

Response ID ANON-R18C-QC7T-W

Submitted to Improving the protection of drinking-water sources
Submitted on 2022-03-04 15:56:37

Your details

1 What is your name?

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3 Which region are you in?

Select your region:
Manawatū-Whanganui

4 Are you submitting as an individual or on behalf of an organisation?

Organisation

5 If on behalf of an organisation, what is its name?

Name of organisation:
Ruapehu District Council (staff)

6 If on behalf of an organisation, what type is it?

Local Government

Example: farmer/agricultural worker, water supplier, etc:
Water Supplier

Consent to release your submission

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No

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Executive summary

Read information from the Executive summary - HTML format

Section 2: Proposal 1 - How at-risk source water areas are delineated

Read information from Proposal 1 - HTML format

1 Domestic and international evidence suggests that delineating three at-risk areas is a good approach for protecting sources of drinking water. Do you think this is a good approach for protecting our source waters?

No

Please explain your response here:

There appears to be a disconnect across the National Policies. The National Policy Statement for Freshwater Management 2020 (NPS_FM), National Environmental Standards for Freshwater 2020 (NES-F) and Stock Exclusion Regulations 2020 are all designed to improve the water quality. These standards should make existing potable water takes permitted. As discretionary activities the approach will drive open source water applications to be declined by Regional Councils because of activities upstream and the uncertainty/risk within the catchment. The use of delineation is adequate as it is the first barrier – not the only barrier in safe guarding water. It may be that sources are higher than MAVs naturally or through contamination. It should not be the reason not to grant a consent to abstract water.

Drinking Water Operators must demonstrate they have adequate Source Water Risk Plans and Drinking Water Quality Assurance Rules are the function of Taumata Arowai as the specialist not Regional Councils.

Council supports Regional Council providing a scientifically derived method of mapping source water risk management areas (SWRMAs) based on time it takes for contaminants to travel to source water intake and level of filtration/mixing before reaching the intake. Also all activities, water quality and quantity results should be published into LAWA in a timely manner to help all catchment users in their decisions.

However the SWRMA needs more clarity and emphasis to improve the system.

SWRMA zones should be reflective of the migration speed of contaminants into the source water zones and what flow regime is used to calculate the travel time.

Rivers:

SWRMA 1 activities in this area are prohibited this needs to be the immediate area. I.e 100 upstream and 50 metres downstream.

SWRMA 2 an actual distance eg 500 meters would provide clarity of close effects. With a subcategory of 8 hrs travel time of influences to consider at low and medium flows.

SWRMA 3 appears to provide visibility to users of what activities are occurring in the catchment, which may help with incidents.

Bores

Need to consider the depth of abstraction and speed of infiltration to this depth. I.e shallow bores are susceptible to a wider land uses than very deep bores.

2 In your view, is the method to determine each SWRMA, for each type of water body, the best option?

No

Please explain your response here:

See Comments in question 1.

There needs to be national guidance to prevent Regional Councils developing their own methodologies as a first instance. However there will be unique geological features etc which are not covered and will provide a secondary path of information collection requirements. For example the abstraction hydrological connectivity at various abstraction rates. NES-DW should be providing guidance about the type of data required to inform the Catchment Environment to Regional Councils. LAWA publications and GIS layer of activities will provide visibilities to support all catchment users.

Again Taumata Arowai and the Water Supply Abstractors should cover the risks and solutions to the Drinking Water.

3 For lakes, do you agree that SWRMA 2 should include the entire lake area?

No

What might be an alternative approach? Please explain your response here:

The size of the lake will determine the influence zone and should be considered along with the Limnological characteristics of the Lake.

Again this is Barrier 1 and should not be considered the only barrier. Treatment systems are developed to account for potential contaminants. Taumata Arowai and the Water Supply Abstractors should cover the risks and solutions to the Drinking Water.

