

Developing a freshwater management framework for the Lower Clutha rohe

STAGE 1 COMMUNITY CONSULTATION - OVERVIEW REPORT OF FEEDBACK
RECEIVED (MARCH 2022)

1. Introduction

1.1 Purpose of this report

This report summarises the results from the first stage of community consultation undertaken to develop a planning framework for managing freshwater in the Lower Clutha rohe.

1.2 Regulatory context

In 2019, Otago Regional Council (ORC) committed to develop and notify a new Land and Water Regional Plan (LWRP), that gives effect to the National Policy Statement for Freshwater Management 2020 (NPSFM) by 31 December 2023.¹

Under the NPSFM regional councils are required to identify Freshwater Management Units (FMUs) for the region at an appropriate spatial scale for freshwater management. Each FMU must reflect the unique circumstances of each region, as these circumstances will dictate what freshwater objectives and limits will be set within the FMU.² Five FMUs have been identified for the Otago region, these are: Clutha Mata-au, Taieri, North Otago, Dunedin & Coast and Catlins. The Clutha Mata-au FMU has been further subdivided into five rohe and the Lower Clutha is one of these rohe. Maps showing the boundaries of the of the Lower Clutha rohe and Clutha Mata-au FMU are shown in Appendices 3 & 4.

Under the NPSFM regional councils are also required to identify values related to freshwater applying to an FMU or part of an FMU. Regional councils must develop environmental outcomes for each of these values and set these as objectives in a plan. Attributes must then be identified for each value, along with baseline and target attribute states and environmental flows/levels and limits designed to support the achievement of the environmental outcomes.³ These environmental outcomes and limits must be developed through engagement with the community and active involvement of takata whenua regarding their values and aspirations.⁴

The NPSFM has identified 4 compulsory values that apply to every FMU and 9 other values that must also be considered as applying to an FMU or part of an FMU.⁵ Other values identified by the community are also to be considered.⁶ Appendices 2A and 2B of the NPSFM list attributes that need to be managed, e.g. total nitrogen is an example of a relevant attribute.

By undertaking this community consultation process, ORC is meeting its obligation to engage with communities under Clause 3.7 (National Objectives Framework process) of the NPSFM.

The process will also assist ORC with fulfilling its statutory requirements under Clause 3 of Schedule 1 of the RMA, including ensuring that consultation is undertaken in accordance with the principles set out in section 82 of the Local Government Act 2002.

¹ NPSFM 2020 <https://environment.govt.nz/publications/national-policy-statement-for-freshwater-management-2020/>.

² NPSFM Clauses 1.4 and 3.8(1).

³ NPSFM Subpart 2 National Objectives Framework.

⁴ While environmental outcomes (and target attribute states, environmental flows/levels and limits) set in the new LWRP need to be developed through engagement with the community and active involvement of takata whenua, the outcomes achieved must also meet the national bottom lines set in the NPSFM, achieve the objective of the NPSFM and fulfil the relevant long-term visions set in the regional policy statement.

⁵ NPSFM Clause 3.9(1), Appendix 1A Ecosystem Health, Human contact, Threatened species, and Mahinga kai, and NPSFM Appendix 1B Natural form and character, Drinking water supply, Wai tapu, Transport and tauranga waka, Fishing, Hydro-electric power generation, Animal drinking water, Irrigation, cultivation, and production of food and beverages, and Commercial and industrial use

⁶ NPSFM Clause 3.9 (2)

2. Consultation

2.1 Purpose

The purpose of the consultation was firstly, to gain an understanding of what characteristics for each value matter to the community, secondly, whether the community thought those characteristics are currently being provided for, thirdly, to identify locations of each value on a map, and lastly, to identify any characteristics or values that were not identified.

This feedback will be used to identify all the values that are important to the community, while also helping to inform the setting of environmental outcomes for each value and the identification of attributes for assessing the achievement of these outcomes.

During consultation participants were asked to comment on characteristics of a value instead of attributes, as this allowed them to provide feedback in simple plain terms on easy-to-understand concepts. Attributes (as referred to in the NPSFM) are a representation of these characteristics in more technical terms, allowing the condition or state of this value to be assessed in objective and, where practicable, numeric terms. Examples of characteristics for the value of swimming include water clarity and risk of getting sick. Attributes that correspond to these characteristics are suspended fine sediment and *Escherichia Coli* (*E. coli*).

2.2 Methodology

2.2.1 Community meetings online

On Tuesday 1st March at 7pm an online community meeting was held. Participants were presented with an overview of the LWRP development process, and the Proposed Regional Policy Statement for Otago (pORPS) long-term vision for the Lower Clutha rohe.⁷ This was followed by a demonstration of the online survey and mapping tool. The presentation was interspersed with facilitated group discussion on visions, values and desired environmental outcomes for their area. An estimated total of 30 people attended the community meeting on Zoom, with 12 further participants, being ORC staff and iwi partners, also present.

Paper copies of the survey were made available for people without internet access wanting to participate in the survey.

2.2.2 Online and paper survey

From 28 February until the 28 March 2022 the public were invited to have their say on twelve values, each with their own set of characteristics, via the survey (see Appendices 5 & 6 for examples of the survey). These values were:

- Swimming (and other primary contact recreational water activities)
- Fishing (and other secondary contact recreational water activities)
- Walking, camping, picnicking, sightseeing (and other non-contact recreational water activities)
- Plants or animals that live in or near water
- Threatened species
- Habitat

⁷ One of the new requirements under the new NPSFM is for all regional councils to develop long-term freshwater visions for Freshwater Management Units (FMUs and Rohe). The freshwater visions are included as objectives in the new proposed Otago RPS. The long-term freshwater visions were developed following engagement with tika whenua and consultation with local communities in October and November 2020.

- Water Quality
- River flow and lake level
- Natural Character
- Water take/use
- Wetlands
- Groundwater

Each of the values has their own specific characteristics. Participants were asked to identify, from the list of characteristics provided, which characteristics matter to them. Participants were then asked to rate the condition of the characteristic, using a Likert scale of 1-5.⁸

The survey also provided people with the opportunity to identify values and characteristics not listed on the survey questionnaire.

A total of 45 people provided feedback via the online survey.

2.2.3 Locational data

Locational data was gathered via an online mapping tool (shown in Appendix 7), and a “location” field in the paper survey (see Appendix 6). The online mapping tool was linked to the online survey, and available for the public to “Pin their interests” between 28 February and 28 March 2022. The locational data resulted in 6 places being identified as having the values of swimming, fishing, wetlands and water quality. These results are shown in Appendix 2.

2.3 Results of the survey

The survey data and comments are displayed in Appendix 1⁹.

3. Future consultation stages

The next consultation stage in the Lower Clutha rohe is scheduled to take place in the second half of 2022. It will focus on presenting environmental outcomes for the various identified community and Kai Tahu values, as well as management options to achieve these outcomes.

4. List of appendices:

Appendix 1: Survey results data

Appendix 2: Locational data

Appendix 3: Map of Lower Clutha rohe

Appendix 4: Map of the Clutha Mataau FMU

Appendix 5: Example of online survey

Appendix 6: Example of paper survey

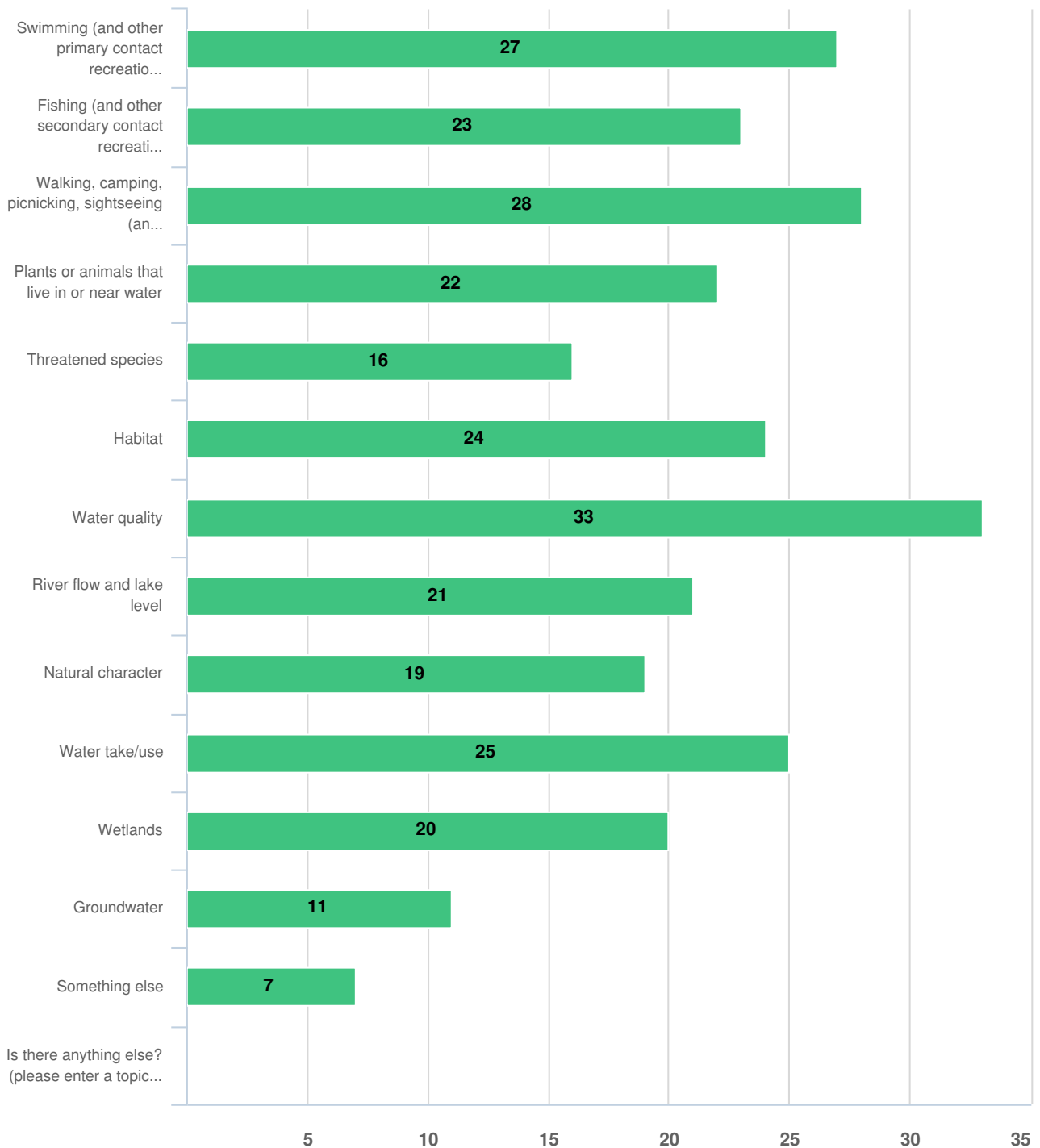
Appendix 7: Example of online mapping tool

⁸ A Likert scale is a rating scale, developed to measure attitudes. The Likert scale (typically) provides five possible answers to a statement or question that allows respondents to indicate their positive-to-negative strength of agreement or strength of feeling regarding a question or statement.

⁹ At the ORC we believe in respectful communication. We have redacted survey comments that may be viewed as abusive, offensive, defamatory, disrespectful or harmful, while trying not to alter the meaning of the feedback received.

Q1 Select the FMU or rohe - Lower Clutha rohe

Q2 Select the things that matter to you.



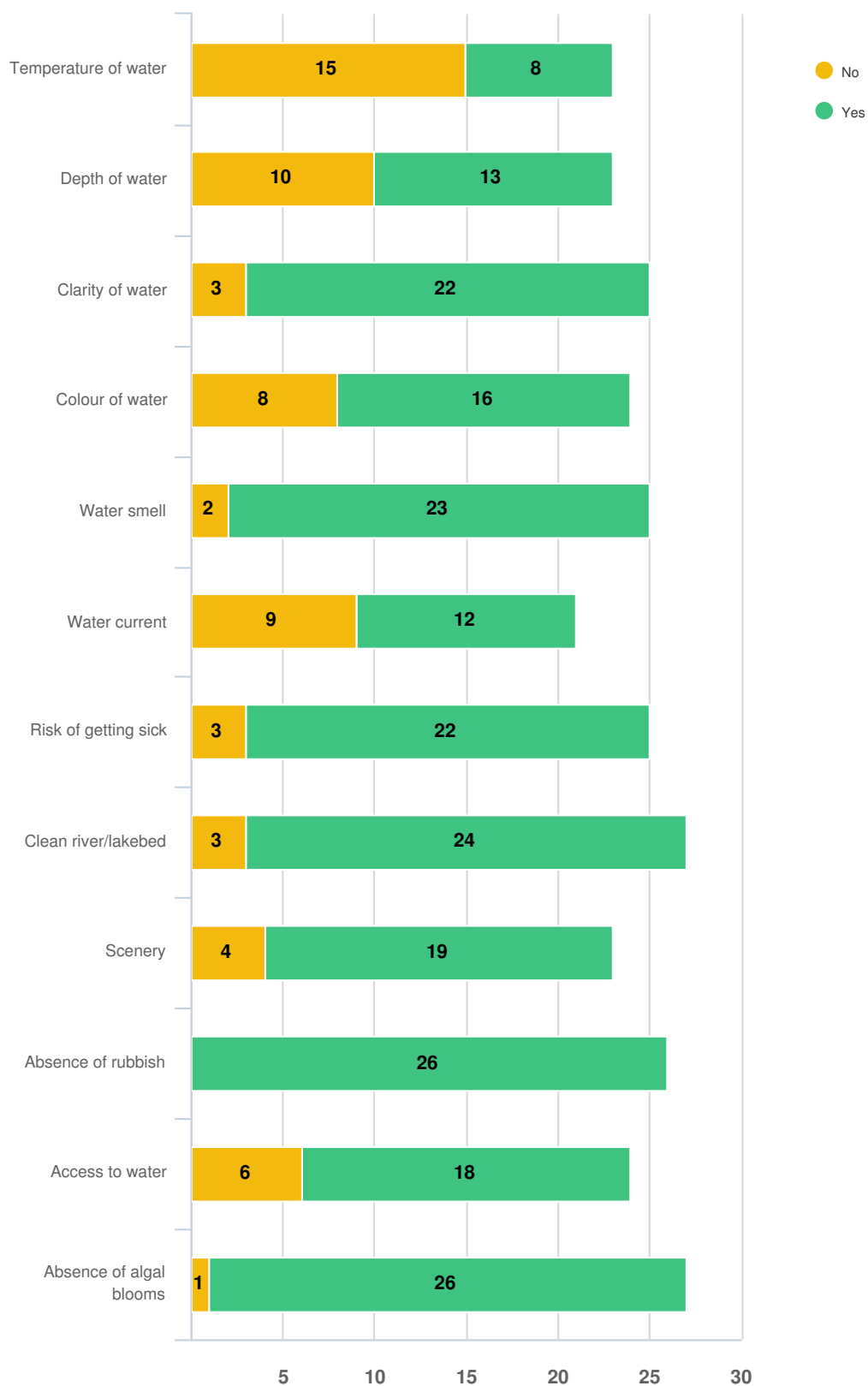
Comparing by:

Select below the FMU or rohe you are interested in.

