Proposed NES Freshwater – recommended redrafting

The proposed NES Freshwater (NESF) lacks consistency with the National Planning Standards and Quality Planning guidance for plan making\(^1\). In particular:

1. **Terminology** Words that are the same as, or similar to those with compulsory definitions in the national planning standards and current Resource Management best practice should be applied in the NESF. Variations between words and definitions used in the NESF and draft National Policy Statement for Freshwater Management (NPSFM) and in regional and district plans will be confusing. All definitions throughout the Action for Healthy Waterways package should be consistent and clear.

2. **Hierarchy of rules.** The proposed NESF does not have a clear or consistent hierarchy of rules, or clear default rules if an activity does not meet the standards of the most relevant rule. In many cases, it is unclear what the default status is for activities which ‘fall between the cracks’ of the NESF activity statuses.

3. **Reliance on consent conditions.** The proposed NESF leaves many key matters, including the assessment of effects, to be dealt with by consent conditions. In our view, this is unlawful (as a consent application must include the assessment of effects, and a decision can only be made after considering those effects).

In addition, there are a number of substantive technical issues which we detail in our submission. It is our view that the proposed NESF needs to be reviewed and substantively amended with these matters in mind but we have had insufficient time to fully reframe and redraft the NESF to address these concerns and to make it consistent with the National Planning Standards and Quality Planning guidance. Therefore, we detail a number of the substantive technical issues in our submission and provide a track changes version of the NESF to reflect our submission, bearing in mind further reframing of the provisions in a clear and consistent manner will be required.

**General definitions**

See definitions in our advice on the draft NPSFM with regards to:

- Ecosystem services
- Natural wetlands
- Constructed wetlands
- Biodiversity offsets and the effects management hierarchy, net gain, and no net loss

All definitions should sit together, preferably in one document otherwise there is confusion between which definition the NESF applies. If the definitions do sit across multiple documents the definitions should be consistent across all and include our advice on definitions in the draft NPSFM.

Definitions should be upfront of all of the provisions for all activities and ecosystem types which they apply to and should all sit together for ease of reference. For example, definitions which sit in sub-part 1 but affect sub-parts 1 and 2 or 3 should sit above sub-part 1 in the NESF.

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\(^1\) [www.qualityplanning.org.nz](http://www.qualityplanning.org.nz)
Part 2 Wetlands, rivers and fish passage

Sub part 1 Wetlands

Natural wetlands

The definition of natural wetlands should list all the wetland types recognised in New Zealand (other than coastal wetlands) following Johnson and Gerbeaux (2004) and as per our advice on the definition in the draft NPSFM should also include wetlands created (‘constructed’) for conservation purposes including as a biodiversity offset. Wetlands created as a conservation or biodiversity offset should not be considered to be constructed wetlands but treated the same as inland wetlands because by definition (for areas that are created as offsets with at least a no net loss objective) these systems will be ecologically equivalent to other areas of wetland of the same type. Areas of wetland habitat created as environmental compensation will also be contributing to ecological function. It is at odds with the purposes for which such areas of wetland are created to exclude them from the provisions of the NPSFM and NESF. In addition, one of the principles of biodiversity offsetting is that the offset must remain in perpetuity and therefore should also be subject to Policy 8 and subservient provisions in the NPSFM.

Constructed wetlands

The definition for constructed wetland should be as in the draft NPSFM and include:

- Our advice on that definition
- Exclude wetlands created or constructed for conservation or biodiversity offsets
- Refer to ecosystems suited to wet conditions rather than just plants.

Wetlands constructed for the purposes of mitigating farm effects on freshwater must also be protected so that they continue to function as such.

Vegetation destruction

Should refer to vegetation clearance as this is the term defined in the National Planning Standards and most commonly used to control these activities in RMA plans. Vegetation destruction does not have a specific meaning in RMA practice, is ambiguous, and thus does not offer adequate protection of wetlands as it is currently used in the NESF. The definition of vegetation (in relation to vegetation clearance provisions) should not be restricted to ‘significant vegetation’ but should be consistent with common definitions of vegetation clearance that capture clearing, burning, crushing, spraying and capture all vegetation (not just significant).

Earth disturbance and general earth disturbance

This is complicated by having ‘earth disturbance’ and ‘general earth disturbance’. One or the other should be used consistently with clarification that earth disturbance doesn’t mean for the purposes of drainage. Preferably the terms ‘earthworks’ and ‘cultivation’ as defined in the National Planning Standards should be used.

The definition of ‘earth disturbance for drainage’ is clear. However, it should apply to any modification to existing drainage such as widening, rather than only referring to ‘deepening’.

