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GOVERNMENT NOTICES

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GOVERNMENT NOTICES

Departmental

National Policy Statement for Freshwater Management Amendment Order 2017

THE RT HON DAME PATSY REDDY, GNZM, QSO,
Governor-General

Order in Council

At Wellington this 7th day of August 2017.

Present:
Her Excellency the Governor-General
Presiding in Council

This Amendment Order is made under section 52(2) of the Resource Management Act 1991 on the advice and with the consent of the Executive Council and on the recommendation of the Minister for the Environment.

1. Title

This Order is the National Policy Statement for Freshwater Management Amendment Order 2017.

2. Commencement

This Order comes into force on the 28th day after the date of its notification in the *New Zealand Gazette*.

3. Principal Order

This Order amends the National Policy Statement for Freshwater Management 2014, as published in the *New Zealand Gazette*, 4 July 2014, No. 71, page 1991.

Part 1

Amendments to preliminary provisions

4. Preamble amended

Replace the text of the preamble with:

> "Fresh water is essential to New Zealand's economic, environmental, cultural and social well-being. Fresh water gives our primary production, tourism, and energy generation sectors their competitive advantage in the global economy. Fresh water is highly valued for its recreational aspects and it underpins important parts of New Zealand's biodiversity and natural heritage. Fresh water has deep cultural meaning to all New Zealanders. Many of New Zealand's lakes, rivers and wetlands are iconic and well known globally for their natural beauty and intrinsic values.
>
> The Treaty of Waitangi/Te Tiriti o Waitangi is the underlying foundation of the Crown–iwi/hapū relationship with regard to freshwater resources. Addressing tangata whenua values and interests across all of the well-beings, and including the involvement of iwi and hapū in the overall management of fresh water, are key to giving effect to the Treaty of Waitangi.
>
> All New Zealanders have a common interest in ensuring the country's freshwater lakes, rivers, aquifers and wetlands are managed wisely.
>
> New Zealand faces challenges in managing our fresh water to provide for all of the values that are important to New Zealanders. The quality, health, availability and economic value of our fresh waters are under threat. These challenges are likely to increase over time due to the impacts of climate change.
>
> To respond effectively to these challenges and issues, we need to have a good understanding of our freshwater resources, the threats to them and provide a management framework that enables water to contribute both to New Zealand's economic growth and environmental integrity and provides for the values that are important to New Zealanders.
>
> Given the vital importance of freshwater resources to New Zealand and New Zealanders, and in order to achieve the purpose of the Resource Management Act 1991 (the Act), there is a particular need for clear

central government policy to set a national direction, though the management of the resource needs to reflect the catchment-level variation and different demands on the resource across regions. This includes managing land use and development activities that affect fresh water so that growth is achieved with a lower environmental footprint.

This national policy statement recognises Te Mana o te Wai and sets out objectives and policies that direct local government to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits. The national policy statement is a first step to improve freshwater management at a national level.

As demand for fresh water increases, it is vital to account for all freshwater takes and sources of relevant contaminants. The freshwater accounting requirements of this national policy statement will provide information for councils to use in establishing freshwater objectives and limits and in targeting their management of fresh water.

This national policy statement provides a National Objectives Framework to assist regional councils and communities to more consistently and transparently plan for freshwater objectives. Te Mana o te Wai is an integral part of the framework that forms the platform for community discussions about the desired state of fresh water relative to the current state. New Zealanders generally aspire to high standards for our waterways and outcomes that are better than those achieved under the status quo. Freshwater planning will require an iterative approach that tests a range of possible objectives, limits and methods for their achievement, including different timeframes for achieving objectives. This ensures that the implications of proposed freshwater objectives are clear for councils and communities.

The national policy statement recognises iwi/hapū and community interests in fresh water, including their environmental, social, economic, and cultural values. There are two compulsory values that must be managed for – ecosystem health and human health.

