



SUBMISSION ON THE PROPOSED NATIONAL ENVIRONMENT STANDARD
FOR PLANTATION FORESTRY

To: NES-PF Consultation
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Introduction

The Royal Forest and Bird Protection Society of New Zealand Incorporated (Forest & Bird) is an independent community-based conservation charity, established in 1923. Its mission is to be a voice for nature, on land, in fresh water, and at sea, on behalf of its 70,000 members and supporters. Volunteers in 50 branches carry out community conservation projects around New Zealand. Forest & Bird has been involved in resource management processes around New Zealand for many years, at the national, regional and district level.

Thank you for the opportunity to provide feedback on the National Environmental Standard for Plantation Forestry ("NESPF"). In addition to this submission on behalf of Forest & Bird's national office, many Forest & Bird branches are providing independent submissions.

Forest & Bird supports the principle of National Environmental Standards as a way of improving environmental outcomes and creating greater environment planning consistency (where this is appropriate) across the country. It is Forest & Bird's experience that, in the absence of clear national guidance, an unnecessary proliferation of local environment planning policies and rules occurs, which often do not provide the level of environmental protection that is required to achieve sustainable management.

The development of this NES has occurred over several years through three distinct phases. Forest & Bird was actively involved in the second of these phases, but was not involved as an active participant in the third and final phase that has led to the proposed NES that is the subject of this consultation.

While we wish to acknowledge the role of forestry in providing economic and social benefits to New Zealanders, carbon sequestration services and potentially lower impacts on freshwater relative to some other land uses, we state clearly at the outset that Forest & Bird has some very significant concerns about the content of the NESPF:

- There appears to have been very little analysis of the likely environmental impacts of forestry as anticipated under the proposed rules, particularly in terms of impacts of sedimentation and direct disturbance on freshwater quality and ecosystems, the natural character of water bodies, sedimentation of coastal marine areas, the threat of wilding conifers on native ecosystems, and impacts on riparian vegetation and other areas of high conservation value.
- We perceive an over-reliance in the NESPF on risk calculation tools, which are an integral part of risk management, but to be effective must be coupled with robust attention to their stated limitations, strong planning, monitoring and enforcement requirements. Permitted activity status, and the associated reliance on operator-produced and operator-monitored management plans, is simply not appropriate for many of the moderate, high and very high risk forestry activities described in the NESPF. No regard has been had to the effects of climate change in designing the calculators and setting the associated rules. Contrary to section 43A of the RMA (and section 70 relating to permitted discharges), the NESPF permits activities that will have significant adverse effects on the environment.
- Protection of wetlands and high conservation value areas (including significant natural areas) is woefully inadequate, and while it is pleasing to see that the NESPF drafters have considered the potential impacts of forestry on threatened fish and birds, the provisions as currently drafted are inadequate to ensure the protection of threatened species (and bats and other species have not been considered at all).
- The areas in which Councils may be more stringent are too narrowly defined, with the result that the NES is inconsistent with section 6, the New Zealand Coastal Policy Statement and the National Policy Statement for Freshwater Management. It is not clear how communities are able to seek more stringent provisions if these are not proposed by Councils (given that no Schedule 1 process occurs in those circumstances).
- A NES is not the appropriate place to make a decision about the appropriateness of GMO trees. The rationale underlying the blanket permitted activity rule for GMO trees has been considered and rejected by both the Environment and High Court, and the rule is therefore not for a proper resource management purpose.

The key issues addressed in this submission are:

- A. The NESPF underlying policy
- B. Erosion risks and consequences
- C. Sedimentation and water quality
- D. The coastal environment
- E. Wetlands

- F. Riparian vegetation and SNAs
- G. Native fish
- H. Native fauna
- I. Wilding conifers
- J. Genetically Modified Organisms
- K. Effects of forestry not able to be managed under the NESPF

A. Underlying policy

Achieving better environmental outcomes

1. Forest & Bird is concerned that achieving better environmental outcomes does not appear to be a goal of the NESPF. We have not seen any analysis of whether the methods proposed in the NESPF will improve environmental outcomes overall (only assumptions that do not appear to be supported by analysis). The NESPF process should have started with an assessment of the environmental impacts of forestry, and the extent to which these impacts need to be avoided, remedied or mitigated to achieve acceptable environmental outcomes. Rules could then have been devised with a view to achieving those outcomes, and a further analysis carried out to ensure that the rules would actually be effective.
2. The consultation document states that Scion has assessed the environmental costs and benefits of the NESPF. We do not agree. The Scion report makes assumptions about environmental outcomes of the NESPF, then applies a costing to the difference between the (assumed) improved state, and the status quo.
3. At no stage does the Scion report actually assess whether the sedimentation-related measures in the NESPF will be an improvement on the status quo, let alone meet water quality objectives. In particular, there is no assessment of the environmental effects of permitting forestry on land with moderate and high erosion susceptibility. The Scion report says that all Councils other than Environment Southland and Canterbury (which do not perceive erosion as a problem in their region) believed that their own guidelines or regulations regarding erosion and sedimentation control would match or better the NESPF controls. Despite this, the report then describes the NESPF as providing “stricter controls” and goes on to assume reductions in sedimentation based on those “stricter controls”.¹
4. Because of Councils’ view that most large forestry operators are doing “all that was reasonable” to control sedimentation from harvesting, the Scion report focuses exclusively on small operators. This does not assist in determining whether forestry activities generally are operating in a way that will meet community expectations and national requirements for water quality. We do not agree that large operators are doing all that is reasonable, and provide some photographs of poor practice by large operators.
5. Similarly, the Scion report assumes that applying a rule which requires resource consent for new plantings with a Wilding score of 11 or less will result in better environmental outcomes in terms of wilding control, and goes on to attribute a monetary value to that “benefit” - but we have not seen any analysis to support the underlying assumption. This is concerning given that a score of 12 equates to a high risk of spread from the site, and the wilding calculator also assesses a ‘Siting’ of 3 or more, together with downwind land

¹ This assumed environmental benefit is even monetised, despite not being demonstrated to be achieved.

management practices as high risk – with no attention given to the additional consideration.