- Lower Clutha Rohe

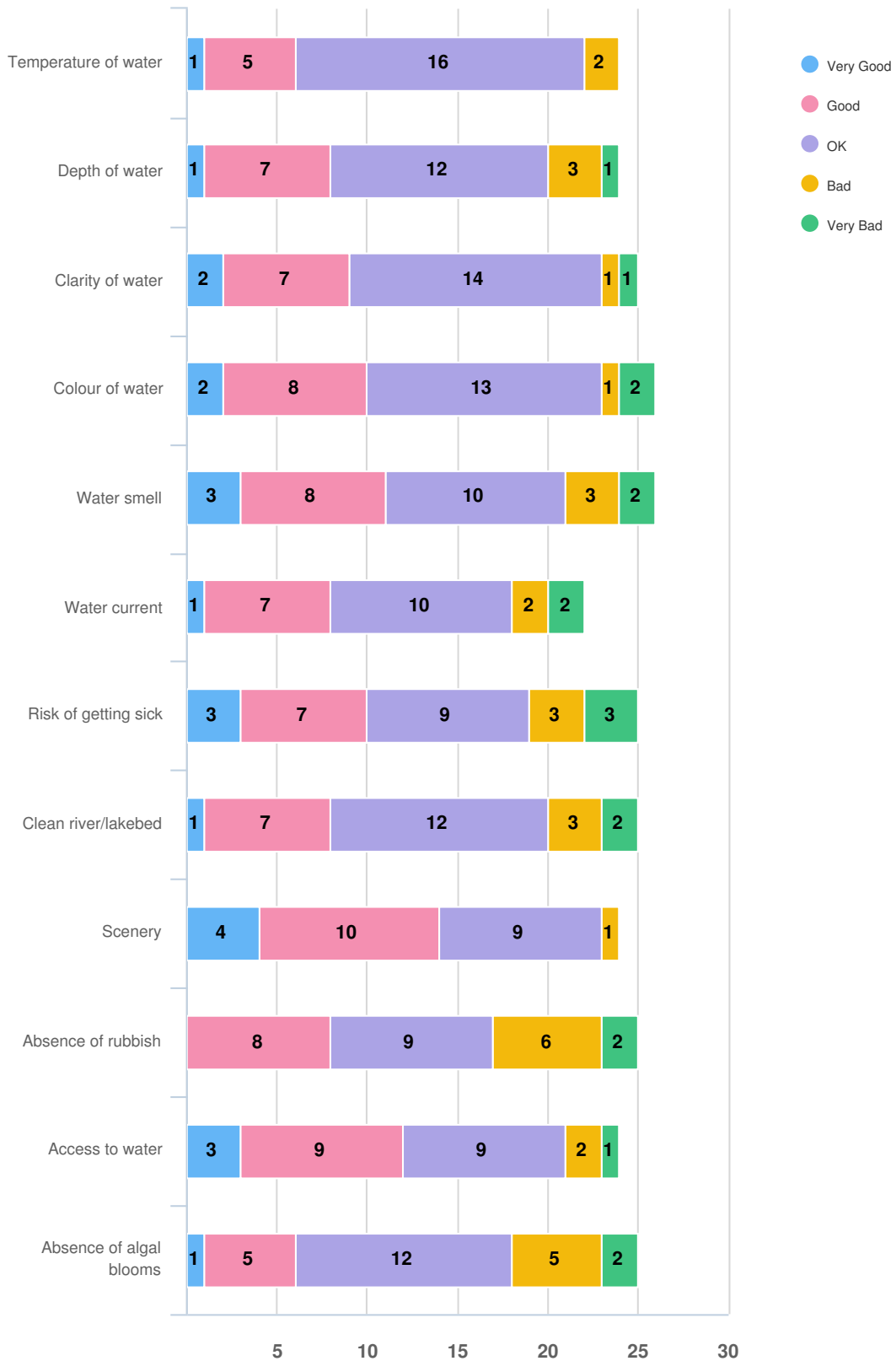
Mandatory Question (45 response(s))

Q3. Regarding swimming, what matters to you?



Optional question (27 response(s), 18 skipped)

Q4 Regarding swimming: how has this been over the last 5 years?



Optional question (26 response(s), 19 skipped)

Q5 Are there any other important characteristics you can think of? Please list them below.

No

3/03/2022 06:35 AM

Anonymous

some of the above has a bit to do with a drier climate

3/13/2022 05:24 PM

Anonymous

We do all our swimming in the sea about Kaka Point, only concern is contaminants from CDC waste treatment.

3/17/2022 08:58 AM

Anonymous

Periodic cloudiness

3/17/2022 08:39 PM

Anonymous

I'm happy with the water in the Clutha river.

3/17/2022 09:03 PM

Anonymous

Remoteness or feeling of seclusion, natural character including scenery, noise heard (natural, unnatural)

3/19/2022 04:13 AM

Anonymous

Our rivers are polluted due to runoff from farming activities - particularly dairy.

3/23/2022 09:34 PM

Anonymous

There is no room to make comment on swimming above. There needs to be designated swimming areas where efforts are concentrated. Swimming in shallow water on altered waterways is definitely not a priority. Protecting the recognised public swimming areas is a priority rather than a blanket approach.

3/24/2022 03:31 PM

Anonymous

I live beside the Clutha River and all the stones/rocks in it are covered in Didymo, which is awful and really spoils the river.

3/24/2022 03:57 PM

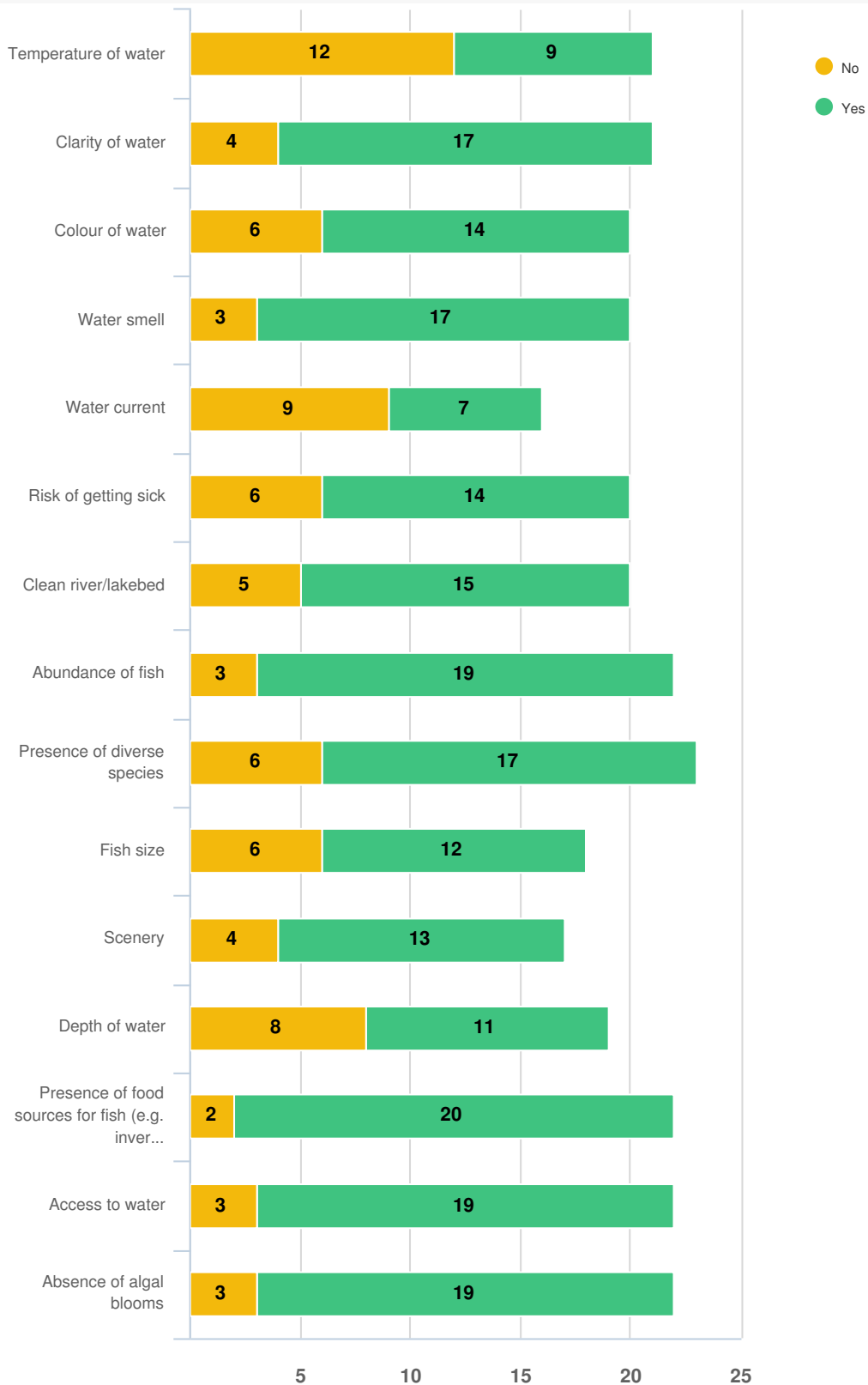
Anonymous

Stock excluded from tributaries, earthworks in streams and discharges into lakes are big concerns

3/24/2022 09:18 PM

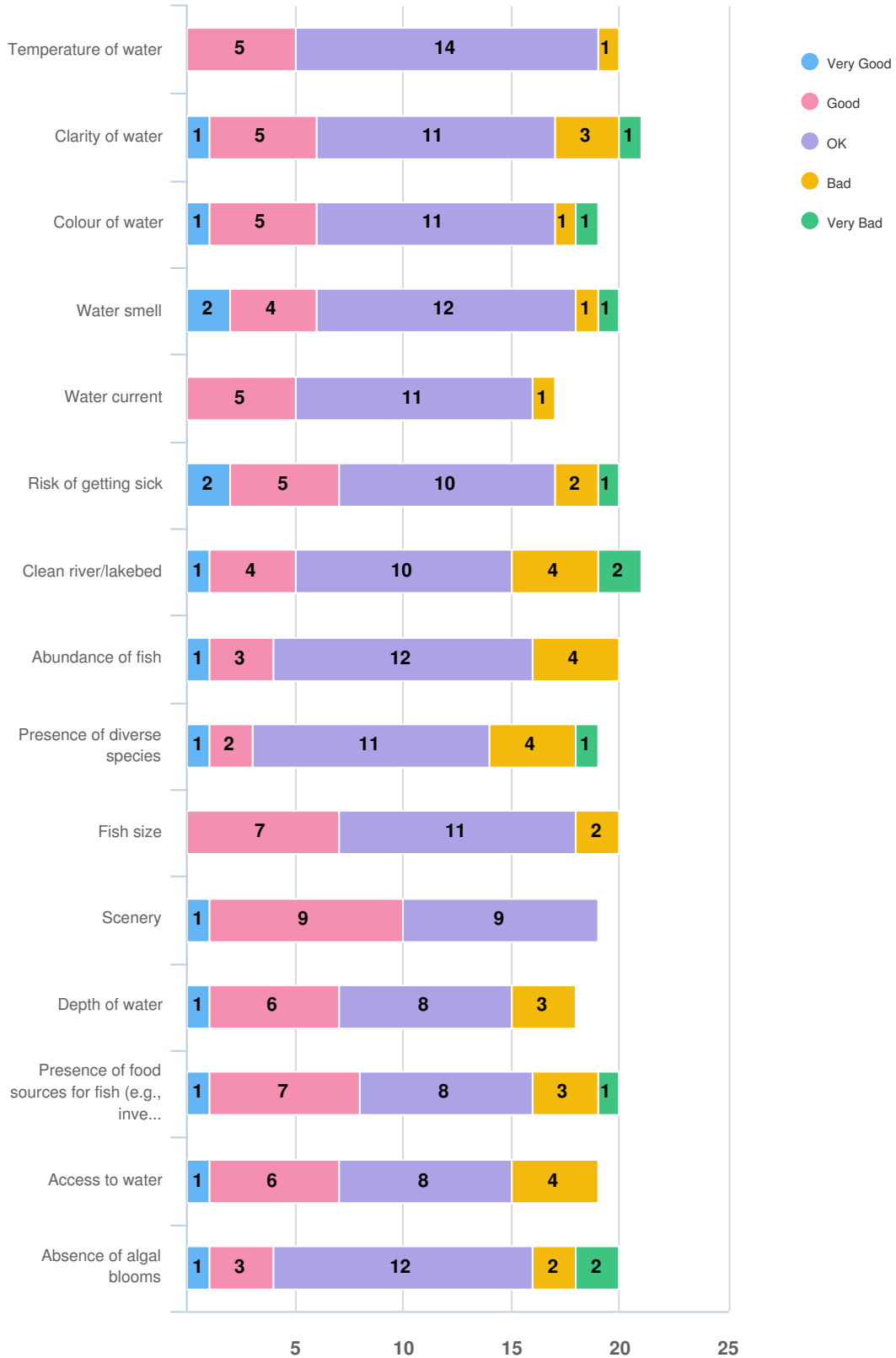
Optional question (10 response(s), 35 skipped)

Q6. Regarding fishing, what matters to you?



Optional question (23 response(s), 22 skipped)

Q7 Regarding fishing, how has this been over the last 5 years?



Optional question (22 response(s), 23 skipped)

Q8 Are there any other important characteristics you can think of? Please list them below.

Anonymous

3/02/2022 01:06 PM

ORC has failed to monitor water quality in the designated wetlands of the Lower Clutha. ORC failed to make any effective response concerning the Clutha Lagoon. even when we had an on-site meeting. Water quality is deteriorating. ORC has not monitored the functioning of the culverts that allow water to flow in and out of the Clutha Lagoon to the further detriment of water quality There have been algal blooms and massive overgrowth of weed in the Clutha Lagoon

Anonymous

3/07/2022 02:37 PM

Some streams previously having excellent Koura populations now have none.....

