

FROM THE LAKES TO THE SEA

Developing a water quantity plan change for the Clutha River/Mata-Au, Kawarau and Hawea Rivers & Lakes Wakatipu, Wanaka, Hawea, Dunstan and Roxburgh



1. Introduction

This report summarises feedback received from community consultation held in November and December 2017. The purpose of the consultation was to identify important values to inform development of a Plan Change to manage water quantity by setting:

- minimum flows in the Clutha River/Mata-Au, Kawarau and Hawea Rivers;
- lake levels for Lakes Wakatipu, Wanaka, Hawea, Dunstan and Roxburgh; and
- allocation limits for each of these water bodies.

This consultation consisted of a series of drop in sessions in order to:

- Provide information about the scope and purpose of the plan change;
- Identify important community values and uses supported by rivers, aquifers and/or lakes;
- Understand the concerns about the current state of these water bodies and community aspirations about their future management.

The feedback will be considered when developing options for the proposed Plan Change.

This report summarises feedback received from people and organisations during the first stage of public consultation. The feedback was received online, via email, by letter and both verbally and in writing.

2. What we did

Consultation ran from 14 November 2017 to 19 February 2018 and during this time people and relevant organisations were able to provide feedback in a number of different ways.

2.1 Key Stakeholder Session

A key stakeholder session was held at ORC's Dunedin offices on 14 November 2017. This was attended by 13 stakeholders from different agencies and organisations, including Otago Fish and Game Council, Aukaha, Forest and Bird, Department of Consultation, Contact Energy Ltd, Federated Farmers, Ministry for Primary Industries and Wise Response. At the session ORC staff outlined the plan change scope, the process for developing the plan change and opportunities for consultation.

2.2 Community Consultation sessions

Approximately 120 people attended eleven drop-in sessions across the Clutha River/Mata-Au catchment:

2 in Queenstown on 22 November 2017
2 in Cromwell on 27 November 2017
2 in Balclutha on 5 December 2017
2 in Ettrick on 12 February 2018
2 in Wanaka on 23 November 2017
2 in Alexandra 28 November 2017
1 in Roxburgh on 11 December 2017

A short presentation was given at the start of each drop-in session to outline the scope of the plan change and the plan change process. After the presentation, people were able to provide feedback to help ORC identify what people and communities value about these waterbodies, and to share



their concerns and aspirations with regard to their management. The methods for providing feedback included:

- **Feedback forms** Attendees were encouraged to fill in a feedback form and submit it at the drop-in session or return it to ORC before closure of the feedback period.
- Values mapping tool Attendees were asked to record their values and areas of interest on interactive maps displayed at the venue.
- **Dotmocracy** Attendees were invited to identify their value preferences by indicating their level of agreement/disagreement with values statements.

Catchment maps were provided at each drop-in session with information on the location of fish species, hydrology, water takes and other data, while ORC staff were available to discuss any feedback or concerns with attendees.

2.3 Written Feedback

During the consultation period (14 November 2018 to 19 February 2018) people could provide feedback by filling in the feedback forms or by going online on the ORC Website. The webpage contains all consultation materials presented and displayed at the drop-in sessions, and provided people with the following tools for getting involved in the consultation process:

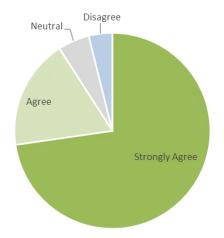
- Online values mapping tool, to record values and areas of interest and submit comments.
- Online/electronic feedback forms, to download or fill in online.

Overall, 83 feedback forms were received, and most of these were received electronically.

3. What we heard: Dotmocracy

Dot-voting or "Dotmocracy" is a facilitation method for collecting and prioritising ideas. People attending the drop-in sessions were invited to indicate their level of agreement or disagreement with seven value statements. This provides a snapshot of what is important to them about these water bodies. Approximately 80 people participated in this activity. The results are shown below.

Statement 1 - A healthy ecosystem supporting a diversity of indigenous flora and fauna is a very important aspect of setting minimum flows and allocation limits.

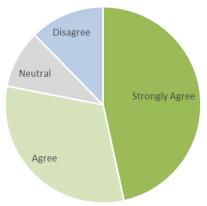


91% of participants either agreed or strongly agreed that a healthy ecosystem supporting a diversity of indigenous flora and fauna is a very important aspect of setting minimum flows and allocation limits. 5% were neutral and 4% disagreed.