6. We have not seen any analysis of whether the NESPF rules will achieve acceptable environmental outcomes in terms of indigenous vegetation, native fish, birds, bats and other fauna species, or the natural character of water bodies.

Relief sought

- a. Clearly define the environmental outcomes that the NESPF must achieve in order to adequately avoid where necessary, and otherwise remedy or mitigate, adverse effects of forestry operations on the environment.
- b. Assess (using evidence rather than assumption) whether the proposed rules will achieve those outcomes.
- c. Revise the rules where necessary to achieve those outcomes.

Preference for permitted activity status

7. Forest & Bird does not agree that activity status for forestry activities should be determined on the basis that permitted status should be used “wherever possible”.

Legal limits on use of permitted activity conditions

8. The NESPF places a great deal of reliance on permitted activity standards to adequately manage activities that can have significant adverse effects on the environment.
9. One example is harvesting, which is provided for as a permitted activity on green, yellow and orange zones, where yellow equates to “moderate” erosion susceptibility, and orange equates to “high” erosion susceptibility. The potential effects, or “risks” identified in the NESPF include sediment and slash transport into water bodies, and soil erosion. The potential effects of harvesting on orange zone land include were demonstrated in the Gisborne District recently, when large amounts of sediment and woody debris were washed into rivers and onto beaches, destroying a large whitebait spawning site on the Te Arai River.
10. The NESPF does not comply with section 43A(3) of the RMA where it allows activities that will have significant adverse effects on the environment and relies on permitted activity conditions to address such effects. Section 43A(4)(b) states that a NES that allows an activity may: (i) state that the activity is permitted but only on the terms or conditions specified in the NES, or (ii) require compliance with the rules in a plan or proposed plan as a term or condition. Section 43A(3) states that if an activity has significant adverse effects on the environment, a NES must not under subsection 4, state that the activity is permitted, or allow the activity unless it states that resource consent is required for it.² Reading those

² Section 43A

- (3) If an activity has significant adverse effects on the environment, a national environmental standard must not, under subsections (1)(b) and (4),—
 - (a) allow the activity, unless it states that a resource consent is required for the activity; or
 - (b) state that the activity is a permitted activity.

sections together it is apparent that a NES must not state that an activity is permitted where the activity would have significant adverse effects on the environment, even where those significant effects can (in theory) be addressed by permitted activity standards.

11. The RMA also places limits on the use of permitted activity standards, particularly in relation to discharge rules. The NESPF purports to authorise the discharge of sedimentation as a permitted activity where it is associated with forestry activities. Sediment is a potential contaminant³ in freshwater and coastal water. Section 70 provides that before a regional council includes in a regional plan a rule that allows as a permitted activity a discharge of a contaminant into water, or onto land in circumstances where it may enter water, the regional council must be satisfied that none of the listed effects are likely to arise in the receiving waters after reasonable mixing. The listed effects which must not be likely to arise include:

- a. The production of conspicuous floatable or suspended materials.
- b. Any conspicuous change in the colour or visual clarity.
- c. Any significant adverse effects on aquatic life.

12. Harvesting, earthworks and mechanical land disturbance are likely to generate substantial amounts of sediment, particularly where they occur on land with moderate, high or very high erosion susceptibility. Permitted activity standards to deal with sediment discharges vary:

- a. Forest & Bird supports the intent of permitted activity standards for harvesting which require that all disturbed soil is stabilised or contained so as to prevent movement of sediment into any water body or coastal water that would result in effects including sedimentation of the bed of any surface water body, or significant adverse effects on aquatic habitat. However, determining in advance whether those impacts will be caused is not straightforward, and will require baseline monitoring of aquatic habitat, an assessment of the effectiveness of mitigation measures, and ongoing monitoring of impacts. Enforcing these standards will in many instances be unfeasible, particularly where an effect on aquatic habitat results from cumulative impacts. In addition to the practical difficulties, there is likely to be disagreement as to whether “significant adverse effects” will be (or, more realistically, have been) caused, and who caused it. Despite their intent, it is unlikely that these standards are consistent with the section 70 requirement to be “satisfied” that particular outcomes will not occur before a discharge is allowed as a permitted activity.

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- (4) A national environmental standard that allows an activity—
 - (a) may state that a resource consent is not required for the activity; or
 - (b) may do one or both of the following:
 - (i) state that the activity is a permitted activity, but only on the terms or conditions specified in the standard; and
 - (ii) require compliance with the rules in a plan or proposed plan as a term or condition.

³ The Act relevantly defines contaminant as including any substance (including solids) that either by itself or in combination with the same, similar, or other substances, energy, or heat, when discharged into water, changes or is likely to change the physical, chemical, or biological condition of water.

- b. Standards that are based on management actions (such as riparian buffers) have not been devised to meet the requirements of section 70. Scion's Environmental Impact Assessment of the Proposed NESPF notes that "overseas publications have highlighted the need for buffers much wider than 10 m to maintain ... in-stream habitat, water quality and biodiversity", and concludes that "A 10m buffer is therefore only likely to reduce the impacts of forestry activities to varying degrees and constitutes a compromise between environmental and economic considerations."⁴ Some of the proposed NESPF buffers are set at 5 m rather than 10, and no setbacks are required from intermittent water bodies.
 - c. Some activities that have the potential to cause sediment discharges to water appear to be inconsistent with section 70. Sedimentation from Earthworks is not required to comply with an output standard (such as a visual clarity or deposited sediment limit) or an environmental outcome (such as avoiding significant adverse effects on aquatic life). Similarly, the permitted activity standards for river crossings will not ensure that the section 70 effects are avoided.
13. Taking those matters into account, it is likely that the NESPF provisions which permit sediment discharges to water bodies and coastal water will not meet the requirements of section 70.

