27 July 2025

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PROPOSED CHANGES TO NATIONAL DIRECTION - PACKAGE 3 DISCUSSION DOCUMENT - FRESHWATER

1. Introduction

1.1 This is the Environmental Defence Society's ("**EDS**") feedback on the Package 3: Freshwater Discussion Document ("**Discussion Document**").

1.2 National direction is the 'engine room' of the Resource Management Act 1991 ("**RMA**"). Regional policy statements and regional and district plans must "give effect" to it[1] and decision-makers on resource consent applications must "have regard"[2] to it. It therefore has significant ramifications for resource management decision-making.

1.3 EDS has been intimately involved in past national direction reviews and considers the proposals set out in the Discussion Document to be of high importance. It wishes to continue engagement in the review process beyond this feedback, including by submitting on a proposed freshwater National Policy Statement in accordance with s 46A of the RMA.

[1] RMA, ss 62(3), 67(3), 75(3)
[2] RMA, s 104(1)(b)(iii) and (v)

1.4 The national direction instruments being reviewed in the Discussion Document are secondary instruments to the RMA, and amendments to them must comply with the relevant provisions of the RMA (including Part 2 RMA). Compliance with RMA statutory obligations is a focus of EDS's feedback on the Discussion Document.

2. Section 1 of Discussion Document: Introduction

Impact assessment

2.1 The Government has released four packages of proposed changes to national direction. The changes proposed in the freshwater package are focused on "enabling primary sector growth" and realising "immediate economic gains".[3] The changes proposed in the infrastructure package are focused on "changing the culture of 'no' that has existed in New Zealand's planning system for decades" and "enabling delivery" of infrastructure.[4] The changes proposed in the primary sector package are focused on "enabling primary sector growth" and making it easier to farm.[5] The changes proposed in the housing package are focused on "freeing up land for development and removing unnecessary planning barriers."[6] In short, all of the proposed changes make use and development easier by reducing the protection afforded to the natural environment and related intrinsic values.

2.2 Within each package, there has been no analysis undertaken of the cumulative impact of the proposed changes to national direction on the natural environment to determine if they enable use and development only "while" (at the same time as)[7] safeguarding the life-supporting capacity of air, water, soil and ecosystems.[8]

2.3 There has also been no analysis undertaken of the cumulative impact of the changes to national direction across all four packages on the natural environment to determine if they enable use and development only "while" (at the same time as)[9] safeguarding the life-supporting capacity of air, water, soil and ecosystems.[10]

2.4 In relation to freshwater, nowhere alongside the numerous changes to facilitate use and development, does the Discussion Document recognise that water quality has been declining for many decades, despite introduction of the regulation the Government now seeks to weaken.

2.5 Freshwater ecosystems are degraded across most of New Zealand and their condition is generally getting worse, not better. Between 2016 - 2020, 55% of New Zealand's rivers show conditions with moderate or severe organic pollution or nutrient enrichment, and 46% of

[3] Freshwater package 3 Discussion Document pg 5 and pg 9
[4] Infrastructure package 1 Discussion Document pg 6 and pg 9
[5] Primary sector package 2 Discussion Document pg 6; Freshwater package 3 Discussion Document pg 9
[6] Going for Housing Growth package Discussion Document pg 5; Freshwater package 3 Discussion Document pg 9
[7] *Environmental Defence Society Inc v New Zealand King Salmon Co Ltd* [2014] NZSC 34
[8] RMA, s 5
[9] Ibid fn 5
[10] RMA, s 5

large lakes show poor or very poor health in terms of nutrient enrichment. 90% of wetlands have been drained, and 76% of native fish are threatened with, or at-risk of, extinction. Polluted waterbodies are located where people live, work and play. Those with mild or almost no pollution are located where population is very low, or where people generally do not live. There is therefore a direct connection between human activities, particularly those which are proposed to be more readily enabled and provided for in the national direction packages, and pollution, destruction and degradation of freshwater bodies.[14]

2.6 This information has been published by the Government this year, in its Our Environment 2025 report. However, despite this being the best information available to inform the type of changes set out in the Discussion Document, and in other national direction packages, it is not mentioned.

2.7 The current state of the country's freshwater environments necessitate increased protection and restoration. The state of the environment is such that careful consideration of what activities can occur and where is required. This will not be achieved by solely enabling activities known to have significant adverse environmental impacts, both individually and cumulatively. Such an approach fails to recognise people's reliance on a healthy natural environment and the sustainable management purpose of the RMA.

3. Section 2: Options for changing national direction for freshwater

Question 1: What resource management changes should be made in the current system under the RMA (to have immediate impact now) or in the future system (to have impact longer term)? From the topics in this discussion document, which elements should lead to changes in the current system or the future system, and why?

3.1 Review of national direction is occurring before replacement resource management laws are enacted in 'phase 3' of the Government's programme of RMA reform. The 'blueprint' for those laws includes national policy direction. The Discussion Document states that the changes being proposed now have been designed to align with the new system, and that it is expected that they will carry over and transition into the new system when it comes online. It is unclear if this will be a 'lift and shift' exercise, or whether new national direction will require a significant re-draft of RMA versions.