4 SWRMA 1 for lakes and rivers is proposed to extend 5 metres into land from the river/lake edge. This contrasts with 3 metre setback requirement of the Resource Management (Stock Exclusion) Regulations 2020. SWRMA 1 is proposed to be used as a basis for controlling activities close to source water intakes, and applies to a wide range of activities. Do you think these differing setbacks will cause confusion or result in other challenges?

Yes

Please explain your response here:

New Fencing added after 2022 should be set at 5m many have already invested heavily in the 3 meter fencing rule.

Most stock do not congregate as mobs along the paddock edge unless there is intensive grazing management being activated or a shortage of water. Best Practice Guidelines could deliver the same effect:

Having a setback of planting crops 5m from the water edge and leaving existing fences at 3m will have only slightly lower effect as that of moving the fence. Having good, reticulated stock water set 5-20 m back from the waterway and some shade will also encourage stock away from the waterway.

5 There is evidence suggesting that a 10–30-metre radius around source water bores is a preferable way to delineate the area where activities would be heavily restricted (SWRMA 1). However, expert advice suggests a 5-metre radius is the most workable option. Do you agree that a 5-metre radius around a source water bore gives enough protection?

Unsure

Why or why not? If not, what alternative would you suggest?:

Retrospectively imposing a 5m radius will be costly and problematic, making the zone 10-30 meters is likely to be impractical. The bore head security should be the major focus of surface contamination which is currently set at 1m.

Stock exclusion zones should remain consistent though out the NPS rules.

The depth of the bore abstraction point, method of bore and screen establishment, geological profile and the hydraulic gradient will have the greatest influence on the bore.

6 While water takes from complex spring systems or wetlands may require a bespoke SWRMA to ensure consideration of any contamination pathways present, a default method is necessary to ensure interim protection. Do you think a default method is practicable in most situations?

Yes

Please explain your response here:

See Question 1, 2 and 3

7 How long do you think is necessary for regional councils to delineate SWRMAs for currently registered water supplies in each region using the default method?

Please explain your response here:

A National default methodology should be developed to enable National Reporting on NPS effectiveness.

Work should be prioritized by the risk of contamination from within the catchment area, population served and align with agreed timeframe to develop SWMP.

The water supply protection delivery should be Taumata Arowai and the Water Supply Operator.

8 What challenges do you foresee in delineating SWRMAs, when previously unregistered supplies are registered with Taumata Arowai (see Proposal 3 for more details)?

Please explain your response here:

As supplies register they should be included onto a GIS layer.

A second catchment map should be done after all the supplies are registered.

Previously unregistered supplies have 5 yrs to register.

The aligning of NES-DW with those supplies covered in WSA will potential require significant new bodies of water to be protected from current land use activities. There is potential for major conflict as new sources are registered into waterbodies where established discharges historically exist. For example wastewater treatment systems also need certainty before investment that a small supply cannot establish within its zone of influence into the future. This needs further research and understanding before legislation is passed. See Q1.

9 What support could enable regional councils to delineate SWRMAs within shorter timeframes?

Please explain your response here:

Using the Taumata Arowai registration and SWMP to finorm the first GIS map.

10 Do you think consideration should be given to mapping currently unregistered supplies as they register (but before the four-year deadline provided under the Water Services Act), or do you think that waiting and mapping them all at the same time is a better approach?

Please explain your response here:

This information should be completed as part of their registration with Taumata Arowai.

There are only limited resources available within NZ.

Mapping for SWRMAs assessment would be better done as a catchment management zone approach at the end of the registration period.

Read more information from Proposal 1 - HTML format

11 If a regional council has already established local/regional source water protection zones through a consultative process, should there be provision to retain that existing protection zone as a bespoke method without further consultation or consideration against new national direction?

Please explain your response here:

A central government single consistent approach will enable NZ reporting. The setting up of LAWA , developing consistent measurement methodologies etc should provide information around "lesson learned" for NZ reporting.

