

4 March 2022

Improving the protection of drinking-water
sources

Urban Water team

Ministry of the Environment

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Kia ora,

Submission on proposed amendments to the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007

1. The Dunedin City Council (DCC) thanks the Ministry for the Environment (MfE) for the opportunity to provide feedback on the proposed amendments to the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 (NES-DW).
2. The DCC is committed to providing safe, high-quality drinking water and to improving Dunedin's environment, including the quality of our freshwater. The DCC supports the intent behind the proposals and agrees with the need for a nationally consistent approach to improving source water quality.
3. As a territorial authority with responsibilities for three waters services and district planning, the DCC is keenly interested in the proposals as they relate to DCC as a water supplier, as a potential discharger and as a regulatory authority with district planning functions.
4. This submission provides background on the DCC, general comments on the proposals set out in 'Kia kaha ake te tiakina o ngā puna wai-inu: Improving the protection of drinking-water sources' consultation document, and feedback on the questions posed in the consultation document (Appendix 1).

Background

5. The DCC provides drinking water, wastewater and stormwater services to customers across Dunedin. The DCC's 3 Waters Group manages the delivery of these services.
6. The DCC 3 Waters Strategic Direction Statement 2010-2060 sets out an integrated approach to the sustainable management of water, wastewater and stormwater in Dunedin. Meeting the water needs of the City for the next 50 years from existing water sources, limiting cost increases for customers, and improving the quality of stormwater and wastewater discharges to minimise impacts on the environment are three of seven key strategic priorities identified in the strategy.

7. The DCC's water supply system collects, treats and delivers drinking water to customers. The system includes 21,000 hectares of water catchment, 1,386km of pipeline, 28 pumping stations, 63 reservoirs (for raw and treated water) and six active water treatment plants.
8. The DCC has four registered drinking water supplies. Water is sourced from a variety of consented surface water takes. The DCC's registered drinking water supplies and their sources are:

REGISTERED SUPPLY	SUPPLY CODE	PLANT	PLANT CODE	SOURCE	SOURCE CODE
Dunedin City	DUN001	Mount Grand	TP00234	Deep Creek Deep Stream	S00999 S00141
Dunedin City	DUN001	Southern	TP00236	Silver Stream Taieri infiltration gallery Deep Creek Deep Stream	S00143 S01067 S00142 S00144
Dunedin City	DUN001	Port Chalmers	TP00237	Rossville Reservoir Cedar Farm Reservoir	S00145 S00869
Outram	OUT001	Outram	TP00245	Outram Infiltration Gallery Taieri Infiltration Gallery	S01068 S01067
Waikouaiti	WAI015	Waikouaiti	TP00250	Waikouaiti River	S00156
West Taieri	WES002	West Taieri	TP00244	Waipori River	S00867

9. At present, the DCC relies upon provisions of the DCC Water Bylaw 2011, supported by aspects of catchment management plans and water safety plans, to protect the sources of Dunedin's drinking water. The DCC is currently preparing source water risk management plans (as required by section 43 of the Water Services Act 2021) and updated water safety plans (as required by section 30 of the Water Services Act 2021).

General comments

10. The DCC supports the overall objective of the proposed amendments to the NES-DW to strengthen and align national direction for protection and management of sources of drinking water. The DCC generally supports the proposals to:
 - a. establish a scientifically derived methodology for mapping Source Water Risk Management Areas (SWRMAs) for different types of water sources
 - b. ensure higher-risk activities are managed either through more stringent controls or direction where necessary, or through consistent consideration of effects on source water
 - c. expand the NES-DW to cover the same supplies as those regulated under the Water Services Act 2021 (WSA), being all water suppliers other than domestic self-suppliers.
11. The DCC appreciates that the proposals are likely to have positive benefits for water suppliers through better protection of source water, allowing water suppliers the ability to undertake maintenance activities without consent, and having requirements for applicants

to consult and get approvals from the water supplier as part of resource consent process for discharges and activities that might impact source water.

