

Residual flows for surface water takes: Plan Change Development

Summary of Community Consultation August 2017:

Clarifying residual flows

Introduction

This report summarises feedback received from the second stage of public consultation on residual flow requirements for surface water takes. The purpose of the consultation was to clarify why it's important that we review residual flow provisions in the Regional Plan: Water for Otago (Water Plan) to address the uncertainty and lack of flexibility in the existing provisions and receive feedback to help us shape the plan change. This was the second of three stages of public consultation during the development of the plan change prior to notification.

This second stage of consultation consisted of a series of community discussion sessions. A presentation was given at the start of the sessions, which provided an overview of the Plan Change and the process. Following the presentation, there was opportunity to talk in small groups and ask questions directly of Otago Regional Council (ORC) staff. The small group discussions focussed on the five key questions which we sought feedback on.

This summary includes both the written feedback and the feedback collected at the discussion sessions. A summary of the feedback received during the first consultation sessions held earlier in 2017 is available on the Residual Flows page on the ORC website, located under background information. The feedback received in both stages of consultation will be considered when developing options for any changes the provisions for setting residual flow conditions on surface water permits.

Summary of consultation process:

Community discussion sessions were held at:

- Tapanui (West Otago Community Centre) Friday 4 August at 2pm;
- Roxburgh (Roxburgh Memorial Hall) Monday 7 August at 10am;
- Wanaka (St John Rooms) Monday 7 August at 3.30pm;
- Omakau (Matakanui Rugby Club) Tuesday 8 August at 10am, and Friday 11 August at 1pm;
- Ranfurly (Maniototo Rugby Club) Tuesday 8 August at 2pm;
- Middlemarch (Strath Taieri Community Centre) Wednesday 9 August at 10am, and Friday 11 August at 5.30pm;
- Outram (West Taieri Memorial Hall) Wednesday 9 August at 2pm;
- Maheno (Maheno Hall) Thursday 10 August at 2pm.



Prior to the community discussion sessions, a short video was prepared and posted on the ORC's website to help people understanding the purpose of the plan change. It addressed the following questions:

- Why is the plan change needed?
- What outcome are we looking for?
- What benefits are there?
- Who does this apply to?
- What do we want from the Otago community?

The sessions provided a point of contact for people to ask questions and discuss any issues around setting and calculating residual flows. Five questions were posed for people to discuss and provide feedback on. These were also the questions on the feedback forms. Approximately 135 people attended over the nine sessions.

Feedback forms were provided for written feedback and information and forms were made available on the Council's website. The feedback period closed on 31 August 2017. Feedback was received online, by email, by letter and the notes taken at the community discussion sessions. Thirty-two written responses were received.

Feedback Received during the consultation period

The feedback forms asked the following five questions, which are also the questions discussed at the public sessions.

- 1. Have you experienced difficulties in measuring a residual flow for your water permit? If so what were these difficulties, and what would you like to see occur to enable more flexibility in measuring a residual flow?
- 2. Currently, we only consider aquatic ecosystems and natural character of the water body when setting a residual flow condition on a water permit. Are there any other values we should consider when setting a residual flow condition on a water permit?
 - No, aquatic ecosystems and natural character are enough;
 - Yes, other downstream permitted water takes (e.g. domestic and stock water);
 - Yes, other downstream consented water takes (e.g. other water permits downstream);
 - Yes, other environmental, social, economic, or cultural values;
 - Yes, the same values considered when setting a minimum flow;
 - Yes, it should contribute to maintaining a minimum flow;
 - Other.
- 3. Would more guidance in the Water Plan be useful to determine what a residual flow level should be? For example, we can consider developing a schedule or method to guide how to decide if a residual flow is required and, what the flow could be.
- 4. Currently, the Water Plan requires a residual flow to be measured at 'the point of take'. Site conditions can often prevent this from being possible (e.g. unstable river bed, access). It also

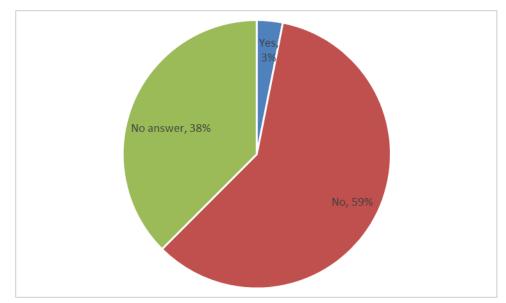


doesn't provide for water permit holders on the same tributary to work together and have one residual flow, at the bottom of the tributary which applies to all of them. Do you think the residual flow provisions should be modified to be more flexible, and if so why?

5. Do you have any other suggestions to improve the residual flow provisions in the Water Plan? Have we missed anything important to you?

Feedback in response to these key questions is summarised below.