Read more information from Proposal 1 - HTML format

Section 2: Proposal 2 - How activities that pose risks to source water are regulated or managed

Read information from Proposal 2 - HTML format

12 Do you think national direction on activities within SWRMA 1 is necessary?

Yes

Please explain your response here:

The RMA legislation is changing which makes this a hard question to answer.

Within the immediate abstraction area (50m) there should be controls to prohibit activities which have a significant effect such as disturbance activities. However question 13 needs to be accounted for

13 For water suppliers, are there any other activities beyond intake maintenance/management that should be provided for?

Please explain your response here:

The maintenance and management needs a little more clarity to reduce uncertainty.

The development and commissioning phase of pipe, pumps and equipment often involve the testing and proofing using untreated water before bringing units online. Such as raw water run to waste is a management tool and should not require a consent.

Allowing discharges of supernatant and treated water/backwash water to be discharged back into the environment. Storm water diversion from the plant area.

14 In and around freshwater, control of pest species (including aquatic pest species) may be necessary, including through physical control (removal, that may include bed disturbance) or chemical control (discharge).

Please explain your response here:

Not an issue provided the water supplier has a working relationship with the activity, notification and incident response plans are developed by the parties with sign off before work commences.

Read more information from Proposal 2 - HTML format

15 Do you think national direction on activities within SWRMA 2 is necessary?

Yes

If so, what activities should it address? Please explain your response here:

Consistent Big Picture Strategies enable consistent methodologies to be developed and good outcomes to be achieved.

National directives SWRMA2 should be considered high-risk activities such as Heavy metal contaminates, fracking/drilling where the material released travel as a slug. Or where the second barrier treatment would be deemed as ineffective. The transportation medium and flow volume which carry the contaminants often dictates if the contaminant will naturally disperse or is treatable at barrier 2. Perhaps this would be a better test.

16 In your view, how much will this proposal impact the current situation in your region?

Please explain your response here:

The SWRMA 1 and 2 can be developed with specific mitigation between water suppliers and activity. Taumata Aorwai will be checking the WSMP.

17 Are there any other activities that should not be permitted within SWRMA 2?

Please explain your response here:

See Q15 answer

18 The original intent of SWRMA 2 was to manage microbial contamination. However, there are indications that protections against other contaminants may be required. What contaminants do you think should be controlled in SWRMA 2?

Please explain your response here:

See Q15 answer

19 What other challenges do you see when making a consent application within SWRMA 2?

Please explain your response here:

There zone is very broad and the current default is not to grant consents. Either to the water supplier to abstract or the activity holder. There needs to be a clear path to enable consents to progress.

By making SWRMA 2 default zones to protect the specific area around the water supplier, will reduce issues with the RMA process. For surface waterways this should align with the stock exclusion requirements. Most activities will be able to occur with appropriate mitigation. High risk ones should be restricted.

Read more information from Proposal 2 - HTML format

20 Do you think any additional controls, other than broad consideration of the effects of the activity on source water, are required in SWRMA 3?

Please explain your response here:

See above answers

For SWRMA 3 zones most activities will be able to occur with appropriate mitigation. If the entire catchment is used, it could cause confusion and unintentionally restrict activities.

There also should be consideration of small hydroelectric plants to be assessed for the value they provide to the natural grid against the ecological effects. Particularly as more alternative technologies to provide power into the national grid develop.

Read more information from Proposal 2 - HTML format

21 What is your view on how to address issues with bores – should it be enough to amend the NZS 4411:2001 (with reference to that standard in the NES-DW), or should greater direction be given in the NES-DW itself?

Please explain your response here:

22 For existing bores: What is your view on requiring unused bores to be decommissioned?

Please explain your response here:

23 What is your view on prohibiting below-ground bore heads?

Please explain your response here:

24 Regional councils are responsible for control of the use of land for the purpose of maintenance and enhancement of the quality of water in water bodies (RMA section 30(1)(c)(ii)). Do you think territorial authorities have a role in land management over aquifers, and if so, what is that role?