**Earth disturbance for drainage** means earth disturbance that involves making new drainage ditches or deepening modifying existing drainage ditches (except where this is to reduce drainage effects on wetlands).
Public flood control and drainage and existing hydro schemes
These definitions are not stringent enough and may mean wetlands, streams and fish passage are not protected to the extent intended by the NESF. The effects of these activities can be significant both spatially and temporally.

5 Standard wetland monitoring obligation
There should be a reference in clause 5 to the need for a suitably qualified ecologist to do the monitoring and reporting.

A baseline of wetland values, condition and extent will be required in order to benchmark and compare or evaluate future condition. This could occur as part of a robust Assessment of Environmental Effects (AEE) but a requirement to formally document the baseline/benchmark prior to a consent being granted is needed in clause 5.

6 Standard conditions for nationally significant infrastructure
Clause 6(a) needs to be consistent with our advice and recommendations on biodiversity offsets and the effects management hierarchy for the draft NPSFM.

a) to the extent that adverse effects on a natural wetland cannot be avoided, remedied, or mitigated, any residual adverse effects on the natural wetlands must be offset to achieve a net gain to achieve at least no net loss, but preferably a net gain, for any of the elements for which there are residual effects;

An advice note is needed that states: In considering a biodiversity offset the principles of offsetting and guidance from Maseyk et al. (2018) must be applied².

7 and 8 Vegetation destruction
The intention of these clauses is generally supported subject to amending vegetation destruction to vegetation clearance and including the activities specified above in the definition.

Clauses 9 – 17
The intent of these clauses is supported (subject to advice provided above), particularly the discretionary, non-complying and prohibited activity statuses for earth disturbance and drainage and water takes in or near wetlands.

However, we note that changes to a wetland’s median water level less than 0.1 m may still have significant effects on the condition, extent and ecological function of some wetlands and may not be stringent enough in some cases. We also note that a baseline water level will need to be established for a wetland prior to granting of consent so that any detrimental change in water level can be detected and evaluated.

Subpart 2 Riverbed infilling
All references to ‘infilling’ should be changed to ‘reclamation’ as ‘infilling’ is not a commonly used term with respect to permanent diversion of streams and reclamation is the most appropriate term and is defined in the National Planning Standards.

The intention to halt the loss of streams from reclamation is supported, however is not appropriate to allow the consideration of offsets after a resource consent is granted.

We note it will be impossible to monitor the condition of the reclaimed area of a river as it will no longer be a river. We also note that the loss of stream length and habitat quantum should also be included in the provisions by ‘realignment’ alongside reclamation in the discretionary activity provisions. There should be no net loss of stream length included as a minimum to control the loss of the quantum of stream habitat via the ‘death by a thousand cuts’, this should be as a minimum a non-complying activity.

We note the interplay between the draft NPSFM, and proposed NESF provisions is not clear, particularly with respect to no net loss of streams. Because Regional Plans will take time to develop and be implemented, we recommend that all provisions relating to no net loss of streams is also included in the NESF so they can be implemented with urgency.

Subpart 3 Fish passage
The intention of the NESF to halt further barriers to fish passage is supported. The loss or reduction of habitat caused by barriers to fish is a key factor in the causes of declining fish populations and depleted fish communities in Aotearoa New Zealand. It is unknown how many culverts there are in Aotearoa New Zealand, but a conservative estimate is that over 300,000 exist. The cumulative effects of all of these culverts on fish passage and the loss of stream length is unknown.

We note that many structures which affect fish passage can become fish barriers over time if maintenance is not adequate. For the all activities the NESF controls (permitted activities and those that require resource consent) there should be a requirement to maintain the passage of fish at the level of the design for the lifetime of the structure. Monitoring over time will also be needed.

We note that permitting these activities will make them difficult to locate and monitor over time. All permitted activity conditions (and conditions on resource consents under the NESF) must require the person undertaking the activity to register the location of the structures and prove they are meeting the design criteria of the NESF provisions with the regional council (who will need to keep a register of these structures, their locations and proof of the design specifications). Otherwise these structures should be controlled activities under the NESF.