Relief sought

- a. Ensure that the NESPF complies with section 43A of the RMA by reviewing the potential effects of all forestry activities that are provided for as permitted activities, and requiring resource consent for any activities that are likely (with or without proposed permitted activity standards) to cause significant adverse effects on the environment.
- b. Ensure that where a sediment discharge is permitted it will (individually and cumulatively) meet the section 70 matters.
- c. In particular, require a restricted discretionary resource consent for any forestry activities on orange zone land, including production forest afforestation.

Permitted activity standards too uncertain and unenforceable

- 14. Qualifying criteria for permitted activities must be clearly specified and capable of objective attainment.⁵ Objectively phrased conditions of permitted activities can be acceptable even if they require an exercise of judgement. But they are to be assessed for validity in terms of the degree of certainty or lack of it.⁶
- 15. Although further legal certainty is proposed through drafting, in a number of instances is not clear how certainty will be achieved. For example, the general condition for vegetation clearance and disturbance provides that indigenous vegetation may be damaged, destroyed or removed provided it is incidental damage to riparian vegetation that will readily recover

⁴ New Zealand Forest Research Instituted Limited, Environmental Impact assessment of the Proposed National Environmental Standard for Plantation Forestry, 8 June 2015 at page 19.

⁵ *Maclean v Thames-Coromandel District Council* A046/03 at [19]-[21].

⁶ *Twisted World Ltd v Wellington City Council* W024/02 at [64].

within five years, or it is incidental damage to adjacent vegetation (including SNAs) that will readily recover within five years.

16. The terms “incidental damage” and “readily recover” are too uncertain to be valid permitted activity standards. They are also unenforceable by local authorities, who would be in the impossible situation of having to determine after the fact whether damage was incidental, and whether vegetation that has been damaged or removed will readily recover within five years.
17. Other examples of uncertain standards which do not have an obvious remedy include the requirements:
 - a. During harvesting operations, to “avoid, mitigate or remedy actions that accelerate erosion and minimise the discharge of sediment to water bodies”
 - b. To limit riparian disturbance by felling away from the riparian zone except where unsafe or impractical to do so.
 - c. To avoid “more than minor adverse effects” (eg on aquatic habitat).
 - d. To carry out mechanical land preparation parallel to the contour where practical.

Relief sought

- a. Devise clear, enforceable permitted activity standards that will effectively control potential environmental effects (including cumulative effects that may not be easily attributable to a single activity or operator).
- b. Where sufficiently clear, enforceable permitted activity conditions cannot be devised, move to a consenting regime.

Consenting relationship improves outcomes

18. The justification for the policy position that “where possible, activities should be permitted” is not clear.
19. Permitted activity status is appropriate for relatively uncomplicated activities where the potential for adverse environmental effects (individually or cumulatively) is small. However, an underlying preference for permitted activity status in the NESPF has led to the use of complex permitted activity standards which leave important considerations such as whether an activity will cause, or has the potential to cause, significant adverse impacts on aquatic habitat, and the steps required to avoid or mitigate such impacts, to the operator, with no local authority oversight.
20. While there are administrative costs associated with obtaining resource consent, that should not be the predominant consideration in determining activity status. Where permitted activity standards are complex and involve the preparation of management plans etc, the additional cost of obtaining consent may be minimal. Permitted activity status merely shifts the cost of determining whether standards have been complied with from the forestry operator to the local authority.
21. The consenting process has a number of benefits:

- a. It enables site-specific mitigation measures that cannot be provided for in permitted activity standards.
 - b. The consenting relationship often means that better environmental outcomes are achieved. This is due in part to the exchange of information between developers and local authority staff during the pre-application and application stages of resource consents.
 - c. Outcomes that are sought through permitted activity standards may be too uncertain to be enforceable, where-as the same outcome can be phrased with more certainty as a resource consent condition.
 - d. The cost of monitoring consent conditions is recovered from developers, where-as enforcement of permitted activity standards is a cost to local authorities. In practice, this means that permitted activity standards are often not enforced. A lack of enforcement results in poor environmental outcomes.
 - e. Compliance monitoring and enforcement is generally reactive in nature, where-as the consenting regime enables potential effects to be identified and addressed in advance. For example, a consent applicant can be required to demonstrate, based on appropriate ecological evidence, that indigenous vegetation that is incidentally damaged will readily recover within 5 years. As a permitted activity standard, it is doubtful that ecological advice will be sought to ensure this standard is met, and in practice it is likely to be ignored.
 - f. Where appropriate, consent can be declined.
22. Accordingly, Forest & Bird submit that a preference should not be given to permitted activity status (and complex self-enforced permitted activity standards) over a consenting regime.
23. Finally, “afforestation” is defined in the NESPF as “the act of planting a production forestry crop on land that is not currently in forest and has not been under plantation forestry cover within the past five years” (p46). The act of afforestation then means, under this definition, that the crop will be harvested in some way. Therefore uncoupling afforestation from the various provisions relating to harvesting, by allowing it as a permitted activity, but then requiring more stringent scrutiny around harvesting (albeit insufficient), does not allow sufficient scrutiny to be observed around the afforestation of land in the first instance.

