFM | National Policy Statement for Freshwater Management 2014 |
| NPSREG | National Policy Statement for Renewable Energy Generation 2011 |
| ORC | Otago Regional Council |
| Plan Change | Proposed Plan Change 5A (Lindis: Integrated water management) |
| RMA | Resource Management Act 1991 |
| RPS | Operative Regional Policy Statement for Otago |
| Proposed RPS | Proposed Regional Policy Statement for Otago |
| SH8 | State Highway 8 |
| Water Plan | Regional Plan: Water for Otago |
| Water permit | Resource consent to take water in accordance with s87(d) of the Resource Management Act 1991 |
| RMA s | A section of the RMA. |

Introduction

Key aspects of Proposed Plan Change 5A

The purpose of Proposed Plan Change 5A (Lindis: Integrated water management) is to set a management regime for the surface and ground water resources of the Lindis Catchment and the Bendigo-Tarras Basin.

As notified, the Plan Change proposes specific changes to the operative Water Plan for managing surface and ground water in the Lindis Catchment and Bendigo-Tarras Basin by:

- Setting a minimum flow for primary allocation for the period 1 October to 31 May for the Lindis Catchment and the connected Lindis Alluvial Ribbon Aquifer in Schedule 2A of the Water Plan;
- Setting a minimum flow for primary allocation for the period 1 June to 30 September for the Lindis Catchment and the connected Lindis Alluvial Ribbon Aquifer in Schedule 2A of the Water Plan;
- Setting a primary allocation limit for the Lindis Catchment and the connected Lindis Alluvial Ribbon Aquifer in Schedule 2A of the Water Plan;
- Setting supplementary allocation blocks for the Lindis Catchment and the connected Lindis Alluvial Ribbon Aquifer in Schedule 2B of the Water Plan;
- Setting minimum flows for the 1st and 2nd supplementary allocation blocks for the period December to April for the Lindis Catchment and the connected Lindis Alluvial Ribbon Aquifer in Schedule 2B of the Water Plan;
- Setting minimum flows for the 1st and 2nd supplementary allocation blocks for the period May to November for the Lindis Catchment and the connected Lindis Alluvial Ribbon Aquifer in Schedule 2B of the Water Plan;
- Setting maximum allocation limits for the Ardgour Valley, Bendigo, and Lower Tarras Aquifers in Schedule 4A of the Water Plan;
- Setting restrictions for groundwater takes from the Bendigo and Lower Tarras Aquifers in Schedule 4B.2 of the Water Plan;
- Mapping the minimum flow catchment boundary and location of the minimum flow monitoring site in the B-series of the Water Plan Maps; and
- Mapping the boundaries of the Ardgour Valley, Bendigo, and Lower Tarras aquifers and amending the boundaries of the Lindis Alluvial Ribbon Aquifer in the C-series of the Water Plan Maps.

Notification process

The Plan Change was publicly notified in the Otago Daily Times on 8 August 2015 and submissions closed on Friday 4 September 2015. Eighty-one submissions were

received by the Otago Regional Council (ORC), one of which was received after the formal submission period closed. A list of all submitters is included in Appendix 1 to this report.

ORC released the Summary of Decisions Requested and called for further submissions on Saturday 26 September 2015. Further submissions closed on Friday 9 October 2015. Six further submissions were received.

Hearing

The Hearing Committee carried out a site visit to the Lindis Catchment and surrounding area on Wednesday 30 March 2016.

In accordance with s41(B)(3) and (4) of the Resource Management Act 1991 (RMA), the Hearing Committee requested that any expert evidence to be presented by submitters during the hearing be pre-circulated five working days ahead of the commencement of the hearing. Evidence was received from 16 individuals, representing 5 submitters.

Submissions were heard in Wanaka over a six day period from Thursday 31 March 2016 to Thursday 7 April 2016. Forty-one submitters spoke and/or tabled evidence at the hearing.

The Hearing Committee made specific requests for additional information to various submitters and the ORC. The Hearing Committee also sought legal advice on whether submitter requests to extend the Lindis Catchment boundary and to provide for transitional arrangements for the introduction of the proposed allocation and minimum flow regime were within the scope of the Plan Change. Submitters were invited to provide their own legal advice on these matters.

The submissions, further submissions, expert evidence, hearing evidence, legal submissions and additional information requested by the Hearing Committee were published on a webpage on the ORC website which was specific to the Plan Change. Submitters were notified that this information was available online.

Deliberations

The Hearing Committee has considered all requests made by submitters and further submitters on the Plan Change and examined the issues, opportunities, costs and benefits of the requested amendments.

Following receipt of the legal advice and further information provided by submitters, the Hearing Committee made decisions on matters of scope and jurisdictional/procedural matters raised by submitters.

All submissions and evidence were re-read to ensure key issues were identified.

All draft decisions were recorded with the amendments to the Plan Change marked in underline and ~~striketrough~~ text.

The Hearing Committee undertook a line by line review of the Summary of Decisions Requested by Submitters to check and confirm that all matters raised in submissions had been considered.

Purpose of this report

This report makes recommendations to Council on the decisions requested in the submissions to the Plan Change. All submissions and further submissions that have requested the same or similar changes to the recommended amendments in this report are accepted. All submissions and further submissions that have requested amendments that have not been made in this recommendation are rejected. The report does not make recommendations on individual submission points.

This report fulfils the requirements under RMA s32AA to undertake a further evaluation of any recommended amendments to the notified Plan Change.

Structure of this report

The report starts by addressing the legal context and process requirements under the RMA. It then goes on to address the matters raised by submitters.

Common issues in submissions have been grouped together and all submission points, further submissions, hearing evidence and further information provided at the request of commissioners has been considered in making these recommendations.

For each of these common issues the report sets out:

- The relevant provisions of the notified Plan Change;
- The decisions requested by submitters;
- The recommendation made by the Hearing Committee; and
- The reasons for making this recommendation.

Where the Hearing Committee makes recommendations to amend the notified Plan Change, a further evaluation of the recommended amendment as required by RMA s32AA has been undertaken in accordance with RMA s32(1) to (4).

Attachments to this report are:

- Appendix 1: List of submitters and further submitters; and
- Appendix 2: Proposed Plan Change 5A (Lindis: Integrated water management) incorporating Hearing Committee Recommendations on Decisions Requested.

The recommendations are to be read in conjunction with the following documents:

- Proposed Plan Change 5A (Lindis: Integrated water management) to the Regional Plan: Water for Otago, 8 August 2015;
- The s32 Evaluation Report: Consideration of alternatives, benefits and costs, 8 August 2015;

- Summary of Decisions Requested in submissions and further submissions on Proposed Plan Change 5A (Lindis: Integrated water management), 9 December 2015; and
- The s42A Report: Decisions requested by Submitters, 11 March 2016.

Executive Summary

In making its recommendations, the Hearing Committee has taken into account the requirements of relevant planning documents. These include:

- The Resource Management Act 1991 (RMA);
- The National Policy Statement for Freshwater Management 2014 (NPSFM);
- The National Policy Statement for Renewable Energy Generation 2011 (NPSREG);
- The Regional Policy Statement for Otago (RPS);
- The Proposed Regional Policy Statement for Otago (Proposed RPS);
- The Regional Plan: Water for Otago (Water Plan);
- The Ngāi Tahu Claims Settlement Act 1998; and
- The Kai Tahu Ki Otago Natural Resource Management Plan 2005.

The Committee has had regard to available scientific evidence and technical information and to those local and wider community's values supported by the surface and ground water resources of the Lindis Catchment and the Bendigo-Tarras Basin.

After having carefully considered the legal advice provided, the submissions and further submissions and the hearing evidence, the Hearing Committee recommends:

Retain Proposed Plan Change 5A (Lindis: Integrated water management) subject to amendments as follows:

- *Amend in Schedule 2A of the Water Plan the proposed minimum flow for primary allocation for the period 1 October to 31 May for the Lindis Catchment to 900 L/s.*
- *Amend in Schedule 2A of the Water Plan the primary allocation limit in Schedule 2A of the Water Plan to 1,200 L/s.*
- *Clarify in Schedule 2B of the Water Plan the dates to which the supplementary minimum flows apply:*
 - *1 May to 30 November*
 - *1 December to 30 April.*
- *Remove from Schedule 4B.2 of the Water Plan the proposed restriction on irrigation takes from the Lower Tarras and Bendigo Aquifers.*

The Hearing Committee is satisfied that, with the recommended amendments, the Plan Change gives effect to the NPSFM and is an efficient, effective and reasonably practicable way of achieving the Water Plan's objectives. It also provides the most appropriate way to achieve the sustainable management of the surface and ground water resources of the Lindis Catchment and the Bendigo-Tarras Basin, as promoted under Part 2 of the RMA.

The following report provides a detailed record of the Hearing Committee's recommendations.

1. Recommendations On The Plan Change As A Whole

This chapter addresses decisions requested by submitters on the Plan Change as a whole.

1.1. Proposed Plan Change 5A

The Plan Change enables ORC to meet its functions and duties as set out in RMA s30(e).

The Plan Change seeks to promote the sustainable management of the surface and ground water resources of the Lindis Catchment and the Bendigo-Tarras Basin in accordance with Part 2 of the RMA, the objectives of the NPSFM, the objectives of the RPS, the Proposed RPS and the Water Plan.

NPSFM objectives, relevant to the Plan Change are:

- Objective B1 - To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of freshwater.
- Objective B2 - To avoid any further over-allocation of freshwater and phase out existing over-allocation.
- Objective B3 - To improve and maximise the efficient allocation and efficient use of water.

In accordance with NPSFM Objective C1, the Plan Change seeks to manage the surface and ground water resources of the Lindis Catchment and Bendigo-Tarras Basin in an integrated manner, recognising the interactions between these freshwater bodies and associated ecosystems.

Decisions requested by submitters were:

- Retain the Plan Change as notified.
- Retain the Plan Change as notified, subject to suggested amendments.
- Amend the Plan Change to achieve the purpose of the RMA and achieve the relevant objectives and policies of the NPSFM, the RPS, the Proposed RPS and the Water Plan.
- Consider the plan change preparation process to be inadequate.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 1 | <i>General Support</i> | <i>Whole</i> | <i>1 - 3</i> | <i>4, 6, 8, 11, 13, 20 - 24, 31, 33, 36, 44, 47, 48, 53, 56, 57, 66, 69, 70, 76, 80, 102, 106</i> |
| 2 | <i>General Opposition</i> | <i>Whole</i> | <i>4 - 8</i> | |
| 27 | <i>s32 Report</i> | <i>N.A.</i> | <i>63 - 64</i> | |
| 30 | <i>Implementation – Other requests</i> | <i>N.A.</i> | <i>61 - 62</i> | |

1.1.1. Recommendation

Retain Proposed Plan Change 5A (Lindis: Integrated water management) subject to the amendments recommended in this report.

1.1.2. Reasons

1.1.2.1 Achieving the purpose of the RMA

In making its recommendations the Hearing Committee has considered the purpose of the RMA, which is to enable people and communities to use and develop natural and physical resources to provide for their social, economic and cultural wellbeing and for their health and safety, while

- (a) Sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and
- (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The Hearing Committee has also considered the requirement to recognise and provide for matters of national importance outlined in RMA s6, and have regard to the matters and principles outlined in RMA ss7 and 8.

The Hearing Committee considers that the Plan Change, subject to the amendments recommended by this committee, promotes for the sustainable management of natural and physical resources as set out in Part 2 of the RMA.

1.1.2.2 Giving effect to the NPSFM

The NPSFM requires ORC to set environmental flows and/or levels for all freshwater management units in its region. The NPSFM states that “*environmental flows for rivers and streams must include an allocation limit and a minimum flow (or other flow/s)*” and

that “*environmental levels for other freshwater management units must include an allocation limit and a minimum water level (or other level/s).*”

The environmental flows and/or levels set under the requirements of the NPSFM must give effect to NPSFM Objectives B1, B2 and B3, while having regard to:

- a) The reasonably foreseeable impacts of climate change;
- b) The connection between water bodies; and
- c) The connections between freshwater bodies and coastal water.

The Hearing Committee considered that the Plan Change, subject to the amendments recommended by this committee, gives effect to the NPSFM.

1.1.2.3 Objectives and policies of other planning documents.

The Plan Change was assessed against the provisions of other relevant planning documents, including:

- The NPSREG;
- The RPS;
- The Proposed RPS;
- The Water Plan;
- The Ngāi Tahu Claims Settlement Act 1998; and
- The Kai Tahu Ki Otago Natural Resource Management Plan 2005.