12. The DCC supports the proposed changes as minimum standards. However, the DCC considers it essential that the NES-DW provides for stricter requirements where necessary based on risk, and that regional councils and resource users be required to engage with water suppliers to determine if stricter controls are needed to address specific characteristics of the source water catchment or impacts from activities in the catchment. The DCC has identified examples of high-risk activities in Appendix 1 that could have significant impacts on the quality of source water if they occurred in the catchment. Water suppliers should be able to provide input into resource consent applications for high-risk activities to ensure any impacts on source water are avoided or managed appropriately.
13. The DCC anticipates that implementing some of the proposals may require review of some provisions of Dunedin's Second Generation District Plan. Implementation will also require significant input into both the territorial authority and regional councils' resource consent processes for discharge permits, earthworks, land use and/or other activities that may impact on source water, and may extend the time it takes to process some resource consents.
14. The DCC supports water suppliers being included in resource consent processes, however it should be recognised that may cause capability and/or capacity issues for some drinking water suppliers. The Government needs to ensure that appropriate support is available to water suppliers to be able to provide the input into consenting processes that will be required to implement the NES-DW.

Detailed feedback on proposals

15. Detailed responses to questions posed in the consultation document are attached as Appendix 1.

Conclusion

16. The DCC thanks MfE once again for the opportunity to provide feedback on the consultation document for the NES-DW. The DCC looks forward to continuing discussions with the Government on measures to improve source water quality and the safety of drinking water.
17. The DCC would like to speak to its submission if there is an opportunity to do so.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Aaron Hawkins', with a stylized flourish at the end.

Aaron Hawkins
MAYOR OF DUNEDIN

Appendix 1 – responses to questions posed in consultation document

Question number	Consultation question	DCC response	DCC suggestion for MfE's consideration
	The default method for delineating SWRMA		
1	<p>Domestic and international evidence suggests that delineating three at-risk areas is a good approach for protecting sources of drinking water.</p> <ul style="list-style-type: none"> Do you think this is a good approach for protecting our source waters? What other approach can you think of that could contribute to protecting our drinking water sources? <p>Do you think that three areas (and therefore levels of control) are sufficient to protect our drinking water sources?</p>	<p>The DCC supports the proposed approach of delineating three default at-risk areas for protecting sources of drinking water. The DCC considers it essential that regional councils are required to engage with drinking water suppliers to understand locally-specific risks to sources of drinking water both (a) when delineating the three areas and (b) during the resource consent process.</p> <p>The current definitions in the NES-DW do not obviously capture raw water storage reservoirs. These also require protection, as they can be impacted by activities in the surrounding environment.</p>	<p>The DCC suggests that MfE:</p> <ul style="list-style-type: none"> Continues to progress the proposed nationally consistent approach and includes provisions requiring regional councils to consult with water suppliers when establishing source water risk management areas and determining impacts as part of the resource consent process. Provides, through an amended NES-DW, the ability for water suppliers to stipulate stricter levels of control to protect the source waters from hazards identified that pose a high level of risk. This could be achieved by providing for water suppliers and regional councils to agree extensions to the default source water risk management areas based on demonstrable risk. In addition, the NES-DW should provide for water supplier input into the resource consent process for applications within source water risk management areas. Provides, through an amended NES-DW, protections for raw water storage reservoirs.