3.2 Either way, progressing substantial national direction review under a regime that is proposed to be replaced, and then implementing those new instruments (presumably via transitional arrangements) in a new regime which Ministers describe as being radically different, is a confusing, unstructured and backwards way for reforming national direction. Any consideration of the future regime in current national direction review is also unlawful. The new regime is not a relevant consideration, particularly given that at this stage its structure, purpose and content is unknown.

3.3 Since the Discussion Document was released for consultation, the Government has compounded uncertainty by announcing that the RMA will be amended to include "plan stop"

provisions. This change would stop notification of proposed plans and regional policy statements, including instruments that have been notified (but not yet reached hearings stage). Some limited plan and policy development will continue, notably including private plan changes, and those that progress the Government's priorities, or relate to natural hazards.

3.4 This latest announcement has significantly constrained the importance of national direction. It will mean that national policy statements will not be implemented in plans and policies, except those that are exempt from the plan stop notice, until some unknown time in the future when the new system switches plan making back on. Meantime, they will remain relevant to resource consent decision-making, but on a limited and discretionary basis (as a relevant consideration to which decision-makers must "have regard"). National Environmental Standards will continue to have effect.

3.5 This announcement has added significant complexity to the uncertain interface between phase 2 and phase 3 RMA reforms. This is not strategic or coherent.

Section 2.1: Rebalancing freshwater management through multiple objectives

Question 2: Would a rebalanced objective on freshwater management give councils more flexibility to provide for various outcomes that are important to the community? How can the NPS-FM ensure freshwater management objectives match community aspirations?

3.6 EDS opposes "rebalancing" the Te Mana o te Wai hierarchy or rewriting the current National Policy Statement for Freshwater Management 2020 ("**NPS-FM**") objective. It accords with and implements s 5 of the RMA and provides for use and development only ".. while … safeguarding the life-supporting capacity of … water … and ecosystems."[11] It does this by requiring resources to be managed in a way that prioritises (meaning 'put first') the "health and well-being" of freshwater. This ensures life-supporting capacity is safeguarded when water is utilised.

3.7 An objective enabling use and development at the expense of freshwater ecosystem health would be contrary to the RMA and lead to irreversible environmental harm.

3.8 Concern that the hierarchy is being interpreted as requiring pristine water quality is misplaced. The objective does not say water quality needs to be pristine and that is also not what the National Objectives Framework provides for.

3.9 If the objective is to be changed, it must provide for use and development only "at the same time as" or "while" safeguarding the life-supporting capacity of freshwater.

3.10 This does not provide for these matters equally. It prevents use and development that would push beyond the ability for freshwater environments to sustain themselves. That ability is a "biophysical bottom line".[12] The importance of this biophysical bottom line was first

[11] RMA, s 5
[12] RMA, Third Reading, Rt Hon S Upton

recognised nationally by the Land and Water Forum in 2009. The signatories to that report spanned the spectrum of freshwater interests. All accepted that "protecting and sustaining the life of waterways" was needed "to ensure that water will meet the on-going cultural, economic, environmental, and social needs of New Zealand".[13]

3.11 EDS's preference is to keep the existing (one) objective because it is clear and simple.

3.12 EDS does not support adding additional objectives to the NPS-FM. A single objective provides a simple and consistent point of focus, particularly when formulated as it is in the NPS-FM. The other 'objectives' set out in the Discussion Document are in fact policies ("courses of action"[14]) for achieving an outcome.

3.13 Any policy or other NPS-FM provision that refers to "communities" needs to be supported by an explanation about what this term means. For impacts on "communities" to be properly understood, including the impacts and cost of change and who bears those costs, the views of the entire community must be taken into account. "Community" is often substituted for "stakeholder", representing those that have a vested interest in using, extracting, or discharging into freshwater environments. For example, in Canterbury, community engagement was done through Zone Committees,[15] which were made up of large-scale water users. They do not reflect or represent the view of the community as a whole.

3.14 Any changes to weaken environmental obligations such as contained in the Discussion Document will enable more pollution for longer. Statements made by Ministers have made it clear that reducing the costs of farming is an objective of these changes. That would create an implicit subsidy which is contrary to New Zealand's obligations in the European Union and United Kingdom Free Trade Agreements. It would undermine our primary production sector's reputation in, and access to, export markets and potentially lead to a formal breach.

Question 3: What do you think would be useful in clarifying the timeframes for achieving freshwater outcomes?

3.15 The societal changes required to meet freshwater outcomes will be different in different regions. The timeframe in which outcomes are met should be able to be determined having regard to those differences. For example, in regions where the local economy and businesses will need to make significant adjustments to meet freshwater outcomes, the time for meeting those outcomes may need to be longer than elsewhere. The overall direction of travel should be one of improvement over time. Where freshwater systems are in a poor state the drivers for improvement will need to be more urgent.
Question 4: Should there be more emphasis on considering the costs involved, when determining what freshwater outcomes councils and communities want to set? Do you have any examples of costs associated with achieving community aspirations for freshwater?