The Plan Change, subject to the amendments recommended by this committee, is consistent with the key objectives and policies of these planning documents (Table 1).

Table 1: Important provisions of principal planning documents relevant to the Plan Change.

| Principle | Plan | Provisions |
|--|--|--|
| Providing for: <ul style="list-style-type: none"> • instream values, • natural character • amenity • cultural values | Regional Policy Statement | <ul style="list-style-type: none"> ▪ Objective 6.4.3, 6.4.4, 6.4.8 ▪ Policy 6.5.1, 6.5.2, 6.5.4 |
| | Proposed Regional Policy Statement | <ul style="list-style-type: none"> ▪ Objective 1.1, 1.2, 2.1 ▪ Policy 1.1.2, 1.2.1, 2.1.1 |
| | Regional Plan: Water | <ul style="list-style-type: none"> ▪ Objective 5.3.1, 5.3.2, 5.3.3, 5.3.4, 6.3.1, 6.3.2A ▪ Policy 5.4.2, 5.4.8, 5.4.9, 6.4.0, 6.4.4, 6.4.9, 6.4.10B ▪ Schedule 1A, 1AA, 1D, Schedule 2D, 4C |
| | Ngāi Tahu Claims Settlement Act 1998 | <ul style="list-style-type: none"> ▪ Schedule 40 |
| | Kai Tahu Ki Otago Natural Resource Management Plan 2005 | <ul style="list-style-type: none"> ▪ Objectives I, II, V ▪ Policies 2, 4, 7 |
| Providing for out-of-stream uses (consumptive uses) | Regional Policy Statement | <ul style="list-style-type: none"> ▪ Objective 6.4.1 ▪ Policy 6.5.11 |
| | Proposed Regional Policy Statement | <ul style="list-style-type: none"> ▪ Objective 4.4 ▪ Policy 4.4.1 |
| | Regional Plan: Water | <ul style="list-style-type: none"> ▪ Objective 5.3.6, 6.3.2, 6.3.3, 6.3.4 ▪ Policy 5.4.3, 6.4.1, 6.4.10A1 ▪ Schedule 2D, 4C |
| Providing for renewable energy generation (non-consumptive uses) | National Policy Statement for Renewable Energy Generation 2011 | <ul style="list-style-type: none"> ▪ Policy D |
| | Regional Policy Statement | <ul style="list-style-type: none"> ▪ Objective 12.4.2 |
| | Proposed Regional Policy Statement | <ul style="list-style-type: none"> ▪ Objective 3.5, 3.6 ▪ Policy 3.5.3, 3.6.3 |
| | Regional Plan: Water | <ul style="list-style-type: none"> ▪ Objective 5.3.6, 6.3.2, 6.3.3 ▪ Policy 5.4.3 ▪ Schedule 2D, 4C |
| Promoting efficient resource use | Regional Policy Statement | <ul style="list-style-type: none"> ▪ Policy 6.5.3 |
| | Regional Plan: Water | <ul style="list-style-type: none"> ▪ Policy 6.4.0A, 6.4.0B, 6.4.0C, 6.4.12A |
| Promote an integrated approach to management of water | Proposed Regional Policy Statement | <ul style="list-style-type: none"> ▪ Objective 2.3 ▪ Policy 2.3.1, 2.3.3 |
| | Regional Plan: Water | <ul style="list-style-type: none"> ▪ Policy 6.4.1A ▪ Schedule 2C |

1.1.2.4 Adopting a precautionary approach to resource management

The Lindis River is located in an environment characterised by climate extremes. The river's main stem is subject to frequent channel and bed changes and strongly interacts with the Lindis Alluvial Ribbon Aquifer.

A precautionary approach is appropriate given the Lindis River's complex and dynamic geomorphology and hydrology and the resulting difficulties in gathering scientific information about the functioning of this river system.

1.1.2.5 Statutory requirements for preparing plan changes

Clause 3 of RMA Schedule 1 sets out the statutory requirements for consultation which must occur before the notification of a proposed plan change. Under Clause 3(1) ORC must consult with the Minister for the Environment; other Ministers of the Crown who may be affected, local authorities who may be affected; and iwi authorities.

ORC has undertaken consultation in accordance with its obligations under RMA Schedule 1. A variety of techniques were used in undertaking consultation, briefly:

- **ORC website**, with information made available on the plan change process, workshop presentations, technical reports and data, and the identification of a contact for information requests and questions.
- **Local interest group meetings** in the period April to June 2015, organised by local parties and attended by ORC.
- **Iwi consultation**, including meetings and a site visit with Iwi representatives in November and December 2013.
- **Six community workshops** in the period February 2009 – April 2015, advertised in the local newspaper and local outlets, open to all members of the public.
- **Release of a Consultation Draft of the Plan Change** in April 2014, publicly notified and distributed to all relevant parties identified in Clause 3(1) of Schedule 1 of the RMA.

RMA s32 requires that the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of the RMA and that the environmental, economic, social and cultural costs and benefits anticipated from the implementation of the proposal are clearly identified and assessed.

The Hearing Committee is satisfied that the Plan Change has been prepared lawfully, in accordance with the consultation requirements set out in Clause 3 of RMA Schedule 1 and the evaluation requirements of RMA s32.

2. Management regime for the surface water resources of the Lindis Catchment

This chapter addresses decisions requested by submitters on the proposed minimum flows for primary allocation, the primary allocation limit, the supplementary allocation blocks and minimum flows for supplementary allocation in the Lindis Catchment.

2.1. Minimum flow for primary allocation for the period 1 October to 31 May

As notified, the Plan Change proposes a minimum flow for primary allocation of 750 L/s for the period 1 October to 31 May.

Requests relating to this matter were:

- Retain the proposed minimum flow for primary allocation of 750 L/s for the period 1 October to 31 May at the Ardgour Road Flow Monitoring Site.
- Set a reasonable minimum flow for primary allocation that provides for the maintenance of freshwater ecology, recreational uses, natural character and amenity.
- Set a lower minimum flow for primary allocation of 250 L/s or 450 L/s for the period 1 October to 31 May at the Ardgour Road Flow Monitoring Site.
- Set a higher minimum flow for primary allocation of 1,000 L/s, 1,200 L/s, 1,250 L/s, 1,440 L/s or 1,500 L/s for the period 1 October to 31 May at the Ardgour Road Flow Monitoring Site.
- Set a stepped minimum flow for primary allocation of 750 L/s in October, November and May and 450 L/s for the period 1 December to 30 April at the Ardgour Road Flow Monitoring Site.
- Set a minimum flow for primary allocation of 250 L/s at the Ardgour Road Flow Monitoring Site during drought periods.
- Amend the 1 October to 31 May minimum flow period to 1 October to 30 April.
- Amend the 1 October to 31 May minimum flow period to 1 September to 30 April.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|---|--|--|--|
| 6 | <i>Schedule 2A –1 Oct to 31 May minimum flow for primary allocation</i> | 10 | 9 - 36 | 1 - 3, 5, 7 - 9, 10, 12, 14 -19, 22, 24 - 30, 32 - 37, 39 - 43, 45 - 69, 71 – 81, 101, 102, 104 - 106 |

2.1.1. Recommendation

Amend in Schedule 2A of the Water Plan the proposed minimum flow for primary allocation for the period 1 October to 31 May for the Lindis Catchment at the Ardgour Road Flow Monitoring Site to 900 L/s.

2.1.2. Reasons

2.1.2.1 Statutory obligations

The Hearing Committee has taken into account the statutory requirements set out in the RMA, the NPSFM, the Proposed RPS, the RPS and the Water Plan when considering a minimum flow for primary allocation for the period 1 October to 31 May (Table 2).

Table 2: Assessment of a 900 L/s minimum flow against the statutory requirements set out in the RMA, the NPSFM, the Proposed RPS, the RPS and the Water Plan.

| Planning documents | Assessment of a 900 L/s minimum flow against relevant statutory requirements. |
|--------------------|--|
| RMA | <p>Provides for the economic, social and cultural wellbeing of the community, while</p> <ul style="list-style-type: none"> • safeguarding the life-supporting capacity of water and ecosystems s5(2)(b); and • avoiding, remedying, or mitigating any adverse effects of activities on the environment s5(c). <p>Recognises and provides for:</p> <ul style="list-style-type: none"> • the preservation of natural character s6(a); • habitat for indigenous fauna s6(c); and • the relationship of Maori and their culture and traditions s6(e). <p>Has regard for:</p> <ul style="list-style-type: none"> • Kaitiakitanga s7(a); • The ethic of stewardship s7(aa); • The maintenance and enhancement of amenity values s7(c); • Intrinsic values of ecosystems s7(d); • Maintenance and enhancement of the quality of the environment s7(f); • Any finite characteristics of natural and physical resources s7(g). • The protection of the habitat of trout and salmon s7(h); and • The effects of climate change s7(i). |
| NPSFM | Gives effect to Objectives B1 and C1. |
| RPS | Achieves Objectives 6.4.3, 6.4.4 and 6.4.8. |
| Proposed RPS | Achieves Objectives 1.1, 1.2, 2.1, 2.3 and 4.5. |
| Water Plan | Achieves Objectives 5.3.1, 5.3.2, 5.3.3, 5.3.4, 6.3.1, 6.3.2A. |

The Hearing Committee considered that the recommended amendment to the proposed minimum flow for primary allocation for the period 1 October to 31 May promotes the overall purpose of the sustainable management of natural and physical resources set out in Part 2 of the RMA, gives effect to the NPSFM, and ensures consistency with relevant objectives of the RPS, the proposed RPS, and the Water Plan.

2.1.2.2 Water Plan Schedule 2D.1 considerations for setting minimum flows

Schedule 2D.1:

(a) Any existing or previous minimum flow regime or residual flow

Prior to the Plan Change there was no minimum flow.

(b) The 7-day mean annual low flow

The calculated 7-day mean annual low flow (MALF) at the Lindis Peak Flow Monitoring Site is 1,626 L/s. The calculated 7-day mean low flow for the period 1 October to 31 May at the same flow monitoring site is 1,431 L/s.

The naturalised MALF at the Ardgour Road Flow Monitoring Site is 1,935 L/s, while the naturalised 7-day mean low flow for the period 1 October to 31 May at the same Flow Monitoring Site is 1,709 L/s (ORC, 2016).

The recommended minimum flow of 900 L/s at the Ardgour Road Flow Monitoring Site represents 46.5% of the naturalised MALF, or 52.6% of the naturalised 7-day mean low flow at the same monitoring site for the period 1 October to 31 May.

(c) Interaction between water bodies

Research undertaken by ORC and expert evidence provided during the hearing shows that there is a strong hydrological connection between surface and ground water flows along large reaches of the Lindis River. The river can be split into four reaches, each with differing hydrological characteristics. The boundaries of these reaches are generally identified as:

1. Between the headwaters of the Lindis River and The Point. The Point is situated towards the northern end of Ardgour Road, approximately 14 kilometres upstream of the Clutha River/Mata-Au confluence. This reach is not characterised by significant flow losses to, or flow gains from, groundwater.
2. Between The Point and the Ardgour Road bridge, the *middle losing reach*. This 3-kilometre-long reach is characterised by significant flow losses to the underlying Lindis Alluvial Ribbon Aquifer.
3. Between the Ardgour Road bridge and the Ardgour Road Flow Monitoring Site. In this gaining reach inflows of groundwater from the Lindis Alluvial Ribbon Aquifer augment surface flows.
4. Between the Ardgour Road Flow Monitoring Site and the Clutha River/Mata-Au confluence, the *lower losing reach*. This 3-kilometre-long reach is characterised by significant loss of surface flows to the underlying Lindis Alluvial Ribbon Aquifer.

Consensus exists among expert witnesses regarding the general spatial distribution of gaining and losing river reaches. However, there are varying estimates regarding actual flow losses or gains that may occur in each of these

reaches. There is also recognition that river hydrology and channel morphology is dynamic and that losses and gains would not be static over time.