2	<p>In your view, is the method to determine each SWRMA, for each type of water body, the best option?</p> <ul style="list-style-type: none"> • Should other factors be considered in determining size? • What challenges can you foresee in delineating SWRMAs? • Do you have any comments or feedback on the detail contained in the technical guidance materials? • Should SWRMA for all aquifers be bespoke so their unique features, depth and overall vulnerability can be considered? 	<p>The DCC supports the proposed methods for determining three at-risk areas as the minimum requirements for determining source water protection zones. More stringent requirements may be warranted according to the hazards and risks identified by water suppliers in their source water risk management plans and water safety plans.</p> <p>The rules should support both regional councils and water suppliers to manage and protect their communities' source waters from contamination. Water suppliers, as experts in drinking water, must have a clearly defined path for raising concerns and extending source water risk management areas based on their knowledge.</p> <p>A default approach without the ability to adapt to local conditions may be detrimental to water suppliers' abilities to manage their water supplies proactively and fulfil their obligations to deliver safe drinking water.</p> <p>The DCC considers the SWRMA 2 delineation for rivers based on an 8-hour travel time to the intake may not be sufficient for slower moving rivers.</p>	<p>The DCC suggests that MfE:</p> <ul style="list-style-type: none"> • Uses amendments to the NES-DW to establish minimum requirements for establishing source water risk management areas (via the proposed default methodology). • Includes provisions in an amended NES-DW to ensure water suppliers can request that regional councils extend the default source water risk management areas based on the source water type and characteristics, and the catchment's specific hazards and risks, as identified in the water supplier's water safety plan / source water risk management plan. • Considers extending the travel time used to delineate SWRMA 2 for slower moving rivers.
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3	<p>For lakes, do you agree that SWRMA 2 should include the entire lake area?</p> <ul style="list-style-type: none"> What might be an alternative approach? 	The DCC supports that SWRMA 2 includes the entire lake area.	The DCC suggests that MfE continues with the proposal for SWRMA 2 to include the entire lake area.
4	<p>SWRMA 1 for lakes and rivers is proposed to extend 5 metres into land from the river/lake edge. This contrasts with 3 metres 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.</p> <ul style="list-style-type: none"> Do you think these differing setbacks will cause confusion or result in other challenges? 	<p>The DCC supports 5 m from the edges of a river as a minimum baseline, but not a restrictive limit. This is because a 5 m limit may not sufficiently account for hazards and risks in the immediate vicinity of the source water intake. The <i>Technical Guidelines for Drinking Water Source Protection Zones</i> (MfE) include examples for SWRMA 1 using site-specific data. The DCC notes that the guidelines state that a larger zone of at least 30 m landward on both sides of the river should be allowed where practical.</p>	The DCC suggests that MfE considers stipulating the proposed distances from the river/lake edge are a minimum requirement and include provision for water suppliers to extend the source water protection zones based on local hazards and risks.
5	<p>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).</p>	<p>As stated for lakes and rivers above, the 5 m radius for source water bores should be a minimum requirement.</p>	As above for lakes and rivers.

	<p>However, expert advice suggests a 5-metre radius is the most workable option.</p> <ul style="list-style-type: none"> • Do you agree that a 5-metre radius around a source water bore gives enough protection? • Why or why not? • If not, what alternative would you suggest? 		
6	<p>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.</p> <ul style="list-style-type: none"> • Do you think a default method is practicable in most situations? • Do you think a regional council should determine (on a case-by-case basis) the most applicable default method: for a river, lake or aquifer, or is 	<p>A default method is practicable as a minimum standard. Regional councils should apply the default methods as a baseline and consult water suppliers on whether that is sufficient. Some systems may be complex and require a bespoke approach. For example – the DCC’s Taieri Infiltration Gallery is a partial surface water and partial ground water take – thus adoption of two of the default methods may be required (river/aquifer) to fully establish a source water protection zone.</p>	<p>As above, the DCC suggests that MfE:</p> <ul style="list-style-type: none"> • Uses amendments to the NES-DW to establish minimum requirements for establishing source water risk management areas (via the proposed default methodology). • Includes provisions in an amended NES-DW to ensure water suppliers can request that regional councils extend the default source water risk management areas based on the source water type and characteristics, and the catchment’s specific hazards and risks, as identified in the water supplier’s water safety plan / source water risk management plan.

	<p>a different default approach necessary?</p> <ul style="list-style-type: none"> • If so, what alternative would you suggest? 		
	Regional council mapping of SWRMA		
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?	Mapping of SWRMAs quickly would enable territorial authorities to more accurately ensure that resource consents, particularly for earthworks, take into consideration effects on the source of a drinking water supply as required by the Resource Management Act 1991 (section 104G).	<p>The DCC suggests that MfE considers:</p> <ul style="list-style-type: none"> • Placing timeframe requirements on regional councils' mapping of registered drinking water suppliers to ensure they are mapped without significant delay. • Aligning timeframe requirements under the NES-DW with relevant timeframes for the implementation of the new drinking water regulatory system established by the Water Services Act 2021, where possible. The DCC notes that the Water Services Act 2021 requires drinking water suppliers previously registered under the Health Act 1956 must have a water safety plan that includes a source water risk management plan by 15 November 2022. Ideally, drinking water suppliers would be able to incorporate mapped source water risk management areas into their source water risk management plans.
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	It would not be appropriate for newly-registered drinking water suppliers to not be afforded the protections offered by the NES-DW, as may be the case if they were not mapped till the end of the four-year deadline under the Water Services Act 2021. Delaying mapping until the end of this four-year time period would also result in a very large project	The DCC suggests that MfE considers including a requirement in an amended NES-DW for regional councils to update maps on an ongoing basis as new drinking water suppliers are registered. An alternative approach could be for regional councils to map newly registered suppliers once or twice a year.

