



31 October 2019

Ministry for the Environment PO Box 10362 WELLINGTON 6143

Via email to: consultation.freshwater@mfe.govt.nz

Dear Sir/Madam

Re: Proposed National Policy Statement for Freshwater Management and the proposed National Environment Standard

Please find attached a submission from the kiwifruit industry on the proposed Ministry for the Environment National Policy Statement for Freshwater Management and National Environment Standard.

Please do not hesitate to contact us if you require any further information on this submission.

Yours sincerely

Carol Ward Chair

Kiwifruit Industry Water Strategy Leadership Group

Nikki Johnson Chief Executive

NZKGI





TO: Ministry for the Environment

SUBMISSION ON: Proposed National Policy Statement for Freshwater

Management (NPSFM) and the National Environment Standard

(NES)

NAME: NZ Kiwifruit Growers Inc (NZKGI)

ADDRESS: PO Box 4246, Mount Maunganui South, 3149

1. The kiwifruit industry in New Zealand

The kiwifruit industry is a major contributor to regional New Zealand returning \$1.8b directly to rural communities in 2018/19. There are ~3000 growers,14,000ha of orchards, 10,000 permanent employees and up to 25,000 jobs during the peak season. Approximately 80% of New Zealand's kiwifruit crop is grown in the Bay of Plenty and the industry is expected to grow its global sales to \$4.5b by 2025 which is an increase from \$3.1b in 2018/19.

Zespri is a New Zealand company owned by New Zealand kiwifruit growers which exports and markets kiwifruit to more than 50 countries around the world. New Zealand Kiwifruit Growers Inc is a grower advocacy organisation that advocates, protects and enhances the commercial and political interests of New Zealand kiwifruit growers.

2. General comments

The kiwifruit industry supports measures to improve water quality - it's what our customers expect - however we support a catchment-based approach rather than prescriptive national policy as allowed for under the operative NPSFM

How we manage water on orchard is a key focus for our industry and that is why we have come together to develop a water strategy. The strategy sets out how we will collectively protect and enhance our water resources for our people, our environment and our communities while still enabling industry growth. To achieve this, we're looking at our use of water and strengthening our data so we can benchmark our progress. This is going to be a long-term project and we have already got some important work underway. This includes a multi-year research project in the Bay of Plenty, measuring the level of nitrogen in soil on kiwifruit orchards. The purpose of the study is to develop kiwifruit-specific models to estimate nitrogen losses. It is anticipated that the models will allow nitrogen losses to be estimated for other kiwifruit growing regions. Estimation of nitrogen losses will be incorporated into materials and systems to help growers make better decisions on nitrogen application use and timing. The final results and report from the study are due in 2022.

This project has enabled NZKGI and Zespri to develop a positive relationship with Bay of Plenty Regional Council (BOPRC). This is reflected in the initial findings from this study being shared with BOPRC to support their modelling of catchment level losses.

Other research is planned to better understand water and nutrient management and outcomes on kiwifruit orchards.





3. Industry submission

This submission is sent on behalf of ~3000 kiwifruit growers, NZKGI, Zespri, and with support from HorticultureNZ and the Maori Kiwifruit Growers Forum.

4. Horticulture NZ Submission

The industry supports the Horticulture NZ submission but notes the different position the kiwifruit industry has taken around opposing the exemption for orchards 5ha and under. While the kiwifruit industry's submission has focussed on the proposed changes that are relevant to kiwifruit, the Horticulture NZ submission has provided a more in-depth analysis of the NPSFWM which the industry supports.

5. Maori Kiwifruit Growers Submission

The industry supports the Maori Kiwifruit Growers Forum submission in particular the elevation of Te Mana o te Wai in hierarchy and the Forum's view on opposing the 5ha exemption for kiwifruit growers.