After reviewing the hydrological information provided by submitters and ORC the Hearing Committee concluded:

1. Limited reliable data is available on the flow loss that occurs in the *middle losing reach*. Flow losses in this reach have been estimated to be between 160 L/s and 500 L/s. (ORC, 2010; ORC, 2016).
2. Limited reliable data is available on flow gains occurring in the reach between the Ardgour Road bridge and the Ardgour Road Flow Monitoring Site. Outflows of groundwater from the Lindis Alluvial Ribbon Aquifer can augment surface flows in this part of the river by up to 250 L/s. (ORC, 2016).
3. A regression equation analysis was undertaken by ORC in 2016 using certified flow monitoring data collected in the seasons 2014/2015 and 2015/2016 from the Ardgour Road and Clutha Confluence Flow Monitoring Sites. The Clutha Confluence Flow Monitoring Site is located approximately 200 metres upstream from the confluence of the Lindis River and Clutha River/Mata-Au. The analysis provided a flow loss range estimate between 352 L/s and 442 L/s for the *lower losing reach*. Downstream of the Clutha Confluence Flow Monitoring Site flow losses are estimated to be up to 30 L/s.
4. The wide range in the estimates of flow gains and flow losses in the main stem of the Lindis River makes a precautionary approach appropriate when setting a minimum flow.

(d) Ecological values, including need for flow variability

Ecological values

In making its recommendations, the Hearing Committee has had regard to the ecological values of the Lindis River. These values were identified through a review of the information collected through the consultation, submission and hearing process, and an assessment of the relevant provisions of the RMA, the NPSFM and the Water Plan, including Water Plan Schedule 1A: Natural Values. Following identification of the ecological values, all submissions and evidence was carefully evaluated to identify the anticipated outcomes of different minimum flows on these values.

The Hearing Committee considered that the minimum flow for primary allocation of 750 L/s, and any minimum flows lower than this, for the period 1 October to 31 May would fail to safeguard the Lindis River's life-supporting capacity. Although a 750 L/s minimum flow will provide some environmental benefits, it will not provide good habitat or passage for fish in the losing reaches of the river due to the lack of sufficient water depth, high levels of predation and the risk of the river drying.

The Hearing Committee considered that a 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will safeguard the Lindis River's life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems. This is achieved by providing continuous habitat and passage for native and introduced fish, and habitat for macro invertebrates throughout the main stem of the river.

A 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will ensure a continuous flow connection between the Lindis River and Clutha River/Mata-Au and provide for the restoration of a flowing braided river in the lower losing reach. The provision of fish passage and additional juvenile rearing habitat will enhance the Lindis River's role as an important spawning and rearing tributary of the nationally important Lake Dunstan and Upper Clutha fisheries. The restoration of flows in the river braids will provide for the ecosystem values associated with the river's riparian margins and create better foraging and nesting opportunities for waterfowl and wading birds.

It is recognised that maximum adult brown trout habitat cannot be provided by any of the minimum flows for primary allocation for the periods 1 October to 31 May requested by submitters.

Flow variability

Flushing flows in the Lindis River are rare during summer and autumn.

The Hearing Committee considered that setting a higher minimum flow at periodic intervals to create flushing flows would be extremely difficult to achieve.

(e) Demand for water, including community water supplies

In setting the minimum flow for primary allocation for the period 1 October to 31 May, the Hearing Committee has had regard to water demand evidence provided by submitters and OPUS International Consultants (*Hydrological analysis to support an economic assessment of the potential impact of a minimum flow regime for the Lindis River, 2015*).

Evidence provided by submitters indicates that the actual combined maximum instantaneous rate of take from the Lindis River is approximately 2,300 L/s.

The OPUS International Consultants report (OPUS, 2015) estimates that with current irrigation practice 2,084 L/s is needed to irrigate an area of 2,240 ha that is currently solely reliant on water from the Lindis River and does not have access to an alternative water source. The report shows that the efficient irrigation of this area requires 1,146 L/s of water.

The demand for irrigation water exceeds supply during the peak irrigation months. With no minimum flow in place, supply reliability is reduced to around 80% in an average year, and can drop to around 60% or less in dry

years. The recommended minimum flow of 900 L/s for primary allocation for the period 1 October to 31 May will further impact on the availability of water for irrigation.

Some water takes that are permitted under the provisions of the Water Plan and RMA s14(3)(b) are not subject to the minimum flow. These water takes include:

- Water takes for stock drinking
- Water takes for domestic use
- Water takes for firefighting purposes

(f) Existing water uses and associated infrastructure

The Lindis River and the Lindis Alluvial Ribbon Aquifer provide for domestic, communal and stock water supply. The largest volume of water allocated from these water sources is used for irrigation. An unknown portion of this water is applied using traditional irrigation methods, such as border-dyke or flood. Most irrigation water taken from the Lindis is delivered through an open race system.

Information included in the OPUS report and gathered through the hearing process shows that it is possible to reduce actual run-of-the-river water taking from the Lindis River and water use by:

- **Replacing traditional irrigation systems with more efficient spray irrigation:** The OPUS International Consultants report (2015) estimates that with the use of efficient irrigation practices only 1,146 L/s is needed to irrigate the area of 2,420 ha that relies solely on irrigation water from the Lindis River.
- **Replacing the existing races with new water distribution infrastructure:** Hearing evidence indicates that the existing races lose up to 400 L/s of water through leakage.
- **Using alternative water sources:** Allocation is available from the Clutha River/Mata-Au and the Lower Tarras and Bendigo Aquifers.
- **Establishing water storage ponds:** Hearing evidence indicates that the establishment of water storage ponds is a feasible option for a number of water users.

These measures will assist irrigators to mitigate the impacts of a minimum flow on water availability during low flows.

(g) Environmental, social, cultural, recreational and economic costs and benefits of taking and using water before and after the implementation of a minimum flow regime

Environmental cost and benefits

The Hearing Committee heard evidence that a 750 L/s minimum flow for primary allocation for the period 1 October to 31 May does not safeguard the Lindis River's life-supporting capacity and cannot guarantee continuous flows and the restoration of the braided river system in the lower losing reach of the river at all times.

A 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will provide for the natural character values of the Lindis River by ensuring continuous flows throughout the main stem of the river and restoring the braided river system in the lower losing reach of the river at all times.

A 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will safeguard the instream values of the Lindis River. This minimum flow provides habitat for macro invertebrates throughout the main stem of the river and ensures continuous habitat and passage for native and introduced fish by maintaining sufficient water depth and providing greater protection against predation. This minimum flow also enhances the ecological values supported by the river's riparian margins and improves the river's role as an important spawning and rearing tributary of the nationally important Lake Dunstan and Upper Clutha fisheries.

Social cost and benefits

The Hearing Committee accepts that, in the short term, the reduced availability of water resulting from the recommended 900 L/s minimum flow could generate increased competition among water users.

The Hearing Committee considered that the recommended 900 L/s minimum flow would benefit the social well-being of the community by:

- Encouraging a cooperative approach to water use;
- Allowing people to value and enjoy a healthy and continually flowing river; and
- Fostering environmental stewardship.

Cultural costs and benefits

The Hearing Committee recognises that a minimum flow for primary allocation of 750 L/s or less does not:

- Provide for the habitat and wider needs of mahika kai, taoka or other species of importance for Kai Tahu;

- Guarantee permanent flow continuity and uninterrupted connection between freshwater bodies and their ecosystems (“ki uta ki tai”);
- Recognise the relationship between the Lindis River and Kai Tahu; and
- Protect the mauri of the Lindis River.

A 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will:

- Provide habitat and passage for all mahika kai and taoka species, including tuna (longfin-eel);
- Guarantee permanent flow continuity and uninterrupted connection between freshwater bodies and their ecosystems;
- Enable Kai Tahu to express their mana and meet their obligations as kaitiaki, and
- Protect the mauri of the Lindis River.

Recreational cost and benefits

The hearing committee considered that a 900 L/s minimum flow for primary allocation in the period 1 October to 31 May will:

- Provide good opportunities for small stream recreation, such as angling, swimming and paddling; and
- Enhance the quality of visitor experiences, such as camping, picnicking, hiking, walking or sightseeing.

Economic cost and benefits

The Hearing Committee considered the evidence on economic impacts of various minimum flow regimes provided by individual submitters, Mr Grant Porter, Mr George Collier and BERL Economics (*Economic impacts of minimum flow regimes on the Lindis River, 2015*).

The economic analyses provided by BERL Economics, Mr Porter and Mr Collier each apply a different approach and are based on differing assumptions:

1. **BERL Economics:** This analysis predicts the economic costs of different minimum flow regime options, no minimum flow, 450 L/s, 750 L/s and 900 L/s, at local, district and regional level. It is based on:
 - A desk top investigation of current land use and water use patterns in the Lindis Catchment; and
 - The hydrological data provided by OPUS International Consultants (2015).

2. **Mr Porter:** This evaluation estimates the financial impacts of a 450 L/s and 750 L/s minimum flow at farm level. It describes the economic impacts of these minimum flow rates on two 400 ha model farms: one a breeding unit, the other a finishing unit, each with 340 ha fully irrigated.
3. **Mr Collier:** This study assesses the potential production and economic impacts of a 450 L/s and 750 L/s minimum flow on the Lindis Catchment and Otago regional economy. The analysis is based on the assumption that 2,300 L/s is taken to irrigate 3,833 ha.

The Hearing Committee considered that the economic analysis provided by BERL Economics addresses the district-wide impacts of minimum flows on farm financial performance. The Porter and Collier analyses focus on the impact of minimum flows on the financial performance of a model farm system and present an opportunity cost for irrigators, rather than the actual cost.

The analyses by BERL Economics (2015) and OPUS International Consultants (2015) show that the implementation of a 900 L/s minimum flow is likely to reduce water availability, causing a reduction in value added and employment. However, these studies also indicate that:

- Most years the impact of annual fluctuations in environmental conditions on water availability for irrigation will be greater than the impact of a 900 L/s minimum flow;
- The number of restriction days in any year under a 900 L/s minimum flow is only slightly greater than the number of restriction days that are likely to occur at a 750 L/s minimum flow; and
- The added economic cost on the local and regional economy of a 900 L/s minimum flow compared to a 750 L/s minimum flow, is relatively small.

The Hearing Committee recognised that the financial impact of a 900 L/s minimum flow can be reduced through:

- The use of alternative water sources;
- The creation of water storage;
- The upgrade or replacement of distribution infrastructure, in order to mitigate losses from leakage or evapotranspiration; and
- The conversion or further conversion to more efficient irrigation methods.

These measures will require initial investment, but are likely to generate long term benefits.

(h) Any relevant matter in giving effect to Part 2 of the RMA

The Hearing Committee assessed the 750 L/s minimum flow for primary allocation for the period 1 October to 31 May proposed in the notified Plan Change and the recommended amendment to increase this to 900 L/s against matters that are relevant in giving effect to Part 2 of the RMA. The Hearing Committee concluded that a minimum flow of 900 L/s will achieve the goal of the sustainable management of the Lindis River by enabling people and communities to provide for their social, cultural and economic well-being, while safeguarding the life-supporting capacity of this resource.

The Hearing Committee considered that all relevant matters of national importance listed under RMA s6 and other relevant matters listed in the RMA are adequately provided for by a 900 L/s minimum flow for primary allocation for the period 1 October to 31 May.

2.1.2.2 A stepped minimum flow or minimum flow for drought periods

Hydrological information shows that under natural conditions, flows at the Ardgour Road Flow Monitoring Site are unlikely to drop below 450 L/s. A minimum flow of 450 L/s or less during the driest months of the year or during drought events would not safeguard the river's natural character and its ecosystem values. This minimum flow regime would also fail to give effect to NPSFM Objectives B1 and C1 and would be inconsistent with Objectives 5.3.1 to 5.3.4, and Objective 6.3.1 of the Water Plan.

2.1.2.3 Amending the duration of the irrigation season minimum flow period

The Hearing Committee considered that a 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will provide adequate passage for adult brown trout in the main stem of the Lindis River. There is no environmental benefit to amending the end date of the irrigation season minimum flow period from 31 May to 30 April.

Commencement of the proposed 1 October to 31 May minimum flow period in September is not necessary because flows in the Lindis River in early spring are high enough to meet the demand for water in September. Demand for water is limited in early spring because soil moisture levels at this time of year are generally high.

2.1.3. Further evaluation under RMA s32AA

This part of the report provides an evaluation of the recommended amendment to set the minimum flow for primary allocation at 900 L/s for the period 1 October to 31 May under RMA s32AA.

2.1.3.1 Benefits and costs of alternative options

The Hearing Committee evaluated the benefits and costs of different options for a minimum flow for primary allocation for the period 1 October to 31 May (Table 3).