	mapping them all at the same time is a better approach?	<p>for regional councils to undertake and could result in significant delays in mapping. The NES-DW will need to specify timeframe requirements for the regional councils to complete mapping and an ongoing process for future new registered water suppliers.</p> <p>Having the water source protection of the NES-DW apply once registered (or soon after) may also encourage people to register as a supplier sooner rather than waiting until the end of the four-year registration period provided under the Water Services Act 2021.</p>	
	Bespoke method for delineating SWRMA		
11	<p>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?</p>	<p>As one of the goals of the NES-DW review is to establish national consistency, it is more appropriate for this document to override existing approaches if they afford less source water protection than required by the NES-DW.</p> <p>The NES-DW should establish a minimum level of protection.</p>	The DCC suggests that a revised NES-DW provides national direction for regional councils to ensure consistency in approaches to protection of source water.
	SWRMA 1 controls		
12	<p>Do you think national direction on activities within SWRMA 1 is necessary?</p> <ul style="list-style-type: none"> If so, what activities should it address? 	National direction will ensure consistency across New Zealand and give clear guidance on minimum requirements for protection of source water.	<p>The DCC suggests that MfE:</p> <ul style="list-style-type: none"> Provides national direction for prohibited and permitted activities in SWRMA 1 through an amended NES-DW.

	<ul style="list-style-type: none"> • How restrictive should controls be in SWRMA 1, for resource users other than water suppliers? • Are there any activities you believe should be fully prohibited in this area? • Are there any activities you believe should be permitted or specifically provided for or acknowledged in this area? 	<p>Risk identification and analysis undertaken recently as part of preparation of the DCC's suite of Water Safety Plans identified potential risks to source water. For the Dunedin City drinking water supply (DUN001), potential risks identified included: discharge or leachate from a landfill site; chemical contamination such as from aerial pesticides; agricultural practices (stock management, spraying); septic tank effluent discharge contamination; and trade waste discharge breaches causing contamination.</p> <p>For the Waikouaiti supply (WAI015), potential risks identified included: agricultural activities close to the Waikouaiti River; arsenic contamination (from sheep dip contamination); cyanotoxin (algal bloom) contamination; flood event causing turbidity and contamination water; major slip causing prolonged dirty water; high salinity; chemical contamination from illegal dumping; and chemical contamination from ash and fire retardant.</p> <p>Controls are needed over pest management (e.g. weed spraying, possum control) other than by the water supplier, to ensure chemicals or dead animals are not able to contaminate source waters.</p> <p>Forestry activities can change the nature of the environment. Harvesting can have physical impacts on the functioning of waterways, and if</p>	<ul style="list-style-type: none"> • Provides for regional councils to impose stricter controls based on specific hazards and risks identified in water suppliers' water safety plans and source water risk management plans. • Engages a working group including drinking water supply experts and water suppliers to develop a list of activities that should be permitted or prohibited. • Considers providing for water suppliers to undertake the following activities in SWRMA 1: maintenance or installations of infrastructure, weed and pest control, erection of natural hazard mitigation structures, remedial works after emergency events (eg. flooding) to damaged infrastructure and river banks, removal of accumulated silt from behind intake structures such as weirs or dams. • Considers appropriate controls on pest management activities in SWRMA 1 undertaken by parties other than the water supplier. • Considers restricting specified forestry activities and/or specified forestry species in SWRMA 1. • Considers prohibiting the use of fire retardant chemicals (other than those explicitly approved for use in drinking water catchments) in SWRMA 1, unless needed to protect life or residential activities. In other words, fire retardants that may have adverse effects on human health if found in drinking water should not be used to suppress fires in bush or paddock areas that are part of a drinking water catchment if life or property is not at immediate risk. A list of fire retardants that have been demonstrated to be safe for use in drinking water catchments and do not have adverse effects on human health could be referenced in an amended NES-DW. Alternatively, a list of
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		<p>a fire occurred, some species, such as eucalyptus, release toxins that could have significant implications for drinking water catchments and drinking water sources.</p> <p>The use of some fire retardant chemicals in catchments can result in extended periods where water cannot be abstracted for drinking purposes as the treatment process does not address these chemicals.</p> <p>Research undertaken in both Australia and New Zealand highlights the need for caution to be applied in the use of fire retardants in drinking water catchments. The Government of Western Australia, Department of Health has released some guidance (<i>Materials, products and substances in contact with drinking water</i>), which includes specific fire retardant chemicals approved for use in drinking water catchments. The following list contained in that document may be a suitable starting point for providing national direction in New Zealand if New Zealand has not yet established its own list of fire retardants that are approved for use in drinking water catchments:</p> <table><tr><th>Product</th><th>Company</th></tr><tr><td>Foamguard-F3 Fluorine Free Foam</td><td>Fire & Safety Industries Pty Ltd</td></tr><tr><td>FREEDOL SF Fluorine Free Foam</td><td>Wormald Australia</td></tr><tr><td>VDAS-F3 Fluorine Free Foam</td><td>Qttec Fire Services Pty Ltd</td></tr></table>	Product	Company	Foamguard-F3 Fluorine Free Foam	Fire & Safety Industries Pty Ltd	FREEDOL SF Fluorine Free Foam	Wormald Australia	VDAS-F3 Fluorine Free Foam	Qttec Fire Services Pty Ltd	<p>chemicals that may be unsafe for use in a drinking water catchments due to potential effects on human health could be identified as prohibited.</p> <ul style="list-style-type: none">• Considers restrictions that are practical, but that recognise that protection of source water for human consumption is paramount. Water suppliers should be allowed to manage their source waters effectively and be engaged in any consenting processes within the SWRMA 1. Source water must be prioritised to minimise or eliminate risks and protect public health in all SWRMAs.
Product	Company										
Foamguard-F3 Fluorine Free Foam	Fire & Safety Industries Pty Ltd										
FREEDOL SF Fluorine Free Foam	Wormald Australia										
VDAS-F3 Fluorine Free Foam	Qttec Fire Services Pty Ltd										