National bottom lines in the national policy statement are not standards to aim for. Where freshwater management units are below national bottom lines they must be improved to at least the national bottom line, or better, over time. It is up to communities and iwi/hapū, through councils, to determine the pathway and timeframe for ensuring freshwater management units meet the national bottom lines. Where changes in the way communities use fresh water are required, the pace of those changes should take into account impacts on economic well-being. Improvements in freshwater quality may take generations depending on the characteristics of each freshwater management unit.

Iwi and hapū have a kinship relationship with the natural environment, including fresh water, through shared whakapapa. Iwi and hapū recognise the importance of fresh water in supporting a healthy ecosystem, including human health, and have a reciprocal obligation as kaitiaki to protect freshwater quality.

New Zealand’s rivers and lakes should be safe for primary contact as often as possible. The Government has set a national target of 90% of specified rivers and lakes to be safe for primary contact by 2040. The expectation is that more of these rivers and lakes will be safe for primary contact more of the time. The risks to human health from contact with fresh water must be reduced. There is an interim target of 80% of these rivers and lakes to be safe for primary contact by 2030. By the end of 2018, councils need to set regional targets to improve water quality for primary contact, so that it is clear how each region will contribute to achieving the national target.

The national policy statement requires freshwater quality within a freshwater management unit to be maintained at its current level (where community values are currently supported) or improved (where community values are not currently supported). For the human health value, water quality in freshwater management units must be improved unless regional targets have been achieved or naturally occurring processes mean further improvement is not possible. This national policy statement allows some variability in terms of freshwater quality, as long as the overall freshwater quality is maintained within a freshwater management unit.

Monitoring plans are intended to be practical and affordable. It is not possible for regional councils to monitor every drop of fresh water, nor every possible indicator of freshwater health. Monitoring freshwater objectives need only be undertaken at representative sites within a freshwater management unit as identified by regional councils, and must use the Macroinvertebrate Community Index, as well as measures of indigenous flora and fauna and Mātauranga Māori. Monitoring plans are also intended to recognise the importance of long term trends in data.

Setting enforceable quality and quantity limits is a key purpose of this national policy statement. This is a fundamental step to achieving environmental outcomes and creating the necessary incentives to use fresh water efficiently, while providing certainty for investment. Water quality and quantity limits must reflect local and national values. The process for setting limits should be informed by the best available information and scientific and socio-economic knowledge.

Once limits are set, freshwater resources need to be allocated to users, while providing the ability to transfer

entitlements between users so that we maximise the value we get from water. Where water resources are over-allocated (in terms of quality and quantity) to the point that national and local values are not met, over-allocation must be reduced over agreed timeframes.

The New Zealand Coastal Policy Statement 2010 addresses issues with water quality in the coastal environment. The management of coastal water and fresh water requires an integrated and consistent approach.

This preamble may assist the interpretation of the national policy statement."

5. Review amended

Under the heading "Review":

a. Replace "2016" with "2020".

b. Delete the last sentence of paragraph 1.

c. Delete "This preamble may assist the interpretation of the national policy statement."

6. "National Significance of Fresh Water and Te Mana o te Wai" section revoked

Before the heading "Title", revoke the section "National significance of fresh water and Te Mana o te Wai".

7. New "National Significance of Fresh Water and Te Mana o te Wai" section inserted

After the "Commencement" section, insert:

"National Significance of Fresh Water and Te Mana O Te Wai

The matter of national significance to which this national policy statement applies is the management of fresh water through a framework that considers and recognises Te Mana o te Wai as an integral part of freshwater management.

The health and well-being of our freshwater bodies is vital for the health and well-being of our land, our resources (including fisheries, flora and fauna) and our communities.

Te Mana o te Wai is the integrated and holistic well-being of a freshwater body.

Upholding Te Mana o te Wai acknowledges and protects the mauri of the water. This requires that in using water you must also provide for Te Hauora o te Taiao (the health of the environment), Te Hauora o te Wai (the health of the waterbody) and Te Hauora o te Tangata (the health of the people).

Te Mana o te Wai incorporates the values of tangata whenua and the wider community in relation to each water body.