Table 3: Costs and benefits of various minimum flow options.

| Minimum flow option | Economic | Social | Environmental | Cultural |
|---------------------|---|---|---|--|
| 450 L/s or less | <ul style="list-style-type: none"> Gross margin reduced by 3.6%. | <ul style="list-style-type: none"> Provides for the social well-being of local irrigators, but not for the well-being of the wider community. | <ul style="list-style-type: none"> Does not provide for continuous flow and connection. Does not provide for natural character. Does not safeguard life-supporting capacity. Does not provide good fish habitat or passage due to the lack of water depth, high levels of predation and the risk of the river drying. | <ul style="list-style-type: none"> Does not provide for the needs of mahika kai and taoka species. Does not guarantee flow continuity. Does not recognise Kai Tahu's relationship with the river. Does not protect the river's mauri. |
| 750 L/s | <ul style="list-style-type: none"> Gross margin reduced by 5.6%. | <ul style="list-style-type: none"> Increased competition among water users (short-term). Some benefits for the wider community (improvement to recreational and amenity values). | <ul style="list-style-type: none"> Provides for natural character through continuous flows, connection and flowing braids in the lower losing reach. Safeguards life-supporting capacity. Provides passage and continuous habitat for native and introduced fish, and habitat for macro invertebrates. Enhances ecological values of riparian margins. Improves recruitment to the Upper Clutha fisheries. Reduces risk of algal blooms. | <ul style="list-style-type: none"> Provides habitat and passage for all taoka and mahika kai species; Provides permanent flow continuity and uninterrupted connection between water bodies and ecosystems. Enables Kai Tahu to meet their obligations as kaitiaki. Protects the river's mauri. |
| 900 L/s | <ul style="list-style-type: none"> Gross margin reduced by 6.6%. | <ul style="list-style-type: none"> Creates increased competition between water users during low flows (short-term). Fosters stewardship. Strengthens social cohesion through involvement in cooperative approach to water use. Community can value and enjoy a healthy river. | <ul style="list-style-type: none"> Provides for natural character through continuous flows, connection and flowing braids in the lower losing reach. Safeguards life-supporting capacity. Provides passage and continuous habitat for native and introduced fish, and habitat for macro invertebrates. Enhances ecological values of riparian margins. Improves recruitment to the Upper Clutha fisheries. Reduces risk of algal blooms. | <ul style="list-style-type: none"> Provides habitat and passage for all taoka and mahika kai species; Provides permanent flow continuity and uninterrupted connection between water bodies and ecosystems. Enables Kai Tahu to meet their obligations as kaitiaki. Protects the river's mauri. |
| 1, 000 L/s or more | <ul style="list-style-type: none"> Economic impacts unknown (No evidence available). | <ul style="list-style-type: none"> Fosters stewardship. Strengthens social cohesion through involvement in cooperative approach to water use. Community can value and enjoy a healthy river. | <ul style="list-style-type: none"> Provides for natural character through continuous flows, connection and flowing braids in the lower losing reach. Safeguards life-supporting capacity. Provides passage and continuous habitat for native and introduced fish, and habitat for macro invertebrates. Enhances ecological values of riparian margins. Improves recruitment to the Upper Clutha fisheries. Reduces risk of algal blooms. | <ul style="list-style-type: none"> Provides habitat and passage for all taoka and mahika kai species; Provides permanent flow continuity and uninterrupted connection between water bodies and ecosystems. Enables Kai Tahu to meet their obligations as kaitiaki. Protects the river's mauri. |

2.1.3.2 Effectiveness and Efficiency

Effectiveness assesses the contribution the proposed new provisions make towards achieving relevant objectives, and how successful they are likely to be in solving the problem they were designed to address. Efficiency measures whether the proposed new provisions are likely to achieve the relevant objectives at the lowest total cost to all

members of society, or achieves the highest net benefit to all of society. The assessment of efficiency under the RMA involves the inclusion of a broad range of costs and benefits, many intangible and non-monetary.

The Hearing Committee evaluated the alternative options for a minimum flow for primary allocation for the period 1 October to 31 May in terms of their effectiveness in achieving the relevant objectives of the NPSFM and Water Plan (Table 4).

Table 4: Effectiveness of various minimum flow options in achieving relevant NPSFM and Water Plan objectives.

| Minimum flow option | Effectiveness in achieving relevant objectives |
|---------------------|---|
| 450 L/s or less | Low: Does not achieve NPSFM Objectives B1 and C1 and Water Plan Objectives 5.3.1, 5.3.2, 5.3.3, 5.3.4, 6.3.1 and 6.3.2A. |
| 750 L/s | Medium: Does not achieve NPSFM Objectives B1 and C1 and Water Plan Objectives 5.3.1, 5.3.2, 5.3.3, 5.3.4, 6.3.1 and 6.3.2A at all times. |
| 900 L/s | High: Achieves NPSFM Objectives B1 and C1 and Water Plan Objectives 5.3.1, 5.3.2, 5.3.3, 5.3.4, 6.3.1 and 6.3.2A at all times. |
| 1, 000 L/s or more | |

The recommended amendment to set a 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will safeguard:

- The Lindis River's life-supporting capacity;
- The river's cultural values;
- Natural character values; and
- The social wellbeing of people and communities.

There will be economic and social costs for irrigators through the reduced availability of water and increased competition between water users during low flow periods. Economic costs can be mitigated through the use of more reliable alternative water sources, the establishment of water storage and the conversion to more efficient irrigation and water supply infrastructure. Where these mitigating measures are implemented the economic and social costs are likely to be short-term. The Hearing Committee recognised that, irrespective of any minimum flow, the Water Plan currently requires water users to apply efficient irrigation practices, avoid wastage of water and consider water storage and alternative water resources where practicable when consents are renewed.

The benefits of a 900 L/s minimum flow for primary allocation for the period 1 October to 31 May are considered to outweigh the costs. The recommended amendment to the proposed minimum flow is therefore effective and efficient.

2.1.3.3 Sufficiency of information

The dynamic nature of the Lindis River makes it difficult to determine an exact range of flow gains and flow losses in the main stem of the Lindis River. The Hearing Committee therefore considered it appropriate to apply a precautionary approach to the setting of a minimum flow.

The Hearing Committee considered that there is sufficient reliable information to determine a minimum flow that will achieve acceptable environmental, cultural, economic and social outcomes.

2.1.3.4 Summary

It is the Hearing Committee's view that the recommended amendment to the minimum flow for primary allocation for the period 1 October to 31 May proposed by the notified Plan Change is the most appropriate for achieving the purpose of the RMA and the relevant objectives of the NPSFM and the Water Plan.

2.2. Minimum flow for primary allocation for the period 1 June to 30 September

As notified, the Plan Change proposes a minimum flow for primary allocation of 1,600 L/s for the period 1 June to 30 September.

Requests relating to this matter were:

- Retain the proposed minimum flow for primary allocation of 1,600 L/s for the period 1 June to 30 September at the Ardgour Road Flow Monitoring Site.
- Amend the 1 June to 30 September minimum flow period to 1 May to 30 September.
- Amend the 1 June to 30 September minimum flow period to 1 June to 31 August.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 7 | <i>Schedule 2A – 1 June to 31 Sept minimum flow for primary allocation</i> | 10 | 36 - 38 | 15, 16, 43, 47, 50, 54, 56, 65, 68, 76, 77, 104 - 106 |

2.2.1. Recommendation

Retain a minimum flow for primary allocation of 1,600 L/s for the period 1 June to 30 September at the Ardgour Road Flow Monitoring Site as notified.

2.2.2. Reason

The Hearing Committee considered that a 900 L/s minimum flow for primary allocation for the period 1 October to 31 May will provide adequate passage for adult brown trout in the main stem of the Lindis River. There is no environmental benefit to amending the 1 June start date for the 1,600L/s flow period to 1 May.

There is no need to amend the start date for the 900L/s minimum flow period from 30 September to 31 August, because flows in the Lindis River in early spring are high enough to meet the demand for water in September. Demand for water is limited in early spring because soil moisture levels at this time of year are generally high.

2.3. Primary allocation limit

The primary allocation limit is the amount of water that can be allocated from a catchment by primary allocation consents. Primary allocation limits are set under Policy 6.4.2 of the Water Plan to provide for aquatic ecosystems and socio-economic and cultural wellbeing, while enabling reliable access to water for existing water permit holders.

Schedule 2A of the Water Plan identifies the primary allocation limit for specified catchments in Otago.

As notified, the Plan Change proposes to set in Schedule 2A of the Water Plan a primary allocation limit of 1,000 L/s for the Lindis River.

Some submitters support the proposed primary allocation limit of 1,000 L/s, but a number of these have stated that their support is conditional upon increasing the minimum flow for the 1 October to 31 May period from 750 L/s to 1,000 L/s. Other submitters opposed the proposed primary allocation limit or requested that it be amended.

Requests relating to this matter were:

- Retain the proposed primary allocation limit of 1,000 L/s.
- Retain the proposed primary allocation limit of 1,000 L/s, but only if the minimum flow for the 1 October to 31 May period is increased from 750 L/s to 1,000 L/s.
- Set the primary allocation limit at 1,500 L/s or 1,900 L/s.
- Set a primary allocation limit that better reflects historic or current levels of water abstraction from the Lindis River.

- Set a primary allocation limit that reflects a quantity of water that is agreed between the irrigators and the ORC.

For detail of the submissions received or hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|--|
| 8 | Schedule 2A – primary allocation limit | 10 | 38 - 43 | 15, 16, 22, 28, 30, 32, 33, 39, 42, 43, 46, 47, 50, 52 – 54, 59 – 58, 60, 61, 65, 68, 69, 71 – 74, 77, 79, 102 |

2.3.1. Recommendation

Amend the primary allocation limit in Schedule 2A of the Water Plan to 1,200 L/s.

2.3.2. Reasons

2.3.2.1 Statutory obligations

The Hearing Committee has taken into account the statutory requirements set out in the NPSFM, the principles and purpose of the RMA and the relevant provisions of the RPS, the Proposed RPS and the Water Plan when considering the primary allocation limit (Table 5).

Table 5: Assessment of a 1,200 L/s primary allocation limit against the statutory requirements set out in the RMA, the NPSFM, the Proposed RPS, the RPS and the Water Plan.

| Planning documents | Assessment of a 1,200 L/s minimum flow against relevant statutory provisions. |
|---------------------------|--|
| RMA | Provides for the economic, social and cultural wellbeing of the community, while <ul style="list-style-type: none"> • safeguarding the life-supporting capacity of water and ecosystems s5(2)(b); and • avoiding, remedying, or mitigating any adverse effects of activities on the environment s5(c). |
| NPSFM | Gives effect to Objectives B2 and B3 |
| RPS | Achieves Objective 6.4.1 |
| Proposed RPS | Achieves Objectives 4.4 and 4.5 |
| Water Plan | Achieves Objectives 5.3.6 and 6.3.2 |

The Hearing Committee considered that the recommended amendment to increase the proposed primary allocation limit in Schedule 2A of the Water Plan to 1,200 L/s promotes the overall purpose of the sustainable management of natural and physical resources set out in Part 2 of the RMA, gives effect to the NPSFM, and ensures consistency with relevant objectives of the RPS, the proposed RPS, and the Water Plan.

2.3.2.2 Schedule 2D.2 considerations for setting primary allocation limits

Schedule 2D.2:

(a) Amount of water currently allocated as primary allocation

There are currently 30 consented surface water takes from the Lindis River and 8 consented groundwater takes within the proposed boundaries of the Lindis Alluvial Ribbon Aquifer that have primary allocation status. The total volume of water allocated through these consents is estimated as 4,000 L/s.

(b) Amount of water currently taken as primary allocation

The evidence provided by submitters indicates that consented allocation does not reflect the actual volume of water that is being taken from the Lindis River. The combined maximum instantaneous take from the Lindis River is estimated by submitters to be 2,300 L/s. However, it is often less because of low summer flows.

(c) The 7-day mean annual low flow

The naturalised MALF of the Lindis River at the Ardour Road Flow Monitoring Site is 1,935 L/s. and the river's naturalised 7-day mean low flow at the same flow monitoring site for the period 1 October to 31 May is 1,709 L/s. A primary allocation of 1,200 L/s represents 62% of the naturalised MALF of the Lindis River at the Ardour Road Flow Monitoring Site, or 70% of the river's naturalised 7-day mean low flow for the period 1 October to 31 May at the same flow monitoring site.