		<div>Chubb PEFS F3N Foam (alternative name SILVARA I)</div> <div>VS FOCUM, S.L.</div>	
		In general, determining health effects of fire retardant chemicals on humans is difficult. A precautionary approach must therefore be used.	
13	For water suppliers, are there any other activities beyond intake maintenance/management that should be provided for?	Water suppliers may need to undertake: maintenance or installations of infrastructure, weed and pest control, erection of natural hazard mitigation structures, remedial works after emergency events (eg. flooding) to damaged infrastructure and river banks, and removal of accumulated silt from behind intake structures such as weirs or dams.	The DCC suggests that a revised NES-DW provides national direction on activities water suppliers may be permitted to undertake within SWRMA.
14	<p>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).</p> <ul style="list-style-type: none"> • How much of an issue is this in and around abstraction points? • How critical is that work? 	Control of pest species is of major concern for water suppliers. Pest control programmes may result in direct and persistent contamination of source waters. It is essential that any control programmes proposed within catchments are discussed with, and approved by, water suppliers.	<p>The DCC suggests that a revised NES-DW ensures activities related to pest control in all SWRMAs are effectively controlled and managed with increased emphasis on minimising public health risk as a key driver for permitting / consenting / prohibiting specific activities.</p> <p>The DCC suggests that MfE engages drinking water supply experts, water suppliers and pest control experts to develop appropriate controls for inclusion in the NES-DW.</p>

	<ul style="list-style-type: none"> • How often is this work mandated by other regulation or requirements? • How frequently is this work undertaken by parties other than the drinking-water supplier (or their contractors)? 		
	SWRMA 2 controls		
15	<p>Do you think national direction on activities within SWRMA 2 is necessary?</p> <ul style="list-style-type: none"> • If so, what activities should it address? 	<p>Yes. National direction is needed on permitted and prohibited activities. Please refer to DCC response to question 12 above.</p>	<p>The DCC suggests that MfE:</p> <ul style="list-style-type: none"> • Provides national direction for prohibited and permitted activities in SWRMA 2 through an amended NES-DW. • Provides for regional councils to impose stricter controls based on specific hazards and risks identified in water suppliers' water safety plans and source water risk management plans. • Engages a working group including drinking water supply experts and water suppliers to develop a list of activities that should be permitted or prohibited. • Considers appropriate controls on pest management activities in SWRMA 2 undertaken by parties other than the water supplier. • Considers restricting specified forestry activities and/or specified forestry species in SWRMA 2. • Considers prohibiting the use of fire retardant chemicals (other than those explicitly approved for use in drinking water catchments) in SWRMA 2, unless needed to protect life or residential activities. In other words, fire retardants that may have adverse effects