The engagement promoted by Te Mana o te Wai will help the community, including tangata whenua, and regional councils develop tailored responses to freshwater management that work within their region.

By recognising Te Mana o te Wai as an integral part of the freshwater management framework it is intended that the health and well-being of freshwater bodies is at the forefront of all discussions and decisions about fresh water, including the identification of freshwater values and objectives, setting limits and the development of policies and rules. This is intended to ensure that water is available for the use and enjoyment of all New Zealanders, including tangata whenua, now and for future generations."

8. Interpretation amended

In the "Interpretation" section:

a. Revoke the definition of "Secondary contact".

b. Insert in their appropriate alphabetical order:

""**National Target**" means the national target for water quality improvement in Appendix 6.

"**Pest**" means a pest as defined in the Biosecurity Act 1993.

"**Primary contact**" means people's contact with fresh water that involves immersion in water, including swimming.

"**Primary contact site**" means:

a. any part of a specified river or lake that a regional council considers is used, or would be used but for existing freshwater quality, for primary contact; and

b. any other site in any other river or lake that a regional council has determined should be managed for primary contact.

"**Regional Target**" means a regional target established under Policy A6.

"**Specified rivers and lakes**" means:

a. rivers that are fourth order or above using the methods outlined in the River Environment Classification system, National Institute of Water and Atmospheric Research, Version 1; and
b. lakes with a perimeter of 1.5 kilometres or more.

"**Suitable for primary contact more often**" means reducing the frequency and magnitude of *E. coli* exceedances for rivers and lakes, and cyanobacteria – planktonic biovolume for lakes, according to the attribute tables in Appendix 2.

"**Unwanted organism**" means an unwanted organism as defined in the Biosecurity Act 1993."

c. Replace the definition of "**Minimum acceptable state**" with:

""**Minimum acceptable state**" means, where specified in Appendix 2, the minimum level at which a freshwater objective may be set in a regional plan in order to provide for the associated national value."

d. In the definition of "**National bottom line**", after "means", insert ", where specified,".

Part 2

Amendments to main body

9. New Part AA inserted

After the Interpretation section, insert:

"AA. Te Mana o te Wai

Objective AA1

To consider and recognise Te Mana o te Wai in the management of fresh water.

Policy AA1

By every regional council making or changing regional policy statements and plans to consider and recognise Te Mana o te Wai, noting that:

a. Te Mana o te Wai recognises the connection between water and the broader environment – Te Hauora o te Taiao (the health of the environment), Te Hauora o te Wai (the health of the waterbody) and Te Hauora o te Tangata (the health of the people); and
b. values identified through engagement and discussion with the community, including tangata whenua, must inform the setting of freshwater objectives and limits."

10. Part A amended

1. In Objective A1(b), delete "at least" and "secondary".
2. In Objective A2, replace "region" with "freshwater management unit".
3. After Objective A2, insert:

"Objective A3

The quality of fresh water within a freshwater management unit is improved so it is suitable for primary contact more often, unless:

a. regional targets established under Policy A6(b) have been achieved; or
b. naturally occurring processes mean further improvement is not possible.

Objective A4

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quality, within limits."

4. In paragraph 2(a) and (b) in Policy A4, delete "secondary".
5. After Policy A4, insert:

"Policy A5

By every regional council making or changing regional plans to the extent needed to ensure the plans:

a. identify specified rivers and lakes, and primary contact sites; and
b. state what improvements will be made, and over what timeframes, to specified rivers and lakes, and primary contact sites, so they are suitable for primary contact more often; or
c. state how specified rivers and lakes, and primary contact sites, will be maintained if regional targets established under Policy A6(b) have been achieved.

Improvements to specified rivers and lakes in (b) must make a contribution to achieving regional targets established under Policy A6(b).

Policy A6

By every regional council developing regional targets to improve the quality of fresh water in specified rivers and lakes and contribute to achieving the national target in Appendix 6, and ensuring:

a. draft regional targets are available to the public by 31 March 2018; and
b. final regional targets are available to the public by 31 December 2018.