Anonymous

3/13/2022 05:24 PM

no

Anonymous

3/14/2022 11:03 AM

Pleasant progress being made in the pomahaka catchment over the last few years

Anonymous

3/14/2022 12:05 PM

WHITEBAITING REGULATIONS

IH

3/17/2022 12:05 AM

Ability/ambition to harvest wildlife compromised by water quality

Anonymous

3/17/2022 09:03 PM

Anonymous

3/19/2022 04:13 AM

Natural character, noise pollution / intrusion (unnatural noise), natural noise, experience / feeling

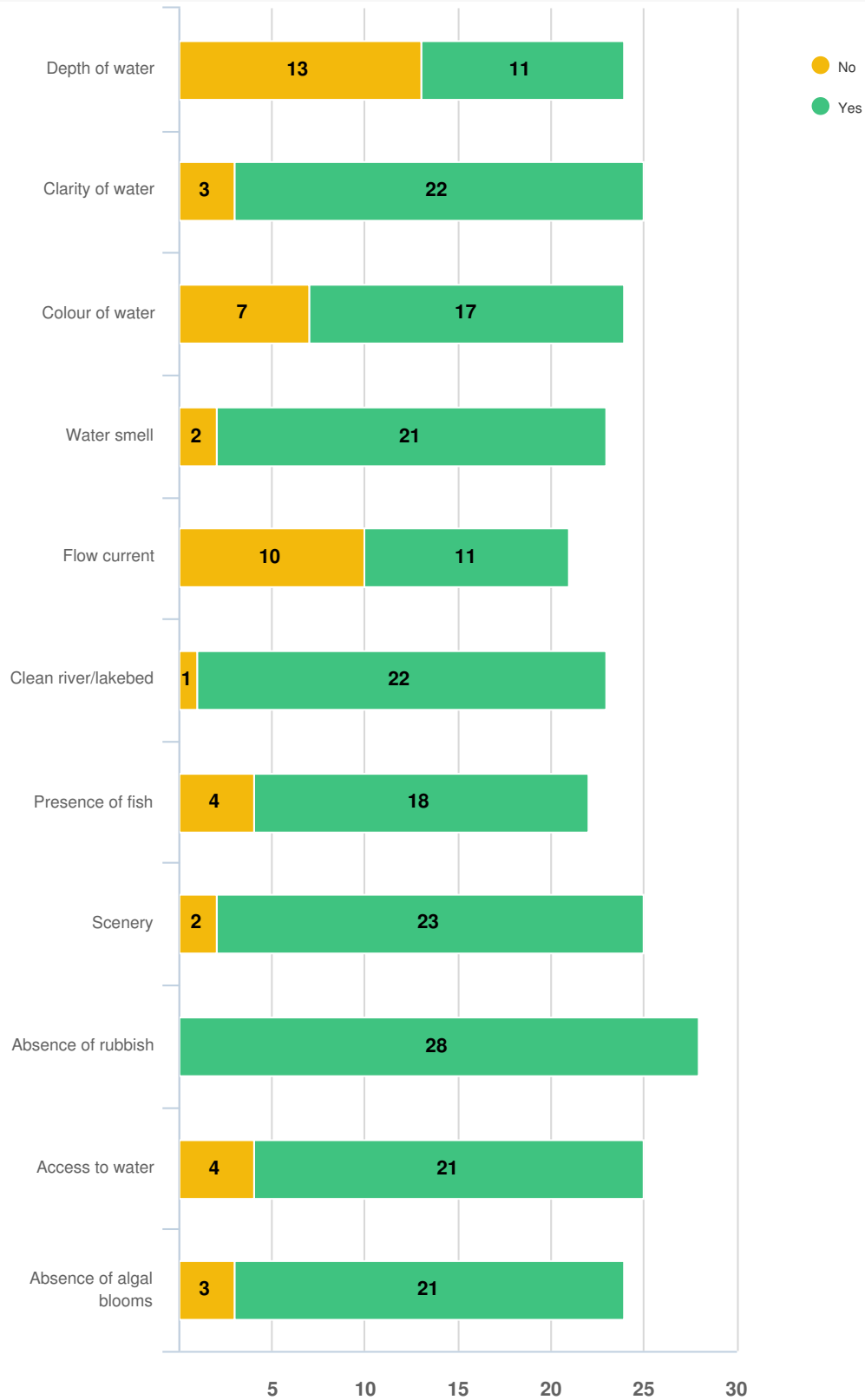
Anonymous

3/24/2022 11:39 AM

Seeing higher levels of didymo. More perch which could be affecting survival of young trout.

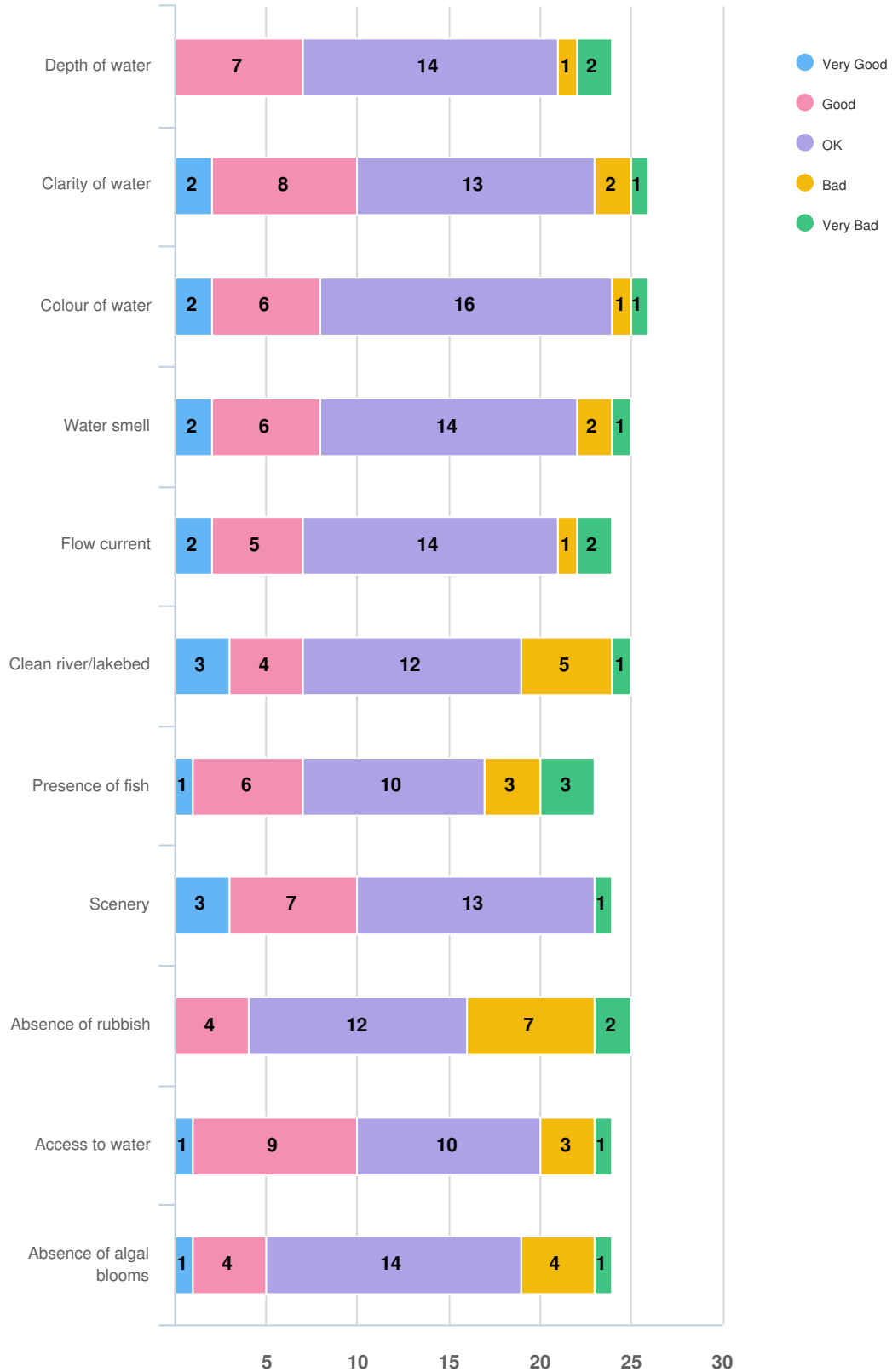
Optional question (9 response(s), 36 skipped)

Q9. Regarding non-contact recreation, what matters to you?



Optional question (28 response(s), 17 skipped)

Q10 Regarding non-contact recreation, how has this been over the last 5 years?



Optional question (27 response(s), 18 skipped)

Q11 Are there any other important characteristics you can think of? Please list them below.

Anonymous
3/01/2022 06:58 PM
We avoid industrial areas and higher population areas where water quality is much poorer and stick to our local areas

Anonymous
3/13/2022 05:24 PM
no

Anonymous
3/15/2022 06:55 PM
Yes it's the town sewage

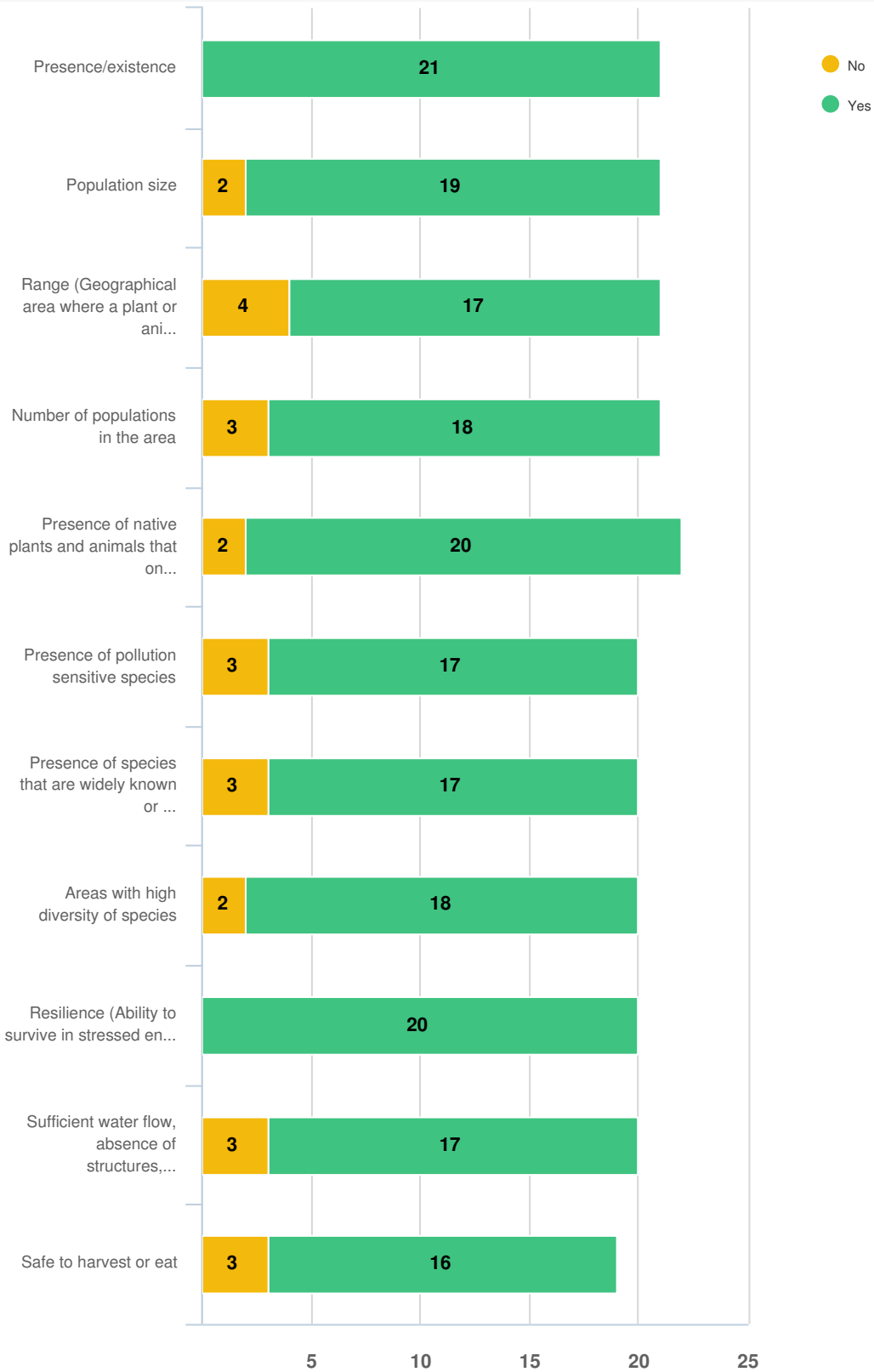
Anonymous
3/17/2022 08:58 AM
We live in a great region with plenty of oppurtunity to enjoy our water bodies.

Anonymous
3/19/2022 04:13 AM
Sound of river

Anonymous
3/24/2022 09:18 PM
Removal of pest plants and more restoration areas

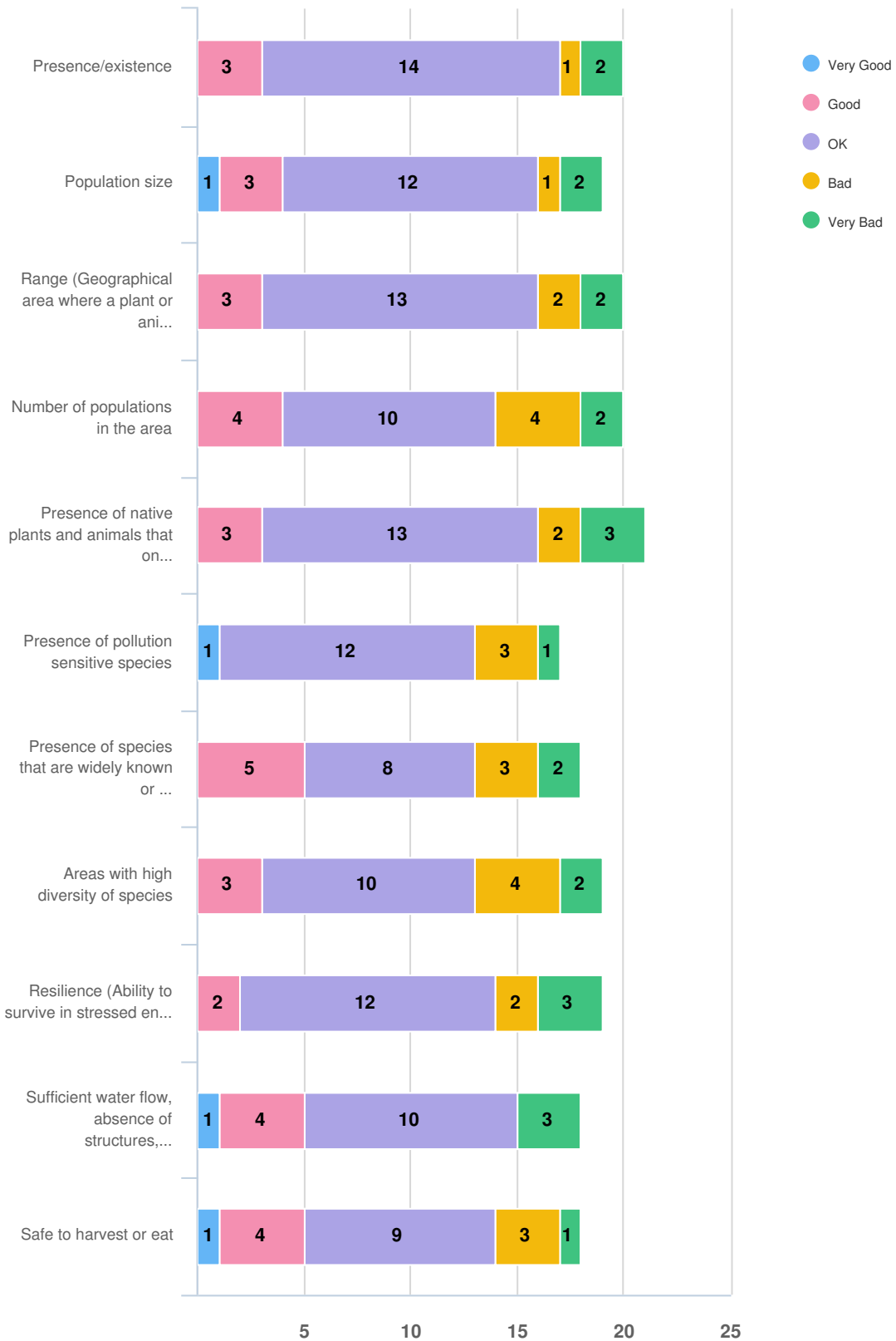
Optional question (6 response(s), 39 skipped)

Q12. Regarding plants or animals that live in or near water, what matters to you?