6. Summary

The table below provides a summary of the key proposals that have potential implications for kiwifruit growers and the industry's response

Proposed rule	Industry response
Te Mana o te Wai	Support but note contradiction of RMA principals
Elevation of hierarchy with water	
bodies first, essential human needs	
second (drinking water etc) and all	
other aspects following	
(development, economic etc).	
NPSFWM timeframe	Do not support
Reduce timeframe from 2030 to 2025	Timeframe pressures will result in compromised
	outcomes for water quality
Decision making process	Do not support
	Industry would like to present to the panel
Appeal process	Do not support
	Not enough information provided to provide an in-
	depth response
Definitions	
<u>Enterprise</u>	Do not support on the basis that the rule is too
Where a grower has more than one	ambiguous
orchard then the orchards will be	
considered a single operating unit.	
Rules are unclear on how this applies	
across different growing regions	
Drain	
Definition of a drain not included	Support drain definition being included and
	thereby exclusion of drains from national policy
Hectare	
Definition of hectare not included eg	Support a definition of hectare (title) being
- title or production area	included





Wetlands	Support
Setbacks for vegetation removal,	
earthworks required	
Irrigated farming	Do not support
Increased on irrigated production	Kiwifruit has a low water quality impact. Land use
area of 10ha or more will require a	change to kiwifruit would not degrade water
consent	quality
5ha and under exemption	Do not support
Orchards 5ha and under exempt	All orchards should be included
from rules in part 3 of the NES	
Freshwater module of a farm plan	Support in part
Nutrient budget and mitigations.	Assuming existing industry assurance systems are
Growers in at risk catchments by	accepted. Support orchards 5ha and under being
2022 and everyone else by 2025	included
(except orchards 5ha and under)	
Mandatory Farm Environmental	Support in part
Plans	Do not support certification
	Assuming existing industry assurance systems are
	accepted.
Nitrogen caps	Support in part
Reducing nitrogen levels in at risk	Support farm-based plans, not nitrogen caps
catchments	
Reporting and Monitoring	Support in part
Mandating of telemetry	
Consultation period	Do not support

7. National Policy Statement for Freshwater Management

<u>Fundamental Concept - Te Mana o te Wai</u>

The industry supports the inclusion of Te Mana o te Wai principles in the NPSFM which guides decision making for local authorities and supports prioritising the health of water as a first priority however the hierarchy of obligations of Te Mana o te Wai seems to be in contradiction to the purpose under Section 5 of the Resource Management Act (RMA). It is presumed that this will be amended as part of the RMA reform prior to the operative date of the NPSFM.

The principles of Te Mana o te Wai are in line with the industry's water strategy principal of He Taonga te Wai and Ko Tatou Katoa Nga Kaitiaki:

He Taonga te Wai

Water is a treasure

- Water is precious and valuable
- Water has spiritual, environmental, physical and economic value
- Water is a resource to use, preserve and replenish
- Water is life

Ko Tātou Katoa Ngā Kaitiaki

We are all guardians and caretakers

- We take collective and personal responsibility to care for water resources
- We are accountable to future generations, so they benefit from water resources like we do
- We will lift our knowledge of caring for and using water better





Timeframe

Industry Position: We do not support the NPSFM operative timeframe of 31 December 2025

The operative 2017 NPSFM directs Councils to have their freshwater plans in place by 2030. The proposed rules in the amended NPSFM reduces this timeframe to 31 December 2025, with notification by 2023. It is important to note that under Part 2 of the RMA, 31 December is not included as a statutory day: **Working day** means a day of the week other than a day in the period commencing on 20 December in any year and ending with 10 January in the following year. The significant time reduction will likely compromise water quality and the public consultation process in the regions. An example of this being:

There are nine catchments within the Bay of Plenty region with BOPRC current workplan allowing for nine plan changes to be operative by 2030. Initiating individual plan changes relative to individual catchments would have allowed BOPRC to spend time on the most at risk catchments getting the data and process right and continually improving the process as more catchments were addressed. Reducing the timeframe to meet the requirements of the NPSFM by five years will mean it is unlikely that BOPRC will be able to provide for all nine plan changes. This is likely to mean:

- i. Water quality levels in some catchments will not be monitored or improved
- ii. A shortened public consultation period which may compromise outcomes
- iii. Councils will require additional resources to support monitoring, research and extra staff for planning, consents and community engagement and this is likely to impact on rate payers
- iv. Council led community projects could be reduced because of resourcing limitations
- v. Community led catchment consultation may no longer be achieved within the timeframe

The industry has real concerns for Councils capacity to deliver this work and proposes to allow Councils the necessary time (as stated under the operative NPSFM) to set plan changes, in conjunction with the community, as intended by 2030.