[13] Land and Water Forum first report, 2009, "Goals" pg 28
[14] *Aratiatia Livestock Ltd v Southland Regional Council* [2019] NZEnvC 208 at [63], [70]
[15] https://www.landcareresearch.co.nz/assets/Discover-Our-Research/Environment/Sustainable-society-policy/VMO/Representation_legitimacy_collaborative_freshwater_planning.pdf

3.16 Costs are already relevant to assessing planning instruments implementing freshwater national direction under s 32 of the RMA. There is no need for further direction on this point.

3.17 Costs are not limited to financial costs associated with land use change. There are costs associated with continued or exacerbated environmental harm, including loss of ecosystem services provided by freshwater environments; compromised drinking water; inability to undertake cultural activities; and inability to undertake recreational activities.

3.18 Failure to consider these wider costs would mean that communities who bear the cost of them are effectively subsidising polluters.[16] EDS supports a polluter pays regime, not a polluter gets paid one.

3.19 Failure to consider these wider costs would be inconsistent with s 5 of the RMA and the requirement to provide for use and development while "sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations."

3.20 Section 5 of the RMA also requires a future-focused understanding of costs. This means the long-term costs of attempting to address pollution need to be considered against the short-term costs of preventing that degradation. The cost-benefit analysis undertaken to inform the last-round of freshwater changes concluded that the benefits of preventing degradation exceed the costs by $193 million yearly, or a total benefit for New Zealand of $3.8 billion by 2050.[17]

3.21 The Discussion Document does not appear to take these more complex and diverse costs into account. It appears concerned primarily with the financial costs of resource consent applications and potential economic implications for primary production operators from having to change how they do business.

Section 2.2: Rebalancing Te Mana o te Wai

Question 5: What will a change to NPS-FM objectives mean for your region and regional plan process?

Question 6: Do you think that Te Mana o te Wai should sit within the NPS-FM's objectives, separate from the NPSFM's objectives, or outside the NPS-FM altogether – and why?

Question 7: How will the proposed rebalancing of Te Mana o te Wai affect the variability with which it has been interpreted to date? Will it ensure consistent implementation?

[16] Foote, K.J., Joy, M.K. & Death, R.G. (2015) New Zealand Dairy Farming: Milking Our Environment for All Its Worth. Environmental Management 56, 709–720; Joy, Marriot, & Chapple (2022). Levelling the Grazing Paddock. *Policy Quarterly, 18*(4). https://ojs.victoria.ac.nz/pq/article/view/8015

[17] https://environment.govt.nz/assets/Publications/Files/action-for-healthy-waterways-information-on-benefits-and-costs.pdf

3.22 Changing the NPS-FM to remove the current objective, or "rebalance" the hierarchy of obligations, and replacing it with multiple objectives that may not be able to be achieved at the same time, will increase the complexity of plan processes. This will in turn increase the amount of case-by-case litigation.

3.23 The current single objective of the NPS FM is clear. It focuses process on first establishing the "biophysical bottom lines" in the region, as the RMA intends, and then on enabling resource use above those. It limits the primary point of tension to be resolved by plan processes to the methods and timing for reaching targets in degraded waterbodies, and the controls on new activities in areas where water quality is acceptable.

3.24 The hierarchy of obligations should be retained as the NPS-FM's single objective.

Section 2.3 Providing flexibility in the National Objectives Framework

Question 8: Which values, if any, should be compulsory? Why?

3.25 Ecosystem Health, Human Contact, Mahinga Kai, and Threatened Species values should remain compulsory values in the NPS-FM.

3.26 Given the threatened state of waterbodies already (with most lowland rivers and streams significantly degraded and unsafe to swim in or gather food from, most lakes in an unhealthy state, 76% of freshwater fish at-risk or threatened with extinction, and many concerning trends of decline in groundwater quality), the Ecosystem Health and Threatened Species values will help prevent the collapse of freshwater systems and the restoration of degraded freshwater bodies.

3.27 The Human Contact value ensures New Zealander's are able to safely swim in freshwater systems.

3.28 Retention of Mahinga Kai as a value is necessary to implement ss 5, 6(e), and 8 of the RMA.

Question 9: What would be the practical effect of removing compulsory national values? Do you think this will make regional processes easier or harder?

3.29 Removing compulsory values would make regional processes significantly more difficult. It would undermine nearly 20 years of national level negotiation, a critical focus of which was on reducing local community conflict over what the minimum goals for freshwater should be.[18]

3.30 The compulsory values remove a critical conflict point from regional planning processes and enable discussions to focus on methods and timeframes for achieving them, and any local

[18] Since the inception of the land and water forum

values. Removing them would increase the points of conflict and so the time and cost of planning processes.

3.31 The compulsory values ensure that the requirements in s 5(2) of the RMA are the foundation of each plan, and a 'given' during plan processes. They frame the regional plan-making process in a helpful way.

Question 10: Which attributes, if any, should be compulsory to manage? Which should be optional to manage?

3.32 The attributes attached to the compulsory values should be retained as compulsory to manage. These attributes were recommended after extensive work by a Science & Technical Advisory Group using the 'best available information' methodology in Clause 1.6 of the NPS-FM. No equivalent scientific analysis has been provided with the Discussion Document to support their status being changed to optional.