1. Have you experienced difficulties in measuring a residual flow for your water permit? If so what were these difficulties, and what would you like to see occur to enable more flexibility in measuring a residual flow?



Summary of written feedback

Figure 1: Have you experienced difficulties in measuring a residual flow for your water permit? This graph shows the responses to the first part of question one from written feedback received. Not all respondents had water permits and so were unable to answer this question.

- Most water users have not experienced difficulties with measuring residual flows.
- Flexibility would be useful.
- Concerns expressed around the plan change potentially leading to onerous electronic measures.

Summary from community discussion session

- Way to measure should be simple, practical, and cost effective.
- Avoid electronic measuring.
- Flexibility would be useful to enable a case by case approach.
- Needs to be enforceable.



2. Currently, we only consider aquatic ecosystems and natural character of the water body when setting a residual flow condition on a water permit. Are there any other values we should consider when setting a residual flow condition on a water permit?



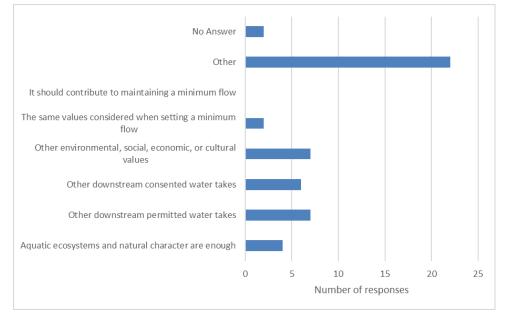


Figure 2: What values should be considered when setting a residual flow on a water permit? This graph shows the responses to the tick boxes in question two from the written feedback.

- Need definition for existing values natural character and aquatic ecosystems.
- There is support for downstream users to be considered.
- Farm sustainability was supported as being a consideration.
- Current policies adequately pick up economic and social aspects and therefore there is no need to alter these policies.
- Domestic and stock drinking was specifically identified as downstream users that should be considered.

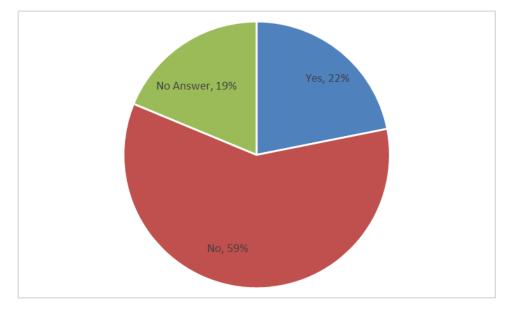
Summary from community discussion session

- Better definition of natural character and aquatic ecosystems needed.
 - Where do you set "Natural" (time in history)?
 - Needs science, and to be specific to areas in the regions.
 - Comes down to the state of the estuary.
 - Do we look out for introduced species or native fish?
 - What about seasonal aspects?
 - Need to consider elements like soil characteristics that affect the water flow.
 - Define "flows all the time".



- Values identified for tributaries that run dry naturally (i.e. Selwyn River).
- What precedent has been set out in the Environment Court for natural character and aquatic ecosystems?
- Social and economic factors/community wellbeing need to be taken into consideration.
- Historic use and baseline information should be taken into consideration.
- Downstream and existing users need to be taken into consideration.
- Concern that it might become more complicated if too many values are added.
- Bed maintenance and gravel movement/extraction can have an impact.
- Domestic water need and future domestic growth should be considered.
- Relationship of tributaries with aquifers needs to be considered in natural character.

3. Would more guidance in the Water Plan be useful to determine what a residual flow level should be?



Summary of written feedback

Figure 3: Would more guidance in the Water Plan be useful to determine what a residual flow level should be?

This graph shows the responses to the tick boxes in question three from the written feedback.

- A guide might be more useful rather than provisions or rules in the Water Plan.
- Concern that one method would not address the variety across the region.
- There was support for a method that would identify a starting point from where calculations and negotiations might start.
- Methodology shouldn't be prescriptive.



- A method won't solve the disagreements between different parties as this generally focusses around the values that are attributed to a water body or the results of what a residual flow should be.
- Consideration that changes now would create instability in the plan at a time when certainty is mostly needed regarding the replacement of Deemed Permits.

Summary from community discussion session

- Guidance would be good.
- Would need to be flexible not too prescriptive.
- Calculations would be nice but may be difficult in changing circumstances.
- Would need to be practical, consistent, and clear.
- Define groups of values, but not a figure that must be reached.
- If minimum flow is sufficient to look after values, then no residuals should be needed.
- Parameters should include historic use.
- Concern about treating all of Otago as one, it needs to recognise stream variability in the region.
- Consideration of seasons and years dry vs wet.
- Irrigation needs must be considered.
- Needs a balance between conservative and prospective approach.
- Approach for the benefit of the community, not just the person applying.
- 4. Currently, the Water Plan requires a residual flow to be measured at 'the point of take'. Site conditions can often prevent this from being possible (e.g. unstable river bed, access). It also doesn't provide for water permit holders on the same tributary to work together and have one residual flow, at the bottom of the tributary which applies to all of them. Do you think the residual flow provisions should be modified to be more flexible, and if so why?