Relief sought

- a. Undertake a review of the activity status provided for all forestry activities, which:
 - i. Recognises the benefits of the resource consent regime described above, and
 - ii. Avoids an underlying bias towards permitted activity status.
- b. Limit the use of permitted activity status to truly low risk activities which can be adequately managed with clear, straightforward and enforceable permitted activity standards.
- c. Ensure afforestation has at least as stringent an activity status as the associated harvesting rule.

Use of Management Plans in permitted activity standards

24. Forest & Bird is concerned at the extent to which the NESPF relies on Management Plans to ensure that environmental outcomes are achieved.
25. There is significant Environment Court guidance on how management plans should be used in the resource consent context. That guidance is also applicable when considering management plans that are used as part of permitted activity standards, as the objective is the same: reasonable certainty that the environmental outcomes envisaged in allowing the activity (whether under a resource consent or as a permitted activity subject to conditions) will eventuate and that unanticipated adverse effects will be avoided.
26. The purpose of a management plan is to provide a consent authority, and anyone else who might be interested, with information about the way in which the consent holder intends to comply with the more specific controls or parameters laid down by the other conditions of consent.⁷ The Board of Inquiry that determined the Transmission Gully proposal set this out in the following way:
- “The Board was initially concerned that the extensive use of management plans which were to be approved or certified by Council Officers rather than the Board, might mean that we were in effect delegating our decision making obligations. Ultimately, we determined that as not the case, provided the conditions of consent imposed contained clear objectives to provide focus to management plan provisions and performance criteria which operate as bottom lines which the management plans must achieve. In other words, the conditions imposed by the Board would identify the performance standards which had to be met and the management plans would identify how those standards were to be met.”⁸
27. In general, the NES does not set out particular standards that the Erosion and Sediment Control Plan, Harvest Plan and Quarry Management Plan are required to meet. Their contents are prescribed, but only in terms of the topics that they need to cover. For example, the Erosion and Sediment Control Plan is required to include “the erosion and sediment control methods to be used and indicative locations”, but not what those methods must achieve. One requirement is to identify methods to “avoid effects on riparian margins and water bodies”. If the intention of this standard is that permitted earthworks must avoid effects on riparian margins and water bodies (which is supported), this should be expressed as a permitted activity standard, and the ESCP should then identify how that standard will be achieved. As currently phrased, the Management Plan could be considered to meet the standard by identifying (some) methods to avoid (some) effects.
28. The Management Plan permitted activity standards are satisfied by preparing a Management Plan that includes the specified content, making the Management Plan available to council on request prior to operations commencing, and thereafter complying with the Management Plan.

⁷ *Wood v West Coast Regional Council* C127/99, 24 February 1999, at [6].

⁸ Final Report and Decision of the Board of Inquiry into the Transmission Gully Proposal (EPA, June 2012), paragraph 190, cited in *Re Canterbury Cricket Association* [2013] NZEnvC 184

29. Outcome standards do not merely “penalise non-compliance once an activity has already occurred.”⁹ Properly applied, they set the parameters within which an activity can operate, which should then be demonstrated in the management plan.
30. It is not clear what is gained by making the Management Plan available to council on request. If the council considers that the content of the Plan is insufficient to ensure that significant adverse effects are avoided, it has no ability to require changes to the Plan (such as additional mitigation measures). Also, as the council cannot recover any costs associated with reviewing management plans, it is unlikely that they will be given much attention.
31. As a result, the Management Plan regime that is proposed is essentially no different to operators complying with voluntary guidelines.
32. Given the significant environmental impacts being caused under the status quo, this approach is not good enough. For example, a recent report on the Marlborough Sounds marine environment identified the permanent destruction of an estuary from the effects of sedimentation caused by forestry harvesting (Davidson & Richards, 2015¹⁰). The estuary, Hitaua Bay, had been the best example of an estuarine habitat in the Tory Channel biogeographic region. It is now no longer listed as significant because of these impacts. Thus, the impacts of forestry on the environment justify a far more rigorous approach.
33. A provision that enables Councils to certify management plans and to require amendments where necessary is unlikely to be lawful as part of a permitted activity standard (generally, permitted activity standards may not reserve a discretion to the Council). However, the alternative – that management plans are prepared by operators and simply made available to Councils – will not ensure that the significant impacts that these management plans are designed to control are adequately addressed.

Relief sought

- a. To the extent that these activities are to remain as permitted activities, the following changes to the Management Plan provisions should be made:
- i. Set out specific standards that management plans must meet by re-framing the contents of management plans as permitted activity standards. Require that the Management Plans demonstrate that the standards will be achieved.
 - ii. Require that the Management Plans are submitted to Council for certification prior to operations commencing, and empower Councils to require changes to the Management Plans.
 - iii. Enable cost recovery by Councils for certifying and monitoring and enforcing compliance with Management Plans.

⁹ Consultation document, page 18, Box 6.

¹⁰ Davidson, R.J. & Richards, L.A. (2015). Significant survey and marine site monitoring programme: Summary 2014-15. Published by Davidson Environmental Ltd for Marlborough District Council. Survey and monitoring report no. 819.

- b. If Management Plans cannot be required to be certified by Councils (and amendments required) as part of a permitted activity regime, move to a consenting regime.

B Erosion risks and consequences

34. Forest & Bird supports the use of scientific information to ensure best practice and gain better environmental outcomes that achieve the implementation of the purpose of the RMA. However it is important in utilising science, that both the limitations and the extra parameters are taken into account in adopting the methodology. Both the initial Erosion Susceptibility Classification (ESC) (2011) and the revised version (2015) acknowledge the limitations of the ESC model. This includes the following:

- a. Basis of the analysis on the NZLRI and the resulting Land Use Classification. This index was developed for use with pastoral activity, and is not necessarily relevant for production forestry. However this method was chosen as that with the most reliable nationwide information over other potential models (e.g. variability with the use of slope stability data).
- b. The limitations of scale of 1:50,000.

