

Next steps for fresh water

SUBMISSION FORM

The Government is seeking views on the way fresh water is managed in New Zealand.

For more information about the Government's proposals read our [Next steps for fresh water consultation document](#).

Submissions close at 5.00pm on Friday 22 April 2016.

Making a submission

You can provide feedback in three ways:

1. Use the online submission form available at www.mfe.govt.nz/consultation/next-steps-fresh-water. This is our preferred way to receive submissions.
2. Complete this submission form and send to us by email or post.
3. Write your own submission and send to us by email or post.

Publishing and releasing submissions

All or part of any written submission (including names of submitters) may be published on the Ministry for the Environment's website www.mfe.govt.nz. Unless you clearly specify otherwise in your submission, we will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this consultation under the Official Information Act.

The Privacy Act 1993 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this consultation. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

Submission form

The questions below are a guide only and all comments are welcome. You do not have to answer all the questions. To ensure your point of view is clearly understood, please explain your rationale and provide supporting evidence where appropriate.

Contact information

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* Questions marked with an asterisk are mandatory.

Fresh water and our environment

1. Do you agree that overall water quality should be maintained or improved within a freshwater management unit rather than within a region? Why or why not?

- Yes
 No

A freshwater management unit as defined in the consultation document is still rather broad, but is generally considered as a catchment. The problem with catchments is that they tend to overlay each other especially when you consider surface water and groundwater, and then further define groundwater as confined, semi-confined, and un-confined.

The FMU's are better able to identify specific attributes of the resource, but also the values that communities place upon them. These values also overlay with differing impacts on water quality. Pressure on a FMU to satisfy economic values, social values, cultural values and environmental values will require give and take by all parties to achieve acceptable outcomes.

The intention of maintaining or improving 'overall' water quality is more prescriptive than earlier documents, where water quality is the sole determinant, rather than considering maintaining or

improving economic outcomes, social outcomes, and cultural outcomes all in order to improve quality or environmental outcomes. I believe all values need to be considered and the concept of trade-offs, or overs and unders may need to be considered in order to advance overall improvement but in doing so may negatively impact some values.

How should the attributes be applied, or the values protected, in giving effect to the requirement to maintain or improve overall water quality? Please explain.

The attributes (management variables) should be applied as limits, but the limits need to flex to mirror environmental events. I.e.; If there is going to be a severe drought then limits need to reduce. Imposing restrictions on consented activity will not avert a drought and should not be used to support some community values at a greater rate than others.

Applying limits to most groundwater systems for quantity abstracted will have little or no impact on surface flows for a significant period, and by the time an impact is felt, recharge will be complete. Some FMU's will differ with varying soils that have varying transmissivity and conductivity (ability for water to move up and down and sideways within the soil profile), and these factors need to be accounted at an individual FMU level.

Applying limits on leachate entering groundwater will be more difficult as these impacts are slow developing, influenced by numerous factors, and experienced for a longer term. There is also potentially an historical burden. The problem with leachate (in this instance Nitrogen, but a similar situation exists for any leachate) is that there is no effective method of measuring individual contributions to leaching (only cumulative)

2. What is an appropriate way to include measures of macro invertebrates in the National Policy Statement for Freshwater Management? What alternative measures could be used for monitoring ecosystem health?

Macroinvertebrates are an effective measure of ecosystem health, but determining the levels and species of macroinvertebrates for which limits are determined is an exercise for the scientists.

My other concern in this area is that there are other factors that impact ecosystem health, like flood protection work, alluvium aggradation, river orientation (straight, braided), tree removal, shading, water temperature (flow rate, depth), oxygen levels and so on.

3. What information should be required in a request to include significant infrastructure in Appendix 3 of the National Policy Statement for Freshwater Management, and why would this information be important?

4. Do you agree with applying lake attributes and national bottom lines to intermittently closing or opening lakes or lagoons? Why or why not?

Yes

No

5. What information should be required in a request to list a water body in Appendix 4 of the National Policy Statement for Freshwater Management, and why would this information be important?

The water body needs to be accurately described, and should be made consistent with the rest of the report and referred to as an FMU. This FMU must be precisely described in extent, and the period for which the inclusion in Appendix 4 relates. The reason for inclusion must be stated in the application for inclusion and accepted by the environmental manager of the regional council. It may include; a natural event like volcanic eruption, lava flow, thermal activity, or artificial impact like accidents or events, or historic events that require time, money and effort to remedy.

6. Do you agree with the proposed requirements and deadlines for excluding livestock from water bodies? Why or why not?

Yes

No

I agree with the sentiment, especially regarding cattle, and I see no difference between dairy and beef cattle, as their wading habits are identical. I agree a date needs to be set, but 1st July 2017 seems very soon to me.