Please explain your response here:

NZ has limited specialist who understand land use and ground water movement. This work should remain with Regional Councils. Also, other research organizations: NIWA, GNS and Landcare should add their data through LAWA.

Territorial Authorities are responsible for land use activities under the District Plan which gets its direction from the Regional Plan. There does need to be consistency but as already highlighted, knowledge on impacts on Water Supply is likely to be limited.

A central database and notification to Water Supply Operators for input would highlight risks and could help reduce the knowledge gap.

Read more information from Proposal 2 - HTML format

25 It is not clear which approach might be best for ensuring risk to vulnerable aquifers is appropriately managed. Do you think that an NES-DW is the right tool for addressing this? If not, what approach might be better?

Please explain your response here:

A national database with vulnerable aquifers highlighted would help parties recognize potential risk. For example, work provided by GNS shows that groundwater is influenced by Mt Ruapehu at all depths from open source, springs and deep bores.

NES-DW is not the mechanism to address this relationship.

26 Would it be helpful if guidance on vulnerable aquifers was provided to support freshwater planning as the NPS-FM is given effect?

Yes

Please explain your response here:

Read more information from Proposal 2 - HTML format

27 What activities do you believe the NES-DW should retrospectively apply to / not apply to, and why?

Please explain your response here:

Retrospectively applying NES-DW will take more resource than the country owns. There is significant volume of works already proposed. Noting the position and potential effect/risk into the SWRMA 1-2 will enable research and future legislation development.

28 In your view, what are the key challenges and benefits to retrospective application?

Please explain your response here:

A risk matrix of activities within the catchment, general estimate of source water travel should provide good general guidance from the Regional Councils. Only high level risk should require further consideration. This work should remain at the Regional Council level and not be passed down to the resource consent for existing activities. This will help ensure the methodologies are consistent and results should be inputted into one database.

Read more information from Proposal 2 - HTML format

29 Do you agree with the proposed list of criteria?

No

Are any additional criteria needed, or clarifications?:

I don't think NZ resources could answer all of these questions for all sites

Read more information from Proposal 2 - HTML format

30 What types of activity might pose a significant risk to a water supply in an accident, emergency, or other natural event?

Please explain your response here:

The types of activities should be kept to a high level such as contaminate category and the vector path, the contaminate might travel by to reach the water source/treatment plant.

Generic SOP are developed for contaminants and events/incidents are well served by these. Writing individual SOP only poses more paperwork and confusion. NZ could have generic SOP for all incidents with a box of specific site variations.

31 Do you think it is reasonable to require all activities with some potential to affect source water to undertake response planning, or just those with a higher risk (likelihood and consequence)?

Please explain your response here:

The RMA requires everyone to have a "duty of care" which suggests that the activity with potential to generate high risk should already have an incident response plan. Eg the application of chemicals within an activity site. More general items such as crop grazing are being addressed by best practice guidance eg Beef and Lamb.

Over legislation simply overwhelms everyone. Much of the guidance to avoid, remedy or mitigate are covered in the management of the catchment. Understanding the high-risk contamination sites and paths is useful. Notification to source water owners when an incident occurs, and its travel times is more useful.

A single source database with up to date contacts is the ultimate goal.

There should be a national incident database with escalation tree for water supplies to register their contact details during any emergency. Having individual consent holders update and coordinate their database at an individual levels is not effective during an emergency. Equally having the database with activity owners and contact details being updated annually or as owners change.

Read more information from Proposal 2 - HTML format

32 Do you agree that resource users should engage with water suppliers in consenting matters, within SWRMA 1 and 2?

Yes

Please explain your response here:

A central register of consents and their potential effects on SWRMA 1 and 2 as assessed by Regional Council should be notified to the suppliers. This registration could then be viewed by suppliers for further involvement or sign off.