3.33 If changes are made to the attribute levels themselves, it is essential that the critical attributes for sustainable freshwater management are sediment, nutrients, microbial pathogens macroinvertebrates and dissolved oxygen (refer to Question 11). National bottom lines are needed for these attributes as a minimum (refer to Question 11). Nationally consistent monitoring of additional attributes is also required for state of the environment reporting.

Question 11: Which attributes, if any, should have national bottom lines? Why?

3.34 All attributes for compulsory values should have bottom lines. This is the final, scientifically-based step in ensuring that the NPS-FM's objective, regional council functions,[19] and ultimately the purpose of the RMA, are achieved.

3.35 Like the attributes, the bottom lines were identified by the Science & Technical Advisory Group after considerable work. No equivalent scientific analysis has been provided with the Discussion Document to support bottom lines being weakened.

3.36 On the contrary, further scientific work has been done since the national bottom lines were set. Changes to reflect this updated information are needed for the bottom lines to remain scientifically robust and to ensure they are set at the level needed to enable freshwater ecosystems to sustain themselves:

a. **Periphyton:** Periphyton is an important attribute for the Ecosystem Health value. Nuisance periphyton growth has negative effects on ecosystem health, affecting water quality (causing fluctuations in dissolved oxygen and pH), macroinvertebrates, ecological processes and habitat. Periphyton proliferation also adversely affects recreational, aesthetic, amenity and cultural values. Periphyton in rivers is primarily driven by flood frequency and magnitude and then by nutrient concentrations.

[19] RMA, s 30

The national bottom line for periphyton should be 50% weighted composite cover (%periWCC). PeriWCC is a visual assessment and is simpler and cheaper to implement.

If chl-a is retained as the periphyton attribute the national bottom line should be 120 mg/m^2 chl-a. This ensures that green filamentous algae is included in the bottom line. It is not included in the current 200 mg chl-a/m^2 bottom line (Biggs 2000).

If a national bottom line of 200 mg chl-a/m^2 is retained, exceedance criteria should be deleted. The exceedance criteria were arbitrarily added on the basis of Snelder et al. (2013). This approach is not supported by strong scientific evidence, given maximum biomass is closely linked to effects but is exempted. Concern has been expressed by the Science & Technical Advisory Group and the New Zealand Freshwater Science Society about inclusion of the periphyton exceedance criteria, with both groups recommending the criteria be removed. Few rivers exceed the chl-a bottom line with a 17% exceedance criteria, and 8% exceedance is also relatively uncommon. The current national bottom line with the exceedance criteria does not manage nuisance periphyton or protect freshwater values from peak biomass events; exceedances are so rare that the national bottom line is meaningless in most instances.

b. **Nitrate nitrogen (Nitrate (toxicity)):** Nitrate nitrogen can be toxic to aquatic life at high concentrations. Effects from nitrate toxicity range from chronic effects on growth to acute lethal effects, depending on the sensitivity of the organism and the concentration of nitrate.

   The concentrations at which nitrate is toxic significantly exceed the concentrations at which nitrate has adverse effects on ecosystem health i.e., enrichment and eutrophication. The A band threshold for nitrate toxicity is consistent with New Zealand and international literature on the upper limit for nitrogen to avoid significant trophic effects on ecosystem health.[10] The bottom line is therefore well below that limit.

   The national bottom line for nitrate nitrogen is higher than what was recommended by the Science & Technical Advisory Group during the development of the NPS-FM. The bottom line should be amended to be 1.0 mg/L Dissolved Inorganic Nitrogen, as per the Group's recommendation.[20]

c. **Dissolved oxygen:** Dissolved oxygen ("**DO**") in water is critical to aquatic life. Hypoxia (low DO) and anoxia (no DO) can have chronic (long-term) or acute (short term) effects depending on the concentration of DO in water and how long reduced concentrations persist. Fish and macroinvertebrates experience behaviour change, avoidance, increased respiration or gulping air at the surface, and adverse effects on metabolism, feeding, growth, reproduction and survival from reduced DO. Absence of DO can be lethal to aquatic life. This is the case across a river not just below a point source, although the NPS-

[20] https://environment.govt.nz/assets/Publications/Files/freshwater-science-and-technical-advisory-group-report.pdf

FM currently does not apply the DO attribute across a river despite this being recommended by the Science & Technical Advisory Group.

The DO attribute should therefore be amended to apply to all rivers and the reference to 'below point sources' should be deleted. Table 17 can be deleted as it is redundant.

d. **Suspended fine sediment:** Sediment is one of New Zealand's most pervasive habitat and water quality issues. Sediment is particularly detrimental to aquatic life and freshwater ecosystems, also affecting recreational, aesthetic and cultural uses of water.

   Suspended and deposited sediment are critical attributes for inclusion in the NPS-FM to manage significant negative effects on ecosystem health and other freshwater values nationally.