Policy A7

By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits."

11. Part B amended

1. After Objective B4, insert:

"Objective B5

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quantity, within limits."

2. After Policy B7, insert:

"Policy B8

By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits."

12. Part C amended

Replace Policy C1 with:

"Policy C1

By every regional council:

a. recognising the interactions, ki uta ki tai (from the mountains to the sea) between fresh water, land, associated ecosystems and the coastal environment; and
b. managing fresh water, land use, and development in catchments in an integrated and sustainable way to avoid, remedy or mitigate adverse effects, including cumulative effects."

13. Part CA amended

1. In Policy CA2, after "By every regional council", insert ", through discussion with communities, including tangata whenua,".
2. After Policy CA2(e)(ii), insert:

"iia. in those cases where a freshwater objective seeks to maintain overall water quality in accordance with Objective A2, by every regional council ensuring:

A. where an attribute is listed in Appendix 2, that freshwater objectives are set at least within the

same attribute state as existing freshwater quality; and

B. where an attribute is not listed in Appendix 2, that freshwater objectives are set so that values identified under Policy CA2(b) will not be worse off when compared to existing freshwater quality; and"

3. Before Policy CA2(f)(i), insert:

"iaa. how to improve the quality of fresh water so it is suitable for primary contact more often, unless regional targets established under Policy A6(b) have been achieved or naturally occurring processes mean further improvement is not possible;

iab. how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits;"

4. In Policy CA2(f)(i), after "resource use" insert ", including community understandings of the health and well-being of the freshwater management unit".
5. In Policy CA2(f)(vii), after "in particular", insert "Objective AA1 and".
6. In Policy CA3, after "already below the national bottom line" insert "for an attribute or attributes".
7. In Policy CA3, after "set the freshwater objective below the national bottom line", insert "for an attribute or attributes".
8. Replace Policy CA3(b) with:

"b. any of the existing significant infrastructure (that was operational on 1 August 2014) listed in Appendix 3 contributes to the existing freshwater quality; and

i. it is necessary to realise the benefits provided by the listed infrastructure; and
ii. it applies only to the waterbody, waterbodies or any part of a waterbody, where the listed infrastructure contributes to the existing water quality."

14. Part CB amended

1. In Objective CB1, after "objectives" insert "and the values identified under Policy CA2(b)".
2. After Policy CB1(a), insert:

"aa. establishes methods for monitoring the extent to which the values identified under Policy CA2(b) are being provided for in a freshwater management unit. These methods must at least include:

i. surveillance monitoring of microbial health risks to people at primary contact sites in accordance with Appendix 5;
ii. the monitoring of macroinvertebrate communities;
iii. measures of the health of indigenous flora and fauna;
iv. information obtained under Policy CB1(a) and Policy CC1; and
v. Mātauranga Māori;

3. In Policy CB1(c), after "results", insert "and the relationship between results and the overall state of fresh water in a freshwater management unit".
4. After Policy CB1, insert:

"Policy CB2

By every regional council establishing methods, for example action plans, for responding to monitoring that indicates freshwater objectives will not be met and/or values will not be provided for in a freshwater management unit.

Policy CB3

By every regional council:

a. using the Macroinvertebrate Community Index;
b. establishing methods under Policy CB2 to respond to a Macroinvertebrate Community Index score

below 80, or a declining trend; and

c. ensuring that methods:

i. investigate the causes of declining trends or the Macroinvertebrate Community Index score below 80;

ii. seek to halt declining trends; and

iii. seek to improve on a Macroinvertebrate Community Index score if it is below 80, unless this is caused by naturally occurring processes, pest or unwanted organism, or by infrastructure listed in Appendix 3.

Policy CB4

By every regional council taking reasonable steps to ensure information gathered in accordance with Policy CB1 is available to the public regularly and in a suitable form."