I agree that deer and pigs which are both wallowing animals, pose an equal risk and should be excluded.

I agree that sheep and goats should not be considered in this rule.

I am not sure how slope is intended to be calculated. Is it an average over the property? Is it an average over the paddock? Is it an average over the waterway?

Economic use of fresh water

7. Should standards for efficient water use be developed? Should standards for good management practices for diffuse nitrogen discharges be developed? Who should be involved in their development? When should they be applied to consents (eg, on consent expiry and/or on limit setting and/or permanent transfer)?

Yes. There are many aspects to consider in this question.

- Efficient use encompasses scheduling and application practices, but is constrained by many factors that are specific to the consent holder, like available plant and machinery, labour inputs, soils and environmental sensitivity, professional support availability and cost.

- Efficient use could mean: soil assessment and knowledge of available water holding capacities, soil moisture monitoring (many forms), accreditation of irrigation operators, variable rate irrigation (VRI), application technology (drip, micro sprinkler, pivot, linear, guns, sprinklers, flood etc.), it could extend to constraints on application timing (day, night) etc.

- In some instances they may be a condition on a consent, especially if a consent is modified to allow additional takes or discharges

- Standards for any Nitrogen discharges should be developed, not just diffuse Nitrogen. I am assuming the terminology discharge refers to leaching. This is a work in progress as there is no (realistic) current methodology for measuring nitrogen discharges. I believe that there is significant difficulty in determining what and where nitrogen may be leached. Distance from waterways, soil types, time of year, soil moisture status, how Nitrogen is applied (diffusely as broadcast solid fertiliser, or intensively as localised dung or urine patches). There are also difficulties in assessing current state as lag times between application and Nitrogen showing up in waterways can be very

long periods. The current modelled approach using Overseer is not the complete answer, although it may be providing reasonable data in some grazing applications.

While this Consultation Document refers to Nitrogen, consideration needs to be made for other potential contaminants like sulphur, phosphorous, perhaps E.coli or periphyton.

The development of GMP for both efficient use of water and nitrogen discharges needs to be a collaboration of all interested parties, including the legislators who need to advise what is possible. Water users, fertiliser industry representation, farm advisors, councils, irrigation designers and so on.

It is important to develop rules around what is currently practiced and what is possible to be achieved. It is not tenable to develop rules that are unachievable.

These rules should be applied on the issuing, changing, transfer, or renewal of a consent.

The practices agreed by the consent holder should become part of the decision process of the council as to other criteria in the individual consent, such as; if VRI is practiced in conjunction with soil moisture monitoring by an accredited operator, then a different weekly volume, or rate of take, or duration of consent, or minimum flow restriction may apply. I.e.; less efficient water users should have less access to water, and consent holders decisions to invest in more efficient application technology or management will be rewarded with greater access to water and for longer consent periods.

8. Do you support easier transfer of consents? Do you think the changes outlined in Proposal 2.4 would better enable transfers? What other changes would better enable transfers?

I believe the ability to transfer consents on the same terms and conditions between water users should be possible.

The bullet point to standardise consent specifications needs to be expanded to reflect agreed conditions between the consent holder and the council. These need to expand over and above volume and rate of take, duration, and low flow restrictions if applicable, and include application technology, operator competence, other GMP's, so water cannot be transferred to a "lower" use.

I consider a mechanism must exist that does not "sell" water, as that implies ownership, and brings into question ownership of the water.

Water can only be transferred within a FMU.

No money or other stipend can be paid in exchange for the consent, and the duration must be recorded. Charges can be levied to recognise the costs of administering these changes.

The process must be managed by the council and telemetric monitoring of any water source both provider and receiver must be in place and operating at all times.

9. How should the Government help councils and communities address over-allocation for water quality and water quantity? Should it provide guidance, rules or something else (please specify)?

As noted in the Consultation Document, the significant issue is "Security of Supply". This is more important than rate of take or volumes assigned, but in times of restriction the only current option is to apply bans. Water users can make do with less water if necessary, but endure hardship when forced to have no water. The prospect of "no water" happening at some time in the future can also incite adverse behaviours, like excessive watering which will worsen a potential situation, whereas the prospect of a reduction in supply would be less likely to see that sort of reaction.

Government needs to provide support to all interested parties to appreciate that security of supply for water users is the issue and that restrictions are applied to all sectors, not just abstractors. This means legislation to support urban water controls, and perhaps less critical users like pastoral irrigation, and the at present unrestricted, less than 5 litres/second consents.

