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 Avocado industry on the proposed Ministry for the Environment National Policy Statement for Freshwater Management and National Environment Standard.

Regards,

[Name], Programme Manager
New Zealand Avocado www.nzavocado.co.nz

M | 0800 AVOCADO

Level 5 Harrington House, 32 Harington Street, Tauranga 3110

Tauranga 3141, New Zealand
TO: Ministry for the Environment

SUBMISSION ON: Proposed National Policy Statement for Freshwater Management (NPSFM) and the National Environment Standard (NES)

NAME: The NZ Avocado Growers Association Inc. (NZAGA) ‘NZ Avocado’

ADDRESS: Personal Tauranga 3141, New Zealand

Personal details removed

The New Zealand avocado industry is New Zealand’s third largest fresh fruit exporter with over 4,000 hectares of production worth approximately $200 million to the economy. The industry vision is to expand this to 10,000ha in production worth $1 billion by 2040.

To achieve this vision, the industry needs to grow. We are currently in a rapid growth stage with a number of new plantings taking place over the last 5 years with many more planned. This expansion is creating new opportunities for employment not only on orchard, but indirectly through supporting business such as our avocado nurseries and rural service providers. We want to see these developments continue not only for the benefit of our industry but for the horticulture sector as a whole.

The avocado industry acknowledges the importance of providing feedback on the Proposed National Policy Statement for Freshwater Management (NPSFM) and the National Environment Standard (NES). However, the industry is concerned that some elements of the Action for Healthy Waterways proposal will create new unattainable requirements that will create a barrier to growth in the horticulture sector.

NZ Avocado represents and advocates for New Zealand’s 1,800 avocado growers by creating a supportive structure to encourage industry growth and development. A strategic objective of the industry is to safeguard producer’s rights to grow and maintain the ability to run a profitable and sustainable business. This aligns with the government agenda to build a productive, sustainable and inclusive economy that supports the wellbeing of all New Zealanders.

The New Zealand avocado industry strongly supports measures to improve water quality to support a more resilient industry. NZ Avocado has recently been granted a Primary Growth Partnership extension to substantiate our eco-credentials providing the ability develop a sustainability strategy focused on enhancing water management and environmental stewardship.

The strategy will aim to establish a pathway to collectively protect and enhance our natural resources, enable industry growth and strengthen our data so we can benchmark our progress. Outputs from this work will create information and system approaches to help growers make better decisions on resource use, orchard inputs and their timing.
1. **Avocado industry submission**  
This submission is on behalf of ~1800 avocado growers → Members of the NZ Avocado Growers Association Inc. (NZAGA).

2. **Horticulture NZ Submission**  
The avocado industry supports the Horticulture NZ submission which has provided a more in-depth review of the NPSFM.

3. **Kiwifruit industry Submission**  
The Avocado industry would like to acknowledge the kiwifruit industry, specifically NZKGI, for their support through the development of the avocado industry submission. Consequently, there are substantial parallels between both the wording and positions of both industry groups who share a significant number of producers and industry systems.

4. **National Policy Statement for Freshwater Management (NPSFM)**

**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 December 2025, with notification by 2023. The significant time reduction will likely compromise water quality and the public consultation process in the regions most affected by the proposed changes. The industry has real concerns for Councils capacity to deliver this work and proposes to allow Councils the necessary time to set plan changes, in consultation with the industry and community, as intended by 2030. over half of regional councils are not confident of completing plan changes to give effect to the current NPSFM by 2025. Most have either extended their timeframe to 2030 or indicated they might need to do so.

65% of avocado production is in the Bay of Plenty region where there are nine water catchments. The current BOPRC work plan will need to allow for nine plan changes to be operative by 2030. The process of implementing individual plan changes relative to individual catchments will allow the BOPRC to spend time on the most at risk catchments, obtaining good data and refining the process with each catchment. 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 will result in:

1. Water quality levels in some catchments will not be monitored or improved
2. A shortened public consultation period with Iwi and producers may compromise outcomes
3. 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
4. Council led community projects could be reduced because of resourcing limitations

**Decision making process**

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

The avocado 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 won’t be hearing submissions but will provide a report to the Minister on their recommendations based on their reading and interpretation of the submissions. The industry requests that the panel allows for hearings to hear from key submitters including those who have submitted from the avocado industry. Further to this, we ask that officials from MfE who have attended consultation meetings and heard first hand from industry are included in the review of submissions.

**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*

The industry believes that the full details of the new appeal planning process within the RMA amendment Bill should have been presented as part of the water policy package in order to give people, in particular Councils, an opportunity to provide informed feedback. Without this detail Council and industry are unable to provide a considered response.