Optional question (22 response(s), 23 skipped)
e

Q13 Regarding plants/animals that live in/near water, how has this been over the last 5 years?



Optional question (21 response(s), 24 skipped)

Q14 Are there any other important characteristics you can think of? Please list them below.

Anonymous

3/02/2022 01:06 PM

Some plantings have been undertaken by DOC but these have been poorly planned as they restrict access to the water because of planting large plants like flax and trees close to the water margin At the same time no attention has been paid to drains taking agricultural runoff into the water bodies and no attention has been given to maintaining flows through culverts that regularly get blocked preventing flushing by tidal flows

Anonymous

3/07/2022 02:37 PM

I have answered this series of questions specifically with Koura in mind,,,

Anonymous

3/13/2022 05:24 PM

no

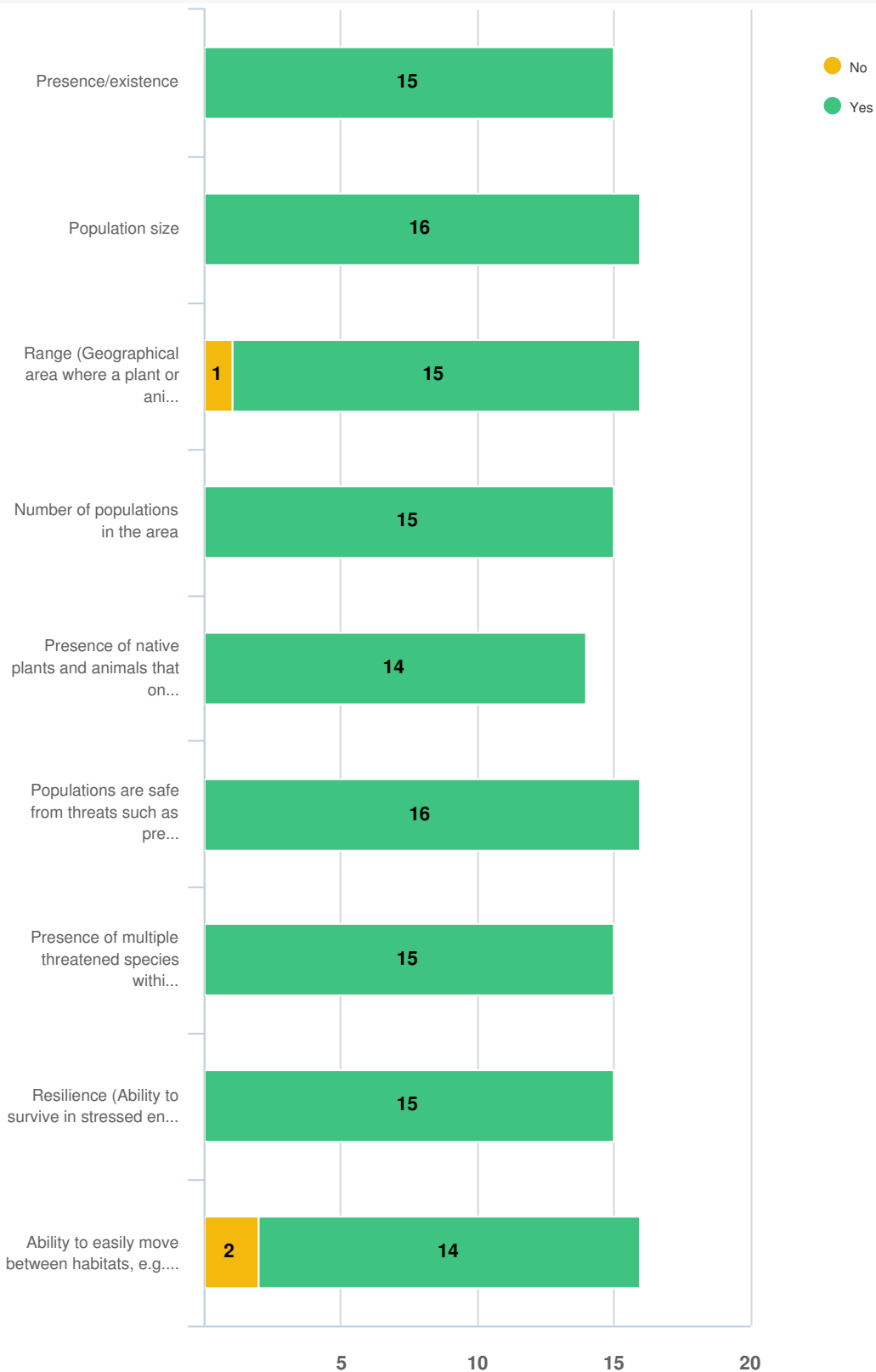
Anonymous

3/24/2022 09:18 PM

Predator control. Exclusion of stock from waterways. More riparian planting

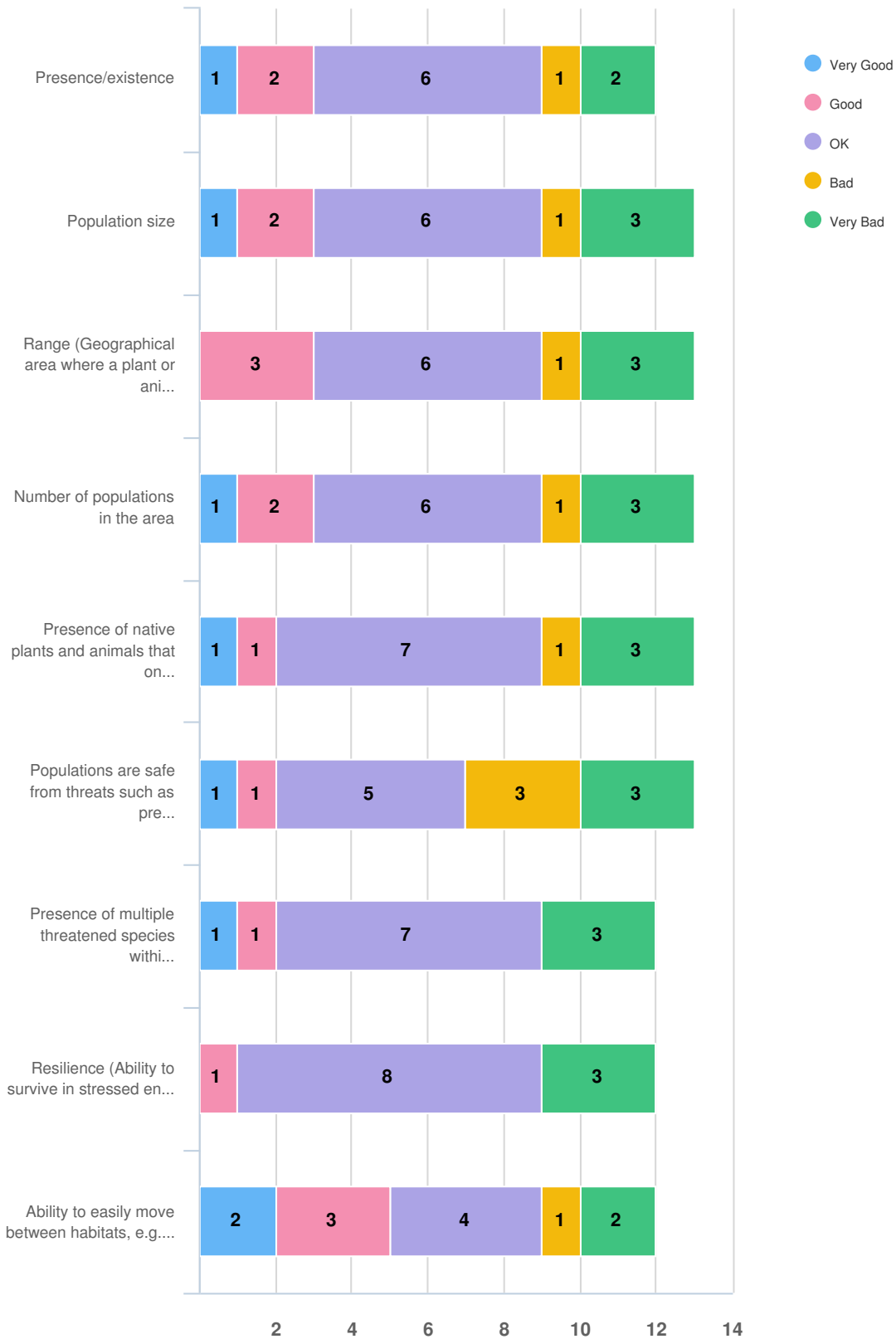
Optional question (4 response(s), 41 skipped)

Q15. Regarding threatened species, what matters to you?



Optional question (16 response(s), 29 skipped)

Q16 Regarding threatened species, how has this been over the last 5 years?



Optional question (13 response(s), 32 skipped)

Q17 Are there any other important characteristics you can think of? Please list them below.

Anonymous

2/28/2022 07:26 PM

that barriers are put in to prevent the spread of trout into our small streams that are providing a safe habitat for pomakaka galaxids

Anonymous

3/07/2022 02:37 PM

Response to these questions were answered with Hoiho in mind...