Decision making process

Industry position: The industry requests that the panel allows for hearings for key submitters including from the kiwifruit industry.

The industry is concerned about the process that has led to the development of the NPSFM and the NES and the decision-making process at the conclusion of the consultation period. We understand that the Independent Advisory Panel (selected by the Minister) will not be hearing submissions but will provide a report to the Minister on their recommendations based on reading of the submissions. By allowing key submitters to attend hearings aligns with a democratic approach, tends to help with decision making and helps clarify points of contention. Further to this, we ask that officials from MfE involved in the consultation process, are included in the review of submissions. Officials have attended consultation meetings up and down the country and have heard first-hand from industries and individuals. Their input will provide critical background to the submissions and decisions on next steps.

Appeal process

Industry position: The RMA Amendment Bill should have been presented before the water policy package so that linkages between the two including the appeal process could be assessed.





It is unfortunate that the new appeal planning process, (amendments to the RMA), does not provide sufficient detail to provide an in-depth response. It is noted that full details will be provided when the RMA amendment Bill is introduced to Parliament in the coming months. The industry submits that the full details should have been presented as part of the water policy package in order to give people, in particular Councils, an opportunity to provide feedback on the proposals.

8. National Environment Standard Definitions

Enterprise

Industry position: Greater consideration and clarity is required on the definition of enterprise particularly at a regional level

The proposed definition means one or more parcels of land held in single or multiple ownership constitutes a single operating unit for the purposes of management. It is not clear how the proposed rules under Part 3 of the NES could be applied to 'one unit' in particular if one of those units is in an alternate geographical location where different rainfall amount, soil types and consent conditions need to be considered. The industry submits that an enterprise should be further defined to one or more parcels of land (held in single or multiple ownership) constitutes a single operating unit for the purposes of management within a regulatory region. To support this view, of the ~3000 growers, the kiwifruit industry has ~470 enterprises spread across different geographical regions.

A further consideration for enterprises, is increasing the area of irrigated production to more than 10ha (which would require a consent). If there are three 'units' that make up a single operating unit and two of those units increase the irrigated area of production, that combined, equals 10ha or above, what is the consenting pathway? Is only one consent required and what if they are in different regions? This gives further weight to defining enterprise to a regional level.

Hectare

Industry position: A definition of hectare is required and the industry supports a definition based on title area

The definition area of hectare is not defined in the NES and while MfE have confirmed that this is an omission, the preliminary view provided to us by MfE is that the definition should be based on the title area which is consistent with Plan Change One in the Waikato Region.

The industry supports this view. The freshwater module of a farm plan applies to the whole farm meaning it includes the less productive area. This allows growers to make environmental improvements on their orchard as a whole, rather than being focused only on their orchard activity (production area).

9. Wetlands

Industry position: Drains should be defined and excluded from any requirements associated with constructed or natural wetlands

The information note on page 17 of the NPSFM provides examples of constructed wetlands which include areas of wetland habitat in or around bodies of water created for, or in connection with any of the following purposes:





- Nutrient attenuation
- Effluent treatment and disposal systems
- Stormwater management
- Reservoir for firefighting
- Hydroelectric power generation
- Irrigation
- Stock watering
- Domestic and community water supply
- Water storage ponds
- Landscaping
- Conservation or biodiversity offsetting
- Hunting
- Other artificial water storage facilities, including open drainage channels and engineered soil conservation structures

Regional Councils must permit the management of a constructed wetland to prioritise activities and management practices that are necessary for, or consistent with, the purpose for which the wetland was constructed. Drains are not defined in the NES therefore it is unclear if they meet the definition of a constructed wetland. The industry would like to see a definition of 'drain' included in the NES which clearly excludes drains from inclusion as a natural or constructed wetland.