15. Part E amended

1. Replace Policy E1(f) with:

"f) Any programme adopted under Policy E1(c) of the National Policy Statement for Freshwater Management 2011 or under Policy E1(c) of the National Policy Statement for Freshwater Management 2014 by a regional council is to be reviewed, revised if necessary, formally adopted by the regional council by 31 December 2018, and publicly notified."

2. After Policy E1(f), insert:

"g) Every regional council must, at intervals of not more than five years, compile and make available to the public a review of the improvements to specified rivers and lakes, and primary contact sites, made in giving effect to Policy A5."

Part 3

Amendments to Appendices

16. Appendix 1 amended

1. This clause amends Appendix 1.
2. Delete the heading "Te Hauora o te Wai / the Health and Mauri of the Water".
3. In the "Ecosystem Health" value description box, delete "The health of flora and fauna may be indicated by measures of macroinvertebrates."
4. Delete the heading "Te Hauora o te Tangata / the Health and Mauri of the People".
5. Replace all the text in the "Human Health for Recreation" value description box with:

"**Human Health for Recreation** – In a healthy waterbody, people are able to connect with the water through a range of activities such as swimming, waka, boating, fishing, mahinga kai and water-skiing, in a range of different flows.

Matters to take into account for a healthy waterbody for human use include pathogens, clarity, deposited sediment, plant growth (from macrophytes to periphyton to phytoplankton), cyanobacteria, and other toxicants."

6. Replace the heading "Additional National Values" with "Other National Values".
7. Delete the heading "Te Hauora o te Taiao / the Health and Mauri of the Environment".
8. Replace all the text for "Natural Form and Character" value description box with:

"**Natural Form and Character** – Where people value particular natural qualities of the freshwater management unit.

Matters contributing to the natural form and character of a freshwater management unit are its biological, visual and physical characteristics that are valued by the community, including:

i. its biophysical, ecological, geological, geomorphological and morphological aspects;

ii. the natural movement of water and sediment including hydrological and fluvial processes;

iii. the location of the water body relative to its natural course;

iv. the relative dominance of indigenous flora and fauna;
v. the presence of culturally significant species;
vi. the colour of the water; and
vii. the clarity of the water.

They may be freshwater management units with exceptional, natural, and iconic aesthetic features."

9. Delete the heading "Mahinga Kai / Food Gathering, Places of Food".
10. In the "Mahinga Kai – Kai are safe to harvest and eat" value description box:
    a. after "Mahinga kai generally refers to indigenous freshwater species that have traditionally been used as food, tools, or other resources.", insert "It also refers to the places those species are found and to the act of catching them.";
    b. replace "catchment" with "water";
    c. replace "and knowledge transfer is present (intergenerational harvest)." with ". Transfer of knowledge would occur about the preparation, storage and cooking of kai.";
    d. replace "highly valued" with "used".
11. In the "Mahinga Kai – kei te or ate mauri (the mauri of the place is intact)" value description box:
    a. delete "at some places (but not everywhere)";
    b. delete "highly".
12. Delete the heading "Mahi Māra / Cultivation".
13. In the sub-heading for "Irrigation and Food Production", after "Irrigation" insert ", Cultivation".
14. Delete the heading "Wai Tapu / Sacred Waters".
15. In the "Wai tapu" value description box:
    a. after "performed", insert ", or where there is special significance to iwi/hapū";
    b. delete "to some extent";
    c. delete "identified catchments have integrity".
16. Delete the heading "Wai Māori / Municipal and Domestic Water Supply".
17. Delete the heading "Āu Putea / Economic or Commercial Development".
18. Delete the heading "He Ara Haere / Navigation".