Summary of written feedback

- Concern around requirements for continued measurement. Anything considered must be cost efficient and practicable.
- It is questioned whether the plan specifies that it must be measured at the take. There are existing examples where this isn't the case.
- Flexibility is supported as this would enable issues like flood prevention to occur.
- Any amendments should be practical and flexible to enable the group permit approach.
- Flexibility should be user driven i.e.: the applicant determines the most appropriate location to set and measure the residual flow.
- A minor tweaking of wording is all that is required, as flexibility is already applied at the assessment stage.



• An advice note should be considered to progress this issue rather than a plan change.

Summary from community discussion session

- A flexible approach is supported.
- Users should have input into choice of location.
 - The confluence of the tributary with the main stem is a critical measuring point.
 - Some support for point of take measurements, others suggest at the property boundary.
- It's the method of measurement rather than the location that is challenging.
- Methods of measurement need to be practical and cost effective.
- Some support for groups and working together, others think it might not work.
- Take into account losses to groundwater.

5. Do you have any other suggestions to improve the residual flow provisions in the Water Plan? Have we missed anything important to you?

Summary of written feedback

- Requests not to proceed with the plan change for the following reasons:
 - Existing provision in the plans work adequately.
 - Worried about unintended consequences on changing now regarding the timing of Deemed Permits.
 - There is concern over the costs to ORC on progressing this to a plan change.
- The plan change needs to be keep tight and simple to ensure that it doesn't become too onerous.
- Flexibility will provide a benefit to the broader community not just those applying for a consent. Flexibility will enable a wider grouping of values.
- Consider downstream users.
- Purpose of residual flows and minimum flows should match one another. The values assessed in both should be the same.
- Consideration needs to be given to what existing environment / natural character should be. Clarity is required.
 - Support was given for the environment prior to abstraction being the existing environment.
- There is a need for better and more information around the hydrology, environmental values, and modelling to be made available to applicants to assist them in the process.
- Concern was expressed that the discussion has focussed too much on the irrigator and not enough on the environmental and recreational benefits.
- Concern was expressed around the privatisation of the river beds because of water taking.



- Consideration needs to be given to what is the baseline aquatic system. A definition would provide clarity around this.
- The Regional Policy Statement provides some guidance on natural character, we should look at this in defining natural character through this plan change.
- The values considered in setting a residual flow should match those when applying for a whole consent.
- The Water Plan needs to identify all instances where a residual flow should be applied.
- Consideration should be given to identifying the natural character for all rivers/tributaries.
- Concern about the Shiny model being used going forward. This model hasn't been peer reviewed yet.
- Residual flows need to be applied differently across the year i.e. Winter different to Summer.
- Process should not increase the cost for applicants.
- Concern was expressed that the notification process for group applications doesn't adequately notify affected parties. Group applications may be quite large and have significant impacts on the community and hence should be publicly notified.
- Storage of water needs to be considered, specifically a community based approach to storage should be undertaken.
- Feedback was received that the consultation sessions were at the wrong times. During the day did not work for many people.

Summary from community discussion session

- Concern at timing of the plan change with the 2021 timeframe for Deemed Permits looming.
- How will the plan change impact on Deemed Permit renewal?
- The impact of storage (dams) needs to be considered.
- Defining definitions for natural character and aquatic ecosystem might be enough.
- Needs flexibility to recognise differences in tributaries and catchments.
- Needs to be practical and enforceable.
- Good science, hydrology and ecology, needed for applicants.
- Aquifer knowledge could be increased.
- Needs to be cost effective.
- Concern that affected parties will have undue weighting in the application process.
- Need to consider future demand.
- No residual flows needed where a stream goes naturally dry (e.g. Thomsons Creek).
- Greater emphasis on fish screens at takes.



Overall summary – key messages

- Flexibility on where a residual flow is set and measured was generally supported.
- Need to ensure that the values considered are not opened too much so that confusion would result and make the process more onerous. However, there was merit in adding downstream users, particularly stock and drinking water consideration.
- Defining aquatic ecosystems and natural character will assist in clarity within the plan and existing policies.
- There is concern that a method in the plan would be too prescriptive but acknowledgement that it would provide clarity. Consideration needs to be given to finding a balance between providing clarity and being too prescriptive.
- More guidance is needed around what information is available, how it can be used, what would be required in an application that may have a residual flow.
- Consideration should be given to what we can do through guidance vs provisions in the Water Plan.