

Submission on:

- 1. Action for Healthy Waterways: A Discussion Document on National Direction for Our Essential Freshwater;**
- 2. Draft National Policy Statement for Freshwater Management;**
- 3. Proposed National Environmental Standards for Freshwater; and**
- 4. Draft Stock Exclusion Section 360 Regulations.**

To: Freshwater Submissions, Ministry for the Environment

From: The New Zealand Institute of Primary Industry Management

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Contact: Stephen Macaulay
Chief Executive
PO Box 5304
Wellington 6145

P: 027 226 3331
E: stephen@nzipim.co.nz

Introduction

The New Zealand Institute of Primary Industry Management (NZIPIM) welcomes the opportunity to provide comment on the Essential Freshwater package 2019, which includes the following four components:

- Action for Healthy Waterways: A Discussion Document on National Direction for Our Essential Freshwater;
- Draft National Policy Statement for Freshwater Management;
- Proposed National Environmental Standards for Freshwater; and
- Draft Stock Exclusion Section 360 Regulations.

By way of background, NZIPIM is the independent peak industry body for the rural profession. We have approximately 1,100 members from a diverse range of occupations within the rural profession, including; farm management advisors, environmental consultants, rural bankers, farm accountants, fertiliser consultants, rural valuers, representatives from industry good organisations, CRIs, universities and agribusiness service providers. In addition to this, we also have over 300 student members undertaking tertiary studies in agriculture and horticulture.

Our members work with farmers on a day-to-day basis in helping them achieve their goals in running successful, sustainable and financially robust farm business enterprises. This has wider flow-on benefits for the economic and social wellbeing of New Zealand, generating primary export earnings of \$46.4 billion for the year ended June 2019.¹

NZIPIM supports the main objective of the Essential Freshwater package 2019 to improve the water quality of our streams, rivers and lakes, and to stop further degradation of our freshwater resources. However, greater care needs to be taken in understanding the significant economic and social costs of the proposals to farmers, growers, industry and communities in meeting these objectives, which have yet to be quantified regarding the practicalities of implementing the proposals on-farm within the timeframes specified.

Should further clarification or more information be required to the points raised within this submission, NZIPIM is happy to discuss these with the Ministry for the Environment.

Providing context

Based on feedback received from members there is a great deal of uncertainty within the farming community brought about by increased on-farm environmental regulations, greater pressure on bank lending arrangements, additional statutory requirements and rising compliance costs to farm businesses.

Competing interests for on-farm capital in meeting new environmental regulations, along with increased pressure from banks for debt reduction, continue to feature highly in farmers' thinking as well as that of their advisors. This is more so now on the back of static or declining equity positions, where capital gains in land values can no longer be relied upon to underpin the balance sheet.

In a recent NZIPIM membership survey, over 55% of the respondents reported significant knowledge gaps and understanding of new environmental regulations by

¹ Situation and Outlook for Primary Industries: September 2019 ([link](#)).

farmers, particularly about how to maintain profitable and sustainable businesses under environmental limits being rolled out by regional councils across the country.

NZIPIIM members and the wider farming community would agree about the need to continue to improve our water quality, with farmers already taking steps in establishing riparian margins, becoming more efficient in the application of nitrogen fertilisers, and being more proactive in implementing on-farm strategies to mitigate contaminants entering our waterways.

Action for Healthy Waterways: A Discussion Document on National Direction for Freshwater (the Discussion Document)

Social and economic impact of proposals

NZIPIIM agrees with the intent of the policy direction to improve water quality entering our waterways. However, we are concerned about the general lack of analysis of the social and economic impact of the proposals, which we believe is a significant shortcoming in the Discussion Document.

We note that the Government's Science and Technical Advisory Group (STAG) recognised that recommendations in their report to the Minister for the Environment on the proposals could have very significant economic and social implications for individuals and communities in some parts of New Zealand.²

Given the significant economic impact of the proposals to farmers, rural communities and the wider New Zealand economy, the lack of a robust macro-economic cost-benefit analysis is a serious deficiency in the Discussion Document. In our view this has stifled deeper consideration and objective discussion of the impact of the proposals by a wider audience.