17. Appendix 2 amended

1. This clause amends Appendix 2.
2. In the "Phytoplankton (Trophic State)" attribute table:
    a. in row B, after "and", insert "/or";
    b. in row B, replace "nutrients" with "nutrient";
    c. in row C, replace "nutrients" with "nutrient";
    d. in row C, after "conditions.", insert: "Reduced water clarity is likely to affect habitat available for native macrophytes.";
    e. in row D, after "state", insert "(without native macrophyte/seagrass cover),";
    f. under the table, insert:

        "**Note:** For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods."
3. In the "Total Nitrogen (Trophic State)" attribute table:
    a. replace "Brackish*" with "Brackish";
    b. in row B after "and", insert "/or";
    c. in row B, replace "nutrients" with "nutrient";
    d. in row C, replace "nutrients" with "nutrient";
    e. in row D, after "state", insert "(without native macrophyte/seagrass cover),";

f. replace the note under the table with:

"**Note:** For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods."

4. In the "Total Phosphorus (Trophic state)" attribute table:
   a. in row B, replace "nutrients" with "nutrient";
   b. in row C, replace "nutrients" with "nutrient";
   c. in row D, after "state", insert "(without native macrophyte/seagrass cover),";
   d. under the table, insert:

"**Note:** For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods."

5. Under the "Periphyton (Trophic state)" attribute table, after the second footnote, insert:

"**Note:** To achieve a freshwater objective for periphyton within a freshwater management unit, regional councils must at least set appropriate instream concentrations and exceedance criteria for dissolved inorganic nitrogen (DIN) and dissolved reactive phosphorus (DRP). Where there are nutrient sensitive downstream receiving environments, criteria for nitrogen and phosphorus will also need to be set to achieve the outcomes sought for those environments.

Regional councils must use the following process, in the following order, to determine instream nitrogen and phosphorus criteria in a freshwater management unit:

a. either –
   i. if the freshwater management unit supports, or could support, conspicuous periphyton, derive instream concentrations and exceedance criteria for DIN and DRP to achieve a periphyton objective for the freshwater management unit; or
   ii. if the freshwater management unit does not support, and could not support, conspicuous periphyton, consider the nitrogen and phosphorus criteria (instream concentrations or instream loads) needed to achieve any other freshwater objectives:
b. if there are nutrient sensitive downstream environments, for example, a lake and/or estuary, derive relevant nitrogen and phosphorus criteria (instream concentrations or instream loads) needed to achieve the outcomes sought for those sensitive downstream environments:
c. compare all nitrogen and phosphorus criteria derived in steps a) – b) and adopt those necessary to achieve the freshwater objectives for the freshwater management unit and outcomes sought for the nutrient sensitive downstream environments."

6. Under the "Nitrate (Toxicity)" Table, insert:

"**Note:** This attribute measures the toxic effects of nitrate, not the trophic state. Where other attributes measure trophic state, for example periphyton, freshwater objectives, limits and/or methods for those attributes will be more stringent."

7. Replace the *E. coli* attribute table with:

Value	Human health for recreation				
Freshwater Body Type	Lakes and rivers				
Attribute	*Escherichia coli (E. coli)*				
Attribute Unit	*E. coli*/100 mL (number of *E. coli* per hundred millilitres)				
Attribute State[1] [2]	**Numeric Attribute State**				**Narrative Attribute State**
	% exceedances over 540 cfu/100ml	**% exceedances over 260 cfu/100ml**	**Median concentration (cfu/100ml)**	**95th percentile of *E. coli*/100 mL**	**Description of risk of *Campylobacter* infection (based on *E. coli* indicator)**

A **(Blue)**	<5%	<20%	≤130	≤540	For at least half the time, the estimated risk is The predicted average infection risk is 1%*
B **(Green)**	5–10%	20–30%	≤130	≤1000	For at least half the time, the estimated risk is The predicted average infection risk is 2%*
C **(Yellow)**	10–20%	20–34%	≤130	≤1200	For at least half the time, the estimated risk is is The predicted average infection risk is 3%*
D **(Orange)**	20–30%	>34%	>130	>1200	20-30% of the time the estimated risk is ≥50 in 1000 (>5% risk) The predicted average infection risk is >3%*
E **(Red)**	>30%	>50%	>260	>1200	For more than 30% of the time the estimated risk is ≥50 in 1000 (>5% risk) The predicted average infection risk is >7%*

* The predicted average infection risk is the overall average infection to swimmers based on a random exposure on a random day, ignoring any possibility of not swimming during high flows or when a surveillance advisory is in place (assuming that the *E. coli* concentration follows a lognormal distribution). Actual risk will generally be less if a person does not swim during high flows.