35. The initial report also emphasised that the model is only one aspect of a series of issues that need to be addressed before determining the suitability of a site for afforestation¹¹. In a personal communication with the lead author, he states:

“The ESC will never be a completely reliable predictor of risk because it is based on coarse-resolution mapping (equivalent to 1:50,000 scale). So all it can do is flag where we need to do more detailed mapping and planning to manage risks from forestry (or any other rural landuse for that matter). I would strongly contend that unless the ESC is backed up by a robust risk management process, as recommended in the original 2011 report by Bloomberg et al (2011) then the job is only half done.” (Bloomberg, pers.comm, August 2015).

36. Instead, the broadbrush of 1:50,000 scale is adopted – even after the opportunity provided by the revised classification in 2015. There has been some discussion, although not formally included in the NESPF, that a plan change may be sought or negotiated (possibly at the cost of the initiator) for the more detailed 1:10,000 assessment that is required for operationalising forestry production and providing greater detail on erosion susceptibility. The opportunity for this greater detail around 1:10,000 mapping should be included in the NESPF as a matter under which Councils can exercise greater ‘stringency’¹².

¹¹ As a result of the narrow brief provided by the Ministry for Primary Industries, the revised report is much more focussed on the reclassification aspect of the 2011 report, and does not address the other considerations.

¹² The word ‘stringency’ is not the most apt in this situation, as the 1:10,000 mapping may result in more closely detailed ESC designation – with some becoming less, and some more, stringent.

37. In both the original 2011 report and in an article in the NZ Journal of Forestry¹³, the need for consideration of a number of other factors in assessing risk of mass movement and fluvial (gully) erosion, is stressed. These two factors are:

- a. The occurrence of a triggering event, e.g. heavy rainfall; and
- b. The consequences of erosion, e.g. impact on human life, property and areas of conservation value (e.g. estuaries).

38. The 2011 report helpfully included a decision-making matrix, to understand risk associated with erosion events. This matrix (copied below) suggests that even with a moderate ESC, and a moderate risk of a triggering event, some degree of risk analysis is required. In slightly higher rankings, e.g. high ESC, and a moderate risk of a triggering event, the recommendation is to “proceed under stringent conditions only if full risk analysis indicates risk can be managed to be acceptable”.

Table 1: Decision matrix using ESC and annual exceedance probability (AEP) of a triggering storm

ESC	AEP				
	<0.08	0.08–0.12	0.12–0.21	0.21–0.30	>0.30
Low	NA	NA	NA	NA	NA
Moderate	NA	NA	SA	SA	SA
High	SA	SA	FA	FA	FA
Very High	FA	FA	FA	FA	FA

NA = no risk analysis required for forestry operations

SA = some risk analysis required

FA = full risk analysis – proceed with forestry operations under stringent conditions only if full risk analysis indicates risk can be managed to be acceptable.

39. This degree of detail is absent from the NESPF. No risk assessment is built into the NESPF around the two issues of “triggering event” and “erosion consequence”.

40. The NESPF should also include the opportunity for Councils to make decisions around siting of forestry for production purposes where they can utilise the information of “triggering event” and “erosion consequence” as a matter under which they can exercise greater stringency.

41. The usefulness of this approach is made pertinent in the report by Bloomberg (2012)¹⁴ following a large landslide and debris flow event into an area of housing in Golden Bay, Tasman. Sited above the coastal embayment, was an area of plantation forestry ready for harvest. After determining a cautious approach to logging to reduce the likelihood of further impacts, the report identified areas with the current forestry plantation that could be

¹³ Bloomberg, M. (2015). “Erosion susceptibility classification and analysis of erosion risks for plantation forestry: Response to Marden, et al.” in NZ Journal of Forestry, Vol. 60, No, 2.

¹⁴ Bloomberg, M. (2012) Review of forest management options for 30-year old radiata pine plantations in upper catchments of Pohara-Ligar Bay area, Golden Bay. Report prepared for Tasman District Council.

replanted, and areas recommended for retirement into native woody vegetation because of high risk of landsliding¹⁵.

42. There is a further disconnect in the NESPF between science and policy. The NESPF, by not adequately taking into account the limitations, and added recommendations for other risks with respect to erosion, is allowing for a permissive regime over a potentially high risk activity. The ESC determines orange and red zone land to have high and very high erosion susceptibility respectively, yet most forestry activities are permitted throughout orange zones (as well as green and yellow zones), and only controlled or restricted discretionary status in red zones. This approach is entirely too permissive given the potential for significant cumulative impacts from erosion.
43. In the NESPF there is the introduction of a qualification around slopes in excess of 25 degrees. There is no reference as to where this figure arises from, although there is an unwritten implication that it possibly arises from within the ESC recommendations and has the same degree of scientific rigour and analysis attached to its inclusion. However there is no reference to slope angle as being a determinatory factor in erosion risk in any of the ESC reports. Although there is some degree of 'commonsense' in this inclusion, the actual figure has no basis in research that is evidenced in any of the reports, and there may be a combination and/or change in slope angles that should be utilised in its place.
44. The 2011 ESC report took the liberty of an additional section where they stated "we believe it is important to consider the implications of an ESC within the proposed NES for plantation forestry." (Bloomberg, et al, p37). In this brief section they identify two matters of importance:
 - "(1) This ESC is based on mapping at 1:50,000 scale. This must be supported by detailed assessment of erosion hazards and risks at a scale suitable for identifying the specific risks at a site or operational level.
 - (2) The ESC must be supported by specific standards for forestry operations that are appropriate for the level of erosion risk on a site. We suggest a set of best management practices (BMPs) which could be used for this purpose. However, we emphasise that these are suggestions for discussion purposes only, not recommendations."
45. This section elucidated a series of BMPs with rules and specific enforcement measures. The NESPF has neglected this important recommendation by the authors of the report, and has instead, by a series of steps, undermined the validity and usefulness of the ESC. They are:
 - a. Failure to provide for more detailed mapping which would assist in determining the most appropriate places for production forestry.
 - b. Failure to take into account the other erosional risk factors: i.e. triggering events and erosional consequences.
 - c. Reviewing the original classification to "Identify LUC units in the High and Very High ESC classes that are misclassified or conservatively classified". The conservative classification adopted in the 2011 report was to cater for the highest degree of erosional risk within any given polygon to compensate for the limitations of the 1:50,000 scale.