The lack of a robust cost-benefit analysis within the Discussion Document would appear to be at odds with the purpose of the Resource Management Act 1991 – the very basis on which the proposals will be delivered – to *promote the sustainable management of natural and physical resources which enable people and communities to provide for their social, economic, and cultural well-being and for their health and safety*.³

To diminish the importance of economic and social considerations within the Discussion Document is concerning, given the significant cost to farmers, rural communities, regional councils and the wider economy in meeting the objectives under the Essential Freshwater package.

NZIPIIM strongly recommends that further analysis is undertaken to better understand the economic and social impact of the proposals. In undertaking this work, we would recommend that the following factors be considered:

- The macro-economic cost-benefit analysis be built on an in-depth understanding of the economic cost of implementing systems change at a farm level;
- The ability to gain and develop robust data sources at a farm level and community level; and
- The utilisation of economic and farm systems modelling knowledge that can also be incorporated into macro-economic models.

² Freshwater Science and Technical Advisory Group Report to the Minister for the Environment; page 5 ([link](#)).

³ Section 5 of the Resource Management Act 1991 ([link](#)).

Water quality – new bottom line for nutrient pollution

NZIPIM supports the need to reduce contaminant (nitrogen, phosphorus, sediment and pathogens) levels in our waterways. Many farmers are already implementing programmes to improve water quality outcomes through company quality assurance programmes and the adoption of industry good management practices (e.g. Sustainable Dairying: Water Accord, Horticulture New Zealand's NZGAP assurance programme).

The Discussion Document proposes new bottom lines for nitrogen in rivers of an annual median of 1.0 milligrams per litre of dissolved inorganic nitrogen (DIN), and for phosphorus an annual median of 0.018 milligrams per litre of dissolved reactive phosphorus (DRP). These targets would appear to be unachievable without very significant land use changes in certain regions across New Zealand.

Capital-intensive irrigation systems operating on lighter soils in Canterbury would find it extremely difficult to achieve the DIN limits proposed, particularly where spring fed rivers with a ground water feed flow have much higher levels, and in some cases 10 times greater, than the 1.0 milligrams per litre level. Taranaki Regional Council's own analysis suggests that the DRP limits are not achievable, as run-off from Mt Taranaki contributes significantly to this region's elevated concentrations of phosphorus.

We also understand that there is concern by regional councils and industry over the robustness of the science underpinning the use of DIN and DRP as a measure of waterway health and in directing and managing land use change.

We oppose the DIN and DRP measures, which appear unachievable in certain regions in New Zealand. Further consideration needs to be given to key attributes to assess and measure the condition of waterways in a manner that more directly correlates positive land use practices to improving water quality and macro-invertebrate health.

Excluding stock from waterways

NZIPIM acknowledges that stock exclusion as one of the most effective measures for reducing contaminants entering permanent waterways. As noted in the Discussion Document, considerable effort has already been made by livestock farmers to fence off waterways. This includes work under the Sustainable Dairying: Water Accord, where dairy cattle have been excluded from 24,744 km of Accord waterways over a five-year period up to the 2017/18 season.⁴

The proposal for setbacks between the fence and the waterway of five metres on average across a farm represents a 'one size fits all' approach. This potentially overrides the good work already completed by farmers and regional councils in fencing off waterways that do not meet the five metre average coverage measure. We also believe this could lead to perverse outcomes if the impact of moving or creating fences causes more environmental harm than leaving the fences as they currently are, as well as farmers having less money to spend on other environmental initiatives to improve water quality.

⁴ Sustainable Dairying: Water Accord – Progress Report for the 2017/2018 Season ([link](#)).

We note under the Draft Stock Exclusion Section 360 Regulations that farmers would be required to replace fencing along waterways if the setback is not at five metres.⁵ This would represent a significant cost to farmers who have already invested considerable funds and demonstrated foresight in excluding stock from waterways. It would seem punitive and counterproductive to require farmers to re-fence riparian margins on the basis of new setbacks limits when they thought they were doing the right thing in excluding stock from waterways.

Farmers should not be punished for already fencing off waterways. NZIPIM recommends that existing fencing established to exclude stock from waterways should be allowed to remain for the life of the fence (25 years from the time it was put in place) and included within a farm environmental plan as part of a future work programme, unless the farmer decides to replace the fence before this time.

Further clarification is needed about how the five metre average setback will be assessed and validated, particularly if this is to be actively measured and enforced. If the expectation is to use a surveyor this would be overly excessive and costly from NZIPIM's perspective.