(d) Proposed minimum flow for primary allocation

Increasing the primary allocation limit enables more water to be taken from the Lindis River through primary allocation consents. However, a higher primary allocation limit may result in reduced water supply and increased rationing needs for individual water users during minimum flow restriction periods.

(e) Possible sources of water

Many irrigators in the upper and middle catchment are solely reliant on irrigation water from the Lindis River. Submitter evidence indicates that alternative water sources are available for some water users, particularly

in areas that are located close to the Clutha River/Mata-Au or situated in the Bendigo-Tarras Basin.

(f) Duration and frequency of rationing

In considering the impacts of the recommended amendments to the primary allocation limit and to the minimum flow for primary allocation for the period 1 October to 31 May, the Hearing Committee has taken guidance from the OPUS International Consultants report (2015).

Figures 4.23 and 4.24 of OPUS International Consultants report show the availability of irrigation water from the Lindis River in the current situation, where there is no minimum flow restriction and 2,084 L/s is taken to irrigate an area of 2,420 ha that only has access to water from the Lindis River. These figures show there would have been 114 restriction days and a total of 100 consecutive restriction days during the irrigation season 1977-1978, possibly the driest irrigation season on record. Under the same scenario there would have been a total of 43 restriction days and 30 consecutive restriction days during an average irrigation season, such as the irrigation season 1994-1995.

Figures 4.29 and 4.30 of the OPUS International Consultants report show the impacts on water availability if the same area were to be irrigated efficiently with an allocation of 1,146 L/s and all takes were subject to a minimum flow of 900 L/s. In the irrigation season 1977-1978 there would be an estimated total of 70 restriction days and less than 45 consecutive restriction days. In the irrigation season 1994 - 1995, there would be less than 30 consecutive restriction days and an estimated total of less than 40 restriction days.

Comparison of the above figures indicates that the reliability of supply achieved with a 900 L/s minimum flow for a total primary allocation take of 1,200 L/s, is likely to be comparable or possibly greater than the reliability of supply that is currently provided by the Lindis River.

(g) Social and economic benefits of taking and using water

A primary allocation limit of 1,200 L/s is considered to be adequate to efficiently irrigate properties within and outside the proposed boundaries of the Lindis Catchment that currently only have access to irrigation water from the Lindis River. This primary allocation limit will provide more certainty to existing consent holders who are currently reliant on run-of-the-river takes from the Lindis River and for whom it is not possible to access an alternative water source.

Increasing the proposed primary allocation limit from 1000 L/s to 1,200 L/s will not noticeably impact on flow variability or the incidence of flushing flows in the Lindis River and is unlikely to have any adverse impact on the river's ecosystem values, recreational values, cultural values and natural

character. Instream values will be mostly protected by the minimum flow for primary allocation.

2.3.2.3 *Setting a high primary allocation limit*

NPSFM Objectives B2 and B3 require ORC to phase out over allocation and maximise the efficient use of water. Setting a primary allocation limit that reflects current levels of water taking would not recognise the need to use efficient irrigation practices when consents are renewed and would fail to give effect to the requirements of the NPSFM.

2.3.3. Further evaluation under RMA s32AA

This part of the report provides an evaluation of the recommended amendment to set the primary allocation limit at 1,200 L/s under RMA s32AA.

2.3.3.1 *Benefits and costs*

The Hearing Committee evaluated the benefits and costs of different options for the primary allocation limit (Table 6)

Table 6: Costs and benefits of primary allocation limit options.

| Primary allocation limit | Economic | Environmental | Social | Cultural |
|--------------------------|--|--|--|-----------------|
| 1,000 L/s or less | Insufficient to efficiently irrigate the area that is currently reliant on Lindis water only. | Limited impact because river flows are naturally low during summer and early spring. | Increased competition among water users as limited water is available within the primary allocation limit. | Limited impact. |
| 1,200 L/s | Sufficient to efficiently irrigate the area that is currently reliant on Lindis water only. | | More certainty to existing consent/deemed permit holders at the time of permit renewal. | |
| 1,500 L/s or more | Sufficient to efficiently irrigate the area that is currently reliant on Lindis water only. Increased frequency of rationing. | | | |

2.3.3.2 *Effectiveness and Efficiency*

The Hearing committee evaluated the alternative options for a primary allocation limit in terms of their effectiveness in achieving the relevant objectives of the NPSFM and Water Plan (Table 7).

Table 7: Effectiveness of various primary allocation limit options in achieving the NPSFM and Water Plan objectives.

| Primary allocation limit | Effectiveness in achieving relevant objectives |
|--------------------------|---|
| 1,000 L/s or less | Medium: Achieves NPSFM Objectives B2 and B3 and Water Plan Objective 5.3.6. Does not achieve Water Plan Objective 6.3.2. |
| 1,200 L/s | High: Achieves NPSFM Objectives B2 and B3 and Water Plan Objectives 5.3.6 and 6.3.2. |
| 1,500 L/s or more | Low: Achieves Water Plan Objective 6.3.2. Does not achieve NPSFM Objectives B2 and B3 and Water Plan Objective 5.3.6. |

The recommended amendment to set a primary allocation limit of 1,200 L/s will:

- Maintain the social and economic well-being of the community by providing sufficient water for irrigators who currently take water from the Lindis River and who don't have access an alternative source to irrigate their land efficiently; and
- Provide existing water permit holders with greater certainty at the time of consent or deemed permit renewal.

The recommended amendment to set a primary allocation limit of 1,200 L/s is not anticipated to have a noticeable impact on the environmental and cultural values supported by the Lindis River.

The benefits of a 1,200 L/s primary allocation limit are considered to outweigh the costs or risks. The recommended amendment to the proposed primary allocation limit is therefore effective and efficient.

2.3.3.3 Summary

It is the Hearing Committee's view that the recommended amendment to the primary allocation limit proposed by the notified Plan Change is the most appropriate for achieving the purpose of the RMA and the objectives of the NPSFM and Water Plan.

2.4. Supplementary allocation regime

Schedule 2B of the Water Plan identifies supplementary allocation blocks and supplementary minimum flows for specified catchments in Otago.

As notified, the Plan Change proposes the following supplementary allocation minimum flow and block sizes for the Lindis Catchment in Schedule 2B:

- Minimum flow for 1st supplementary allocation block of 500 L/s:
 - May to November: 2,200 L/s

- December to April: 1,600 L/s
- Minimum flow for 2nd supplementary allocation block of 500 L/s:
 - May to November: 2,700 L/s
 - December to April: 2,100 L/s

Most submitters were in support of the proposed supplementary allocation minimum flow and block sizes. One submitter requested specification of the dates to which the supplementary minimum flows apply.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 6 | <i>Schedule 2B – Supplementary allocation regime</i> | 10 | 43 - 44 | 15, 16, 43, 47, 50, 54, 56, 65, 68, 70, 76, 77, 102, 104, 106 |

2.4.1. Recommendations

- a) Retain the proposed supplementary allocation blocks as notified.
- b) Retain the proposed supplementary allocation block minimum flows for the period December to October as notified.
- c) Retain the proposed supplementary allocation block minimum flows for the period May to November as notified.
- d) Clarify the dates in Schedule 2B of the Water Plan to which the supplementary minimum flows apply, as follows:
 - 1 May to 30 November: 2200
 - 1 December to 30 April: 1600
 - 1 May to 30 November: 2700
 - 1 December to 30 April: 2100

2.4.2. Reasons

2.4.2.1 Proposed supplementary allocation regime

No requests have been received from submitters to amend the proposed minimum flows for the first and second supplementary allocation.

The minimum flows that apply to supplementary allocation takes ensure that any taking from within supplementary allocation does not reduce the availability of water for primary allocation consent holders.

2.4.2.2 Providing more clarity

Specifying the start and end dates of the minimum flow periods for supplementary allocation in Schedule 2B of the Water Plan will provide more clarity and certainty for Water Plan users.

2.4.3. Further evaluation under RMA s32AA

The Hearing Committee considered that it is not necessary to undertake a further evaluation under RMA s32AA for the recommended amendment to the start and end dates of the minimum flow periods for supplementary allocation. This recommended amendment only serves to provide plan users with more clarity and does not materially alter the Plan Change as notified.

2.5. Flow monitoring site

As notified, the Plan Change proposes minimum flows for primary and supplementary allocation for the Lindis Catchment as measured at the Ardgour Road Flow Monitoring Site. This flow monitoring site is situated at E 1314224 N 5023403 (NZTM).

The Ardgour Road Flow Monitoring Site is referred to as *Ardgour Road (MS17)* in the proposed new Schedules 2A and 2B and is shown as “Lindis at Ardgour Road – MS17” on proposed new Map B7, to be included in the B-series of the Water Plan Maps.

Those submitting on the proposed flow monitoring site were all in support of its location.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|---|--|--|---|
| 15 | <i>Schedule 2A and 2B – Monitoring site</i> | 10 | 45 | 46, 56, 102 |

2.5.1. Recommendation

Retain the Ardgour Road Flow Monitoring Site, shown as MS17 on proposed new Map B7, as the monitoring site for the minimum flows for primary and supplementary allocation, as notified.

2.5.2. Reason

2.5.2.1 Submitter support for the proposed flow monitoring site

No requests have been received from submitters to amend the proposal to set the minimum flow monitoring site located at E 1314224 N 5023403 (NZTM).

2.6. Mapping of the Lindis Catchment

The B-series of the Water Plan Maps shows the boundaries of catchments within which consented water takes will be subject to the minimum flows and allocation limits set in Water Plan Schedule 2A and 2B.

As notified, the Plan Change proposes in the B-series of the Water Plan Maps new Maps B4 and B7 showing the boundaries of the Lindis Catchment and adds the Lindis Catchment to Rule 12.1.4.4.

Some submitters supported the mapping of the Lindis Catchment as shown on the new B-series Maps. Others have opposed the proposed catchment boundaries and have asked they be amended.

Requests relating to this matter were:

- Retain the proposed boundaries of the Lindis Catchment as shown on Maps B4 and B7.
- Remove the reference to the proposed new B-series Maps of the Lindis Catchment in Rule 12.1.4.4.
- Amend the boundaries of the Lindis Catchment shown on proposed new Maps B4 and B7 to include the Tarras Creek area.
- Amend the boundaries of the Lindis Catchment shown on proposed new Maps B4 and B7 to include the true geographic area of the catchment.
- Map Tarras Creek as a separate area within the Lindis Catchment and include new plan provisions to exclude water permit holders in the Tarras Creek area from the minimum flow for the Lindis River.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--------------------------------|--|--|--|
| 36 | <i>Rule 12.1.4 and mapping</i> | <i>6 - 7, Map B4, Map B7</i> | <i>45 - 49</i> | <i>22, 30, 32, 33, 39, 42, 45, 47, 50, 52 – 54, 56 -61, 69, 70, 73, 74, 76, 79, 80, 102 – 104, 106</i> |

2.6.1. Recommendations

- a) Retain the boundaries of the Lindis Catchment, shown on proposed new Maps B4 and B7 of the Water Plan Maps, as notified.
- b) Retain the reference to the proposed new B-series Maps of the Lindis Catchment in Rule 12.1.4.4 as notified.

2.6.2. Reasons

2.6.2.1 *Hydraulic connection between Tarras Creek and the Lindis River*

No evidence has been submitted or presented during the hearing that identifies a hydraulic connection between Tarras Creek and the Lindis River or the Lindis Alluvial Ribbon Aquifer.

2.6.2.2 *Providing for existing out-of-catchment uses*

Consent holders who take water from the Lindis River and use it outside the catchment boundaries shown on the B-series Maps retain their primary allocation status and can apply for replacement consent under Rule 12.1.5 (Discretionary activity).

The Water Plan allows for the reduction of over-allocation to be considered when processing applications for replacement consents to take water from fully allocated resources under both rules 12.1.4.4 and 12.1.5.

2.6.2.3 *Removing the reference to the Lindis Catchment from Rule 12.1.4.4*

The addition of the reference to the Lindis Catchment to Rule 2.1.4.4 is a fundamental part of the Plan Change. Removing the references to the Lindis Catchment would cause all resource consent applications to become a fully discretionary activity under Rule 12.1.5, regardless of whether the water is used inside or outside the boundaries of the Lindis Catchment. Rule 12.1.4.4 relates activity to the minimum flows and primary allocation limit set in Schedule 2A for the Lindis Catchment.

3. Management regime for the groundwater resources of the Lindis Catchment

This chapter addresses submitter requests relating to the management of the Lindis Alluvial Ribbon Aquifer.