			<p>on human health if present in drinking water should not be used to suppress fires in bush or paddock areas that are part of a drinking water catchment if life or property is not at immediate risk. A list of fire retardants that have been demonstrated to be safe for use in drinking water catchments and do not have adverse effects on human health could be referenced in an amended NES-DW. Alternatively, a list of chemicals that are not safe for use in a drinking water catchment due to potential effects on human health could be identified as prohibited.</p> <ul style="list-style-type: none"> • Considers restrictions that are practical, but that recognise that protection of source water for human consumption is paramount. Water suppliers should be allowed to manage their source waters effectively and be engaged in any consenting processes within the SWRMA 2. Source water must be prioritised to minimise or eliminate risks and protect public health in all SWRMAs.
17	Are there any other activities that should not be permitted within SWRMA 2?		The DCC suggests that MfE considers appropriate control measures for a range of risks to source water identified by water suppliers in water safety plans and/or source water risk management plans.
18	<p>The original intent of SWRMA 2 was to manage microbial contamination. However, there are indications that protections against other contaminants may be required.</p> <ul style="list-style-type: none"> • What contaminants do you think should 	All determinands controlled in the applicable Drinking Water Standards should be controlled in SWRMA 2, along with any other determinands that may pose a risk to public health and any other determinands where the health risk is unknown.	The DCC suggests that a revised NES-DW ensures controls on SWRMA 2 are able to manage a wider range of contaminants, including chemical as well as microbial contaminants.

	be controlled in SWRMA 2?		
	SWRMA 3 controls		
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?	<p>Controls are needed over pest management (e.g. weed spraying, possum control) other than by the water supplier, to ensure chemicals or dead animals are not able to contaminate source water.</p> <p>The use of fire retardant chemicals in catchments can result in extended periods where water cannot be abstracted for drinking purposes as the treatment process does not address these chemicals.</p>	<p>The DCC suggests that MfE:</p> <ul style="list-style-type: none"> • Provides national direction for prohibited and permitted activities in SWRMA 3 through an amended NES-DW. • Provides for regional councils to impose stricter controls based on specific hazards and risks identified in water suppliers' water safety plans and source water risk management plans. • Engages a working group including drinking water supply experts and water suppliers to develop a list of activities and appropriate controls. • Considers appropriate controls on pest management activities in SWRMA 3 undertaken by parties other than the water supplier. • Considers appropriate controls on the use of fire retardant chemicals in SWRMA 3. • Considers restrictions that are practical, but that recognise that protection of source water for human consumption is paramount. Water suppliers should be allowed to manage their source waters effectively and be engaged in any consenting processes within the SWRMA 3. Source water must be prioritised to minimise or eliminate risks and protect public health in all SWRMAs.
	Improving the protection of drinking-water sources		
24	Regional councils are responsible for control of the use of land for the purpose of maintenance and	Earthworks in Dunedin are also managed through the Dunedin City District Plan with reduced limits in groundwater protection mapped areas and hazard overlay zones. While	The DCC suggests that MfE recognises the role of territorial authorities in managing earthworks.

	<p>enhancement of the quality of water in water bodies (RMA section 30(1)(c)(ii)).</p> <ul style="list-style-type: none"> Do you think territorial authorities have a role in land management over aquifers, and if so, what is that role? 	<p>the earthworks are managed for different reasons, such as amenity and land stability, versus water quality, identification of SWRMA areas on District Plan maps may ensure that developers are also aware of regional council requirements.</p>	
	Retrospective application of the NES-DW to existing activities		
27	<p>What activities do you believe the NES-DW should retrospectively apply to / not apply to, and why?</p>	<p>The DCC considers the NES-DW should not be applied retrospectively, other than to activities that pose the highest risk to the quality of source water.</p> <p>However, the NES-DW should apply to any existing activity where the nature and scale of the activity changes and a new resource consent is required. It may be very difficult and unfair to apply new rules to an existing activity as the existing activity may not easily be able to change discharges that occur or could face high costs to change their activity.</p> <p>New applications to take water for drinking water purposes should be required to consider existing activities to determine if it is a safe drinking water source, with consideration of impacts on source water from existing activities.</p>	<p>The DCC suggests that MfE considers the practicalities of retrospective application of the NES-DW to the highest risk activities.</p> <p>For all other activities, the DCC does support retrospective application if the activity is not changing. However, if the nature and scale of an activity changes and a new resource consent is required, the DCC suggests the NES-DW provisions be applied.</p>