Part 3 Farming
25 Definitions for Part 3
All definitions are supported with the following amendments:

Critical source areas
All potential critical source areas must be included in the definition for it to be useful and clear. We suggest the following addition:

**Critical source area** means a landscape feature such as a gully, swale, or depression that accumulates runoff from adjacent flats and slopes and delivers it to surface water body such as rivers and lakes, artificial waterways, and field tiles and can include farming activities such as stock camps, static stock feed sites (e.g. hay racks), gateways, farm tracks and raceways, stock yards, break-fed fodder/forage crops, cultivated land, gully/hill/watercourse erosion, and areas of soil pugging by stock.
TCG and PPL submission

Intermittent rivers need to be defined or those preparing a farm environment plan will not be able to clearly identify them. Tukituki PC6 Rule TT1 has a workable definition similar to the Horizons One Plan (see below). The way Rule TT1 is worded, the assessment of “intermittent” is at paddock scale, not property scale, which is needed.

**Intermittent River** requires a definition. We suggest: A river that does not flow continuously and has a bed that is predominantly unvegetated and comprises clay, silt, sand, gravel, boulders or similar material.

**Land disturbance** requires a definition. This should include cultivation as well as excavation and tracking and needs to be explicit for the purposes of a FEP.

**Best practice options:** It is unclear what this means and there is no definition. It seems to be a hybrid of best management practice and best practicable option as per the RMA. We suggest: relevant industry good management practices and where consent for discharges is required under Subpart 4 of this Standard, the best practicable option.

29 Other stock holding
We support controls on feedlots, sacrifice paddocks, and other stock holding areas, subject to the sequence of days of use and linked intensity of use remaining consistent.

30 Intensive winter grazing
We support controls on intensive winter grazing and suggest the following amendments:

*Permitted activity*

(1) Intensive winter grazing on a farm is a permitted activity if it complies with the following conditions:

a) the grazing does not take place on land with a slope equal to or greater than 10 [15] degrees; where the majority of land to be grazed has a slope equal to or greater than 10 degrees;

b) the grazing does not take place over more than 30 ha [50 ha] or 5% [10%] (whichever is greater) cumulatively or in one contiguous area of the farm;

e) a vegetated strip of at least 5 m [20 m] that does not include any annual forage crop species is maintained between the grazed area and any water body or drainage ditch, and all stock are excluded from this strip during the grazing;

f) pugging to a depth of more than an average of 20 cm [10 cm] does not occur over more than 50% of the paddock, unless soils are moderately well or well-drained in which case the depth should be no more than 20 cm over more than 50% of the paddock.

**Subpart 2 Intensification**
We support the proposals in this section subject to the following advice:

32 Duration of consents
We are concerned with the idea of less reliance on national regulation in the long-term. National regulation needs to continue to define environmental limits that inform the boundaries of practice.
on-farm and support a natural capital approach to managing within limits, including for terrestrial biodiversity and emissions outcomes.

However, we are concerned that the caveat for resource consents to change land use to ‘ensure that pollution from that land use does not increase’ is not an effective or efficient means of achieving the outcome sought.

While we have some tools to model losses of nitrogen, we do not have readily available tools to model and compare losses of sediment, phosphorus or faecal contamination at the farm level. The lack of tools will likely mean that decisions about whether or not contaminant losses will increase will be based on poor information or no information at all.

Many regional councils do not have robust processes and policy in place against which to assess resource consent applications for changes to land use, and so decisions will be made in a comparative information and policy vacuum. As a consequence, the risk that environmental outcomes will be worse when land changes use is high.

We would support a more targeted approach of a prohibition or moratorium on changes to more intensive land uses until the region has an NES compliant plan in place.

Minimum standards in regulation should only be superseded by regional plan that fully meets the requirements of the NPSFM 2020. The proposed NESF states (at 31(2)(a)) that the intensification rules do not apply if the council has fully implemented the current (2014/2017) NPSFM. The current NPSFM does not have bottom lines, particularly for nitrogen, that are consistent with achieving a healthy ecosystem. In particular a regional plan may have objectives to achieve the current bottom line for nitrogen, which is 6 times higher than the bottom line for nitrogen in the draft NPSFM. In those regions (which includes Canterbury) further conversion to dairy farming would be controlled by that, clearly inadequate, regional plan, rather than being considered under the new bottom lines and rules of this new freshwater package. The exclusion from rules controlling intensification and high risk activities for regions with a plan that complies with the NPSFM2014/2017 should be removed.

Subpart 3 Freshwater module of farm plans

There are significant risks associated with devolving compliance with regional plan provisions for freshwater to farm plans as they may be seen and used as a tick box exercise, and not necessarily include best practice or transformative practice. We are also concerned with the long-term development idea of less reliance on national regulation. National regulation needs to continue to define environmental limits that inform the boundaries of practice on-farm and support a natural capital approach to managing within limits, including for terrestrial biodiversity and emissions outcomes.

To reduce these risks farm plans needs to include minimum standards that are clearly linked to freshwater outcomes (for water quality, mauri, ecosystem health and threatened and at risk taxa habitats).