3.1. Management of groundwater takes from the Lindis Alluvial Ribbon Aquifer

The Lindis Alluvial Ribbon Aquifer is currently included in Schedule 2C of the Water Plan. Under Policy 6.4.1A of the Water Plan, water takes from this aquifer are managed as surface water takes from the Lindis River.

As notified, the Plan Change proposes to retain the reference to the Lindis Alluvial Ribbon Aquifer in Schedule 2C.

All submitters were in support of retaining the reference to the Lindis Alluvial Ribbon Aquifer in Schedule 2C of the Water Plan.

For detail of the submissions received or hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|---|--|--|---|
| 37 | <i>Schedule 2C – Lindis Alluvial Ribbon Aquifer</i> | 12 | 50 | 46, 50, 54, 56, 76, 106 |

3.1.1. Recommendation

Retain the reference to the Lindis Alluvial Ribbon Aquifer in Schedule 2C of the Water Plan as notified.

3.1.2. Reason

3.1.2.1 *Recognising the connection between water bodies*

The *Bendigo and Tarras Groundwater Allocation Study* undertaken by ORC (2010) shows that the Lindis Alluvial Ribbon is closely connected to the Lindis River and that takes from within this aquifer have a cumulative impact on surface flows in the river. By retaining the reference to the Lindis Alluvial Ribbon Aquifer in Schedule 2C of the Water Plan, groundwater takes from this aquifer can be managed as surface water takes.

This provides for an effective and equitable approach to the management of natural resources whereby all surface and ground water takes that have an impact on surface flows on the Lindis River are subject to the same minimum flow and allocation regime.

3.2. Mapping of the Lindis Alluvial Ribbon Aquifer

Groundwater takes from the Lindis Alluvial Ribbon Aquifer located upstream from the SH8 bridge are currently managed as surface water takes through the inclusion of this aquifer in Schedule 2C. Groundwater takes downstream from the SH8 bridge are excluded from the water management regime that applies to the Lindis Alluvial Ribbon Aquifer.

As notified, the Plan Change extends the boundaries of the Lindis Alluvial Ribbon Aquifer as shown in the C-series of the Water Plan Maps to include the Lower Lindis Alluvial Fan Zone located between the edge of the Ardgour Valley at the SH8 bridge and the Clutha River/Mata-Au.

A small number of submitters have commented on the proposal to extend the boundaries of the Lindis Alluvial Fan Zone. Specific requests relating to this matter were:

- Retain the mapped extent of Lindis Alluvial Ribbon Aquifer as proposed to ensure the health of the river and continuity with the minimum flow.
- Adopt the original extent of Lindis Alluvial Ribbon Aquifer as currently shown in C-series of the Water Plan Maps.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 22 | <i>Map C-series: C5, C6 – Lindis Alluvial Ribbon Aquifer</i> | <i>Map C5, Map C6</i> | 53 | 47, 56, 57, 102 |

3.2.1. Recommendation

Retain the proposed boundaries of the Lindis Alluvial Ribbon Aquifer, shown on Maps C5 and C6 of Proposed Plan Change 5A (Lindis: Integrated water management), as notified.

3.2.2. Reason

3.2.2.1 *Recognising the stream depletion effects*

The *Bendigo and Tarras Groundwater Allocation Study* (ORC, 2010) and evidence provided during the hearing show that bores located in the Lower Lindis Alluvial Fan Zone, close to the Lindis River downstream of the SH8 bridge, can affect surface flows in the river. Including the Lower Lindis Alluvial Fan Zone within the mapped extent of the Lindis Alluvial Ribbon Aquifer will minimise the effects of bores located in this zone on surface flows in the Lindis River downstream of the SH8 bridge.

Extending the boundary of the Lindis Alluvial Ribbon Aquifer in the C-series of the Water Plan Maps into the Lower Lindis Alluvial Fan Zone is necessary to ensure an effective and equitable approach to the management of surface flows in the Lindis River.

4. Management regime for the groundwater resources of the Bendigo-Tarras Basin

This chapter addresses submitter requests relating to the management of the Bendigo, Lower Tarras and Ardour Valley Aquifers.

4.1. Maximum allocation limits for the Bendigo, Lower Tarras and Ardour Valley Aquifers

Currently, there are no maximum allocation limits set for the Lower Tarras, Bendigo or Ardour Valley Aquifers in Schedule 4A of the Water Plan. When no limit is set in Schedule 4A, the maximum allocation limit is determined as 50% of the mean annual recharge (MAR) of the aquifer.

As notified, the Plan Change proposes to include the following maximum allocation limits for the Ardour Valley, Bendigo and Lower Tarras Aquifers in Schedule 4A of the Water Plan:

| | |
|------------------------|---------------------------|
| Ardour Valley Aquifer: | 0.19 Mm ³ /yr |
| Bendigo Aquifer: | 29.00 Mm ³ /yr |
| Lower Tarras Aquifer: | 18.80 Mm ³ /yr |

All submitters on this matter are in support of the proposed maximum allocation limits for the Lower Tarras, Bendigo and Ardour Valley Aquifers in Schedule 4A of the Water Plan.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|---|--|--|---|
| 37 | <i>Schedule 4A –Maximum Allocation Limits</i> | 12 | 50 | 43, 50, 54, 76, 106 |

4.1.1. Recommendation

Retain the proposed maximum allocation limits for the Lower Tarras, Bendigo and Ardour Valley Aquifers, shown in Schedule 4A of the Water Plan, as notified.

4.1.2. Reason

4.1.2.1 Providing for the sustainable management of groundwater

The maximum allocation limits proposed for the Lower Tarras, Bendigo and Ardgour Valley Aquifers have been determined while considering all the relevant matters listed in Schedule 4C.1 of the Water Plan.

The findings from scientific investigations into the aquifers' hydraulic properties, their recharge sources and outflows were taken into account when setting maximum allocation limits for aquifers. This will ensure that adverse effects from groundwater taking on the aquifer, the Clutha River/Mata-Au and Lake Dunstan are avoided.

The proposed maximum allocation limits for the Lower Tarras, Bendigo and Ardgour Valley Aquifers assist with reducing the over-allocation from the Lindis River. The proposed maximum allocation limits enable the Bendigo and Lower Tarras to be used as an alternative and more reliable water source for some irrigators that currently take water from the Lindis River.

4.2. Restrictions on groundwater takes from the Bendigo and Lower Tarras Aquifers

As notified, the Plan Change proposes to include restrictions for irrigation takes between 1 May and 31 August from the Bendigo and Lower Tarras Aquifers in Schedule 4B.2 of the Water Plan:

Various submitters have commented on this matter. Requests relating to this matter were:

- Retain the proposed restrictions on groundwater takes for irrigation from the Bendigo and Lower Tarras Aquifers between 1 May and 31 August to provide a higher degree of protection for existing hydro-electricity generation operations on main stem of the Clutha River/Mata-Au.
- Remove the proposed restriction on irrigation takes from the Lower Tarras and Bendigo Aquifers.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 38 | <i>Schedule 4B.2 – Restrictions on Groundwater Takes</i> | 12 | 51 - 53 | 47, 54, 56, 57, 76, 102, 103, 105, 106, |

4.2.1. Recommendation

Remove the proposed restriction on irrigation takes from the Lower Tarras and Bendigo Aquifers from Schedule 4B.2 of the Water Plan.

4.2.2. Reasons

4.2.2.1 *No evidential basis for setting a blanket take restriction*

The Hearing Committee considered the requirement to give effect to the provisions of the National Policy Statement for Renewable Energy Generation 2011 (NPSREG). However, no evidence was provided through the submission or hearing process that the taking of water for irrigation purposes from the Bendigo and Lower Tarras Aquifers between 1 May and 31 August is currently compromising the viability of existing hydro-electricity generation operations. Therefore, the Hearing Committee considered that it is not appropriate to set a blanket restriction on the taking of groundwater for irrigation from the Bendigo and Lower Tarras Aquifers during winter to protect existing hydro-electricity generation operations.

4.2.2.2 *Assessing the need for take restrictions on a case-by-case basis*

The resource consent process allows for the assessment on a case-by-case basis of the impacts of groundwater takes from the Bendigo and Lower Tarras Aquifers on surface flows in the Clutha River/Mata-Au and the viability of existing hydro-electricity generation schemes on the river's main stem.

4.2.3. Further evaluation under RMA s32AA

This part of the report provides an evaluation under RMA s32AA of the recommended amendment to remove the proposed restriction on irrigation takes from the Lower Tarras and Bendigo Aquifers from Water Plan Schedule 4B.2.

4.2.3.1 *Benefits and costs of alternative options*

The Hearing Committee has evaluated the benefits and costs of the different options for managing the potential impacts of groundwater takes on hydro-electricity generation operations on the main stem of the Clutha River/Mata-Au (Table 8).

Table 8: Costs and benefits of different options for managing the impacts of groundwater takes on hydro-electricity generation operations.

| Options for managing groundwater takes | Economic | Social | Environmental & Cultural |
|---|---|--|--------------------------|
| Set restrictions on irrigation takes from the Lower Tarras and Bendigo Aquifers in Schedule 4B.2. | <ul style="list-style-type: none"> • Safeguards hydro electricity generation. • May restrict irrigation takes from the Bendigo and Lower Tarras Aquifers that do not have a stream depletion effect on the Clutha River/Mata-Au. • Does not maximise opportunities for diverse economic uses. | Does not maximise the well-being of the local farming community. | Limited impact. |
| Remove take restrictions on irrigation takes from the Lower Tarras and Bendigo Aquifers from Schedule 4B.2. | <ul style="list-style-type: none"> • Hydro electricity generation safeguarded through conditions on groundwater take consents, where appropriate • Avoids undue restrictions on irrigation takes from the Bendigo and Lower Tarras Aquifers that do not have a stream depletion effect on the Clutha River/Mata-Au. • Maximises opportunities for diverse economic uses. | Creates better opportunities to improve the well-being of the local community. | |

4.2.3.2 Effectiveness and Efficiency

The hearing committee evaluated the different options for managing the potential impacts of irrigation takes from the Lower Tarras and Bendigo Aquifers on existing hydro-electricity generation operations on the main stem of the Clutha River/Mata-Au in terms of their effectiveness in achieving the relevant objectives of the Water Plan (Table 9).

Table 9: Effectiveness of different options for managing impacts of groundwater takes on hydro-electricity generation in achieving the relevant Water Plan objectives.

| Options for managing the impacts of groundwater takes on hydro-electricity generation | Effectiveness in achieving relevant objectives |
|--|--|
| Set groundwater take restrictions in Schedule 4B.2 | Medium: Does not fully achieve Objectives 6.3.2, 6.3.3 and 6.3.4. |
| Remove the restriction on irrigation takes from Schedule 4B.2 (impose resource consents conditions on groundwater takes where appropriate) | High: Does not fully achieve Objectives 6.3.2, 6.3.3 and 6.3.4. |

The recommended amendment to remove from Schedule 4B.2 of the Water Plan the proposed restriction on water takes for irrigation from the Lower Tarras and Bendigo Aquifers provides for the wellbeing of the local farming community. Any adverse effect of these takes on surface flows in the Clutha River/Mata-Au or on the operational requirements of hydro-electricity generation can be addressed through the water permit consent process.

The benefits of removing the proposed restriction on irrigation takes from the Lower Tarras and Bendigo Aquifers from Schedule 4B.2 of the Water Plan are considered to outweigh any risks in terms of the ongoing viability of existing hydro-electricity generation on the Clutha River/Mata-Au. The recommended approach is therefore effective and efficient.

4.2.3.3 Summary

It is the Hearing Committee's view that the recommended amendment to remove the restrictions on groundwater takes from the Lower Tarras and Bendigo Aquifers proposed by the notified Plan Change is the most appropriate means of achieving the purpose of the RMA and the objectives of the Water Plan.

4.3. Mapping of the Bendigo, Lower Tarras and Ardgour Valley Aquifers

As notified, the Plan Change proposes to include new maps for the Bendigo, Lower Tarras and Ardgour Valley Aquifers in the C-series of the Water Plan Maps.

All submissions on this matter support the proposed boundaries of the Bendigo, Lower Tarras and Ardgour Valley Aquifers shown on new Maps C5 and C6 of the Water Plan Maps.