   However, the concerns with respect to the derivation of the attribute bands and national bottom lines for the four suspended sediment classes in Table 8 have some validity. The difference in water clarity between each band is minor and the range between A bands and national bottom lines for each sediment class are also small (i.e., Class 1 = 0.44 m, 2 = 0.32 m, 3 = 0.73 m and 4 = 0.40 m). National bottom lines that reflect a precautionary safety margin from a known ecological tipping point will be more meaningful and practical to implement, at least until further work has been completed. One option for continuing to use the current framework for suspended fine sediment is to apply only the national bottom line, without attribute bands.

e. **Macroinvertebrate Community Index ("MCI"):** Benthic macroinvertebrates are relatively long-lived aquatic organisms that lend themselves to monitoring multiple aspects of the health of freshwater ecosystems as they integrate the variability of water quality and instream conditions over their lifespans (e.g., weeks to months). Individual invertebrates have variable responses to instream conditions (tolerance/sensitivity) and this is reflected in their presence or absence (MCI) and relative abundance (QMCI) in a sample. The advantages of biological monitoring and the use of biotic indices like MCI/QMCI are well-established in freshwater science.

   The NPS-FM needs to clarify that MCI and QMCI should be assessed together and that the lower of the two results should apply.

f. **Deposited fine sediment:** The key threats of deposited sediment for aquatic life and ecosystem health are the loss of aquatic habitat by in-filling of the interstitial places between substrates and the direct smothering of, and damage to, aquatic organisms, including periphyton, invertebrates and fish. Deposited fine sediment has had wide-spread detrimental effects on aquatic ecosystems, particularly across New Zealand's lowland waterways.

   The proportion of deposited sediment cover at which different ecological impacts can be discriminated may not fit a 'four-band' system. Instead, national bottom lines that reflect

a precautionary safety margin from a known ecological tipping point may be more meaningful and practical to implement. Clapcott et al. (2011) developed a national deposited sediment guideline for hard bottomed streams at the request of, and in consultation with, regional councils. This established a guideline bottom line of 20% for ecosystem health. This roughly equates to the current banded 21-29%.

Retaining deposited fine sediment is essential but the attribute bands could be removed and only the national bottom line retained.

g. **Dissolved reactive phosphorus:** Dissolved reactive phosphorus is an important determinant of ecosystem health, alongside dissolved inorganic nitrogen. Together, these nutrients contribute to nutrient enrichment and can cause eutrophication, not just to periphyton and macrophytes (plants), but they can also contribute to impacts on macroinvertebrate community health, water quality and ecosystem metabolism. Table 20 of the NPS-FM has no national bottom line for dissolved reactive phosphorus and 95th percentiles of concentration have no direct relationships with the attribute bands and descriptions of impacts on ecological communities.

   95th percentiles should be removed and Table 20 replaced with national bottom lines for dissolved reactive phosphorus and dissolved inorganic nitrogen that are consistent with a national bottom line for macroinvertebrates: 0.6 mg/L for dissolved inorganic nitrogen and 0.002mg/L for dissolved reactive phosphorus.

3.37 The Discussion Document expresses a desire for greater regional flexibility whilst also simplifying the attributes in the NPS-FM. These two aims directly conflict. Allowing regional councils flexibility in how they monitor, measure and report will significantly increase costs and complexity for all parties involved in freshwater management. A lack of nationally consistent monitoring methods and environmental standards (i.e., attributes and national bottom lines) will create considerable uncertainty for resource users and time-consuming and disjointed freshwater management, which will differ from region to region. Consistent and transparent national reporting is an absolute requirement.

3.38 Nationally set and applicable values, attributes, and bottom lines enable certain, consistent monitoring. This is essential if we are to understand the impacts of activities and interventions.

Question 12: To what extent should action plans be relied upon, including to achieve targets for attributes?

3.39 Action Plans are useful if they have clearly stated actions with strict enforceable timelines.

Question 13: Should councils have flexibility to deviate from the default national thresholds (including bottom lines) and methods? Are there any other purposes which should be included?

3.40 Councils should not have flexibility to deviate from the default national thresholds, including bottom lines. This would undermine nearly 20 years of national level negotiation, a critical focus of which was on reducing local community conflict over what the minimum goal should be.[21] It would expand the range of issues to be addressed in local planning processes, increasing their complexity, cost and time.

3.41 The NPS-FM already provides an exception based on naturally occurring processes. There is no justification for further flexibility given the importance of unpolluted freshwater ecosystems for all people.

3.42 The Discussion Document outlines four purposes for allowing local authorities to deviate from nationally defined thresholds or monitoring methods. None of these hold up to scrutiny:

a. Advances in the science underpinning a threshold or monitoring method may be a suitable reason for changes to attributes or national bottom lines, but any such change should be at the national level. There is no justification for a regional approach to address scientific advances. The Discussion Document misses the fact that the attributes and national bottom lines are based on the best available scientific information at the time of writing and were developed specifically for the national context.