**5. National Environment Standard**

*Definitions*

**Enterprise**

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

The industry submits that an enterprise be defined as one or more parcels of land (held in single or multiple ownership) to constitute a single operating unit for the purposes of management within a *regulatory region*. However, the proposed definition of an ‘Enterprise’ means one or more parcels of land constitutes a single operating unit for the purposes of management. Yet it is not clear how the proposed rules under Part 3 of the NES could then be applied to ‘one unit’ 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 consenting pathway would be unclear when there are multiple ‘units’ that make up a single operating unit and some of those units increase the irrigated area of production, that when combined, equals 10ha or above. 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 (production area or title boundary) is not defined in the NES and while MfE have confirmed that this is an omission, the preliminary view 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 avocado industry supports this view as the freshwater module of a farm plan applies to the whole property. This allows growers to make environmental improvements on their orchard environment as a whole, rather than being focused only on their production area.
6. Wetlands

*Industry position: Drains should be defined and excluded from any requirements associated with constructed or natural wetlands. Earth disturbance for horticulture land preparation also requires exclusion or further defining to allow for this fundamental process in orchard establishment.*

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. As drains are not defined in the NES it is unclear if they meet the definition of a constructed wetland. Avocados are extremely sensitive to ‘wet feet’ or water logged soils, so surface drains are often used on orchards to reduce water build up. Without this intervention excess surface water can result in disease spread/infection (*Phytophthora*) reduced yield and when left unmanaged, tree death. Some growers actively fence off drains and plant riparian areas which help to filter out sediment and nutrients before they enter waterways. To provide clarity to these proposed requirements, the industry would like to see a definition of ‘drain’ included in the NES.

An essential process for orchard establishment is land preparation yet this does not seem to be specially defined in the ‘earth disturbance’ allowances. This is a critical issue in Northland where soil structure and type has a tendency to form a hard pan that requires shallow earth works to facilitate successful orchard establishment. Without further clarity on these allowances significant planting will not be able to proceed in this growth region.

**Standard wetland monitoring**

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

Proposed rules within the NES state 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 and report any decline. This view contradicts the RMA which states that the 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.

Growers cannot and should not be expected to be ecologists, hydrologists and water quality scientists. Therefore, the industry does not support monitoring being a condition of a consent and believes that this is not the intention of the RMA. The NPSFM also supports this point on monitoring requirements by stating 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.

7. Irrigated farming (*proposed restrictions for developments over 10ha*)

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

There is a proposal that 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 avocado industry does
not support this proposed rule as, in most cases, a land use change to low intensity irrigated horticulture would result in an improvement in water quality. Low intensity horticulture should therefore be exempt from this proposed rule.

Avocados have a low intensity impact on the land and use changes for development is generally from intensive pastoral farming which has higher nitrogen leaching levels than fruit production.

Prior to purchasing land, a buyer would have to know that their intensification plans would be able to be carried out but they cannot apply for a resource consent until they are the landowner. There is no pathway in the proposals that allow a change of ownership and land use. Approximately half of the industries nurseries production is destined for current and planned developments that are over 10ha. Therefore, we believe that between now and 2025 many horticulture developments will cease and this is not positive for the environment nor the growth of New Zealand horticulture or the regional communities these business support.

It is proposed that a resource consent will only be granted if the activity does not increase nitrogen, phosphorus, sediment or microbial pathogen discharges above the enterprise or property’s 2013–18 baseline (average for this period). However, there are no clear guidelines on baseline figures when applying for resource consent and how these will be measured. Measuring nitrogen, phosphorus and sediment is not something that is currently measured in avocado production so there are no baselines to work to, especially with such short deadlines.

Requiring a consent to increase a water take is a current council 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?

It is presumed that the average will be calculated once full canopy has been achieved – taking note that it takes over 5 years for avocado planting to reach substantial production. There is currently no tool to model developing years of orchards. The proposed modelling tool, Overseer, assumes the area being modelled is established (not developing).

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 – this is not the case.

Land intensification is not defined. Some suggestions are made but it is insinuated that irrigation is bad. Intensive Avocado growing takes cows off land and replaces them with trees, which improves the environmental situation considerably. Replacing cows with trees means less methane and CO2 discharges and more carbon sequestration. If a stop is put on any developments over 10 Ha until 2025, then there is 5 years of environmental improvement that the country is missing out on.

Several Northland Iwi are starting Avocado developments or are undertaking due diligence on proposed developments as they are all being encouraged to develop their land with the intention of improving the financial and social outcomes for their people. All of the Iwi developments and proposed developments are over 10 Ha.