28	In your view, what are the key challenges and benefits to retrospective application?	Existing activities may not easily be able to change discharges that occur or could face high costs to change their activity.	
	Criteria when considering effects on source water		
29	Do you agree with the proposed list of criteria? <ul style="list-style-type: none"> Are any additional criteria needed, or clarification? 	Agree with the proposed criteria.	The DCC suggests MfE retains the proposed criteria.
	Water supplier involvement		
32	Do you agree that resource users should engage with water suppliers in consenting matters, within SWRMA 1 and 2?	Yes. It is important for water suppliers to be able to consider the effects of activities in SWRMA 1 and 2.	<p>The DCC suggests that MfE ensures an amended NES-DW includes requirements for regional councils and resource users to engage with drinking water suppliers during the resource consent process to determine the impacts of activities on source water.</p> <p>The DCC also suggests that MfE consider whether a scalable approach to engagement may be warranted to manage any capability and capacity issues that may result for small drinking water suppliers as a result of engagement on resource consent applications.</p>
33	What hurdles do you see in promoting this engagement with water suppliers?	Smaller drinking water suppliers may not understand the resource consent process, the implications of discharges on the water source, or raise issues that are not relevant.	The DCC suggests that MfE ensures there are clear processes to guide resource users and regional councils in engaging with drinking water suppliers, including actions to take when water suppliers cannot be contacted or do not want to be involved.
34	What support might small water suppliers need to effectively engage in the consent process?	Regional councils may need to be able to provide assistance to smaller drinking water suppliers to ensure they understand the resource consent process and potential	

		<p>implications of applications that may affect source water.</p> <p>Regional councils will need to be resourced to adequately assess the impacts on small water suppliers where those suppliers do not participate in the consent process.</p>	
	Improving the protection of drinking-water sources		
37	<p>If you are a water supplier, do you think these amendments will affect your ability to supply water (positively or negatively)?</p> <ul style="list-style-type: none"> • Would they influence whether you continue to provide water? 	<p>The proposed amendments, as adjusted to reflect the DCC's suggestions in this submission, are likely to provide improved protection of source waters. Benefits to the operation of a safe drinking water supply would include the ability for drinking water suppliers to undertake necessary intake maintenance without consent, and the involvement of drinking water suppliers in resource consent processes for discharges and activities that might impact source water.</p> <p>As a territorial authority, the DCC will continue to provide water to Dunedin's communities.</p>	
38	<p>If you are a resource user, do you think these amendments will affect how you currently use your land or undertake activities?</p> <ul style="list-style-type: none"> • Will you have to change how you do things as a result? 	<p>Without knowing the location of all source water risk management areas for the wide range of drinking water suppliers captured by the new drinking water regulatory system, it is difficult to know the implications for any of the discharge activities that the DCC currently undertakes or may undertake in the future.</p> <p>The DCC notes that the proposed amendments to the NES-DW are broadly consistent with</p>	

		regional policy direction in Otago to prefer wastewater discharges to land unless the adverse effects of a discharge to land are greater than the adverse effects of a discharge to water.	
	Which water supplies should be protected by the NES-DW		
39	<p>Do you think the protections of the NES-DW should apply to all registered water supplies?</p> <ul style="list-style-type: none"> If not, what types of supplies should be included, and why? 	<p>As there is going to be a significant number of new registered water suppliers under the Water Services Act 2021 to which the NES will apply, many areas are likely to be impacted. Until all drinking water suppliers are registered and mapped it is difficult to know the scale of the impact the amended NES-DW will have on discharges and other controlled activities.</p> <p>Small drinking water suppliers may struggle to engage with the resource consent process and fully understand implications of activities on source water.</p> <p>While it is important for source water to be of an adequate quality for all water suppliers, it may be more practical in the short-term for the NES-DW to apply to specified types / sizes of suppliers to ensure the highest risks are managed.</p>	<p>The DCC suggests MfE considers developing risk-based criteria to guide the staged application of an amended NES-DW to all drinking water suppliers over time.</p>