38 Content of FW-FP

The content of a freshwater farm environment plan should be specific and supported by evidence of best practices. We suggest the following amendments:
(2) The mapping required in an FW-FP must, whether using maps, aerial photography, or both, clearly show the following:

a) the boundaries of the property, including, where different to the legal boundaries, the boundaries of the total farmed area;

d) location of permanent or intermittent rivers, streams, lakes, drainage ditches, ponds, overland flow paths, artificial sub-surface drainage, threatened or at risk taxa habitats (including spawning habitats of indigenous fish), significant indigenous vegetation and wetlands;

(3) The risk assessment part of the FW-FP must identify and assess the risk of contaminant losses from the farm and benchmark against industry good management practices, with consequent impacts on freshwater ecosystem health, associated with any of the following activities carried out on the farm:

   d) management of soil loss resulting from land disturbance including cultivation and intensive grazing;

   h) management of contaminant loss as a result of land disturbance including cultivation and intensive grazing;

(5) The action points in an FW-FP must set out the actions (with timeframes that are no later than 2035) that the person implementing the FW-FP is undertaking, or will undertake, to avoid, remedy, or mitigate the loss of nitrogen in accordance with:

a) any relevant plan rule; or

b) where there are no relevant plan rules, best practice options appropriate for the farm type, size and operation including all relevant industry good management practices and where consent is required under Subpart 4 of this Standard the best practicable option.

40 Certification of FW-FP
We note that significant upskilling of farm environment planners will be needed to ensure they are able to identify and remediate (used evidence-based mitigations or practices) critical impacts on freshwater of various activities on farm, particularly with respect to effects on ecological and biodiversity values. For example, a farm environment planner may need to be able to identify critical source areas, ephemeral and intermittent waterbodies, wetlands, threatened and at risk taxa habitats and potential impacts on aquatic life as well as water quality. Farm environment planners will also need to be able to interpret environmental outcomes and target attribute states for a particular waterbody and what farm practices may need to change to implement plans and improve ecosystem health, mauri and water quality in the freshwater module of a farm plan.

We recommend that the certification requirements for farm environment planners specifically include environmental management experience. This is essential to ensure farm environment
planners have the right skillset to achieve the desired environmental outcome. FEPs are primarily designed for environmental outcomes and are different from general farm operation plans (which the current proposed experience is tailored towards). We suggest the following wording:

(2) A person may not be approved as an approved farm environment planner unless they have at least the following qualifications and experience:

   a) 3 years’ experience in environmental management or ecology, and a sound understanding of the management of pastoral, horticultural, or arable farm systems;

Additionally, we suggest, any farm plan that has been prepared by a:

- currently certified nutrient management planner, or
- regional council approved farm plan provider

will not also be required to be approved by FW-FP certified person, provided they are consistent with all the requirements of a FW-FP.

These suggestions also apply to auditors of FW-FPs.

Subpart 4 Nitrogen cap

Schedule 1

Whilst we support the intention of the nitrogen cap provisions in the NESF, we note with some concern that many waterways with significant nitrogen issues are excluded from Schedule 1. Lakes and ICOLL catchments and their tributaries which exceed national bottom lines for nitrogen are not included in the nitrogen cap criteria. There are many such lakes in the Horizons region (and other regions) where nitrogen losses are not being adequately managed through regional plans, including all of the coastal dune lakes outside of main river catchments and Lake Horowhenua. The Arawhata Stream (a tributary of Lake Horowhenua with a total oxidised nitrogen 5-year median concentration of 10.5 mg/L^3) has some of the highest nitrogen concentrations in the country, yet this catchment is excluded from Schedule 1. These lakes and ICOLL catchments should also be included in Schedule 1 and a reassessment of the criteria for inclusion in Schedule 1 is needed.

In the discussion document, the Manawatū catchment in the Horizons region is excluded from Schedule 1 on the basis that there is already management of nitrogen losses to meet cumulative nitrogen loss limits for target water management zones in Table 14.2 of the One Plan. However, proposed Plan Change 2 to the One Plan^4 provides a ‘consenting pathway’ for intensive land uses to exceed the nitrogen allocation for an unknown number of intensive farms in these catchments to an unknown degree and thus proposes to undermine the nitrogen controls of the One Plan for some rivers and all of the target lake catchments. Additionally, the lower Manawatū catchment is not included in the management zones for nitrogen control via the Plan. If the Manawatū River meets the criteria for a nitrogen cap it should be included in Schedule 1. Other catchments in the Horizons region which are considered to have nitrogen controls under the One Plan should also be included.