NZ Avocado supports proposals to improve farm practices yet does not support a blanket 10-year moratorium on further intensification of land use and further consumptive water takes for horticulture.
Not that consent requirements are the appropriate means of assessing whether planned intensification is likely to contribute to environmental effects.

**Nursery impacts**

The industry has two large avocado nurseries, with one supplying 60%-70% of all trees to the NZ industry. This nursery has a full-time staff of 40 employees and an additional 10 casual employees for six months of the year. If the proposed restrictions are adopted and future plantings were restricted, it is estimated that employee numbers would be cut by up to 50%.

Producing clonal avocado trees is a highly specialised and lengthy process. Making the delay between placing orders for trees and receipt of these often over two years. The proposed restrictions to expansion will therefore not only have future impacts to industry growth but immediate effects on growers who have invested in purchasing and preparing land, establishing employment while also having placed large orders at the nursery.

**Regional impacts – Northland example**

The number of avocado plantings and all of the development to prepare for them equates to approximately $40m a year being invested in Northland alone.

One development of 400 Ha has employed 60 full time staff and when harvesting commences in 3 or 4 years’ time there will be another 120 to 150 jobs for 5 to 6 months each year. Currently there is about 400 Hectares a year being planted in Northland every year.

The Northland project ‘Kai for Kaipara’ has the goal of helping the people of Kaipara to use their fertile land and bountiful water to its best potential. There has also been $980,000 of funding allocated to investigate developing a potential 50,000 Ha of fertile land into a sustainable horticultural area in Northland. The potential for this development and the significant benefits it will bring the regional economy will be severely constrained, or not realised at all, if policy is put in place to that restrict developments beyond 10 Ha.

8. **Exemption for orchards 5ha and under**

*Industry position:* The industry supports the exemption for orchards 5ha and under, but would also like to see a second phase where orchards under 5ha will be required to implement the requirements of the NES – thereby aligning this with a timeframe that will allow industry and councils to support and resource this universal requirement.

The NES states that a range of new requirements will not apply to horticultural farms of less than five hectares. The average productive avocado orchard across all of New Zealand is currently ~3ha however industry supports that all orchards regardless of their size should, over time and in structured and considered approach, have to manage environmental impacts consistently.

The industry supports this exemption in the short term but would like to see a second phase where orchards under 5ha will be required to implement the requirements of the NES at a later date.

This is based on the acknowledgment that adverse environmental effects are not determined by orchard size – e.g. orchards under 5ha can have the same environmental impacts as well managed orchards over 5ha. Meaning industry would ultimately like to see universal uptake of best practice to align with the industry approach to water management to promote sustainability practices across the industry.
9. Freshwater Module of Farm Plans

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

The industry supports the proposed requirement for a Freshwater Module of a Farm Plan (FWM) but suggest clarifying the difference between a FWM and a Farm Environment Plan (FEP). If it is MFE intention for the FWM to be a module of an Integrated Farm Plan (IFP) via the Ministry of Primary Industries (MPI) then the Ministry needs to be clear on this.

The industry notes that the risk assessment part of the proposed Freshwater module requires all producers to identify and assess the risk of contaminant losses when undertaking activities described in the Hazardous Activities (HAIL) list - such as agrichemical use. The horticulture industry is already meeting most if not all of the proposed requirements via their existing requirements to be complaint with GAP or equivalent schemes. Including site risk assessments, water management and contamination prevention plans including those via regional plans to identify sensitive areas and mitigate risk.

Therefore, there are a number of existing and mandatory mechanisms to drive sustainable practises via adherence to Global GAP and NZGAP which are independently audited. **We therefore submit that existing GAP schemes, which may include additional standards in future, should be recognised under NES.**

While the industry supports set time frames for implementation of FWM, there needs to be further consideration given to the short compliance timeframe for at risk catchments. Allowing modification of these existing systems to align with the timeframes of new regulations.

There is an increasing number of mixed farming systems, any modulisation would need to ensure consistency across systems wherever possible for ease of implementation and management for growers.

NZ Avocado supports a longer term goal of all growers having a farm plan with a freshwater module yet believe the aim of having these universally implemented by 2025 may be unachievable if time is not provided for the education and uptake of the practical on orchard outcomes that these intend to deliver alongside other environmentally focused modules.

The monitoring and regulatory requirements of plans needing to be enforced by regional Council is not a preferred approach where administration and compliance costs deter from the investment in activities on-orchard that will deliver good water and environmental management.