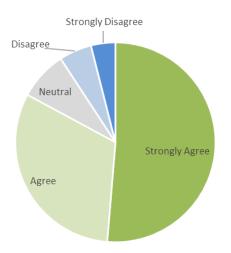


Statement 2 - The recreational use of these rivers and lakes is a priority and flows should ensure a healthy river for human use.

78% of participants either agreed or strongly agreed that the recreational use of the rivers and lakes is a priority and flows should ensure a healthy river for human use. 10% were neutral and 12% disagreed.



Statement 3 - The use of water for irrigation is important for the wellbeing of our local communities and the growth of our regional economy.

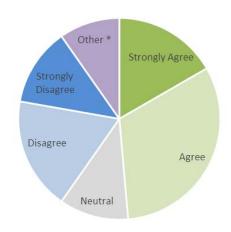


83% of participants either agreed or strongly agreed that the use of water for irrigation is important for the wellbeing of the local communities and the growth of the regional economy. 8% were neutral and 9% either disagreed or strongly disagreed.

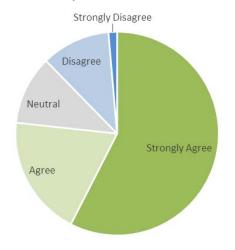
Statement 4 - The water needs of the community, in particular drinking water and electricity generation, are the most important uses of water in these rivers and lakes.

49% of participants either agreed or strongly agreed that the water needs of the community, in particular drinking water and electricity generation, are the most important use of water in these rivers and lakes. 11% were neutral and 31% either disagreed or strongly disagreed.

* 10% thought that drinking water and electricity generation were very different values and should not be put together in the same statement.



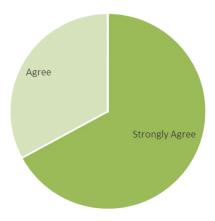
Statement 5 - The mauri (life-force) of the water and the ability to harvest and eat mahika kai are important values that a minimum flow/level needs to protect.



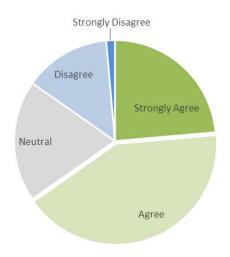
77% of participants either agreed or strongly agreed that the mauri (life force) of the water and the ability to harvest and eat mahika kai are important values that a minimum flow needs to protect. 11% were neutral and 12% either disagreed or strongly disagreed.

Statement 6 - The character of the rivers and lakes both physical (form and flow) and visual (aesthetics, cleanliness) are important to the local community and Otago region.

100% of participants either agreed or strongly agreed that the character of the rivers and lakes both physical (form and flow) and visual (aesthetics, clean) are important to the local community and Otago region.



Statement 7 - The tourism industry that has grown around these rivers and lakes is important for the development of local and regional economies.



65% of participants either agreed or strongly agreed that the tourism industry that has grown around these rivers and lakes is important for the development of local and regional economies. 19% were neutral and 15% either disagreed or strongly disagreed.

4. What we heard

People attending the drop-in sessions and visiting the website were invited to provide feedback via a feedback form, which contained two sets of questions:

- Questions about the role, importance and state of the Clutha River/Mata-Au and associated lakes and river;
- Questions about the role of the Clutha River/Mata-Au and associated lakes and river in supporting local economies and communities.

Feedback in response to these questions is summarised below.

4.1 Questions about the role, importance and state of the Clutha River/ Mata-Au and associated lakes and rivers

Three questions in the feedback form (Questions 1, 2 and 3) were aimed at exploring how people use and value the Clutha River / Mata-Au and associated lakes and rivers, and what they perceive to be threats to the current state of these water bodies.

4.1.1 How important are these rivers and lakes to you, your whanau or community?

Many respondents recognised that ecosystems, people, and communities all need reliable access to clean water. They considered that good quality and abundance of water are vital for ensuring the survival and prosperity of people and communities located along the riverbanks and lake shores, as it is often their only or main source of water.

The rivers and lakes were seen as vital elements in sustaining the well-being of local and wider communities by providing for nationally important renewable energy generation and supporting tourism, and agricultural, horticultural, and winemaking industries, the key contributors to the region's Gross Domestic Product (GDP).

Some considered the rivers and lakes are still underutilised as a reliable water source. Some saw potential for the Clutha River/Mata-Au and connected lakes to augment or substitute the supply of water from smaller, and often drier tributary streams. The Clutha River/Mata-Au was considered to be more resilient than other rivers to the impacts of climate variance and climate change. Others expressed a preference for more water to be taken from these lakes and rivers as a means of ensuring the future growth of communities and businesses.