   The example given at Figure 2 of the Discussion Document appears to indicate that regions could deviate from any of the numeric attribute states, methods and bottom lines to assess ammonia toxicity (in orange in the diagram). This fails to appreciate that the concentrations at which various proportions of species are protected (i.e., 99%, 95%, 80%) from ammonia toxicity is scientific fact, based on toxicological research, not just a matter of opinion that could differ from region to region. Changes should be made to the attributes to national bottom lines if new scientific information supports this, but not for any other reason.

b. Local conditions are already addressed through the naturally occurring processes exceptions throughout the NPS-FM.

c. Like advances in the underpinning science, if more effective or efficient monitoring methods are developed there is benefit to all regions in addressing this at a national level, rather than a regional one.

d. Social, cultural or economic costs of achieving a bottom line must also take into account the cost of not achieving a bottom line (see Graham et al. 2020).

Section 2.4 Enabling commercial vegetable growing

Question 14: What are the pros and cons of making commercial vegetable production a permitted activity?

[21] Since the inception of the land and water forum

3.43 Permitted activity status is not appropriate for commercial vegetable operations.

3.44 The RMA provides for rules describing activities as permitted, controlled, restricted discretionary, discretionary, non-complying and prohibited. These titles "present a hierarchy in terms of achieving the objectives and policies of the [applicable] plan and the purpose of the Act. The least restrictive permitted activities are anticipated to occur, indeed they could be described as 'desirable'."[22]

3.45 Permitted activity status is only appropriate for activities where there is certainty that the effects of the activity will always be consistent with the purpose of the RMA, recognising and providing for s 6 values, meeting local authority functions and achieving applicable policy statement and plan provisions.[23]

3.46 That requirement is unlikely to be met where "significant values are at play". In that case, a "cautious approach", enabling decision-makers to grant or decline consent is likely to be needed to ensure that different instances of that activity are consistent with maintaining or enhancing those values.[24]

3.47 New Zealand's commercial vegetable operations are predominantly located in a handful of discrete areas in the Manawatu-Wanganui, Auckland, Wairarapa and Canterbury regions. In all these regions, many waterways are already significantly degraded, with contaminant levels well above the levels set in planning documents for ecosystem health.[25]

3.48 There are also other activities operating that rely on the ability to discharge contaminants, or other people (including iwi through Settlement) with land with biophysical characteristics that support highly efficient primary production, but which has not yet been utilised.

3.49 Turning to the operations themselves, individual commercial vegetable operations, in particular green vegetable and brassica growing operations, are diverse and complex, and there are vastly varying degrees to which operators use good management practices.

3.50 They also have extremely high leaching per hectare. For example, in the targeted water management subzones in which commercial vegetable growers are primarily located (the Hoki 1a and West 9b) they make a significant contribution to instream nitrogen despite covering a very small land area. In the Hoki 1a, which is significantly above the nitrogen limits in the Manawatu-Wanganui Regional One Plan, they contribute to approximately 25% of the nitrogen but cover only approximately 7% of the land area.

3.51 EDS recognises the importance of commercial vegetable growing. But it is simply not an activity that is sufficiently utilitarian or low impact to justify permitted activity status given the

[22] *Carter Holt Harvey v Waikato Regional Council* [2008] ELHNZ 479 at [113]
[23] *Carter Holt Harvey* at [113]-[114]
[24] *TKC Holdings Ltd v Western BOP District Council* [2015] NZEnvC 100 at [88]
[25] E.g. See Manawatu-Wanganui Regional One Plan parts 5 and 15

current state of many of waterways and the wider demand for the ability to discharge contaminants. Local authorities need to have discretion to have an influential role in determining the controls applying to a particular operation, and ultimately to decline consent if that is needed.

Question 15: How do you think policies and/or rules should be designed to provide for crop rotation? Do you think these should be considered within sub-catchments only?

3.52 An approach which required commercial vegetable growing to seek consent with local authority input would enable crop rotation to be considered and managed.

3.53 Crop rotation sees crops move from different growing areas within an overall farming operation. This could mean that crops move between soils with different leaching profiles and, consequently, that at each rotation location more or less nitrogen is lost into the waterway. This potential for difference in leaching means there is potential for a spectrum of effects, which need to be taken into account.

Question 16: For the proposal to develop nationally set standards, what conditions should be included

3.54 Any nationally set standard should apply restricted discretionary activity status. Matters of discretion should relate to the provision of a farm management plan, nitrogen leaching loss and a trajectory of reductions proposed to occur over time, the biophysical characteristics of the land across the operation (e.g. LUC), instream limits and targets, instream effects including on the downstream receiving environment, predominant weather conditions, good management practices, and nitrogen use efficiency.

Section 2.5 Addressing water security and water storage

3.55 Standards applying to off-stream water storage have been appended to the Discussion Document. EDS understands that these are "draft" and therefore expects that a "proposed" version will be publicly notified for submission in accordance with s 46A of the RMA.

Question 17: Should rules for water security and water storage be set nationally or regionally?

3.56 The draft standards are premature.

3.57 It is important that provisions put in place now do not predetermine allocation in the future. Setting up a permitted activity framework for storage infrastructure for primary sector purposes risks creating an expectation that water will be allocated to those with this infrastructure on their property. Given many waterways are over-allocated for water takes, competition for water, and the relevance of factors like the biophysical characteristics of land to efficient water use, this is a signal the Government should avoid.