33 What hurdles do you see in promoting this engagement with water suppliers?

Please explain your response here:

Currently the RMA requires the submitters to read the application and assess effects on their activity, which generally requires specialist. Regional Councils also involve their specialist in assessing environmental effects. It would be more effective if the Regional Council science reports were available to the submitters before they considered the need to engage their own specialists. This still allows for the democratic process of submissions but reduces

the need of specialist and costs.

Currently the process is very resource hungry and costly to consider all activities consents. A specialist pool and who is representing parties should also be available to the suppliers. This would enable them to co-operate and coordinate their responses.

34 What support might small water suppliers need to effectively engage in the consent process?

Please explain your response here:

The potential volume of consents could overwhelm small suppliers and required cost support.

Read more information from Proposal 2 - HTML format

35 A National Environmental Standard is a regulation under the Resource Management Act 1991 (RMA) that requires, among other things, that regional councils make changes to their regional plan rules. Making these changes can add costs (eg, financial, administrative) for regional councils. In your view, how might regional councils be affected by the NES-DW's new requirements to change regional plan rules?

Do these effects outweigh the expected benefits of better source water protection?:

. Q35-38 NES-DW should be brought into Regional Plans over time. Asking individuals to deliver NES-DW is likely to generate even more costs. There also needs to be consideration that source water protection is only the first barrier not the only barrier. Currently open-source water is discouraged by SWRMA 1 and 2 planning.

Ground water is considered much safer source, however, there is far less known about groundwater movement and contamination paths. The dissolved minerals in cold water are harder to abstract and may require even more chemicals to be added to treat the water.

Adding NES-DW should not prevent current open source resource consents being renewed. There are sufficient treatment methods within other Barriers. New Zealand aim is to improve its water quality not drive behavior into abstracting from groundwater sources.

Changing abstraction sources is more likely to alter the focus but not resolve any risk as ground water and surface waters are linked. The NPS-FM, NES-F and stock Exclusion Regulations were designed to provide guidance to improve water quality by changing practices and reducing contamination paths. Adding the NES-DW as a regulation tool imposed against the activity is a step too far.

Making NES-DW information available for everyone to understand how the catchment is linked and how activities impact on the water quality as a catchment model and central database makes much more sense. The NES-DW models are currently not available to help understand how activities effect all small supplies. Given it's a risk adverse model, it's likely to have negative effects on all activities. Retrospectively imposing this on land use activities is a step too far with activities currently changing their practices to improve water quality.

36 In your view, how could the amendments to the NES-DW better align with farm plans?

Please explain your response here:

37 If you are a water supplier, do you think these amendments will affect your ability to supply water (positively or negatively)? Would they influence whether you continue to provide water?

Please explain your response here:

38 If you are a resource user, do you think these amendments will affect how you currently use your land or undertake activities? Will you have to change how you do things as a result?

Please explain your response here:

Section 2: Proposal 3 - Protecting all registered water supplies

Read information from Proposal 3 - HTML format

39 Do you think the protections of the NES-DW should apply to all registered water supplies?

Yes

If not, what types of supplies should be excluded, and why?:

40 The WSA has a registration timeframe of four years for currently unregistered supplies. Do you agree with aligning application of the NES-DW with the WSA? If not, why? In your view, what are the challenges resulting from including these newly registered supplies within the NES-DW framework?

Please explain your response here:

The dates should be aligned to existing requirements.

Read more information from Proposal 3 - HTML format

Section 3: Impacts of amending the NES-DW

Read information from Section 3 - HTML format

Provide further feedback

41 Do you have any other comments you wish to make?

Add your comments, ideas, and feedback here.:

There appears to be a disjoint in the timeline and changes of legislation.

The NES-DW has been written against the RMA which is being split into three new Legislation Acts. There is no assessment against the new legislations.

NES-DW appears to have taken the lead over the Drinking water legislation and is imposing requirements which have not yet been considered as necessary by the new regulator.

There is a strong emphasis for Regional Council input but most of the DW knowledge lies within the TLA. This may bias the information collection.

The timing of legislation is out of step.

42 Upload documentation

Upload PDF:

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