¹⁵ This area includes Separation Point granites is zoned "orange" and is therefore a permitted activity.

- d. Providing for forestry as a permitted activity over land, when after reading the reports conclusions, a more detailed analysis is required because of potential erosion risk.
- e. Decoupling afforestation from the inevitable consequence of harvesting and associated activities. The NESPF is limited to production forestry, and deliberately excludes restoration planting.
- f. Having a rule based system that provides for forestry as a permitted activity (including as a matter of course, harvesting practices) over almost all land except that classed under the LUC system as Very High. The Very High (under the 2015 revision) is limited to very steep, almost vegetation-less surfaces in the South Island, and very highly erodible areas in the far east of the North Island.
- g. Not setting standards for Best Management Practice and the requirement for Plans to be approved by Council and that is linked to an appropriate rule structure.
- h. The inclusion of a 25 degree angle slope, without relevant scientific reference.

Relief Sought

- a. Allow Councils to exercise greater stringency around mapping at 1:10,000 scale.
- b. Require Councils to undertake an assessment including the other erosional risk factors of triggering events, and consequences. As a result of this, Councils may determine areas are inappropriate for production forestry. They may decide afforestation in permanent forest restoration initiatives are the best way to reduce erosional risk.
- c. Recouple afforestation with harvesting, so that there are controls provided at the outset around the amount of soil disturbance permitted during harvesting¹⁶.
- d. Retain the concept of slope as a risk factor, but provide for its consideration in the wider analysis of detailed mapping, triggering events, and erosion consequences.
- e. Provide for a maximum area of deep soil disturbance as a condition of site management, dependent on erosion risk. For example, the best management practices suggested in Bloomberg, et al (2011, pp42-43), were 6% on land of moderate risk, and 4% on land of high risk (excluding permanent road infrastructure).

C Water quality and sedimentation

NESPF will not maintain or improve water quality

- 46. The NESPF provisions will not maintain or improve water quality, and so will not enable Councils to fulfil their mandatory function under section 30 of the RMA to (at least) maintain water quality. The NESPF will not safeguard the life-supporting capacity of

¹⁶ This will have a crucial impact upon the original decision whether or not to afforest an area in production forestry, permanent forest restoration, leave under current land use, or consider other options.

freshwater, and as such is inconsistent with the National Policy Statement on Freshwater Management, and cuts across the community value- and limit-setting process provided for in the NPS Freshwater.

47. The consultation document states that the proposed NESPF is expected to contribute to improved water quality outcomes, and that it is likely that in many cases the rules under the NESPF would be sufficient to meet water quality objectives once objectives and the corresponding limits have been set.¹⁷ As discussed above in relation to the underlying policy and approach to the NESPF, those assertions do not appear to be supported by analysis.
48. Sedimentation associated with forestry activities can have very significant impacts on freshwater quality and ecosystem health. Suspended sediment directly smothers the feeding and gill structures of invertebrates and gills of fish and is known to reduce fish diversity (Richardson and Jowett 2002) and cause avoidance behaviour in a number of native fish species, including juvenile banded kokopu (Rowe et al. 2000; Richardson et al. 2001). Suspended sediment also reduces the ability of fish to feed (Rowe and Dean 1998) and disrupts the natural primary productivity base of the food chain in both freshwater and estuarine ecosystems (Rafaelli et al. 1998).
49. Deposited sediment directly affects aquatic life by increasing invertebrate drift out of affected habitat (Suren and Jowett 2001); reduces interstitial spaces, spawning habitat and refugia for aquatic invertebrates and fish (Clapcott et al. 2011); enables the establishment of aquatic weeds, alters bed habitat and can create anoxic conditions. In severe cases estuarine sedimentation contributes to anoxia and mortality of estuarine fauna (Robertson and Stevens 2007, 2011).
50. The effects of forestry on stream environments are well-documented in New Zealand (see reviews of Harding et al. 2000 and Fahey et al. 2004). Fahey et al. (2004) identify vegetation clearance and roading and tracking as the greatest generators of sediment during forest establishment. Roading, log landings and mass movement from harvested slopes are the key contributors once harvest has commenced. Between establishment and harvest, roading and tracking continue to contribute surface eroded sediment. Effects on water clarity generally last from harvest until re-establishment of groundcover.
51. As identified in the 2011 ESC report, the NESPF should put additional focus on reducing the impacts of roading (especially hauler roads), log landings and other sites of mass movement.
52. Hauler (harvest, skidder) roads generate a much high proportion of catchment sediment than permanent roads (Fransen, et al, 2001 cited in Bloomberg, et al, 2011). Figure 1 shows an aerial image of hauler roads across the contours on moderately steep slopes. The construction of such roads result in a significant expanse of the harvest site topsoil and subsoil being exposed to possible mass movement events. Given the suggested recommendations of a maximum deep soil disturbance (excluding permanent roads) of between 4 – 6% on slopes of moderate – high erosion susceptibility, these current practices should not be permitted. Other methods exist, e.g. cable hauler.