Standard wetland monitoring

Industry position: The industry does not support monitoring being a condition of a consent. The industry's strong view is that monitoring requirements are the sole responsibility of Regional Councils as per the intention of the RMA

Proposed rule 1(a) of the NES states that if a standard wetland monitoring obligation is a requirement of a consent, then the consent holder must monitor the condition of the wetland in terms of extent, vegetation, hydrology and nutrients. This means there would be an expectation on growers to be ecologists, hydrologists and water quality scientists which is totally unrealistic. This view completely contradicts the RMA which states that a local authority must monitor compliance with resource consent conditions and the impact on the environment. If a local authority has granted a resource consent that is subject to conditions, then the local authority monitors the activity to ensure that it complies with the relevant conditions.

Further to this, in terms of monitoring requirements, the NES contradicts the wording of the NPSFM. Subpart 3 (9) (a) of the NPSFM states that every Regional Council must develop and undertake a monitoring plan to monitor the condition of its region's natural inland wetlands by reference to, at a minimum, their extent, vegetation, hydrology, and nutrients (in water, soil, or both).

It is worth noting that on page 44 of the Action for Healthy Waterways document and page 17 of the NPSFM, the reader is referred to section 11 of the proposed National Policy Statement for Indigenous Biodiversity (NPSIB). This reinforces proposals for wetland restoration however it is noted that the proposed NPSIB will not be released for public consultation until sometime in October and is therefore not available to the reader.

10. Irrigated farming

Industry position: The industry does not support this proposed rule for kiwifruit as in most cases, land use change to irrigated low impact horticulture would result in an improvement in water quality.





An increase in the amount of land for irrigated production will require a consent if the increase is more than 10ha from the commencement date of the NES. The industry does not support this proposed rule for kiwifruit as in most cases, land use change to irrigated low impact horticulture would result in an improvement in water quality. It is the industry's view that kiwifruit (along with other low water quality impact horticulture) should be exempt from this proposed rule however the industry makes the following comments:

- i. Requiring a consent to increase a water take is a current requirement however the industry notes the proposed consent conditions to provide the average discharges of nitrogen, phosphorus, sediment, or microbial pathogen discharges is not easily achievable. If the increased irrigated production area is from a different land use how is the average calculated? Is this based on the average of the previous land use? If this is the intention, is the grower required to obtain a record of discharge from the previous landowner?
- ii. It is presumed that the average will be calculated once full canopy has been achieved. There is currently no tool to model developing years of orchards. Overseer assumes the area being modelled is established (not developing).
- iii. There is no pathway on how discharges will be measured, and the industry is concerned that there is a presumption that all industries have appropriate models that can support the consent requirements.
- iv. The time period of the average calculation is contradicted in the NES (2017-2018) and NPSFM (2013- 2018)

11. Exemption for orchards 5ha and under Industry position: The industry does not support the exemption for orchards 5ha and under

Part 3 of the NES states that nothing in this part applies to the following: horticultural farms of less than five hectares.

The industry does not support this exemption based on the following reasons:

- Adverse environmental effects are not determined by orchard size e.g. orchards under 5ha have the same environmental impacts as orchards over 5ha. Opposing the exemption means that all orchards regardless of size have to manage environmental impacts consistently
- Making the requirement compulsory for all growers aligns with the best practice
 policy in the kiwifruit industry water strategy and promotes sustainable practices
 across the industry
- Improved farm practices can lead to large reductions in nitrate leaching and sediment loss
- The kiwifruit industry's view on this proposed rule relates solely to kiwifruit growers and should not be taken as a representation across all horticulture.

It is worth noting that if the government does not remove the exemption, the industry will likely apply the rules across all growers regardless of orchard size.





The average sized kiwifruit orchard is 3.4ha (green) and 2.8 (gold) with 1076 orchards 5ha and under (presuming the definition is total land area) across multiple growing regions of New Zealand.

12. Freshwater Module of Farm Plans

Industry position: The Industry supports the requirement for a Freshwater Module of a Farm Plan (FWM) assuming it is delivered through existing industry systems.

While the industry supports the proposed requirement for a FWM it is suggested clarifying the difference between an FWM, Farm Environment Plan (FEP) and an Integrated Farm Plan (IFP) would be beneficial.

The industry has had discussions with the Ministry for Primary Industries (MPI) in regard to IFP and if it is MfE intention for the FWM to be a module of an IFP then the MfE needs to be clear on this.