For detail of the submissions received or hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|---|--|--|---|
| 22 | <i>Map C-series: C5, C6 – Ardgour Valley, Bendigo and Tarras Aquifers</i> | <i>Map C5, Map C6</i> | 53 | 56, 102 |

4.3.1. Recommendation

Retain the proposed boundaries for the Lower Tarras, Bendigo and Ardgour Valley Aquifers, shown on Maps C5 and C6 of the Plan Change as notified.

4.3.2. Reason

4.3.2.1 *No challenge to the aquifer boundaries*

The proposed boundaries of the Lower Tarras, Bendigo and Ardgour Valley Aquifers were delineated following extensive scientific research and submitters supported the proposed boundaries.

5. Implementation matters

This chapter makes recommendations on matters relating to the implementation of the proposed minimum flow, allocation limits and groundwater restrictions.

5.1. Providing for a reasonable transition timeframe

The Plan Change becomes fully operative after ORC has adopted the recommendations, notifies the decisions on the Plan Change and any court appeals have been resolved.

Policy 6.4.5 of the Water Plan provides direction as to when minimum flows are to be applied.

Various submitters have commented on the implementation timelines and the transition timeframe. Requests relating to these matters were:

- Implement the minimum flow regime as proposed.
- Extend the transition timeframe for existing water takes from the Lindis River to 2025, 2026, or 31 December 2030.
- Extend the transition timeframe by at least 5 years for consent holders that have recently upgraded their irrigation infrastructure or that have recently undergone a process of family succession.
- Implement the minimum flow no sooner than 5 years after the commencement of the replacement resource consents for deemed permits.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 2 | <i>General Opposition</i> | 2-4 | 4-8 | 22, 28, 30 – 33, 39, 42, 45 – 47, 52, 53, 55 – 61, 68 – 70, 72 – 74, 76, 79, 80, 103, 106 |
| 5 | <i>Policy 6.4.5, including transition timeframes</i> | 2-4 | 54-61 | |

5.1.1. Recommendation

Retain the timeframe for implementing the minimum flow for primary and supplementary allocations as notified in the Plan Change.

5.1.2. Reasons

5.1.2.1 *Achieving the purpose and principles of the RMA*

When the RMA came into effect in 1991, s413 stated that deemed permits were to expire on 1 October 2021. Deemed permit holders were given a thirty-year timeframe to apply for replacement consents to continue the activity to which the permit relates before expiry on 1 October 2021. Resource consents that replace deemed permits must achieve the purpose of the RMA as set out in Part 2 of the Act.

The Hearing Committee considered that the requirement to set minimum flows and allocation limits for the Lindis River has been signalled on a number of occasions:

- The Water Plan, which became operative in 2004, directs ORC to set allocation limits and minimum flows that will provide for the life-supporting capacity and natural character of streams.
- In July 2008, ORC published the *Management Flows for Aquatic Ecosystems in the Lindis River* Report which includes recommendations for setting a minimum flow at the Ardour Road Flow Monitoring Site.
- Between February 2009 and April 2015 ORC organised 6 workshops for the local community and interested community groups as part of preparing the Plan Change.

5.1.2.2 *Applying a fair and equitable approach*

The use of water for irrigation and economic purposes is an important consideration in determining the appropriateness of implementation timeframes, but should not override the statutory obligation to consider the river's intrinsic values, its ecosystem values or the interests of other stakeholders.

Having a minimum flow restriction that applies to all consent holders is critical in ensuring that the minimum flow safeguards the life-supporting capacity of the river during periods of low flow and that other important values are protected. Extending the transition timeframes for some consent holders could compromise the effectiveness of a minimum flow.

5.2. Transitioning from deemed permits to RMA consents

The Plan Change does not prescribe the implementation process for making the transition from deemed permits to RMA resource consents.

Various submitters requested that ORC provide more assistance with the transition process from deemed permits to RMA granted water permits that will be subject to the minimum flow. Some submitters requested this be done through the addition of new

consent streamlining provisions to the Water Plan. Others have requested more assistance through non-statutory processes.

Requests relating to this matter were:

- Adopt a clear planning framework and enabling provisions to facilitate the transitioning process from deemed permits to RMA consents.
- Adopt a new policy that residual flows will be considered for consents to take water from the tributaries, but not for takes from the main stem of the Lindis River.
- Adopt new controlled activity rules for the taking of surface water from the main stem of the Lindis River and its tributaries where that water was previously taken with a water permit.
- Put in place a proactive management approach and processes to facilitate the transition from deemed permits to RMA consents

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 5 | <i>Policy 6.4.5, including transition timeframes</i> | 2-4 | 54 - 61 | 28, 47, 56, 57, 72, 80, 102, 103, 106 |

5.2.1. Recommendations

Make no amendment to the Plan Change to include in the Water Plan:

- a) New provisions to facilitate the transitioning process from deemed permits to RMA consents.
- b) A new policy that residual flows will be considered for consents to take water from the tributaries, but not for takes from the main stem of the Lindis River.
- c) New controlled activity rules for the taking of surface water from the main stem of the Lindis River and its tributaries where that water was previously taken with a water permit.

5.2.2. Reasons

5.2.2.1 *Transitioning from deemed permits to RMA consents*

The Water Plan currently contains provisions applicable to all of Otago's catchments for the transitioning from deemed permits to RMA consents.

5.2.2.2 Support services

The Water Plan contains provisions in Policy 6.6.3 and Method 15.7.1.1 that enable the development and implementation of non-statutory strategies and support services to facilitate the orderly transition from deemed permits to resource consents that are subject to a minimum flow.

5.2.2.3 Amending the residual flow provisions in the operative Water Plan

There is no need to amend the policy framework for the setting of residual flows. The explanation to Policy 6.4.7 of the Water Plan states that residual flows are to be applied in the following circumstances:

- Where water is taken for community supply purposes; or
- Where water is taken from a tributary stream that has different flow characteristics from the main stem of the river.

5.2.2.4 Provide for the renewal of deemed permits as a controlled activity

Controlled activities require a resource consent which must be granted by the Council, who can only apply conditions to that consent on matters that are specified in the relevant rule.

Objective B2 of the NPSFM requires ORC to avoid any further over-allocation and phase out existing over-allocation. The operative Water Plan contains a number of provisions that seek to reduce over-allocation. These provisions are:

- Policy 6.4.0A: promoting the efficient use of water.
- Policy 6.4.0C: promoting, where practicable, the use of alternative water source.
- Policy 6.4.2: avoiding the reallocation of primary allocation from expired, lapsed or surrendered consents or unused consents that have been cancelled under Policy 6.4.18.
- Policy 6.4.2A: limiting the quantity of water allocated in a replacement consents to that what has been taken in the past.
- Policy 6.4.2AA: granting new consents to take water as supplementary allocation where water has been taken historically above the minimum flow.
- Policy 6.6.2: promoting water storage.

A new controlled activity rule in the Water Plan for the renewal of deemed permits and existing resource consents does not give effect to NPSFM Objective B2 and is inconsistent with the policy framework of the Water Plan, which aims to reduce over-allocation.

5.3. Other implementation requests

As notified, the Plan Change proposes to set allocation limits and environmental flows for the Lindis Catchment and the Bendigo-Tarras Basin, but does not address other aspects of the management of these freshwater resources.

A number of submitters have asked for ORC to amend the Plan Change in order to:

- Enable unique and innovative solutions to river management.
- Enable opportunities to move takes and apply innovation and new technology.
- Include provisions that interlink the minimum flow with the primary allocation.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 2 | <i>General Opposition</i> | 2-4 | 4 - 8 | 31, 33, 53, 56, 80 |
| 5 | <i>Policy 6.4.5, including transition timeframes</i> | 2-4 | 54 - 61 | |

5.3.1. Recommendations

Make no amendment to the Plan Change to include new provisions in the Water Plan that:

- a) Enable innovative solutions for the management of the Lindis River.
- b) Enable the shifting of takes and use of new technology.
- c) Interlink the minimum flow with the primary allocation.

5.3.2. Reasons

5.3.2.1 *Enabling innovation, technology and the shifting of water takes*

The transition timeframe provided under Policy 6.4.5 gives irrigators an opportunity to investigate and give effect to alternative river management activities and other management options, such as:

- The formation of a water management group or alternative arrangements for the shared taking and use of water;
- The use of efficient irrigation, water distribution, and intake infrastructure;
- The use of alternative water sources; and
- The establishment of water storage.

It is not appropriate to amend the Plan Change to enable these activities. The Water Plan allows for some river management activities to be undertaken as a permitted activity where there is minimal risk to the natural environment or existing lawful uses.

The use of innovative and holistic management approaches does not relieve ORC from its duty to give effect to the NPSFM objectives. These measures may complement, but should not substitute the setting of a minimum flow and allocation limit for the Lindis River.

5.3.2.2 *Linking the minimum flow with the primary allocation*

Water Plan Schedules 2D.1 and 2D.2 list all relevant matters that need to be considered when setting minimum flows and allocation limits. These schedules require that the relationship between a minimum flow and the primary allocation limit is considered when they are being set. Amending the Water Plan to provide greater direction is not necessary.

6. Other plan change matters

This chapter makes recommendations on the matters not dealt with elsewhere in this report.

6.1. Minor and consequential amendments

As notified, the Plan Change proposes a number of minor and consequential changes, including changes to the Water Plan's table of contents, page numbering, and headers and footers.

A number of submitters have requested that any minor or consequential amendments arising from their requests be given effect to.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|---|--|--|---|
| 26 | <i>Minor and consequential amendments</i> | 13. | 63 | 50, 65, 70, 76, 77, 106 |

6.1.1. Recommendations

Make any minor and consequential amendments necessary to give effect to the Plan Change.

6.1.2. Reason

Clause 10(2) of Schedule 1 RMA provides for any necessary consequential alterations.

7. Matters beyond the scope

The Hearing Committee can recommend amendments to the Plan Change to address requests proposed in the submissions as long as any amendment does not go beyond what is reasonably and fairly raised in submissions.

This chapter makes recommendations on all matters that are considered beyond the scope of Proposed Plan Change 5A (Lindis: Integrated water management).

7.1. Transitional matters

Submitters requested new provisions be added to the Water Plan to ease the transition from deemed permits. Some requests were considered beyond the scope.

Requests for the inclusion of transitional provisions in the Water Plan that are considered beyond the scope of the Plan Change were:

- Adding a new policy to the Water Plan that directs consent authorities to consider the positive environmental impacts resulting from the disestablishment of the existing water races.
- Adding a new policy to the Water Plan that prescribes the conditions a consent authority will impose on a resource consent to take surface water in the Lindis Catchment area if the take is managed by a water management group.
- Adding a new controlled activity rule to the Water Plan for the transfer of primary allocation takes, applied for prior to 28 February 1998, from the Lindis Catchment to the Clutha River/Mata-Au or its connected aquifers.
- Adding a new issue, objective and rule to the Water Plan that provide for the channel management works to take place.

For detail of the submissions received and hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 2 | <i>Overall approach – general opposition</i> | <i>N.A.</i> | <i>4 - 8</i> | <i>56</i> |
| 5 | <i>Policy 6.4.5, including implementation</i> | <i>N.A.</i> | <i>60</i> | |
| 33 | <i>Matters beyond the scope of the Plan Change</i> | <i>N.A.</i> | <i>65</i> | |

7.1.1. Recommendations

Make no amendment to the Plan Change in order to address requests for transitional provisions that are beyond the scope of the Plan Change.

7.1.2. Reasons

7.1.2.1 Positive impacts from the disestablishment of existing water races

The request to include a new policy in the Water Plan that requires ORC to consider the positive impacts from the disestablishment of existing water races does not directly respond to the Plan Change. The request goes beyond the submitter's original submission. There is a risk that persons potentially affected by the requested amendment have not had a chance to respond to the proposed new provisions.

7.1.2.2 Flexibility for consented takes held by water management groups

The request to include a new policy in the Water Plan that prescribes the conditions a consent authority can impose on one or more water permits held by a water management group does not directly respond to the Plan Change. The request goes beyond the submitter's original submission. There is a risk that persons potentially affected by the requested amendment have not had a chance to respond to the proposed new policy.

7.1.2.3 Transfer of water takes from the Lindis Catchment to the Clutha River/Mata-Au

The request to include a new controlled activity rule in the Water Plan to enable the transfer of primary allocation takes from the Lindis Catchment to the Clutha River/Mata-Au Catchment area or any alternative source aquifer, extends beyond the geographical scope of the Plan Change. There is a risk that persons potentially affected by the proposal have not had a chance to respond to the proposed new rule.