¹⁷ Page 42.



Figure 1: Image from aerial photography showing contour roading lines across a moderately steep slope.



Figure 2: The regular haul roads created 50 metres apart across a moderately steep slope. This increases the potential for large sediment loads

53. In some areas, forestry has been permitted to occur on surfaces with resulting erosion issues. However Council may wish to see the land utilised in other ways to ensure sustainable land management. Matters that may need to be considered include retirement to alternative land cover (not pastoral), and if replanting, consider methods of harvesting. One of these areas is the Separation Point granites that although not in the highest class of the ESC, often have significant slippage, including during heavy rain events.



Figure 3: Road constructed on highly erodible Separation Point Granites (SPG). SPG are identified within the Plan as occurring within the Orange Zone, with afforestation as a permitted activity.



Figure 4: Forestry operation on SPG. Note the extensive slips and other mass movement events, compounded by road cuts, and inappropriate disposal of slash.

54. A GNS report prepared following several large landslides in the Nelson Tasman region identified SPG as one of the most significant factors in the mass movement of the hillside. Aggravating factors were roading, the removal of a toe-slope and other earthworks¹⁸.

¹⁸ Page, M.J. (2013), Landslides and Debris Flows caused by the 15 – 17 June 2013 rain storm in the Marahau-Motueka area, and the fatal landslide at Otuwhero Inlet. GNS Science Report 2013/44.
file:///C:/Users/fb_general/Downloads/SR%202013-044_Final.pdf

Although vegetation may aid the stability of SPG, the wider impacts of harvesting may potentially aggravate the issue.

55. As a failure to give integrity to the NESPF by adopting the full suite of considerations that should be included alongside the ESC, Forest & Bird considers that the NESPF will result in poorer water quality outcomes.
56. The ESC does not take into account the current and future impacts of climate disruption (eg droughts, more frequent storm events) on erosion and sediment generation. Although it is noted in the ESC 2011 report, climate change is not taken into account because of the need for predictive modelling, rather than utilising existing data. Much obviously depends on the veracity of the climate modelling, however there is consensus building around increased storm, wind, and heavy rainfall events, and their likely impacts on parts of the country¹⁹. Councils should have the opportunity to address this in their planning, and it should be made a matter for greater stringency.

57. Relief Sought

- a. Provide for a less permissive regime for afforestation, harvesting, land preparation, earthworks, and other related activities.
- b. Include specific performance standards in the conditions, and require all Plans to be approved by the Council prior to any further activity occurring (which allows for Plans to be instigated at any part of the planting cycle given the existing nature of plantation forestry).

Greater stringency

58. The NESPF enables councils to take a more stringent position in their plans, but only in tightly defined circumstances. There is internal inconsistency within the NESPF consultation document as to how councils may take a more stringent position on freshwater matters:
- a. Table 4, page 23 says that Councils may apply more stringency where an NESPF is not sufficient to meet the objectives and corresponding limits set under the National Policy Statement for Freshwater Management ("NPS Freshwater"). Councils may also provide greater stringency in relation to outstanding freshwater bodies and water conservation orders.
 - b. Appendix 3, page 98 is a table of *Matters where councils can apply more stringent rules* but does not refer to the NPS Freshwater. It does refer to Outstanding freshwater bodies (a NPS freshwater concept), but appears to limit the ability to be more stringent to setbacks only. The rationale refers to "significant wetlands, rivers or lakes".
 - c. Section 6.1, page 42 says that greater stringency will be allowed where (i) a limit has been set for a freshwater management unit that is not being met and forestry activities are a source of the contaminant within that freshwater management unit; or (ii) significant values of an outstanding water body that have been specified (for example in a Water Conservation Order or a regional plan) and forestry activities

¹⁹ Ministry for the Environment website: <http://www.mfe.govt.nz/climate-change/how-climate-change-affects-nz/how-might-climate-change-affect-my-region>

would have an adverse effect on those values. Section 6.1 refers to “setting alternative rules” and does not limit the stringency measures to setbacks.

59. As a result, it is not clear from the consultation document what types of stringency measures will be permissible in relation to NPS Freshwater limits and outstanding freshwater bodies. Merely requiring larger setbacks may not be sufficient where forestry activities are or would cause unacceptable sedimentation of water bodies. The Scion report appears to suggest that setbacks have minimal impacts on sedimentation reduction and that reduction in sedimentation is better addressed through reducing the sources of sediment generation.²⁰
60. In relation to freshwater limits, the ability to be more stringent is only triggered where a limit is not being met. Where water quality currently exceeds a limit, Councils could not be more stringent in order to maintain that good water quality. This is inconsistent with the section 30 obligation to (at least) maintain water quality, and Objective 2 of the NPS Freshwater.
61. Regional Councils have until 2025 (and potentially 2030) to implement the NPS Freshwater provisions relating to value- and limit-setting. In the meantime, the NESPF rules have the potential to override this process.
62. The NPS Freshwater includes a National Objectives Framework (“NOF”) which sets out attribute states and national bottom lines for some attributes that impact on water quality (for example, *E.Coli*). There is currently no suspended or deposited sediment or visual clarity attribute in the NOF. This means that sedimentation-related attributes will only be included in the value- and limit-setting process if they are “attributes that the regional council considers appropriate”.²¹ Where a regional council is not motivated to address sedimentation as an attribute that is degrading ecosystem health, it will be more difficult for the community to achieve its inclusion where forestry-related sedimentation that is contributing to that degradation is already permitted under the NESPF.
63. Outstanding freshwater bodies are only intended to be those with truly outstanding values. This does not capture all of the areas that may be important in terms of their natural character or ecological significance. Outstanding freshwater bodies may also take some time to be identified and incorporated into plans. At present, Councils use a range of different labels to identify riparian areas of high natural character and amenity value (for example, Auckland Council’s Proposed Auckland Unitary Plan has “Natural Stream Management Areas”). The ability to be more stringent should apply to all water bodies with high natural character and significant water bodies.
64. A procedural matter that arises in relation to all of the areas where greater stringency is enabled relates to how interested groups or individuals can seek greater stringency if this is not provided for by the Council. That is, if the Council elects to incorporate only the NESPF rules, and not to provide greater stringency, the NESPF rules are adopted without following a Schedule 1 process. This means that there is no opportunity for interested parties to seek greater stringency, which in effect cuts across the Schedule 1 process that would otherwise be available in relation to freshwater, significant natural areas, and the other matters where greater stringency is allowed.