The industry is currently in discussions on incorporating the FWM into the existing customer assurance programme - Zespri GAP. Industry support of the FWM is on the basis that existing systems such as Zespri GAP can be used for delivery. The industry does not support a separate system for delivering farm plans. The development of Zespri GAP is primarily based on the Global GAP Standard. In addition, Zespri incorporates other elements in several areas where Global GAP certification alone does not meet customer expectations. The kiwifruit industry is currently reviewing how Zespri GAP can incorporate proposed requirements for FWM.

The industry notes that the risk assessment part of the module must identify and assess the risk of contaminant losses from the farm associated with any of the following activities carried out on the farm, meaning land on which an activity or industry described in the Hazardous Activities and Industries list is being, or has being, undertaken. The Hazardous Activities and Industries list include:

- Agrichemicals
- Fertiliser manufacture or bulk storage
- Livestock dip or spray race operations
- Persistent pesticide bulk storage or use
- Pest control
- Storage tanks or drums for fuel, chemicals, or liquid waste.

The horticulture industry already meets these requirements via:

- GAP Site Risk Assessment¹
- Orchard Water Management Action Plan (considers the bulk of the activities listed above)²
- Water Conservation Risk Assessment (use and contamination prevention)³
- Spray Plan (which is a requirement of Global Gap). The spray Plan identifies sensitive areas (including waterways) and identifies how to mitigate risk. Minimising contaminants (agrichemicals) into waterways is a requirement in most Regional Air Plans and the industry has good guidelines for growers to follow:

² Zespri, 2019 Orchard Water Management Action Plan (Attachment 2 available from Zespri

¹ Zespri, 2019 Site Risk Assessment (Attachment 1available on request)

³ Zespri, 2019 Water Conservation Risk Assessment available from Zespri (Attachment 3 available on request)





https://www.nzkgi.org.nz/wp-content/uploads/2019/06/J001501_Zespri_Spraying_Info_Sheet.pdf

While the industry supports set time frames for implementation of FWM, there needs to be consideration given to the two-year time frame for at risk catchment requirements. Allowing sufficient time for modification of existing systems to meet timeframes needs to be considered.

13. Mandatory Farm Environmental Plans

Industry position: Subject to understanding the detail, the industry supports mandatory FEP if they can be delivered through existing industry systems. The industry supports auditing but does not support certification of FEP

The Ministry has asked for opinions on whether FEP should be made mandatory. The industry supports the concept of mandatory FEP for all growers only if these can be delivered through existing systems like Global or Zespri GAP or including additional standards into existing schemes. This will reduce cost for growers, be less resource intensive and will build on existing practices. It is the industry's intention to use Zespri GAP as the delivery mechanism for FEP. The industry does not support certification of FEP but does support auditing of FEP and submits that this is already done via Zespri GAP for kiwifruit orchards. Requiring the use of certified planners will add significant cost and is unnecessary given the existing Zespri GAP system. The industry makes the following comments on the mandatory FEP proposal:

- i. Submitters are being asked to provide feedback on whether FEP should be mandatory however there is no definition of a FEP for submitters to base their opinion on
- ii. It is not clear how a FEP is different to the freshwater module of a farm plan. The risk assessment part of the freshwater module must identify and assess the risk of contaminant losses from the farm which is similar if not the same to a risk assessment of a FEP
- iii. Requiring everyone to have a FEP provides a simplistic approach and the use of FEPs will improve local authority ability to model, target and manage environmental risk
- iv. The industry agrees with the Freshwaters Leaders Group that the FEP programme could be slow to implement given current lack of capacity of farm planners and auditors which is why the use of existing systems should be recognised.
- v. While it is expected that FEP would contain national regulatory requirements, there needs to be flexibility at a regional level based on individual catchment area requirements

14. Nitrogen caps

Industry position: The industry supports farm plan-based restrictions and does not support nitrogen loss caps or national caps. The industry does not support Overseer as the only acceptable model.