Anonymous

3/10/2022 10:00 PM

dairying is the only thing you see now

Anonymous

3/13/2022 05:24 PM

no

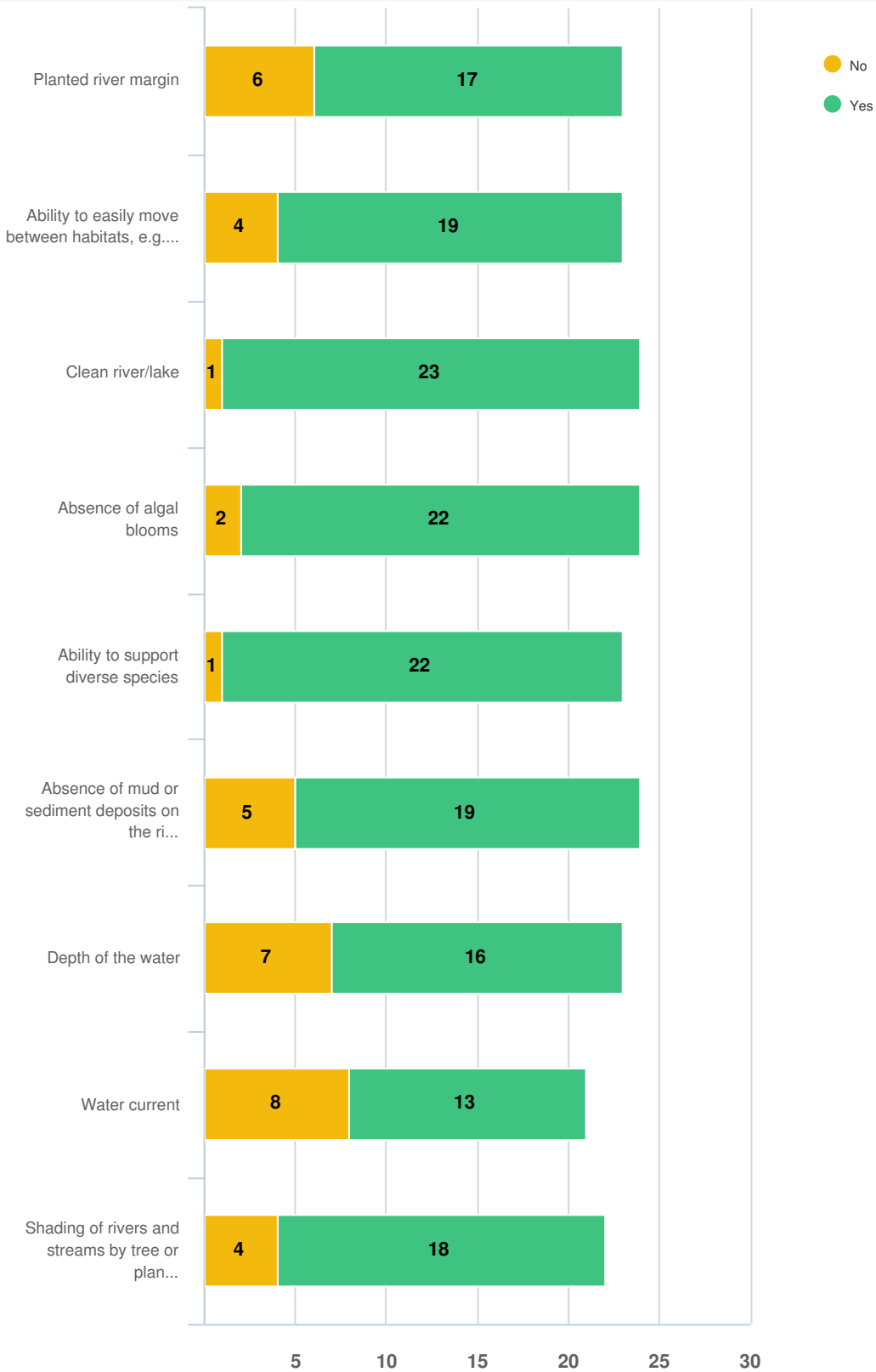
Anonymous

3/24/2022 09:18 PM

Protection of smaller tributaries

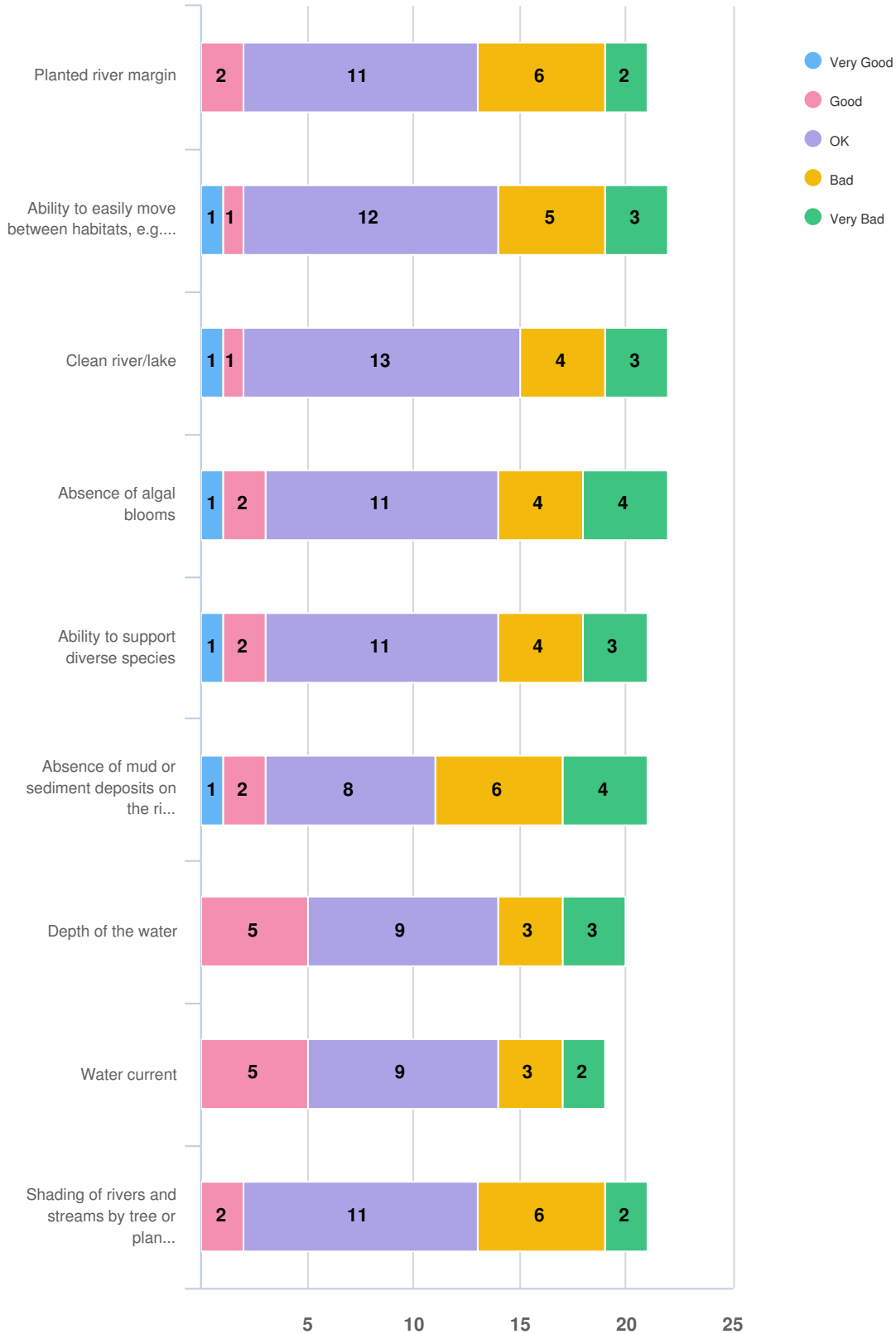
Optional question (5 response(s), 40 skipped)

Q18. Regarding habitats, what matters to you?



Optional question (24 response(s), 21 skipped)

Q19 Regarding habitats, how has this been over the last 5 years?



Optional question (22 response(s), 23 skipped)

Q20 Are there any other important characteristics you can think of? Please list them below.

Anonymous

3/02/2022 01:06 PM

Barriers to flow and fish migration have been a major remedial problem and this has not been done due to lack of attention

Anonymous

3/12/2022 07:52 PM

I am keen fisher. I would like to comment on the health of the old river channel between the two mouths of the Clutha, sometimes called the lagoon . This is a special place which I value highly. The flow of water at the northern end needs attention. It blocks often which has a very detrimental effect on the lagoon , causing algae blooms, blocking fish access and leading to poor water quality. The water flowing into the lagoon from adjacent land leaves a lot to be desired also. The lagoon is in decline and needs an improved management plan.

Anonymous

3/13/2022 05:24 PM

no

IH

3/17/2022 12:05 AM

Irrigularity of Clutha River flows with daily ramping up and down is very hard on the riverine environment.

Anonymous

3/19/2022 04:13 AM

A sense of mud not necessarily a good thing - depends what uses that habitat

Anonymous

3/24/2022 04:03 PM

Rivers need to be regularly flushed (often by flooding) but gravel extraction needs to be encouraged to keep rivers within the banks and protect the bridges etc. Currently no t enough gravel extraction takes place and it is all building up and flooding is having a much greater impact that it should

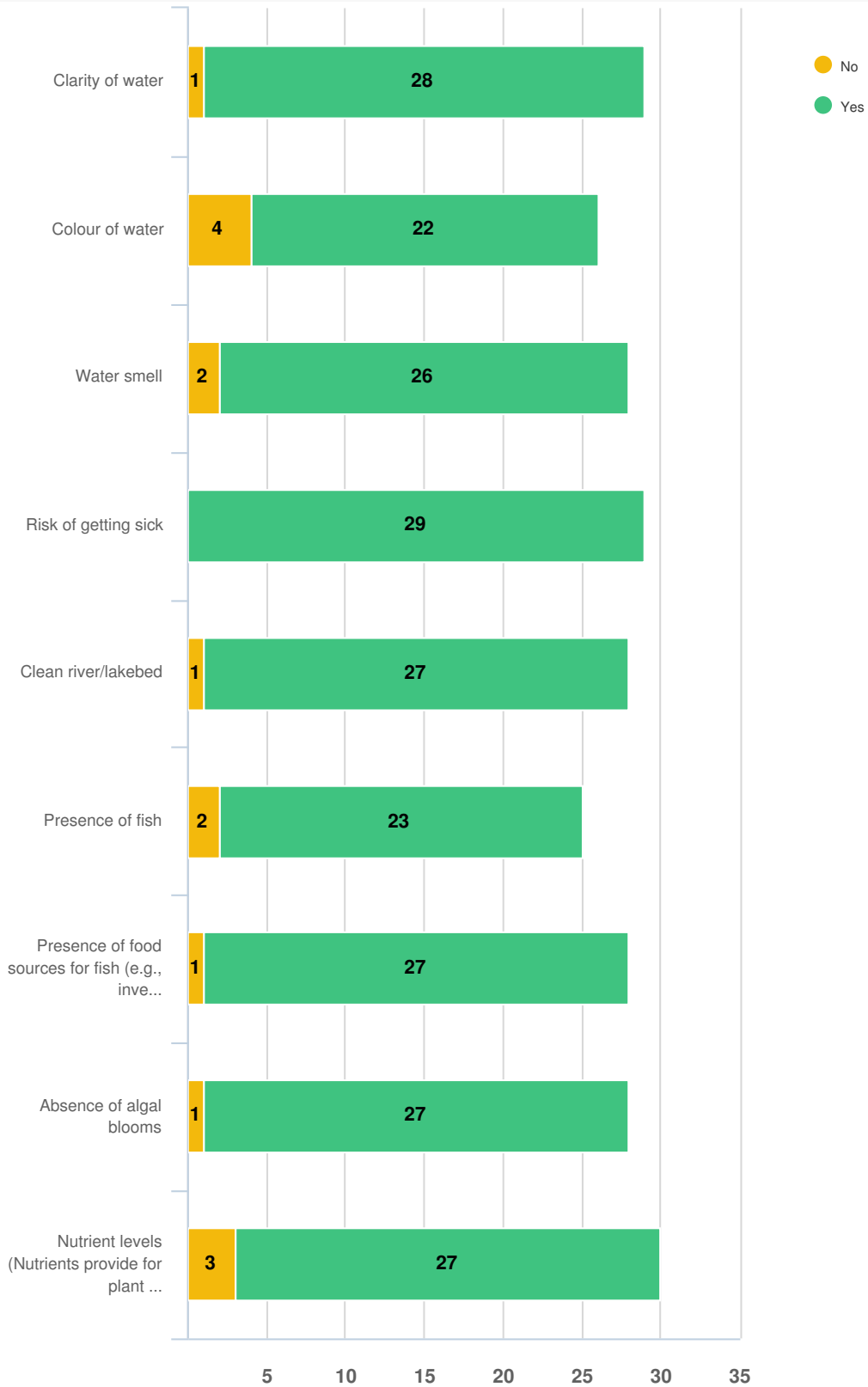
Anonymous

3/25/2022 08:47 AM

Shading with native plants on streams and riparian margins, not main river trunks that flood. Support by ORC to supply or subsidies native plants in south otago where there is very little biodiversity.

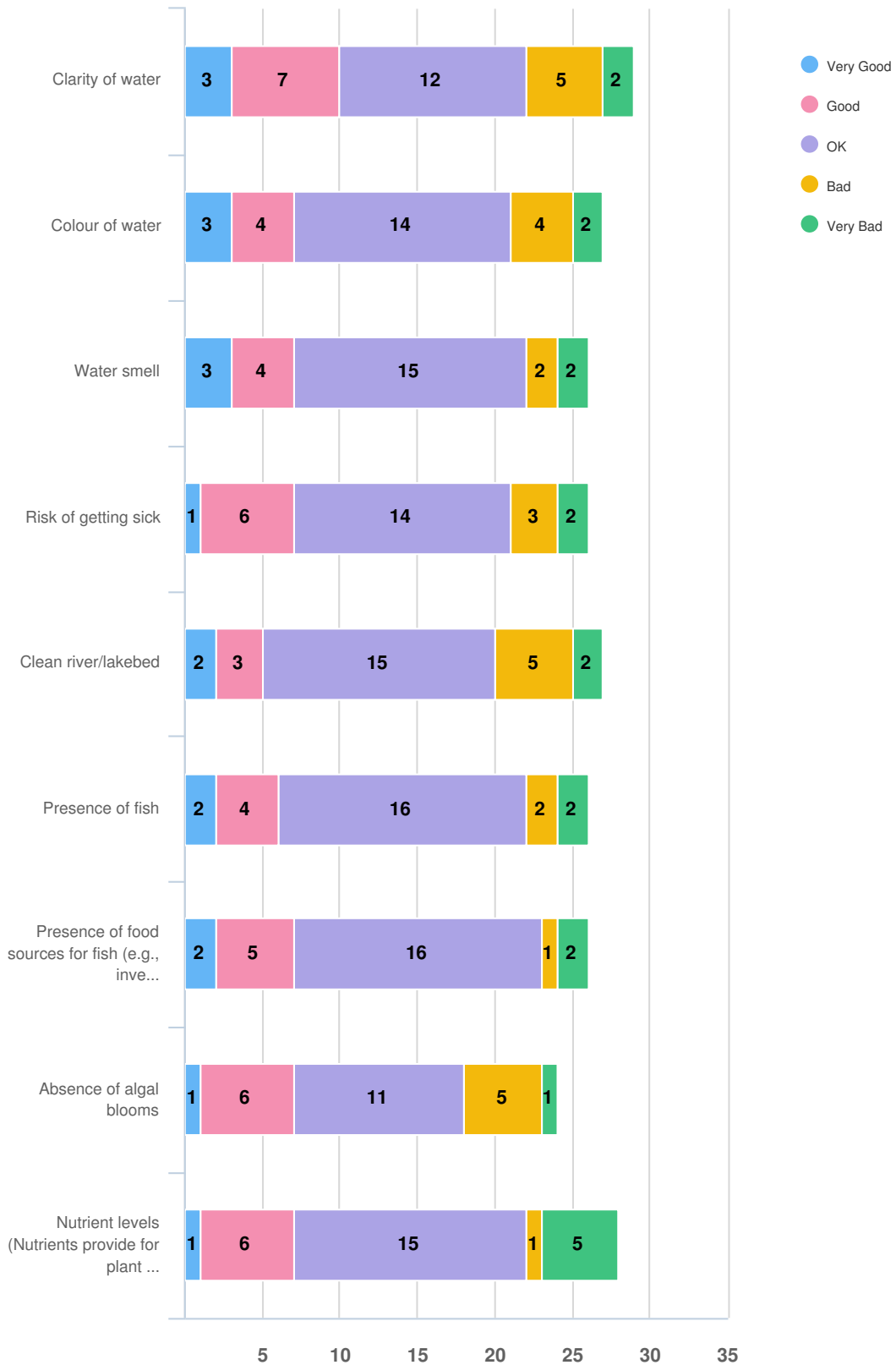
Optional question (7 response(s), 38 skipped)

Q21. Regarding water quality, what matters to you?



Optional question (32 response(s), 13 skipped)

Q22 Regarding water quality, how has this been over the last 5 years?



Optional question (30 response(s), 15 skipped)

Q23 Are there any other important characteristics you can think of? Please list them below.

Anonymous

3/03/2022 11:26 AM

Anonymous

3/10/2022 10:00 PM

fish farming feed and other pollutants. Unlawful diversion, use and taking of water

Anonymous

3/13/2022 05:24 PM

no

Anonymous

3/17/2022 10:09 AM

Native fish species and invertebrates are much more important than trout.

Anonymous

3/24/2022 11:39 AM

We get our drinking water from a fork off the the Clutha river. Not ideal when river is low as water becomes stagnant, loses quality and tastes like trout.