Prioritising water use already exists in that there are protocols that have permitted activity which include; water for human use and stock drinking water and firefighting, (in some situations this includes frost protection), then there is consented use, and further to this discretionary use which may be a lower impact situation. I consider this prioritisation could be further refined and perhaps listed in a similar manner to this;

1. Human use
2. Stock Drinking Water
3. Firefighting
4. Municipal or urban use excluding lawn watering and washing cars buildings etc.
5. Permanent Horticultural crops
6. Annual Horticultural crops
7. Amenity areas, parks, playgrounds
8. Pastoral crops
9. Lawn watering and washing
10. Bottled or exported water

Legislation should support security of supply in diminishing importance as we move down the list. This support can be by way of reducing the rate or volume of take with a table of diminishing values for each class of water use.

10. Should councils have greater flexibility in how they meet the costs of improving freshwater management? For example, by recovering costs from water users and those who discharge to water? Please provide examples.

Freshwater management is core business of councils and should be funded by rates. Specific demands by individuals or groups should be recoverable, especially in this suggested arena of variable consents. Where a collective benefit is perceived, then those costs should be shared, and demands for reports or supporting evidence demanded by councils should only extend to that which is still unknown by the council at that time.

Iwi rights and interests in fresh water

11. How can the Government help councils and communities to better interpret and apply Te Mana o te Wai in their region?
12. Should councils be required to identify and record iwi/hapū relationships with freshwater bodies, and how should they do it?

13. What would support councils and iwi/hapū to engage about their values for freshwater bodies?
14. What are your views on the proposal for a new rohe-based agreement between iwi and councils for natural resource management? What type of support would be helpful for councils and iwi to implement these to enable better iwi/hapū engagement in natural resource planning and decision-making?
15. What are your views of the proposed amendments to water conservation orders? Outline any issues you see with the process and protection afforded by water conservation orders?
16. If you are involved with a marae or live in a papakāinga, does it have access to clean, safe drinking water? What would improve access to clean, safe drinking water for your marae or papakāinga?

Freshwater funding

17. Do you agree with the proposed criteria for the Freshwater Improvement Fund? Why or why not?

Yes

In order that significant projects can be established a capital injection of public money which recognises benefits accrue in environmental, social, cultural as well as economic arenas, and that an economic return can be over a very long term, but without this investment, these changes may not occur.

I also believe that legislation should allow for private investment in projects that must also achieve the same objectives, in particular hydroelectricity projects, but may allow for private water supply schemes, where charges may be levied to recover costs and obtain profit for the storage, supply, and possibly reticulation of water. In these instances they must also abide by the same scrutiny for maintaining or improving environmental, social and cultural outcomes. This legislation must support the principle of not selling the water, but reimbursing the investment in storage, supply and reticulation.

Other comments

18. Do you have any further comments you wish to make about the Government's proposals

- I would like the regulators to look at ways to encourage improvement by existing water users.

At present there is no incentive or requirement for existing water users to improve. There exists application technology, science and monitoring services that could allow improved outcomes from using less water, but no incentive to use them. In many cases there is capital investment or operating expenditure needed, and unless legislation to enforce improvement is introduced, or incentives to improve introduced, then nothing will change.

I am in favour of incentives;

These could be: Longer consent periods, different volumes or rates of take at periods of low flow, different low flow levels, or other negotiated outcomes.

- I would like regulators to allow new users access to water in fully allocated FMU's.

New users are going to be more in tune with current freshwater management and objectives to maintain or improve water quality. They will investigate and propose new ways of achieving these. By not allowing new users into the programme, these improvements will not be achieved.

- I do not favour allocating water on a first come first served basis, rather the best possible use of water, measured against all desired values should be favoured. This would allow new improved water uses to be implemented.

- I believe that water consent renewals should be treated as new applications and all existing users need to portray that they are using water as well as possible. There does need to be some consideration for existing users in fully allocated FMU's when adopting this attitude, but renewals should not be considered as of right and that these applications need to be considered in the context of "is this water use the best possible outcome given all these considerations"

- I do not believe that consents to take up to 5 litres per second should be permitted activity. The only permitted activity should be for human use (not necessarily all urban or municipal needs), stock drinking water, and firefighting. With the expansion of "lifestyle" blocks in and around urban areas, the cumulative impact on the resource must be increasing. (5 litres/sec is enough to irrigate 6ha at 3.6mm/day)

Thank you,

Bruce Mackay

Releasing submissions

Your submission may be released under the Official Information Act 1982 and may be published on the Ministry's website. Unless you clearly specify otherwise in your submission, we will consider that you have consented to website posting of both your submission and your name.

Please check this box if you would like your name, address, and any personal details withheld.

Note that the name, email, and submitter type fields are mandatory for you to make your submission.

When your submission is complete

If you are emailing your submission, send it to watersubmissions@mfe.govt.nz as a:

- PDF
- Microsoft Word document (2003 or later version).

If you are posting your submission, send it to Freshwater Consultation 2016, Ministry for the Environment, PO Box 10362, Wellington 6143.

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