4.1.2 What do you use these rivers, lakes, and their surroundings for?

We wanted to hear from people about the different ways in which people use the water from the Clutha River / Mata-Au and associated lakes and rivers. Feedback was provided on a range of activities and this is discussed further below.

Recreation

Many respondents discussed the importance of the river and lakes in sustaining different recreational uses and opportunities. They often recognised the role of recreation in providing for



people's well-being and community cohesion, and directly and indirectly supporting the local and regional economy such as hospitality, retail, and guiding industries.

Recreational activities discussed include fishing, swimming, kayaking, white-water rafting, and boating, as well as walking and biking along the lakeshore or the riverbanks. Other recreation activities discussed include wading or paddling, camping and picnicking, gamebird hunting, sunbathing, wildlife spotting, exploration of historic sites and sight-seeing.

While recreational activities appear to occur throughout the entire lake and river system, a higher number of responses were received about recreation in the following areas:

- Lake Wakatipu and Kawarau River near Queenstown;
- Lake Hawea and the Hawea River;
- Lake Wanaka; and
- Upper Clutha River between Lake Wanaka outlet and Alexandra.

Economic and communal use

Many respondents recognised the important role of water for a range of productive and commercial activities, including agriculture, horticulture, viticulture, and tourism.

Respondents often cited the rivers and lakes as an important source of water for:

- hydro-electricity generation;
- pasture, vineyard, orchard, and golf-course irrigation;
- frost-fighting purposes; and
- stock drinking water.

The lakes and rivers were also seen as a vital source of clean freshwater for domestic and communal supplies, including water for human consumption and household activities such as garden watering.

Cultural, spiritual and community values

Some respondents identified the important role of the river and lakes for supporting their spiritual beliefs and cultural, community or family traditions. Responses were also received on the water bodies and margins as a food resource, for trout, salmon, eel, koura, whitebait, watercress, and fruit.

The values associated with cultural and spiritual belief and food gathering traditions identified through consultation occurred mostly at either end of the Clutha River/Mata-Au catchment, particularly around Lakes Hawea and Wanaka and the Koau (southern) and Matau (northern) branches near the river's mouth.

Finally, some respondents pointed to the important role of the lakes and rivers in educating current and future generations.

Landscape and amenity

Feedback was received on the natural beauty and scenic value of the Clutha River/Mata-Au, Hawea, Kawarau Rivers and associated lakes and their surrounding landscape, and how this inspires local residents and visitors. The large scale and outstanding characteristics of these water bodies, often



traversing semi-arid landscapes and remote and natural settings, were seen as creating a unique experience and sense of space and belonging.

4.1.3 Do you have any concerns about the current state of these rivers and lakes?

The feedback form also sought to identify any concerns people have with the current state of the water bodies. Most respondents considered the Clutha River/Mata-Au, Kawarau and Hawea Rivers and Southern lakes are generally in good health. Some noted that in recent years the levels of Lakes Wanaka and Hawea and the flows in the Upper Clutha have been lower than usual at times, while others noted a gradual decline in water quality.

Increasing proliferation of noxious water weeds (e.g. lagarosiphon) and algae (e.g. didymo and lake snow) in the rivers and lakes were seen as a symptom of declining water quality in the upper Clutha and Wakatipu Basin. Others considered declining water quality is noticeable downstream of Cromwell, especially in the lower reaches of the Clutha River/Mata-Au.

In most instances respondents attributed the threat of environmental degradation to urban development, the growth of the primary and tourism industries and hydro-electricity generation.

While most responses received generally indicate that the rivers and lakes are currently able to maintain the diversity of uses and values, some expressed concern about the risk of certain uses or activities being undertaken at a scale or intensity that is no longer compatible with other uses or values.

4.2 Questions about the relationship between water, community, and economy.

As part of the plan change process the ORC needs to understand the social and economic effects of the proposed change. Three questions in the feedback form (Questions 4, 5 and 6) were aimed at exploring the broader relationships between water, community preferences and economic aspirations. A greater understanding of these relationships will help identify the likely social and economic impacts of the options for the management of these water bodies.

4.2.1 What community or area close to these rivers and lakes do you have a strong connection with?

Participants were asked questions to explain the community or area close to these rivers and lakes that they have a strong connection with, and what is important to them about their community.

Responses were received from all over the catchment from Wakatipu, Wanaka and Hawea through Central Otago to Balclutha, Kaitangata and Kaka Point on the coast. Half of the responses identified the lakes and rivers as their connection, some visiting or recreating on the river on a daily basis. Others identified a town or area that was important to them. A number of the responses indicated a long connection with the area and water bodies either living there or holidaying, some spanning several generations.