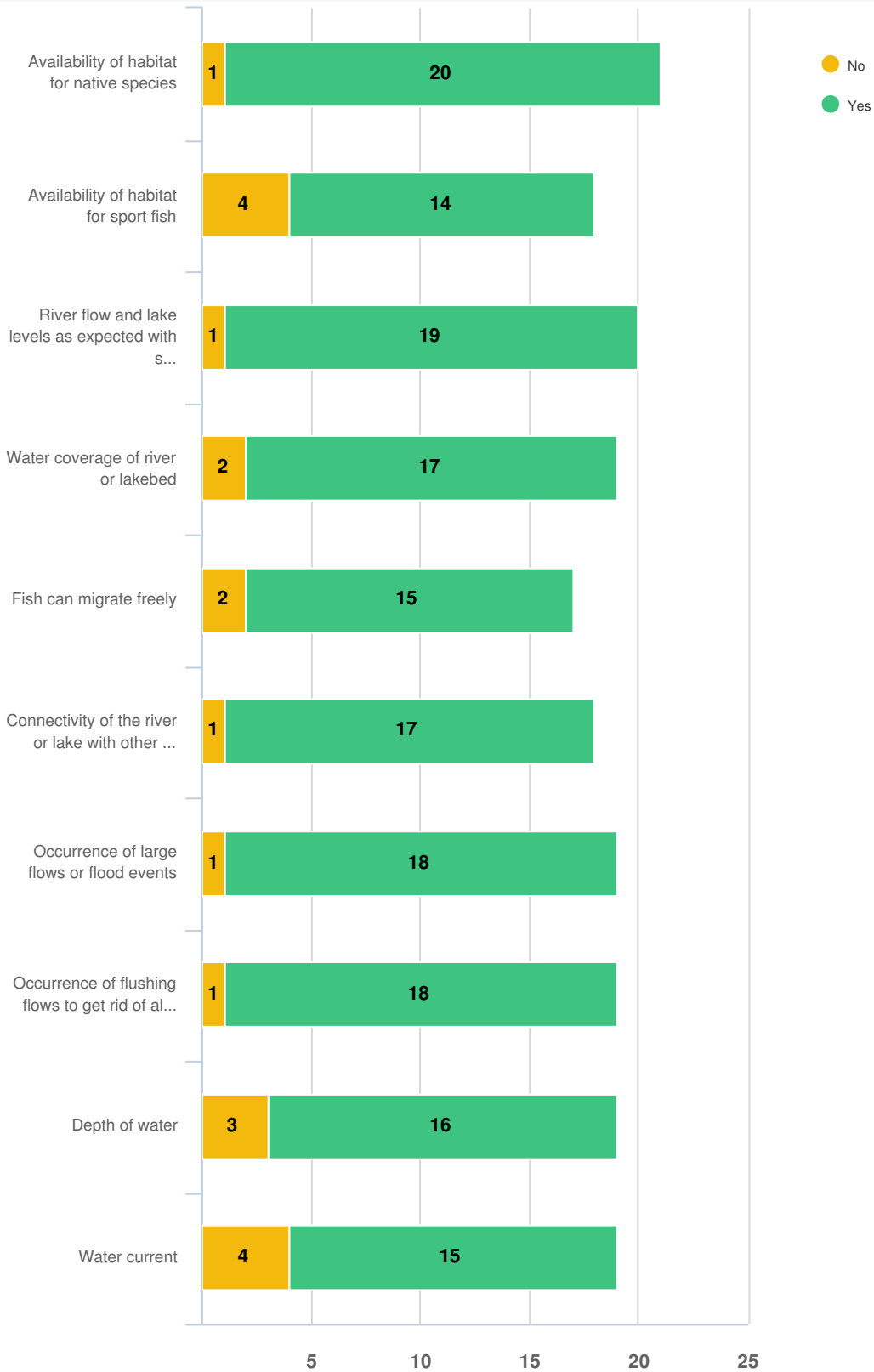
Anonymous

3/24/2022 09:18 PM

Ecology of water should be put before human health

Optional question (5 response(s), 40 skipped)

Q24. Regarding river flow and lake levels, what matters to you?



Optional question (21 response(s), 24 skipped)

Q25 Regarding river flow and lake levels, how has this been over the last 5 years?



Optional question (20 response(s), 25 skipped)

Q26 Are there any other important characteristics you can think of? Please list them below.

Stewart

No

3/03/2022 06:35 AM

Anonymous

It would be nice to see native fish again

3/10/2022 10:00 PM

Anonymous

no

3/13/2022 05:24 PM

Anonymous

Whitebaiting at the mouth of the river

3/14/2022 12:05 PM

Anonymous

We are starting to get more flood events and extended drier periods. Lower Clutha can be hard to manage in flood events. Trying to enhance Lake Tuakitoto can conflict with its use as a ponding area if the Clutha is in flood.

3/17/2022 08:58 AM

Anonymous

Look, feel, sound of river, resilience of waterway

3/19/2022 04:13 AM

Anonymous

The river needs to be regularly flushed to lessen the severity of floods events.

3/24/2022 03:57 PM

Anonymous

Rivers need to be regularly flushed (often by flooding) but gravel extraction needs to be encouraged to keep rivers within the banks and protect the bridges etc. Currently not enough gravel extraction takes place and it is all building up and flooding is having a much greater impact than it should

3/24/2022 04:03 PM

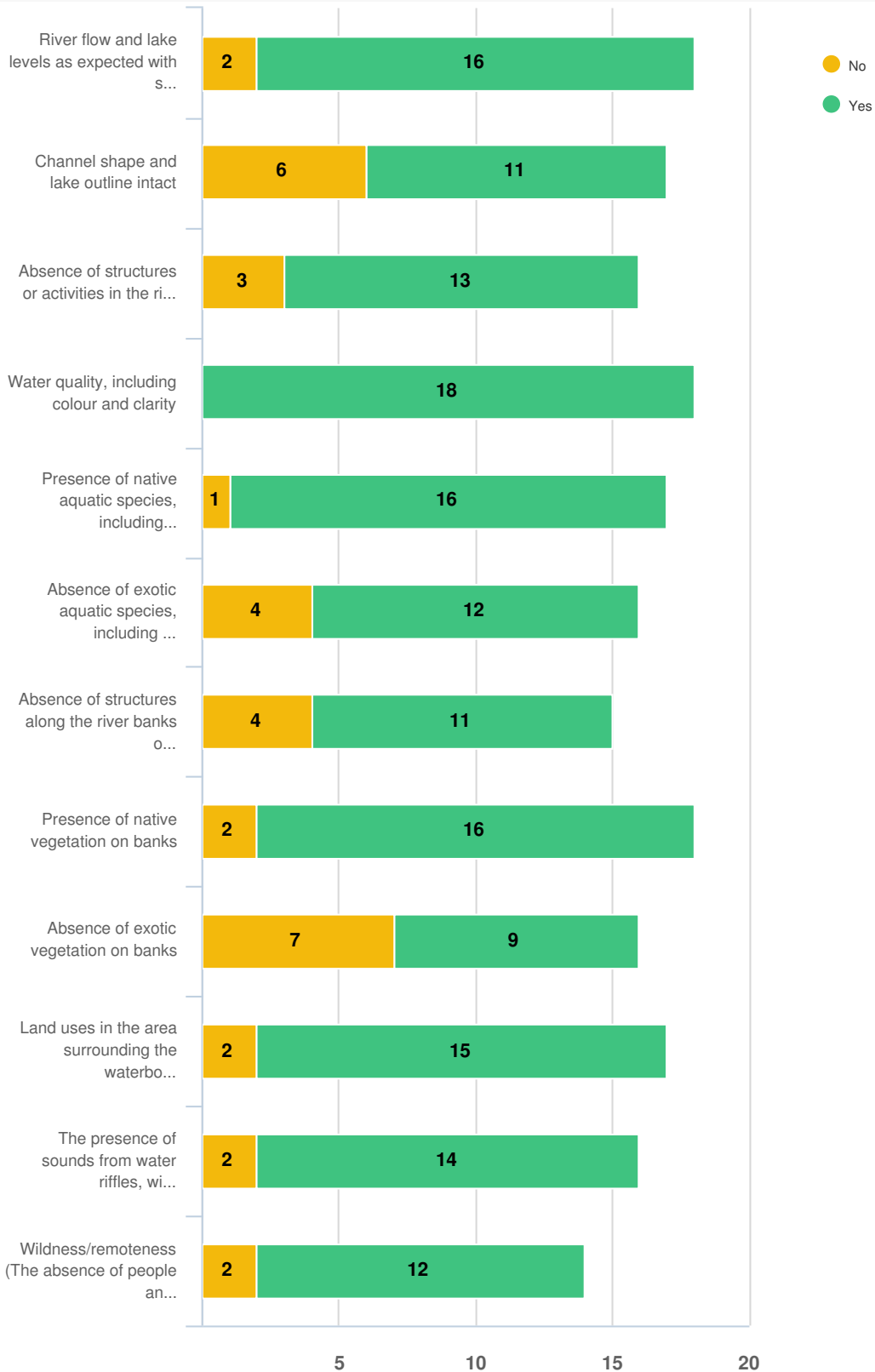
Anonymous

Lindis river, Cardrona river, Manuherikia - none of the above are being adequately managed - economic values are totally prioritised over ecological health of rivers

3/24/2022 09:18 PM

Optional question (9 response(s), 36 skipped)

Q27. Regarding natural character, what matters to you?



Optional question (18 response(s), 27 skipped)

Q28 Regarding natural character, how has this been over the last 5 years?



Optional question (16 response(s), 29 skipped)

Q29 Are there any other important characteristics you can think of? Please list them below.

Anonymous

native birdsong would be nice

3/10/2022 10:00 PM

Anonymous

no

3/13/2022 05:24 PM

Anonymous

In areas with little human intervention those should remain and be enhanced

3/19/2022 04:13 AM

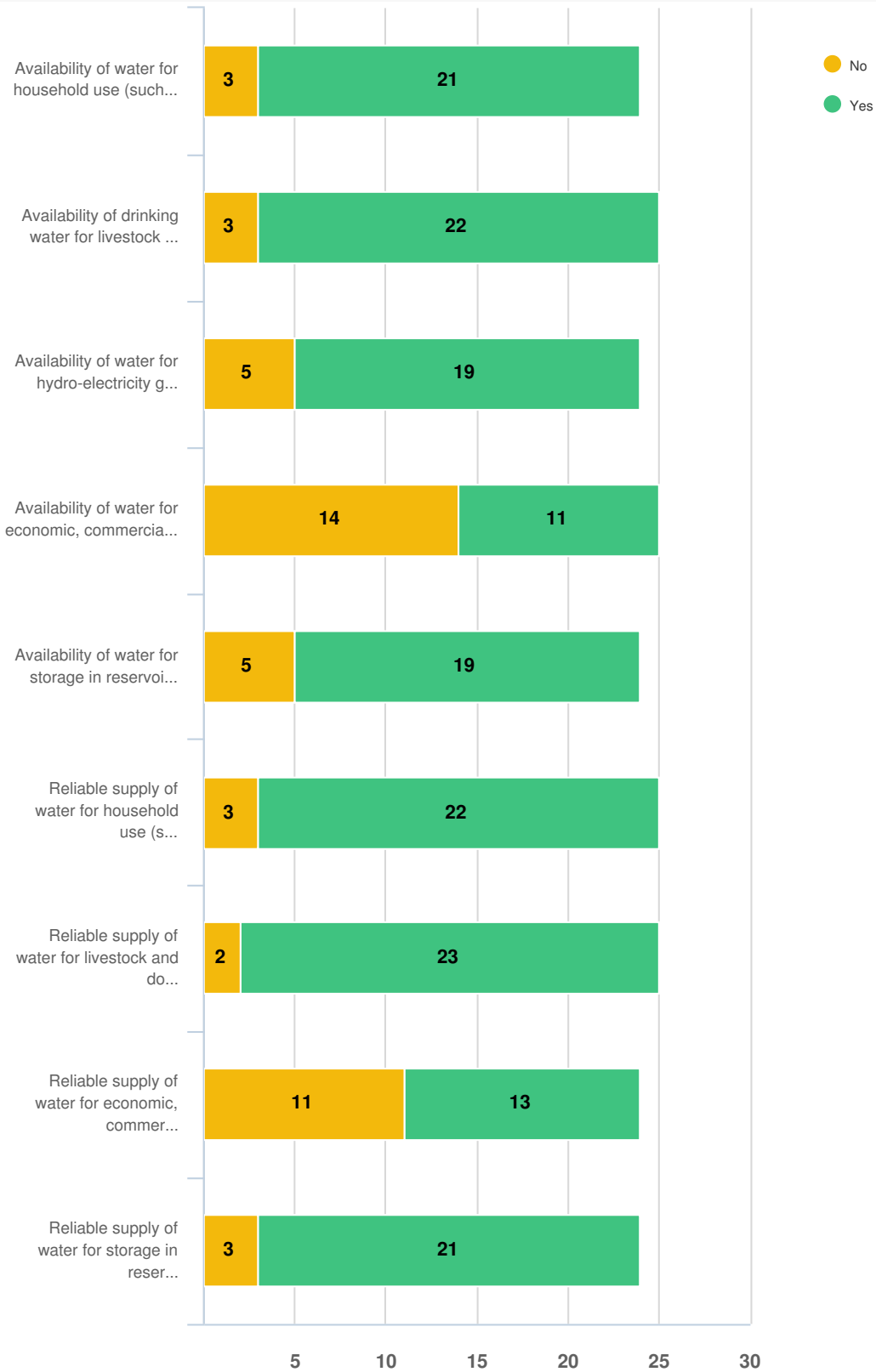
Anonymous

I have watched the intensification along the cardrona valley - why has the river not had any ecological enhancement done? Only increasing water takes and presumably fertilisation of the immediately adjoining new paddocks?

3/24/2022 09:18 PM

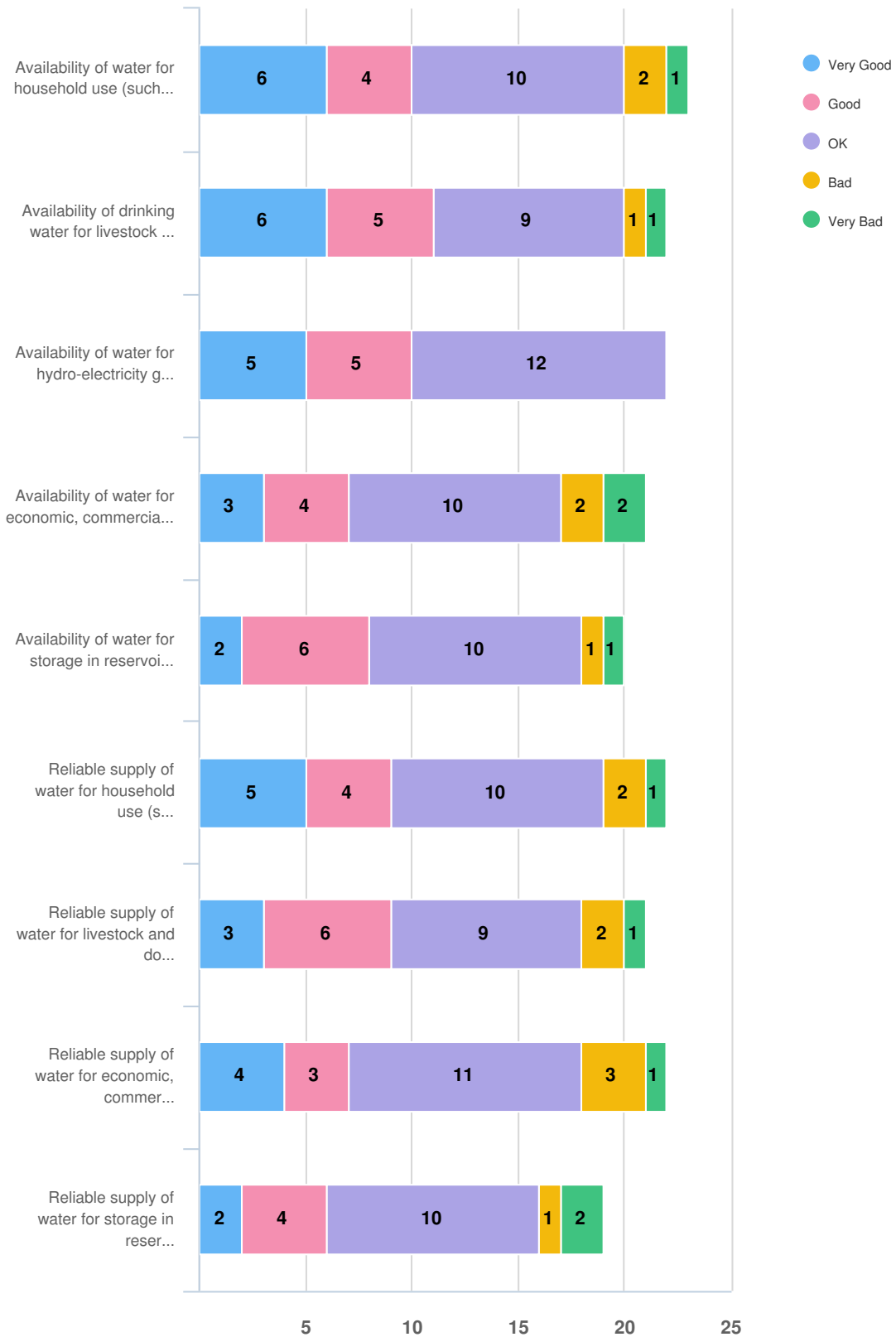
Optional question (4 response(s), 41 skipped)

Q30. Regarding water take/use, what matters to you?