As mentioned, under general comments, the industry has a multi-year research project measuring the level of nitrogen in soils and will use the data to promote best practice of fertiliser on orchards. The industry supports using the freshwater module of a farm plan to help growers in at risk catchments however has noted the following comments on the proposed options:





Nitrogen loss cap in high nitrogen catchments

i. This option applies to low-slope pastoral land, which is currently being mapped nationally, it is presumed that option one does not apply to horticulture, however, this option does not clearly define what would occur in an at-risk catchment that has mixed land uses. Would each land use be grouped, with thresholds applied to relevant land use classes? Or would all land uses be ranked equally, meaning this could unduly impact those with smaller areas but higher leaching rates. The industry does not support this option.

National nitrogen fertiliser cap

- i. Significant consultation would be required as assigning a fertiliser cap that is blanketly applied to all soil types (in different climates) could have significant detrimental impacts to the industry if the cap is set too low, impeding production
- ii. Scientific information on leaching and plant nutrient requirements is insufficient to support this option and it makes no sense to have a national cap as leaching will vary depending on soil type, application and climate
- iii. If a national cap is implemented, there is no information to support how this would be regulated in practice. Given the vast amount of land uses requiring different fertiliser applications rates, the complexity of this alone would be impossible to regulate

Farm plan-based reductions

- i. The industry supports this option but notes that horticulture is not specifically mentioned however the industry presumes that this option applies to growers
- ii. A freshwater module would be required by growers within these catchments within two years, and within the module there would have to be methods specifically outlined about how nutrient leaching would be reduced. Inherently, this would suggest that a nutrient budget would also be required for the orchard to first characterise how much nutrients are being leached in order to be able to track changes
- iii. There is no indication in the proposal about how much leaching would need to be reduced, which leaves a large area of uncertainty about what central government may require or impose. In the industry's view, the requirements should be based on implementation of best practice rather than specifying a certain reduction limit
- iv. If Overseer is recognised as the platform to assess nutrient losses, then it does not currently reliably estimate leaching from kiwifruit orchards because it has not been calibrated for kiwifruit. Considerable investment has been made with other modelling tools such as:
 - Plant and Food Research's SPASMO model which is used for horticultural nutrient assessments and by some councils to inform water allocation
 - APSIM which has been used by the Bay of Plenty Regional Council

These models have been calibrated for kiwifruit however, these are research models, not readily accessible and require specialised skills to use. Whether other models can be used as a substitute for Overseer is unclear. Zespri and NZKGI are currently in discussions with the Overseer team on development of the model for kiwifruit. The industry does not support specification of Overseer as the only acceptable model and submits that consideration should be given to other models. Specifying a model in the NES requires that model to be used where that model may not be fit for purpose for all industry types.





15. Reporting and Monitoring

Industry position: The industry supports water measuring devices but suggests that the mechanism (e.g. telemetry) should not be defined as more appropriate technology could become available. The industry supports alignment of the timeframes with the timeframes for implementing a FWM of a farm plan

There has been a requirement to install a water measuring device if a water take is >5 litres per second since December 2016, however the type of measuring device was never defined. This has resulted in inaccurate adhoc information being sent to local authorities which does not provide an accurate reading of water use. While the industry sees the value in requiring growers to use a consistent method to record water use, the model should not be defined. Technology is advancing at a rapid rate and in 2-3 years' time there could be a more advance way of recording water takes. The industry supports updating the regulations to mandate telemetry as the water measuring system but notes the following comments:

- i. In rural areas where there is limited, or no cell phone coverage/internet access, growers will not be able to use telemetry. Has consideration been given to exemption for these growers in these circumstances? Will the government look to upgrade telecommunication and internet systems in rural environments to support this proposal?
- ii. It is proposed that larger water take consent holders will require to have telemetry within two years of the commencement date and all other consent holders within six years. There is no analysis as to why these timeframes have been proposed and the industry would like to see these timeframes align with the timeframe of the requirements for the freshwater module of a farm plan:
 - growers in at risk catchments by 2022
 - all other growers by 2025

16. Consultation period

The industry is concerned that the government has provided a relatively short consultation period. With the importance placed on water use and quality and the implications of the proposed rules across multiple industries, the industry hoped for a longer consultation period to consult with growers and other product groups. Other MfE policies out for consultation has meant intense use of resources and reduced time for grower consultation. Further to this, the consultation on related policies at the same time and the lack of information available on future policies (e.g. the RMA) have impacted the industry's ability to understand how all of the policies will practically work together.