For some the presence of these water bodies was a major influence in their decision to live in the area. Landscape and natural beauty, vibrant and strong communities, a clean and healthy environment, and the presence of lakes and rivers were regarded as characteristics with great



appeal to residents and visitors. Others considered access to waterways, natural areas, and a diversity of recreational activities as highly valued characteristics of their area or community. The rural isolation and peace and quiet were also identified as valued characteristics of the environment surrounding the Clutha River/Mata-Au and its connected lakes and rivers.

Finally, various respondents recognised the diversity of land uses and ability to take water for these land uses as an important value associated with this environment.

4.2.2 What economic activities associated with these rivers and lakes are important to you?

Most respondents recognised that farming, agriculture, viticulture, and horticulture are all important to the region's economy, along with tourism and hydroelectricity generation. The water bodies are seen as an integral part of these activities and in most cases irrigation or in or out of stream use of the water resource was understood to be necessary.

Many noted that economic activities do have impacts on the environment and the community. These concerns were discussed in greater detail in section 4.1 above.

4.2.3 Are there any changes you would like to see in this community and are there any trends within this community or area which you are concerned about?

From the responses received ORC was able to distil a wide range of concern around the current and future management of these water resources as well as suggestions as to how these resources could be better managed. Many concerns were around unmanaged growth and development in population and tourism, and the impact that this has on the environment and on infrastructure. The increasing numbers of freedom campers was specifically mentioned, particularly as some of the seasonal workers are camping on the lake and river edges.

The impacts of increasing agriculture and dairy farming are also concerns, along with the increasing demand for water for irrigation. Some considered the agricultural interests in the region may be put above the environment and other needs. Conversely concerns were raised about the effects that water restrictions may have on horticulture and farming and therefore employment in the district. Concern was also raised that lower river and lake levels from hydro-electric generation and water abstraction are threatening the landscape, the natural state of these water bodies, health of connected aquifers and wetland ecosystems near river or lake margins.

Many of the changes that respondents would like to see reflect the concerns mentioned above. They would like to see growth limited or managed in a sustainable way with more environmental education, protection, and planning. Several respondents would like to see farm types that are less reliant on irrigation with a focus on sustainable land use and best practice.

Other changes that respondents would like to see are employment of locals rather than people from overseas; more full and part time work with less reliance on transient people; higher treatment of sewage or removal of discharge from the rivers; better management of power boats on the lakes and rivers; and a more coordinated focus on water quality and quantity issues.



5. Spatial distribution of values, uses and areas of concern

Information collected via the interactive values mapping tool made available online and during the drop-in sessions was collated to get a better understanding of the geographic distribution of the diverse values, uses and activities that are present within or supported by the Clutha River/Mata-Au and associated lakes and rivers. The findings from this exercise are shown on Maps 1 and 2 on pages 11 and 12.

A similar approach was applied for the mapping of areas of concern, e.g. where the environment had become degraded or was at risk of becoming degraded or where the community identified significant health and safety risks. The areas of concern are shown on Map 3 on page 13.

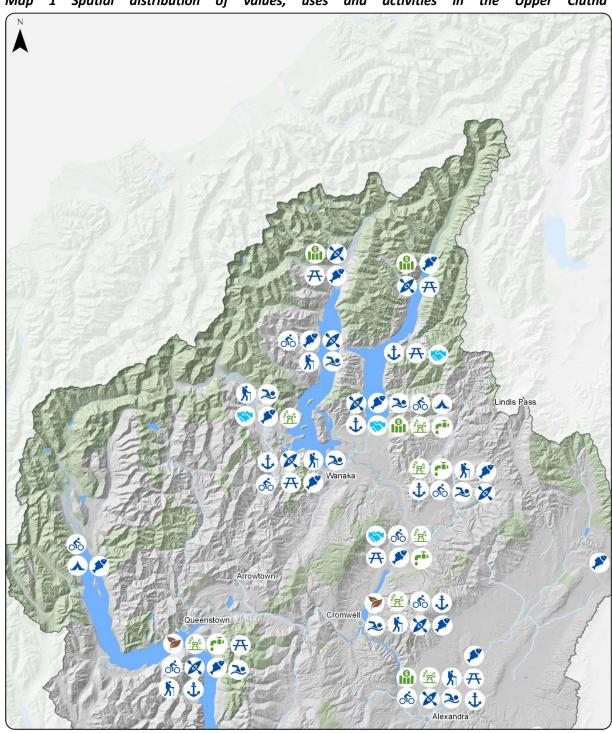
6. Other matters

Participants were also given the opportunity to provide feedback on anything else they considered important. Most of the feedback on matters people wanted to comment but that are not discussed in the previous sections relate to the process for engaging with communities and stakeholders and developing the plan change. These matters are summarised below:

- **Timeframes:** A number of respondents urged ORC not to delay the process in order to avoid the risk of further environmental degradation. Others asked ORC not to rush the plan change or even to postpone the plan change until minimum flows and allocation limits for important tributary catchments have been determined.
- Consultation process: Some stressed the importance of properly consulting with local communities and stakeholders when developing the plan change in order to fully understand community concerns and issues. Organisations and community groups that were specifically identified as needing to be involved in the consultation process include:
 - District councils;
 - Water users (incl. irrigators and Contact Energy);
 - o Environmental groups and agencies (incl. the Guardians of Lake Wanaka and Hawea).
- Gathering, analysis and use of scientific data: Many respondents stressed the need for any
 proposals for managing water quantity in these rivers and lakes to be based on robust scientific
 information and a sound understanding of physical processes, including hydrology, river
 channel morphology, ecosystem processes and the likely impacts of climate change in the
 different parts of the wider Clutha/Mata-Au catchment. The use of independently sourced or
 reviewed scientific data was also identified by some as an important precondition for
 developing such proposals.



Map Spatial distribution values, activities Upper Clutha uses and in the

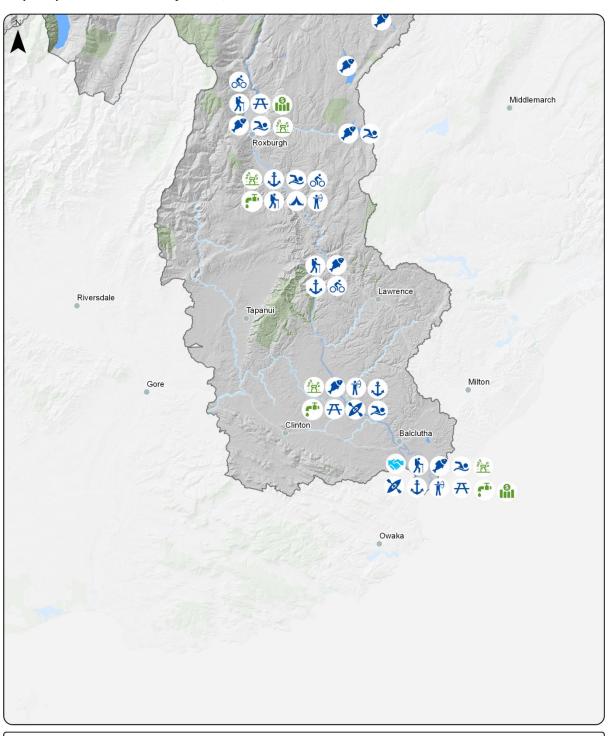


Clutha River / Mata-Au Values Map





Map 2: Spatial distribution of values, uses and activities in the Lower Clutha

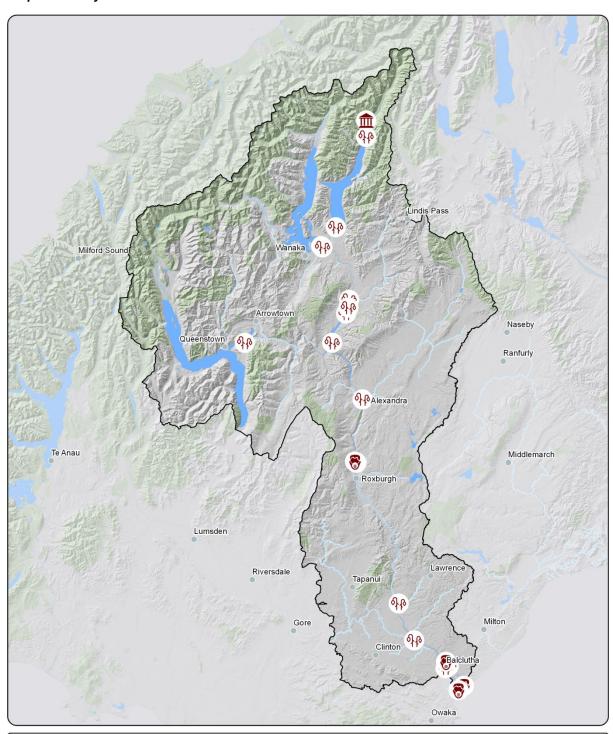








Map 3 Areas of concern



Clutha River / Mata-Au Values Map