Optional question (25 response(s), 20 skipped)

Q31 Regarding water take/use, how has this been over the last 5 years?



Optional question (23 response(s), 22 skipped)

Q32 Are there any other important characteristics you can think of? Please list them below.

Stewart

3/03/2022 06:35 AM

No

Anonymous

3/07/2022 02:37 PM

Irrigation should be limited. Land use should be designated as suitable for purpose without irrigation. ie. areas unsuitable for dairying without irrigation could be used for sheep with lucerne (deep-routed) pasture, grown without irrigation. Under no circumstance should water for irrigation be used by on a large area, of say 20 hectares, for private individuals to maintain a private gold course; or other such use, for an individual's selfish, privileged, indulgence.

Anonymous

3/09/2022 06:11 PM

Need more water storage for electricity generation,irrigation and river flow augmentation

Anonymous

3/13/2022 05:24 PM

quality of water available for house hold use

Anonymous

3/13/2022 09:52 PM

Not happy with power companies messing with the lake levels to cause a shortage and artificially increase the price. There should have been significant penalties.

Anonymous

3/17/2022 09:03 PM

Balclutha has very good water systems.

Anonymous

3/19/2022 04:13 AM

Reliable supply very important. Healthy supply (clean, clear, sustainable) very important

Anonymous

3/24/2022 11:39 AM

We rely on irrigation from a fork off the Clutha river and are very concerned about the increased frequency over recent years of the flow being too low for the intake pumps. The flow has been the lowest we have seen it during March 2022, and the pumps stopping is affecting grass growth and milk production. We would benefit from a more consistent release of water and more notice of when water will be held and released so we can plan ahead.

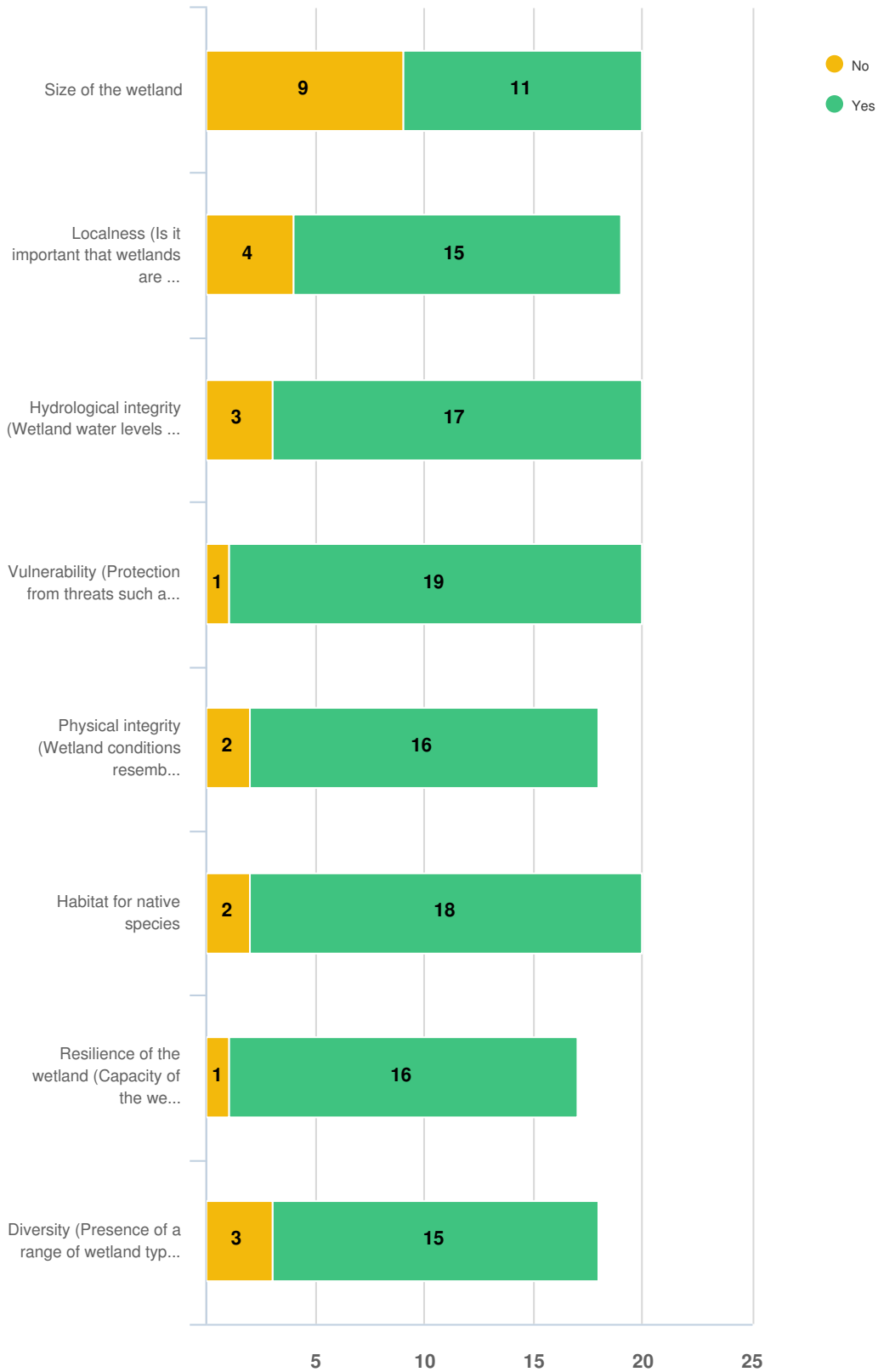
Anonymous

3/24/2022 09:18 PM

How are watertakes monitored? Are they?!

Optional question (9 response(s), 36 skipped)

Q33. Regarding wetlands, what matters to you?*



Optional question (20 response(s), 25 skipped)

Q34 Regarding wetlands, how has this been over the last 5 years?



Optional question (16 response(s), 29 skipped)

Q35 Are there any other important characteristics you can think of? Please list them below.

Anonymous

were there wetlands here

3/10/2022 10:00 PM

Anonymous

no

3/13/2022 05:24 PM

IH

Gamebird hunting is a primary recreational use of wetlands. That should get plenty of emphasis

3/17/2022 12:05 AM

Anonymous

Connectivity of water, connectivity of habitat / wetlands (eco stepping stones or eco corridors)

3/19/2022 04:13 AM

Anonymous

I think there needs to be an emphasis on maintaining and encouraging the regeneration of wetland. No one size fits all. Lots of small wetland areas in current CSA will help slow the water down allowing the water to cleans. Downstream flooding would be reduced with lower flows over a longer period rather than rouge floods. You do not need specific criteria for wetland development. If an area is retired it will revert over time. We can assist this process. If wetlands / CSA are well managed there will be flow on benefits to the other values.

3/24/2022 03:31 PM

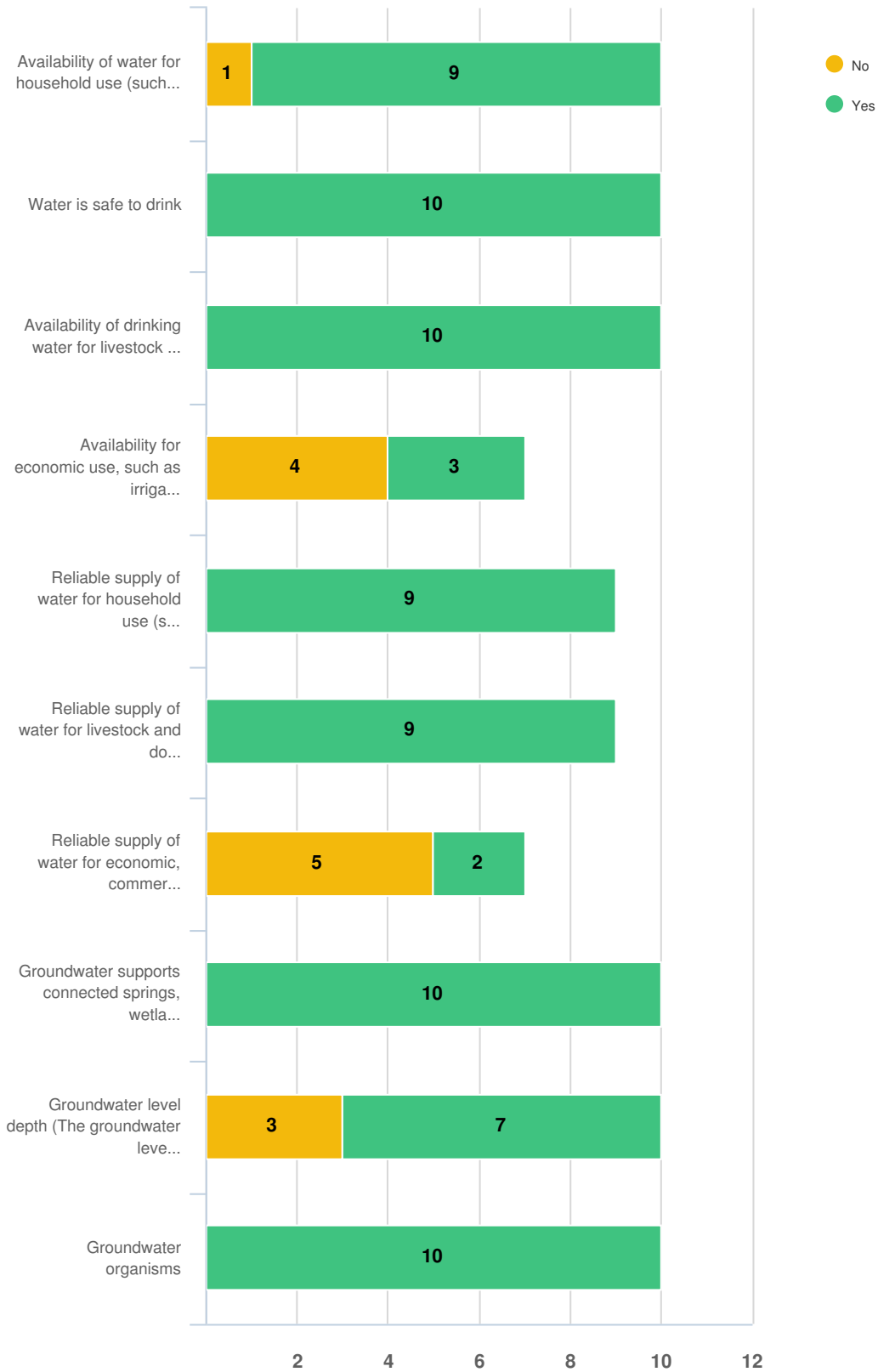
Anonymous

How are wetlands monitored and protected?

3/24/2022 09:18 PM

Optional question (6 response(s), 39 skipped)

Q36. Regarding groundwater, what matters to you?



Optional question (10 response(s), 35 skipped)

Q37 Regarding groundwater, how has this been over the last 5 years?



Optional question (8 response(s), 37 skipped)

Q38 Are there any other important characteristics you can think of? Please list them below.

Anonymous

Water storage helps augment ground water

3/09/2022 06:11 PM

Anonymous

no

3/13/2022 05:24 PM

Anonymous

Pine forestry is negatively impacting the ground water and streams, as the trees mature the small streams and ground water is drying up and water quality is decreasing

3/17/2022 10:09 AM

Anonymous

Supply for human and livestock should be priority, bottling water should not be important

3/24/2022 04:03 PM

Anonymous

Again, how is groundwater monitored??

3/24/2022 09:18 PM

Optional question (5 response(s), 40 skipped)

Q39 What else matters to you?

Anonymous

2/28/2022 07:26 PM

that the water supports a thriving primary industries and communities thrive

Anonymous

3/24/2022 02:20 PM

Agricultural use to be sustainable and economic

Anonymous

3/24/2022 03:31 PM

First priority is for the well being of the people and our small communities. We need sustainable land based businesses surviving alongside environmental improvements. Our values should not be to return to natural state or how it was however many years ag

Anonymous

3/24/2022 03:39 PM

First priority is for the well being of the people and our small communities. We need sustainable land based businesses surviving alongside environmental improvements. Our values should not be to return to natural state as that is not possible. Why is thi

Anonymous

3/25/2022 08:47 AM

Thriving communities, ability to have thriving agriculture with flexibility to make environmental improvements and change without consent. limits which are achievable and a focus on best practice.

Optional question (5 response(s), 40 skipped)

Q40 | Let us know if there is anything else you would like to tell us.