NZIPIM questions the practicality and financial feasibility of fencing off waterways on hill country with its many interlacing water tributaries. Not only will this be cost-prohibitive for many hill country farms, but in many cases this type of fencing will require earthworks to establish clear fencing lines, increasing the risk of sediment entering waterways.

NZIPIM recommends further analysis be undertaken on setbacks that considers a broader range of science and best practice principles to achieve the desired outcome of reducing contaminants entering waterways. Any research which informs, or has informed, the five metre requirement (as opposed to an alternative width) should be applicable for New Zealand conditions and ideally 'ground-truthed' in local conditions. This analysis also needs to consider the costs of maintaining larger setback margins including the control of noxious and evasive weeds (e.g. gorse, blackberry, ragwort, thistles, etc).

Proposed National Environmental Standards for Freshwater (NES for Freshwater)

Subpart 2 – Wetlands, rivers and fish passage

Clause 5 – Standard wetland monitoring obligation

There is little incentive under Clause 5 for farmers and other land owners to construct or even notify regional councils about wetland habitats on their land when they could face additional regulatory oversight and compliance costs in the monitoring and reporting on the state of wetlands to councils.

NZIPIM would encourage a more enabling framework for activities related to the enhancement of wetland areas, rather than additional regulatory requirements that are likely to discourage some people from undertaking enhancement activities in these areas.

⁵ Under the Draft Stock Exclusion Section 360 Regulations: 'Re-fencing will be required in five years if it does not comply with setback requirements, and existing setbacks with a minimum of 2 metre average width and is not less than 1 metre at any point by 2035.'

Subpart 3 – Freshwater module of farm plan (FW-FP)

NZIPIM supports the use of farm plans as a method to sustainably improve performance and profitability on-farm. Farm plans also provide assurance and confidence to regulators, communities and the marketplace that our primary products have been sustainably produced with due care for our environment, livestock and people.

Clause 37 – Who must have FW-FP?

Clause 37 sets out the timeframes for farms to have an FW-FP. It is estimated that 28,000 farms will require a certified FW-FPs over the next two to five years. The timeframe to meet this target represents a significant challenge as there is currently insufficient capability and capacity of environmental planners in the market to develop certified FW-FPs.

NZIPIM estimates that approximately 200 full-time approved farm environmental planners⁶ will be needed to certify FW-FPs for farmers and growers over the next two to five years. In addition to this, 120 full-time approved auditors⁷ would be required to audit FW-FPs on a two-year cycle. We note that the number of approved farm environment planners and auditors will most likely need to be higher than 320 as many will not want to become full-time planners or auditors. We also understand that there is usually a high turnover rate of auditors associated with undertaking similar audit functions, which represents a challenge if we are to maintain a steady pipeline of approved auditors coming through the certification process.

In reviewing NZIPIM's membership database, as well as in discussions with environmental planners, we estimate that 40 full-time environmental planners are currently involved in developing farm environmental plans. This represents a significant gap in the market, and it will take time to build the capability and capacity of planners and auditors to meet the expected demand for certified FW-FPs and the associated auditing function.

Considerable efforts must be made to quickly build the competency and knowledge base of individuals in environmental planning to assist farmers and growers in identifying good management practices and in the uptake of risk mitigation strategies in the development of FW-FPs. This could include targeted professional development programmes, subsidising the cost and an individual's time in attending nutrient management⁸ and other related courses, and working with existing consultancy firms in the market in building capacity. Ensuring that planners and auditors have a strong knowledge of farm systems and on-farm environmental strategies will be critically important for the successful roll-out and monitoring of FW-FPs into the future.

In what timeframes will FW-FPs remain valid?

The timeframe in which an FW-FP remains in effect has not been identified within the NES for Freshwater. This would suggest that regional councils would determine the length of time an FW-FP would remain valid.

⁶ Assumes conservatively five days to complete an FW-FP. Depending on the sophistication of the farm system and consents required this could take significantly longer. Assumes 9,333 farms needing FW-FPs over the next three years.

⁷ Assumes each audit would require two days to complete across 14,000 farms/year (28,000 farms audited every two years).

⁸ Massey University's Intermediate Sustainable Nutrient Management course (\$1,500+GST) and the Advanced Sustainable Nutrient Management course (\$1,950+GST) ([link](#)).

The FW-FP should be seen as a living document that can continually evolve and adapt to incorporate innovative on-farm practices and allow for the ready adoption of new technologies that improve on-farm performance and better environmental outcomes.