3.58 It is also not efficient or effective to provide standards relating to a portion of the physical infrastructure, while other physical infrastructure and water take allocation is left.

Question 18: Are there any other options we should consider? What are they, and why should we consider them?

3.59 This matter should be left to local authorities or addressed as part of a comprehensive approach capturing all relevant matters to ensure integrated management.

Question 19: What are your views on the draft standards for off-stream water storage set out in Appendix 2: Draft standards for off-stream water storage? Should other standards be included? Should some standards be excluded?

3.60 The standards do not identify what activity status would apply to an activity that meets them. Water storage activities are complex with the potential for multiple effects, consequently permitted activity status is not appropriate, particularly for large -scale water storage. Large-scale storage incentivises land-use intensification that has been shown to be the main driver of freshwater quality harm[26] and biodiversity impacts.[27]

3.61 Any permitted storage should be limited to farm scale and be subject to strict standards. These need to capture the matters below, as well as any listed in the Discussion Document.

3.62 In terms of the specific standards themselves:

a. The "site selection" standards are too limited. Water storage infrastructure should not be permitted in areas of significant indigenous vegetation or indigenous habitat, or areas of outstanding or high natural character or landscape value. They should also not be permitted within 10m of these areas because of edge effects. These must be upfront site constraints.

b. The "site interactions with wider settings" needs to include a requirement to consider and assess hydrological connections with wetlands. Any water storage infrastructure must not be located within a connection area.

c. For "onsite activities during and after construction", setbacks must be at least 10m from a waterway. This is the minimum required to support ecosystem function.[28]

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[26] "The greatest negative impact on river water quality in NZ in recent decades has been high-producing pastures that require large amounts of fertilizer to support high densities of livestock" Julian, J. P., et al. (2017). "River water quality changes in New Zealand over 26 years: response to land use intensity." Hydrology and Earth System Sciences 21(2): 1149-1171.

[27] "The continuing intensification agriculture along with the multiple impacts of climate change mean that without bold initiatives to reduce farming intensity and to restore habitats New Zealand's mostly endemic freshwater fish fauna will be further imperilled" Joy, M. K., et al. (2019). "Decline in New Zealand's freshwater fish fauna: effect of land use." Marine and Freshwater Research 70(1): 114-124.

[28] https://www.nrc.govt.nz/media/yoxonnvq/riparian-setbacks-summary-of-the-science.pdf; http://www.aucklandcity.govt.nz/council/documents/technicalpublications/TP350%20Review%20of%20Information%20o

Question 20: Should both small-scale and large-scale water storage be enabled through new standards?

3.63 The answer to this question depends on what is meant by enabled. If this means both small-scale and large-scale water storage are classified as permitted activities across the country, the answer is no, they should not be enabled.

3.64 Whether either should be provided permitted activity status requires specific analysis of whether enabling these activities without resource consent is consistent with sustainable management, in particular providing for ecosystem health. This analysis has not been undertaken. The statement that "[T]he Government has committed to … removing the need for farmers to get resource consent to build larger-scale water storage schemes on land"[29] suggests the outcome is predetermined regardless of the outcome of this analysis. Standards adopted without proper analysis against statutory requirements and on a predetermined basis are unreasonable and unlawful.

3.65 EDS understands the importance of water storage. However, a nationally applicable, broad-brush approach which permits this infrastructure is simply not appropriate given the limited controls proposed and the degraded and threatened state of much of New Zealand's natural environment.

Section 2.6 Simplifying the wetlands provisions

3.66 Any changes to the wetland provisions in the NPS-FM and Resource Management (National Environmental Standards for Freshwater) Regulations 2020 ("**NES-F**") need to be considered from the factual starting point that 90% of wetlands have been lost since European settlement and that wetland ecosystems provide important ecosystem services as natural filtration systems, carbon sinks, and habitat for a diverse range of species.[30] This loss is not just historical: between 1996 and 2018 5,761ha of freshwater wetland was lost.[31] The consequence of human development is that much of the 10% of remaining wetlands are degraded.

3.67 This factual context demands a precautionary approach to wetland management. Activities with the potential to result in further loss and degradation need to be carefully controlled. Activities supporting restoration or re-establishment need to be promoted so there is no further overall loss of wetland habitat.

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n%20Riparian%20Buffer%20Widths%20Necessary%20to%20Support%20Sustainable%20Vegetation%20and%20Meet%20Aquatic%20Functions.pdf

[29] Freshwater package 3 Discussion Document pg 24

[30] https://environment.govt.nz/assets/publications/Environmental-Reporting/6.1-Wetland-extent.pdf; https://www.wetlandtrust.org.nz/wp-content/uploads/2021/04/ROOT-CAUSES-OF-WETLAND-LOSS-IN-NZ_1-STATISTICS-AND-BACKSTORIES_Jan-2021.pdf

[31] https://www.stats.govt.nz/indicators/wetland-area/; https://environment.govt.nz/assets/publications/Environmental-Reporting/6.1-Wetland-extent.pdf

Questions 21 and 22: What else is needed to support farmers and others to do things that benefit the environment or improve water quality? What should a farming activities pathway include? Is a farming activities pathway likely to be more efficient and/or effective at enabling activities in and around wetlands?