1. Attribute state should be determined by using a minimum of 60 samples over a maximum of 5 years, collected on a regular basis regardless of weather and flow conditions. However, where a sample has been missed due to adverse weather or error, attribute state may be determined using samples over a longer timeframe.

2. Attribute state must be determined by satisfying all numeric attribute states.

8. Replace the Cyanobacteria – Planktonic attribute table with:

Value	Human health for recreation	
Freshwater Body Type	Lakes and lake fed rivers	
Attribute	Cyanobacteria - Planktonic	
Attribute Unit	Biovolume - mm^3/L (cubic millimetres per litre)	
Attribute State	**Numeric Attribute State**	**Narrative Attribute State**
	80th percentile*	
A **(Blue)**	≤0.5 mm^3/L biovolume equivalent for the combined total of all cyanobacteria	Risk exposure from cyanobacteria is no different to that in natural conditions (from any contact with fresh water).

B **(Green)**	>0.5 and ≤1.0 mm^3/L biovolume equivalent for the combined total of all cyanobacteria	Low risk of health effects from exposure to cyanobacteria (from any contact with fresh water).
C **(Yellow)**	>1.0 and ≤1.8 mm^3/L biovolume equivalent of potentially toxic cyanobacteria OR >1.0 and ≤10 mm^3/L total biovolume of all cyanobacteria	Moderate risk of health effects from exposure to cyanobacteria (from any contact with fresh water).
National Bottom Line	**1.8 mm^3/L biovolume equivalent of potentially toxic cyanobacteria OR** **10 mm^3/L total biovolume of all cyanobacteria**	
D **(Orange/Red)**	>1.8 mm^3/L biovolume equivalent of potentially toxic cyanobacteria OR >10 mm^3/L total biovolume of all cyanobacteria	High health risks (eg, respiratory, irritation and allergy symptoms) exist from exposure to cyanobacteria (from any contact with fresh water).
* The 80th percentile must be calculated using a minimum of 12 samples collected over 3 years. 30 samples collected over 3 years is recommended.		

18. Appendix 3 title amended

In the title for Appendix 3, after the reference to "Policy CA3(b)", insert "and Policy CB3(c)."

19. New Appendix 5 and 6 inserted

After Appendix 4, insert:

"Appendix 5: Surveillance Monitoring of *E. coli* at Primary Contact Sites

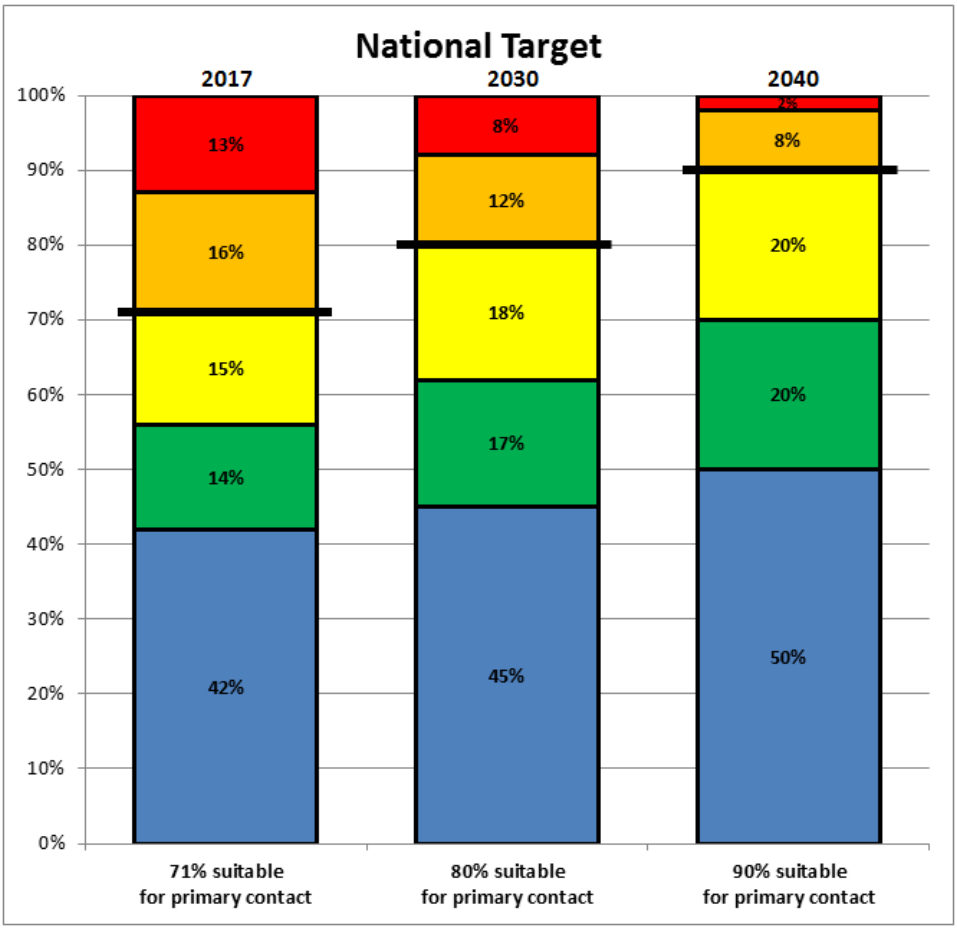
Monitoring requirements for *E. coli*

Where a regional plan has identified primary contact sites, the regional council will:

a. for each primary contact site, identify the date range or date ranges, and flow conditions within which it is or would be used for primary contact;
b. identify a sampling site (or sites) that is representative of the primary contact site (or primary contact sites); and
c. for each sampling site, and within the date range or date ranges identified in (a) undertake weekly sampling for *E. coli,* unless;
   i. a single sample from a sampling site is greater than 260 *E. coli* per 100ml, in which case, increase sampling frequency to daily where practicable, and take all reasonable steps to identify potential causes of microbiological contamination; and
   ii. a single sample is greater than 540 *E. coli* per 100 ml, in which case take all reasonable steps to notify, and keep the public informed, that the site is unsuitable for recreation until further sampling shows a result of 540 *E. coli* per 100ml or less.

Appendix 6: National Target for Water Quality Improvement

The national target is to increase proportions of specified rivers and lakes that are suitable for primary contact (those that are in the **blue**, **green** and **yellow** categories) to at least 80% by 2030, and 90% no later than 2040, but also to improve water quality across all categories.



The categories above represent combined improvements in all regions. For each region, this means reducing the length of specified rivers and lakes in the **red** and **orange** categories, and increasing the length of specified rivers and lakes in the **yellow**, **green** and **blue** categories.

The categories are based on water quality in terms of the two human health attributes, *E. coli* and cyanobacteria – planktonic in Appendix 2 of this national policy statement.

For rivers and lakes, the target categories are same as the *E. coli* table attribute states. However, the categories do not include the 95th percentile of *E. coli*/100 mL numeric attribute state if there is insufficient monitoring data to establish the 95th percentile.

For lakes, the categories are also based on the cyanobacteria – planktonic attribute states, however, to provide additional granularity for tracking improvements over time, the D band has been split into two categories (**orange** and **red**) as follows:

a. **orange** means the lake has between 1.8 and 3.0 mm^3/L biovolume of planktonic cyanobacteria, using a 80th percentile; and

b. **red** means the lake has more than 3.0 mm^3/L biovolume of planktonic cyanobacteria, using a 80th percentile.

For lakes, the lowest category for either *E. coli* or cyanobacteria – planktonic applies."

MICHAEL WEBSTER, Clerk of the Executive Council.

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