7.1.2.4 Providing for channel management works

The request to amend the Water Plan to include a new issue, objective and rule that provides for channel management works is outside the scope of the Plan Change. The requested new rule applies to any river in Otago. There is a risk that persons potentially affected by the requested amendment have not had a chance to respond to the proposed new provisions.

7.2. Other requests

A number of other matters that were raised during the submissions and hearing process that are considered to be beyond the scope of the Plan Change include:

- Add “birddiv” to the list of values of the Central Otago sub region included in Schedule 1A: Natural Values of the Water Plan.
- Publicly notify water allocation information for the Lindis River and associated aquifers.
- Enforce the minimum flow.
- Restrict the granting of new consents to take water from Church Creek in order to protect wildlife and existing stock water takes.
- Include a new non-complying activity rule for groundwater takes from a Schedule 2C Aquifer that may not be connected to the Lindis River.
- Include a new local and central government policy to streamline the process to access an alternative source of water.

For detail of the submissions received or hearing evidence presented relating to this matter, refer to:

| <i>Provision Code</i> | <i>Provision</i> | <i>Page(s) of Proposed Plan Change</i> | <i>Page(s) of Summary of Decisions Requested</i> | <i>Submitter and Further Submitter no</i> |
|-----------------------|--|--|--|---|
| 5 | <i>Policy 6.4.5, including implementation</i> | <i>N.A.</i> | 60 | 20, 23, 38, 54, 76, 80, 103, 106 |
| 33 | <i>Matters beyond the scope of the Plan Change</i> | <i>N.A.</i> | 65 | |

7.2.1. Recommendations

Make no amendment to the Plan Change in order to:

- a) Add “birddiv” to the list of values of the Central Otago sub-region included in Schedule 1A: Natural Values of the Water Plan.
- b) Publicly notify water allocation information for the Lindis River and associated aquifers.
- c) Enforce the minimum flow.
- d) Restrict the granting of new consents to take water from Church Creek in order to protect wildlife and existing stock water takes.

- e) Include a new non-complying activity rule in the Water Plan for groundwater takes from a Schedule 2C Aquifer that may not be connected to the Lindis River.
- f) Include in the Water Plan a new local and central government policy to streamline the process to access an alternative source of water.

7.2.2. Reasons

7.2.2.1 Updating Water Plan Schedule 1A: Natural Values

As notified, the Plan Change does not seek to change Schedule 1A: Natural Values of the Water Plan. Amending Schedule 1A would require a new plan change to ensure that the persons that are potentially affected by these matters are consulted, notified and heard.

7.2.2.2 Providing transparency around allocation information

The Plan Change does not address the provision of water allocation information.

7.2.2.3 Enforce the minimum flow

Compliance and enforcement strategies are not included in the Water Plan. It is not appropriate to make recommendations on enforcement and compliance matters through this plan change process.

7.2.2.4 New consented water takes from Church Creek

The Plan Change does not address the taking of surface water from water bodies outside of the Lindis Catchment area. There is a risk that persons potentially affected by the requested amendment may not have had a chance to respond.

7.2.2.5 Non-complying activity status for groundwater takes from a Schedule 2C aquifer that may not be directly connected to the Lindis River

As notified, the Plan Change did not address changes to the activity status for groundwater takes. There is a risk that persons potentially affected by the requested amendment may not have had a chance to respond.

7.2.2.6 Enabling local and central government policies to streamline the process to access an alternative source

The Plan Change is not able to impose legal obligations on government bodies or to change private property rights.

Reference material

Resource Management Act 1991

National Policy Statement for Freshwater Management 2014

National Policy Statement for Renewable Energy Generation 2011

Regional Policy Statement for Otago

Proposed Regional Policy Statement for Otago

Regional Plan: Water for Otago (updated to 1 March 2016)

Ngāi Tahu Claims Settlement Act 1998

Kai Tahu Ki Otago Natural Resource Management Plan 2005

Reports to ORC committees:

2010/1776: Bendigo-Tarras Allocation Study

2014/764: Consultation Draft Proposed Plan Change 5A (Lindis: Integrated water management)

Technical reports:

“Bendigo and Tarras Allocation Study”, ORC, December 2010

“Economic impacts of minimum flow regimes on the Lindis River”, BERL Economics, 2015

“Lindis Catchment: Hydrological analysis to support an economic assessment of the potential impact of a minimum flow regime for the Lindis River”, OPUS International Consultants, 2015

“Lindis Catchment Water Resource Study”, ORC, June 2014

“Management Flow for Aquatic Ecosystems in the Lindis River”, ORC, July 2008

“Review of the science supporting the proposed minimum flow regime for the Lindis River”, NIWA, December 2014

“Water quality in the Lindis River catchment 2015” ORC, January 2016

“Update of scientific work in the Lindis catchment: 2008-2015” ORC, January 2016

“2015/16 Flow losses” file note, ORC, February 2016

Hearing evidence, submissions, further submissions, additional information and legal opinions provided to the Hearing Committee:

Submissions, further submissions, expert evidence and hearing evidence, additional information and legal opinions from experts and submitters.

Lindis Catchment / ORC workshop materials:

“Information Sheet: Lindis Catchment and Bendigo-Tarras Basin”, ORC, June 2015

Workshop 1, 19 Feb 2009:

“Key themes from small group discussion”

“Minutes”

“Presentation”

Workshop 2, 11 May 2010:

“Comments and feedback”

“Flow matrix assessment”

Workshop 3, 22 Mar 2011

“Presentation 1”

“Presentation 2: Groundwater”

Workshop 4, 30 Nov 2011

“Feedback”

“Presentation”

“Regime Handout”

Workshop 5: 1 April 2014

“Key themes”

“Presentation”

Workshop 6: 1 April 2015

“Key themes”

“Presentation”

Other material:

“Guide to Preparing a resource consent application to take surface water, including replacing a deemed permit”, ORC, August 2015.

“Towards Better Tourism Outcomes for Central Otago 2014-2019 – A community owned strategy”, Central Otago District Council, 2013.

“Otago Economic Overview”, BERL, 2012

“Central Otago Outdoor Recreation Strategy 2012-2022 – A community owned strategy”, Central Otago District Council, 2012.

All reference material, including submissions, further submissions, expert evidence and hearing evidence, additional information and legal opinions, is available online www.orc.govt.nz.

Appendix 1: Index of submitters and further submitters

| <i>Submitter Number</i> | <i>Surname, First Name or Organisation</i> |
|-------------------------|---|
| 1 | Lambie, Bruce |
| 2 | Otago Natural History Trust – Alyth Grant |
| 3 | McKendry, Russell |
| 4 | Seward, Tania |
| 5 | Highton, John |
| 6 | van Noorden, Hugh |
| 7 | Sayers, Peter |
| 8 | Finlayson, Jan |
| 9 | Otago Anglers' Association - Casey Cravens |
| 10 | McManus, Gordon |
| 11 | Rose, Christine |
| 12 | Smith, Quentin |
| 13 | Parker, James |
| 14 | Batchelor, John |
| 15 | Lawton, Ella |
| 16 | Mauchline, Johnny |
| 17 | Sidey, Richard |
| 18 | Young, Aliscia |
| 19 | Barnes, David - Backcountry Matters |
| 20 | Peddle, Doug |
| 21 | Whitehead, Esther |
| 22 | Rutherford, Alastair - The Point Partnership |
| 23 | Wilcox, Duncan |
| 24 | Cole, Ian |
| 25 | Lawton, Maggie - Future by Design Ltd |
| 26 | Clutha Mata-Au River Parkway Group - Lewis: Verduyn-Cassels |
| 27 | Scoles, Stephen - Claas Harvest Centre Otago |
| 28 | Telford, Gerald |
| 29 | McElrae, Kent |
| 30 | McElrae, Rebecca |
| 31 | Perriam, John - Bendigo Station |
| 32 | Spiers, Adam |
| 33 | Davis, John |

| | |
|----|---|
| 34 | <i>Cassells, Jay</i> |
| 35 | <i>Ainsley, Daryl - Ainsley Shearing Ltd</i> |
| 36 | <i>Clutha Sports Fisheries Trust - Horrell, Aaron</i> |
| 37 | <i>Sole, Matthew</i> |
| 38 | <i>Parcell, Phillip - C/O Peter Dymock, Paterson Pitts Group</i> |
| 39 | <i>Rive, Jayne - Cloudy Peak Ltd</i> |
| 40 | <i>Hocks, Fraser - Wakatipu Anglers Club</i> |
| 41 | <i>Lane, Mike - Wakatipu Anglers Club</i> |
| 42 | <i>Lucas, J.C.A - Sand Hills</i> |
| 43 | <i>Upper Clutha Angling Club – Rick Boyd</i> |
| 44 | <i>Lucas, S.J.C. - Timburn Station</i> |
| 45 | <i>Chapman-Cohen, Rebecca & Angus - Lindis Downs Ltd</i> |
| 46 | <i>Jolly, Bruce</i> |
| 47 | <i>Gibson, Robbie & William - Malvern Downs</i> |
| 48 | <i>Barlow, John & Marilyn</i> |
| 49 | <i>James, Gavin</i> |
| 50 | <i>Environmental Defence Society Inc. - Madeleine Cochrane Wright</i> |
| 51 | <i>Wrighton, Bryan</i> |
| 52 | <i>Jolly, Peter William - Kotiti</i> |
| 53 | <i>Davis, Tim - Longacre Station</i> |
| 54 | <i>Fish and Game Council - Peter Wilson</i> |
| 55 | <i>Federated Farmers High Country - Bob Douglas</i> |
| 56 | <i>Lindis Catchment Group Inc. - C/O Sally Dicey, McKeague Consultancy Ltd</i> |
| 57 | <i>Federated Farmers of New Zealand - Kim Reilly</i> |
| 58 | <i>Hayman, Michael & Felicity - Pukemara</i> |
| 59 | <i>Wilson, Justin & Tui</i> |
| 60 | <i>Lucas, Gordon - Nine Mile Pastoral Ltd</i> |
| 61 | <i>Lucas, Lesley - Nine Mile Pastoral Ltd</i> |
| 62 | <i>Wanaka Agricultural Contracting</i> |
| 63 | <i>New Zealand Professional Fishing Guides Association – Craig Smith</i> |
| 64 | <i>Wallace, Donald</i> |
| 65 | <i>Royal Forest and Bird Protection Society of New Zealand Inc. – Sue Maturin</i> |
| 66 | <i>Neilson, J. Murray</i> |
| 67 | <i>Turner, Brian</i> |
| 68 | <i>Central Otago Environmental Society Inc. – D.G. Shattky</i> |
| 69 | <i>Trevathan, Beau - Lindisvale</i> |
| 70 | <i>Department of Conservation - Geoff Deavoll</i> |

| | |
|----|--|
| 71 | <i>McCall, Lynne</i> |
| 72 | <i>McCaughan, Matthew - Geordie Hill Station Ltd</i> |
| 73 | <i>Emmerson, R.S. & J - Forest Range Station</i> |
| 74 | <i>Emmerson, David - Forest Range Station</i> |
| 75 | <i>McKenzie, Gregor</i> |
| 76 | <i>Contact Energy Ltd - Daniel Druce</i> |
| 77 | <i>Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, and Te Rūnanga o Ōtākou (collectively Kāi Tahu) - C/O Tim Vial, KTKO Ltd</i> |
| 78 | <i>Marsh, Wayne & Billee</i> |
| 79 | <i>Cooke, T.J. - C/O Werner Murray, Landpro</i> |
| 80 | <i>Lindis Irrigation Ltd – Bruce Jolly</i> |
| 81 | <i>Cromwell Rod and Gun Club - Allan Campbell</i> |

| <i>Further Submitter Number</i> | <i>Surname, First Name or Organisation</i> |
|---------------------------------|--|
| 101 | <i>Fish and Game Council - Peter Wilson</i> |
| 102 | <i>Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, and Te Rūnanga o Ōtākou (collectively Kāi Tahu) - C/O Tim Vial, KTKO Ltd</i> |
| 103 | <i>Lindis Catchment Group Inc. - C/O Sally Dicey, McKeague Consultancy Ltd</i> |
| 104 | <i>Federated Farmers of New Zealand - Kim Reilly</i> |
| 105 | <i>Contact Energy Ltd - Daniel Druce</i> |
| 106 | <i>Neilson, J. Murray</i> |

Appendix 2: Proposed Plan Change 5A (Lindis: Integrated water management) incorporating hearing committee recommendations on decisions requested