NZIPIIM recommends that the NES for Freshwater specify a timeframe in which an FW-FP remains in effect to avoid any doubt. This would enable farmers and growers to plan and budget for the next revision of their FW-FP and more easily incorporate changes into the farm system to improve water quality outcomes on-farm. It is recommended that FW-FPs remain valid for five years.

Further clarification also needs to be given as to how an FW-FP can be changed should the farmer or grower change their farm system, or should budget constraints during a market downturn impact on planned improvements. Consideration would need to be given to the magnitude of change to establish when the farm environmental planner and/or regional council might need to revise and approve the FW-FP.

NZIPIIM is also mindful that individuals thinking of investing time and resources into training programmes to upskill themselves to become an approved farm environmental planner will need to have confidence that there is a pipeline of work to warrant this investment. If there is no specified timeline for the life of an FW-FP the ability to attract in excess of 200 full-time approved farm environment planners becomes even more difficult.

Clause 38 – Content of FW-FP

Under subclause 38(3) it states:

'The risk assessment part of the FW-FP must identify and assess the risk of contaminant losses from the farm, with consequent impacts on freshwater ecosystem health, associated with any of the following activities carried out on the farm: ...'

The ability for farm environment planners to understand the consequential impacts on freshwater ecosystem health will require a deeper level of understanding and expertise than currently exists to provide advice and report on this requirement. If, rather, the expectation is to retain a qualified wetland ecologist and hydrologist to establish the natural hydrological regime of the natural wetland as proposed under subclause 12(2)(a) & 16(3)(a), then the time and cost involved in completing an FW-FP will quickly escalate.

Understanding what a farm environment planner needs to know in the area of freshwater ecosystem health will be important. Under the Farm Environmental Plan Certification Scheme (see below), a competency framework was developed to identify the benchmark knowledge and competencies required by a farm environment planner. It is recommended that such competencies be established in the area of freshwater ecosystem health, which would specific to planners what is expected from them and where they need to develop their knowledge base in freshwater ecosystem health.

Clause 39 – Obligation to provide FW-FP is required

This clause suggests that regionals councils can decide whether or not to obtain a copy of an FW-FP. NZIPIIM seeks clarity on the conditions in which FW-FPs are likely, or not likely, to be required by regional councils.

Clause 40 – Certification of FW-FP

NZIPIIM supports the proposal for farm environment planners to complete the requirements of the certification scheme approved by the Minister for the Environment and the Minister of Agriculture. By way of background, NZIPIIM was contracted by regional councils, central government (Ministry for the Environment and Ministry for Primary Industries) and industry (DairyNZ, Beef + Lamb New Zealand, Horticulture New Zealand) to design and develop the Farm Environmental Plan Certification Scheme, which was completed in April 2019.

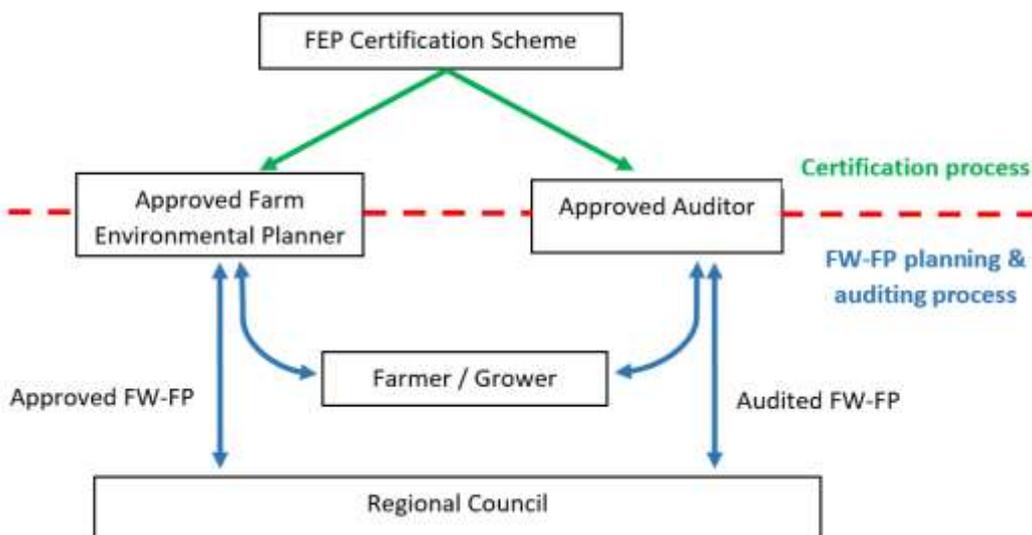
It is pleasing to see that the requirements of the approved certification scheme identified in the NES for Freshwater closely reflect those developed for the Farm Environmental Plan Certification Scheme as referred to under subclauses 40(1)(2)&(3).