Anonymous

3/02/2022 01:06 PM

I am a keen fisher. I think the high value that the general community places on the ability to gather healthy food from a healthy environment has not been adequately recognised. The value of this has been recognised for Mahika Kai but not for the wider community. This needs to be recognised as an underlying principle. People like to gather food (mushrooms, blackberries, elderberries etc) as well as hunt and fish. This is an important cultural value that needs more recognition when considering the Land and Water Regional Plan There are massive contradictions in the high level statements for the plan. In particular, the exemption of hydro-electric power generation from environmental considerations is a huge anomaly. This is a big issue for the Lower Clutha already with large daily fluctuations in the water level which is environmentally damaging, not to mention blockage of fish migration. The Onslow scheme has the potential to make this much worse with larger fluctuations in level. This will make a mockery of all the other high level values if it is allowed to go ahead. The LWRP should address the issue of exemption of hydro-electric generation from environmental effects. If the Onslow scheme is allowed to go ahead there should be massive compensation required for environmental damage in the Lower Clutha. The value of the Clutha estuary has not been fully realised or taken seriously. The area the region's largest river meets the sea is of great environmental, historical and cultural importance. It was the site of Maori settlement and a village called Murikauhaka near the Puerua estuary so the area would have supported extensive food gathering. It is a site where the two mouths of the Clutha, the Puerua river, major recognised wetlands (Tuakitoko, Clutha Lagoon and Puerua estuary) and the sea all come together. The area will change massively with global warming and sea level rise. For all these reasons the estuary of the Clutha should be recognised as a high value site. ORC has conducted some meetings regarding Tuakitoko but has taken very little interest in the Puerua estuary or the Clutha Lagoon. I am most familiar with the Clutha Lagoon where I fish frequently. Over the last few years it has deteriorated significantly with poor and worsening water quality and poor flows through culverts that regularly become blocked, further worsening conditions within the lagoon. The state of the Clutha Lagoon in particular needs urgent attention. It is at least as valuable as Southland's Waituna Lagoon but despite this has received nothing like the same degree of attention. This must change if this valuable wetland is to survive.

Anonymous

This is an appalling waste of time and money. Is anybody keen on

3/03/2022 11:26 AM	dirty water?
Anonymous 3/05/2022 09:41 AM	
Anonymous 3/07/2022 02:37 PM	It would be nice to feel confident to swim in our rivers again. There is a new generation of children coming on who may never have the pleasure, unless more effort is put into environmental values rather than commercial gain.
Anonymous 3/09/2022 07:25 AM	Sprayed cut down trees causing erosion and when river is high take our fences and cause erosion...
Anonymous 3/09/2022 06:11 PM	Raise Falls Dam now
Anonymous 3/12/2022 07:52 PM	already get monthly on stream newsletter
Anonymous 3/13/2022 05:24 PM	nothing at this stage
Anonymous 3/13/2022 09:52 PM	I am tired of hearing stories about testing not being done correctly, or being done to bias the results, or not make certain groups look bad (only testing upstream and not testing downstream of a particular town, and saying results are fine). Water quality measurement should be taken correctly along the whole of the waterway to determine or trace at what points the water quality deteriorates, so that issues can be identified and fixed.
Anonymous 3/14/2022 06:33 AM	I would like to have access to Lake tuatikoto from the benhar side of the lake, and a consistently usable year round maintained track to walk or cycle on.
Anonymous 3/14/2022 11:03 AM	Support the progress being made in pomahaka area - these things can't be fixed instantaneously - encourage the good work being done
Anonymous 3/15/2022 06:55 PM	Yes if the water is totally on the flats the idea is that is where sediment will rest we caN not go back as we need progress but we do need to educate some of the community as to where the car was goes or the mud from gravel roads etc people are changing and the environment is heaps better now instead of negative feedback we need the good
Anonymous 3/17/2022 09:03 PM	

Anonymous

3/24/2022 03:39 PM

Why is the other section word limited?

Anonymous

3/24/2022 04:03 PM

There is alot more didyimo in the river over past 5 years

Anonymous

3/24/2022 09:18 PM

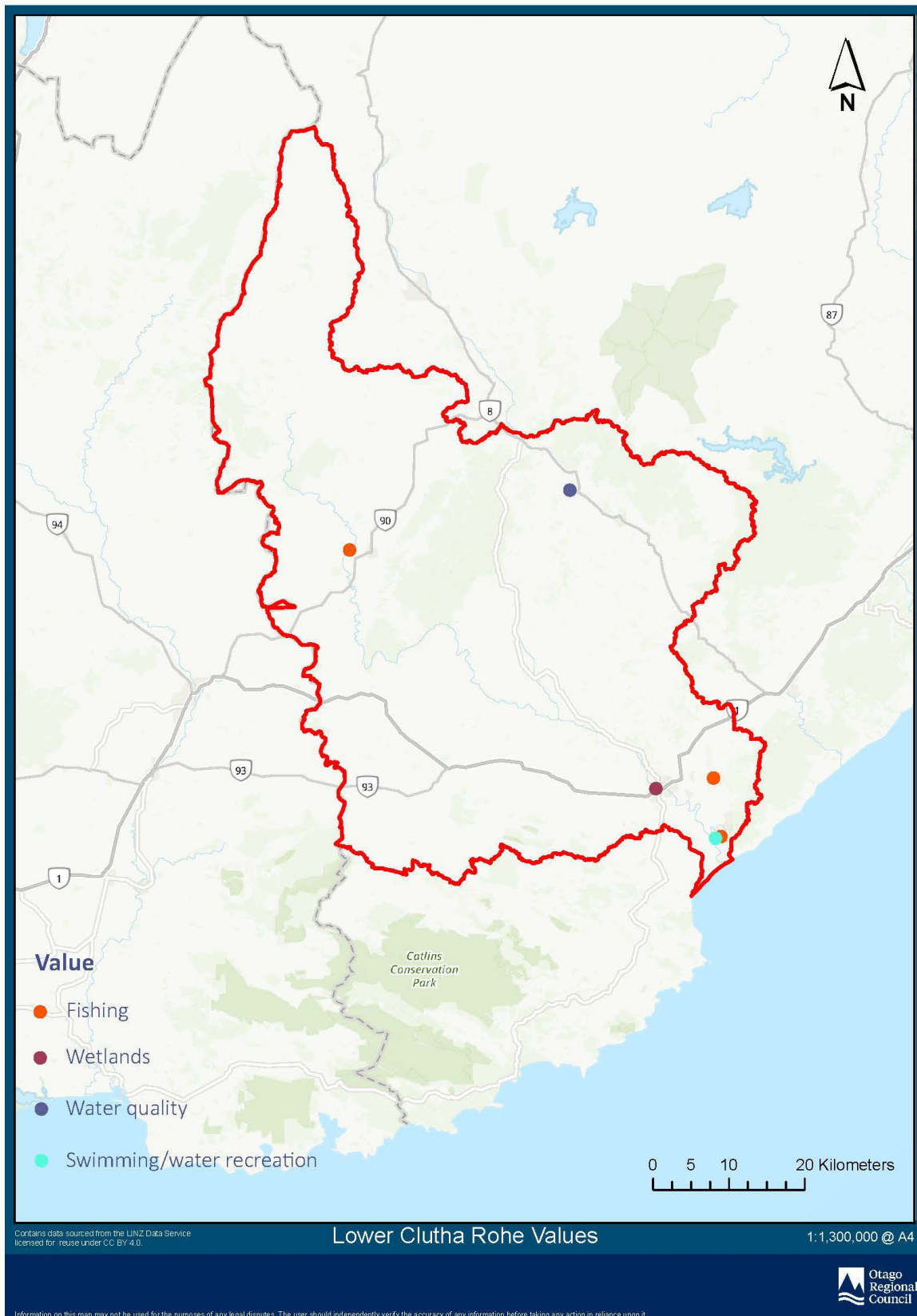
Anonymous

3/25/2022 08:47 AM

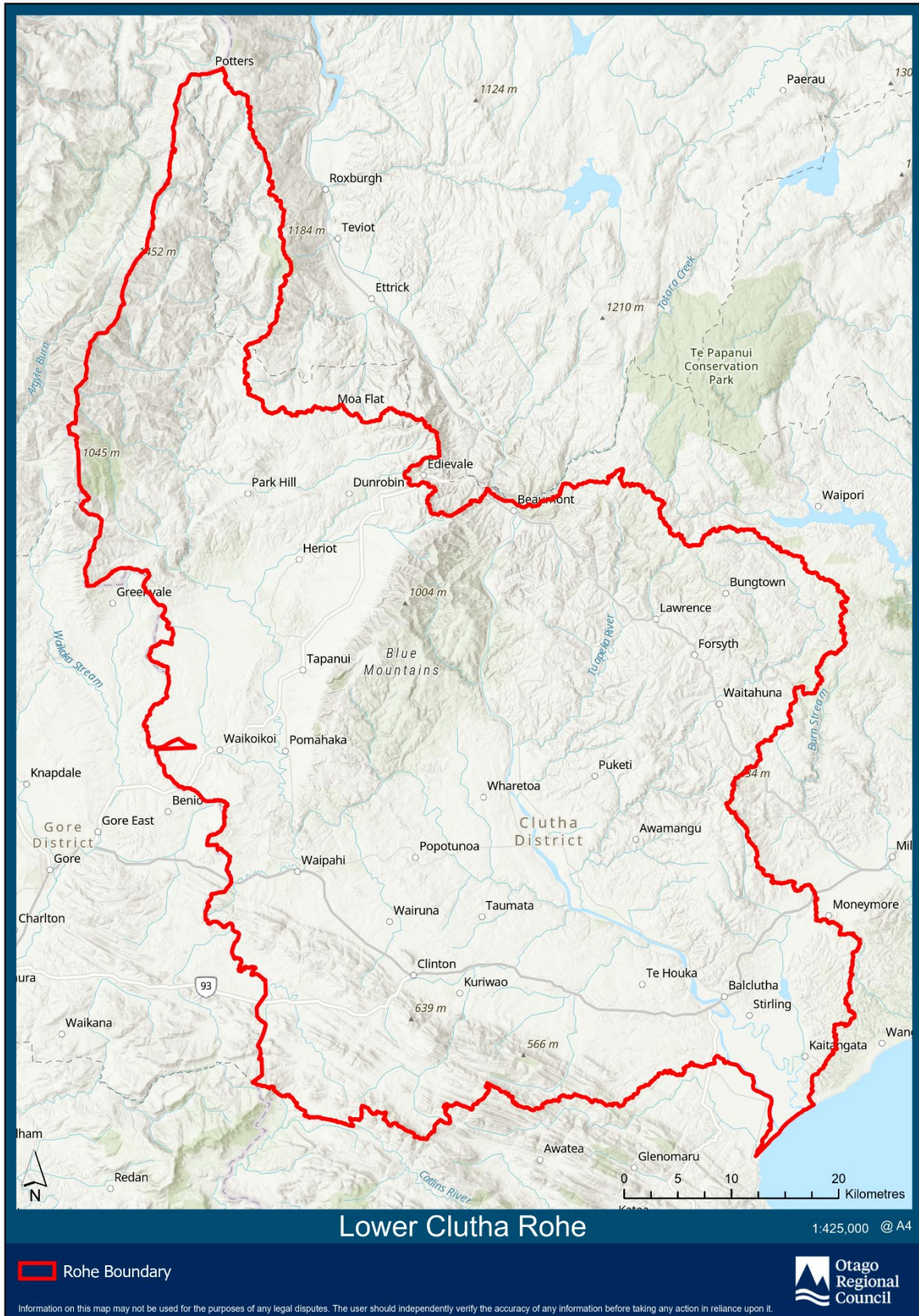
There is plenty of room for aspiration outside of policy in community, with catchment groups, in proactive activities from the council. Policy is a blunt tool, a lot can be done with community buy in.

Optional question (17 response(s), 28 skipped)

Appendix 2: Locational data



Appendix 3: Map of Lower Clutha rohe



Appendix 4: Map of Clutha Mata-Au FMU



Appendix 5: Example of online survey

1. Select below the FMU or rohe you are interested in. *

Choose an option

2. Select the things that matter to you. *

- | | |
|--|--|
| <input type="checkbox"/> Swimming (and other primary contact recreational water activities) | <input type="checkbox"/> Fishing (and other secondary contact recreational water activities) |
| <input type="checkbox"/> Walking, camping, picnicking, sightseeing (and other non-contact recreational water activities) | <input type="checkbox"/> Plants or animals that live in or near water |
| <input type="checkbox"/> Threatened species | <input type="checkbox"/> Habitat |
| <input type="checkbox"/> Water quality | <input type="checkbox"/> River flow and lake level |
| <input type="checkbox"/> Natural character | <input type="checkbox"/> Water take/use |
| <input type="checkbox"/> Wetlands | <input type="checkbox"/> Groundwater |
| <input type="checkbox"/> Something else | |

3. Regarding swimming (or other primary contact recreational water activities*), what matters to you?

*Activities where your body or face are often underwater, wetted by spray, and where you are likely to swallow water.

	Yes	No
Temperature of water	<input type="radio"/>	<input type="radio"/>
Depth of water	<input type="radio"/>	<input type="radio"/>
Clarity of water	<input type="radio"/>	<input type="radio"/>
Colour of water	<input type="radio"/>	<input type="radio"/>
Water smell	<input type="radio"/>	<input type="radio"/>
Water current	<input type="radio"/>	<input type="radio"/>
Risk of getting sick	<input type="radio"/>	<input type="radio"/>
Clean river/lakebed	<input type="radio"/>	<input type="radio"/>
Scenery	<input type="radio"/>	<input type="radio"/>
Absence of rubbish	<input type="radio"/>	<input type="radio"/>
Access to water	<input type="radio"/>	<input type="radio"/>
Absence of algal blooms	<input type="radio"/>	<input type="radio"/>

4. How has this been over the last 5 years?

	Very Bad	Bad	OK	Good	Very Good
Temperature of water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Depth of water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clarity of water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Colour of water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water smell	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water current	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk of getting sick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean river/lakebed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Absence of rubbish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Absence of algal blooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Are there any other important characteristics you can think of? Please list them below.

Please add your comment here...

Appendix 6: Example of paper survey

Land and Water Regional Plan Consultations

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Swimming

Activities where your body or face are often underwater, wetted by spray, and where you are likely to swallow water.

Where do you swim in freshwater? Please list locations



Regarding swimming, what matters to you?	Yes		No		How has this been over the last 5 years?				
	Yes	No	Very bad	Bad	OK	Good	Very Good		
Temperature of water									
Depth of water									
Clarity of water									
Colour of water									
Water smell									
Water current									
Risk of getting sick									
Clean river/lakebed									
Scenery									
Absence of rubbish									
Access to water									
Absence of algal blooms									
Are there any other important characteristics you can think of?									

Land and Water Regional Plan Consultations

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Fishing (secondary contact recreational water activities)

Activities where only your arms and legs are in contact with the water, like kayaking, boating, duck shooting and wading.

Where do you fish in freshwater? Please list locations

Regarding fishing, what matters to you?	Yes		No		How has this been over the last 5 years?				
	Yes	No	Very bad	Bad	OK	Good	Very Good		
Temperature of water									
Clarity of water									
Colour of water									
Water smell									
Water current									
Risk of getting sick									
Clean river/lakebed									
Abundance of fish									
Presence of diverse species									
Fish size									
Scenery									
Depth of water									
Presence of food sources for fish (e.g., invertebrates)									
Access to water									
Absence of algal blooms									
Are there any other important characteristics you can think of?									

Appendix 7: Example of online mapping tool