NZ Avocado agrees that Farm Environment Plans should not be used as a tool to ensure regulatory compliance. They can only be used as a tool to help growers comply with limits and regulations set by central and/or local government. i.e. they cannot be used to set limits for environmental performance in their own right.
10. Mandatory Farm Environmental Plans

*Industry position: The industry supports mandatory Farm Environmental Plans if they can be delivered through existing industry systems. The industry supports auditing but does not support certification of Farm Environmental Plans*

By 2025 it is proposed that orchards over 5 hectares will need a Farm Environment Plan (FEP). The avocado industry supports the concept of mandatory FEP’s however, as noted above, supports using existing schemes with additional standards as required. This will reduce external consultant and auditing cost for growers, be less resource intensive, will build on existing practices and get greater support from industry. The industry does not support a separate certification scheme for FEP that are not built into existing standards.

The industry makes the following comments on the mandatory FEP proposal:

1. 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
2. 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
3. Requiring orchards over 5 hectares 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
4. 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.

It must be stressed that Farm Environment Plans could be slow to implement given the current lack of suitably qualified farm planners and auditors. With no published requirements or assessment criteria for Farm Planners it is unclear how long it will take to train and certify planners. Growers in sensitive catchments have to have the FEP in place by 2022. The industry believes that there is simply not enough time to achieve the goals set out in the NES to a standard that would achieve this outcome which is why the use of existing systems should be allowed for.

11. Actions to reduce nitrogen loss

*Industry position: The industry supports farm plan-based restrictions (option 3) and does not support nitrogen loss caps or national caps. The industry does not support Overseer as the only acceptable model.*

As mentioned in our introduction, the industry has received continued Primary Growth Partnership funding to better understand what to measure, how to measure and how to report on the use of nutrients and the resulting environmental footprint of avocado orchards. This data can also be used to benchmark progress, track orchard performance and promote best practice on orchard.

The Action for Healthy Waterways consultation proposed three options for rapid reduction of excessive nutrient leaching:
1. Setting a cap in catchments with high nitrate-nitrogen levels, so farms with excessive losses will have to reduce to come under the cap.

2. Setting a national nitrogen fertiliser cap.

3. Requiring farmers in catchments with high nitrate-nitrogen levels to show, in the freshwater module in their farm plan, how they will rapidly reduce nitrogen leaching, and auditing their progress.

**Option 1. Nitrogen loss cap in high nitrogen catchments**

A nitrogen loss cap in high nitrogen catchments applies to low-slope pastoral land, which is currently being mapped nationally, it is presumed that this option does not apply to horticulture, however this option does not clearly define what would occur in and at risk catchment that has mixed land use.

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.

Placing restrictions on a per hectare basis is very generalised and may have no correlation to nitrogen losses in a horticultural enterprise. The industry therefore does not support this option.

**Option 2. National nitrogen fertiliser cap**

Significant consultation would be required as assigning a fertiliser cap that is 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.

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.

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.

The industry therefore does not support a national nitrogen fertiliser cap.

**Option 3. Farm plan-based reductions**

The industry supports this option but notes that horticulture is not specifically mentioned however the industry presumes that this option applies to growers. Good management practices implemented through Farm plans would allow a programme for continuous improvement.

A freshwater module would be required by growers within at risk 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.

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.

If Overseer is recognised as the platform to assess nutrient losses, then it does not currently reliably estimate leaching from avocado orchards because it has not been calibrated for all horticulture industries. 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 are being activity worked on with data provided from industry to calibrated them for avocados and other horticulture types however, these are research models, not readily accessible and require specialised skills to use.

**Overseer**

Overseer is acknowledged as not being fit for horticulture or multi use sites. There are other options for horticulture such as Plant and Food Research’s SPASMO however this system is not readily available for growers at present. Whether other models can be used as a substitute for Overseer is unclear however we believe that investment is SPASMO is required to assist growers in reaching their targets.

**12. 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 ad hoc information being sent to local authorities which does not provide an accurate reading of water use. Many Councils are also still working on how to receive this data in a standardised format.

NZ Avocado support in principle improving the collection of data on freshwater as these provides a better understanding off water use and hence availability to other users and facilitates proposed expansion plans.

The industry therefore supports updating the regulations to mandate telemetry as the water measuring system but notes that in rural areas where there is limited, or no cell phone coverage/internet access, growers will not be able to readily or cost effectively 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?

**13. 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.

Councils have also been working towards completing new fresh water plans by 2030. Bringing it forward to 2025 will put pressure on councils and communities by not allowing for robust consultation, leaving some catchments not being properly managed with a shortage of trained support staff. We are concerned that councils will not be able to deliver on the proposals.

Given the water policy is going to have wide reaching effects on growers, farmers and New Zealand we submit that the consultation period should be extended.