We are generally supportive of the intent of subclause 40(4), but NZIPIIM believes this could be open to wider interpretations and quite possibly liabilities against the certification scheme directly. Under subclause 40(4) it states:

'As soon as practicable after certifying an FW-FP, the approved farm environment planner must notify the relevant regional council of the date on which the FW-FP was certified, using whatever method the council specifies to identify the farm to which the FW-FP relates.'

On its own subclause 40(4) could be interpreted that the approved farm environment planner certifying an FW-FP could by extension be certifying this on behalf of the certification scheme, rather than by the approved farm environment planner individually. The function of the certification scheme should be to assess the competency and knowledge base of planners and auditors, rather than planners and auditors being seen as third party agents of the certification scheme who certify FW-FPs.

The relationship and responsibilities between the certification scheme, the approved farm environment planners/auditor, the farmer/grower and regional councils needs to be clearer. This is represented in the following schematic.



This schematic does not include any moderation that regional councils may choose to undertake of FW-FPs submitted by planners and auditors, or complaints lodged against an approved farm environmental planner or auditor by a farmer or grower, which we expect would be directed to the certification scheme's complaints process.

Clause 41 – Audit of compliance with FW-FP

NZIPIIM supports the proposed requirement for FW-FPs to be audited by an approved auditor. As subclause 40(5) stands, an auditor can make a judgement call to extend audits out to three years. NZIPIIM recommends that approved guidelines are developed on what is required to enable audits to move out to three years. Such clarity may also encourage more farmers and growers to implement practice change, as well as assist auditors' decision-making processes about what is required to move to a three-year audit.

We also wish to seek clarity on what happens if there is a failed farm plan audit. The NES for Freshwater proposes that it is merely necessary to have an audit completed and to inform the regional council of the result. It is unclear what regional councils are meant to do with that information if passing an FW-FP audit is not a requirement. We suggest that 'passing' a farm plan audit (or whatever 'actions required to pass' a farm plan audit are) should be a requirement, which would need to be determined by regional councils.

Draft National Policy Statement for Freshwater Management (NPS for Freshwater)

In many regions work to improve water quality is well advanced. To ensure the good work done to date in these processes is not wasted, we would support mechanisms that enable existing work and plans to be recognised rather than starting from a zero base again, provided the tenor of the plans is not in direct odds with what is in the national proposals.

Subpart 3 – Specific requirements

Clause 3.15 – Inland wetlands

Under subclause 3.15(5), every regional council is required to identify wetlands of greater than 500 m² in its region. Should a significant number of wetlands be identified on-farm, this will likely have financial and grazing management impacts associated in fencing off (with setbacks) these areas.

In addition to lost earnings and still paying rates on this land, there will be a significant cost burden for farmers in fencing setbacks from the wetland. There will also be the ongoing costs of monitoring and reporting to regional councils on the state of wetlands to regional councils, or should councils choose to undertake this work themselves this cost would rest with ratepayers, which includes farmers.

Perversely, faced with increased regulatory and cost burdens, farmers and growers are less likely to want to construct wetland habitats or work with regional councils in identifying on-farm wetlands, particularly if the categorisation of such wetlands is a marginal call that takes land out of production. Providing an enabling regulatory framework that gives a platform to build constructive arrangements between regional councils and farmers and growers in establishing and restoring wetlands will result in far better outcome than the heavy compliance focus that runs through the proposals.

Under subclause 3.15(6), it states that in case of uncertainty or dispute about the existence or extent of a natural inland wetland a regional authority must use the Wetland Delineation Protocol.⁹ The protocol includes off-site methods to identify a

⁹ Wetland Delineation Protocols that were prepared for Tasman District Council ([link](#)).

wetland presence without the need for on-site inspection. This is a blunt instrument and NZIPIM recommends that this should be used sparingly in exceptional circumstances, or replaced with an alternative method that is supported by suitable qualified people and field visits.