3.68 The questions on this topic do not relate back to the matters being consulted on.

3.69 There is no question about the proposed definition of "induced wetlands" and no questions about simply permitting farming activities that can occur in an around wetlands. The questions are instead framed around 'what else can be done to support farmers'.

3.70 This is misleading and presupposes that these changes will, and should, occur.

3.71 The Discussion Document proposes to exempt "induced wetlands" from the NES-F. It appears that "induced wetlands" are any wetland area that has established as a result of any human intervention not intended to have that consequence. This broad concept of "induced wetlands" is misconceived. It fails to recognise that much of the country's intensively developed areas (including farming areas) were wetlands that have been drained. Thus, the idea of inducing a wetland is wrong. Rather, the cessation of drainage has enabled the natural wetland vegetative ecosystem to regenerate. The soil must be hydric for this to occur.

3.72 This wetland regeneration and restoration should be supported given the significant extent of wetland loss. Any exception should be limited to working pasture (as currently provided for) and to enabling works within wetlands specifically constructed for a functional purpose, to enable that purpose to be met. These matters are already provided for in the exclusions from the natural inland wetland definition. Changes are not required.

3.73 The Discussion Document proposes to remove the pasture exclusion in the NPS-FM and instead allow an undefined range of farming activities within wetlands (expressly including fencing and irrigation). This is opposed.

3.74 It should not be removed simply because it has some complexity. Some measure of complexity is an unavoidable consequence of managing the natural environment which is itself incredibly complex. If a simple solution is desired, the correct approach is to avoid farming in these wetland areas. This reflects the significant threat wetlands are under and recognises and provides for the protection of their natural character in accordance with s 6(a) of the RMA. An approach which enables further *carte blanche* degradation does not.

3.75 The Discussion Document provides no evidence to support the changes set out, or related changes for new permitted activity standards for farming activities, or explain why these proposals are consistent with sustainable management.

3.76 The Government's own analysis, not referred to in the Discussion Document, identifies farming activities as a threat to New Zealand's remaining wetlands through drainage, sediment and nutrient pollution, stock grazing, and vegetation clearance.[32]

Question 23: What will be the impact of removing the requirement to map wetlands by 2030?

3.77 EDS opposes removing the requirement to map wetlands by 2030. Removing the requirement to map wetlands will compromise wetland protection. Incremental loss of wetlands will continue to occur unnoticed because it is difficult to manage and protect something that has not been identified.[33]

3.78 It will also require reduced use of permitted activities and increased consent requirements. This is because councils will not know where wetlands are located, and so will be required to have regulatory oversight of all activities in areas where wetlands might be located to ensure planning instruments are not allowing activities contrary to national policy and their statutory functions.

Section 2.8 Addressing remaining issues with farmer-facing regulations

Question 29: To what extent will it be more efficient to require dairy farmers to report on fertiliser use at the same time of year they report on other matters?

3.79 EDS does not oppose removing the requirement to provide receipts to inform nitrogen use. The more accurate information source will be a farm's Farm Plan or its Overseer record because these are the tools used to understand cost and efficiency implications of a particular nitrogen application on a particular part of the farm.

3.80 EDS also does not oppose changing the fertilizer reporting date.

Question 30: Has the requirement for dairy farms to report their use of fertilizer already served its purpose, in terms of having signaled a level of unacceptable use that should be avoided – no more than 190 kilograms per hectare per year – and if so, is this requirement still necessary?

3.81 The 190 kilogram per hectare per year cap ("**190 N Cap**") serves a useful purpose and should remain.

3.82 The way the Discussion Document frames this issue is misleading. It says: "[W]e are consulting on whether to repeal the requirement for farmers to use less than 190 kilograms of nitrogen per hectare per year". That is not what the 190 N Cap does. Rather, it requires farmers to use

[32] https://www.doc.govt.nz/nature/habitats/wetlands/#:~:text=loss%20of%20vegetation%20in%20surrounding%20catchments%20allow,farming%20practices%20cause%20sediment%20and/or%20fertiliser%20run%2Doff; https://environment.govt.nz/publications/our-environment-2025/freshwater/#freshwater-quality

[33] 'The Root Cause of Wetland Loss in New Zealand' for the Ministry for the Environment to the National Wetland Trust report (2020)

less than 190 kilograms per hectare per year if they want nitrogen use to be a permitted activity for which resource consent is not required.

3.83 The 190 N Cap is still necessary because it serves a greater purpose than "awareness" as the Discussion Document suggests. It sets a limit on nitrogen use above which regulatory oversight is engaged. This is of critical importance given the significant impact of nitrogen on instream water quality. Whether the cap should be reduced is a valid question that needs more attention.

4. Conclusion

4.1 EDS awaits public notification of the proposed national direction instruments addressed by the Discussion Document. It expects that the changes included in those proposed instruments will reflect public submissions on the Discussion Document, be underpinned by detailed scientific and legal analysis, and comply with the RMA.