²⁰ Page 20.

²¹ Policy CA2c.i.B

Relief sought

- a. Determine the outcomes required to safeguard life-supporting capacity and ecosystem health of freshwater.
- b. Analyse the effectiveness of the NESPF rules to achieve those outcomes, and make changes where necessary to ensure desired freshwater outcomes are achieved.
- c. Review the areas in which greater stringency is permitted, and ensure that the NESPF does not preclude the use of greater stringency to:
 - i. Maintain or enhance water quality (where a freshwater limit is met).
 - ii. Ensure that freshwater limits are not breached, and that targets are met within defined timeframes.
 - iii. Address issues/controls other than setbacks.
 - iv. Protect freshwater bodies that are significant but not “outstanding”.
- d. Work with MfE to develop sedimentation/water clarity attributes for the NPS Freshwater NOF.
- e. Devise a process to allow submitters to seek greater stringency where this has not been proposed by a local authority (this is not limited to freshwater, but applies generally to all areas of greater stringency).
- f. Revise the ESC to take account of climate disruption.

Setbacks

65. Setback standards only relate to perennial rivers and streams (defined as a stream that maintains water in its channel throughout the year or maintains a series of discrete pools that provide habitat for the continuation of the aquatic ecosystem). No setbacks are provided for in relation to intermittent streams.
66. An intermittent stream is hydrologically connected to downstream perennial channels, but may not have standing pools above ground. Above-ground flow may cease at times of the year when rainfall is low. Intermittent streams have a defined streambed, often covered with a hard substrate (eg. gravels, cobbles or bedrock) under natural conditions, regardless of the channel width. Many of these intermittent streams would be identified on a topomap or REC as first order streams, and thus should be identifiable by foresters prior to a site visit to confirm.
67. Intermittent streams are the beginnings of the catchment. Water quality impacts to intermittent streams (such as sediment discharge) contribute significantly to increasing cumulative water quality issues downstream in perennial rivers. Intermittent streams are also extremely important ecological habitats for aquatic life and play an important role in maintaining aquatic and terrestrial biodiversity. Macroinvertebrates and native fish take refuge in intermittent streams when conditions are unsuitable downstream and for some species (including national vulnerable taxa like lamprey and shortjaw kōkopu) the riparian vegetation alongside headwater intermittent and perennial streams are important spawning

habitats during autumnal freshes. It is important that destructive forestry activities are set back from intermittent streams.

68. Harvesting and Pruning and Thinning-to-waste are not subject to setbacks. Machinery and operations associated with these activities should be required to operate outside setbacks.
69. The proposed setbacks are not adequate to mitigate effects on water quality, riparian vegetation and habitat such as inanga spawning sites, and aquatic habitat. Literature on setbacks results in a variety of recommendations, generally because setbacks are used for a variety of purposes, and depending on the outcome, there will be a different size recommendation.
70. In forestry, one of the biggest reasons for setbacks is to protect the instream and riparian biodiversity. "Sediment intrusion into waterways from forest harvest and roading activities is, however, a major impact on stream water quality. The amount of sediment lost from a catchment depends on site factors such as slope, soil type, and harvesting operations, but in general, road and landing-area construction are believed to be the major sources of sediments from forests." (Parkyn, et al, 2000, p27²²).
71. Setbacks should take account of the threat status of indigenous species. Many threatened fish species live in very small streams, and appropriate setbacks (alongside soil disturbance quantity and siting rules) are required to protect them from sedimentation and habitat degradation from physical impacts of forestry operation.
72. Setbacks do not take 'slope' into account. For example, in the Marlborough Sounds, much of the afforested land is moderately steep - steep, and a setback must clearly be of at least 10 metres horizontal width. It should be prohibited for plantation trees to be felled into the setback. If necessary to avoid this, greater setbacks should be included during afforestation or replanting. Provision should ensure that felled trees do not land in waterbodies, including the coastal marine area.
73. Following a review of literature it is recommended that to improve water quality and riparian habitat, all streams (including intermittent streams) under 3 metres wide should have a minimum setback of 10 metres. Streams between 3 and 20 metres should require a 20 metre setback; and large rivers or rivers protected by Water Conservation Orders should have a minimum setback of 30 metres. (Parkyn, et al, 2000; Collins, et al, 2013²³; Gerbeaux, 2014²⁴) This should apply both to afforestation and replanting, as well as all mechanical activities.

Relief sought

- a. Apply setbacks to intermittent, as well as perennial streams.

²² Parkyn, S., Shaw, W., & Eades, P. (2000). "Review of information on riparian buffer widths necessary to support sustainable vegetation and meet aquatic functions". Report prepared for Auckland Regional Council: NIWA Client Report: ARC00262.

²³ Collins, K.E., Doscher, C., Rennie, H.G., & Ross, J.G. "The Effectiveness of Riparian 'Restoration' on Water Quality – A Case Study of Lowland Streams in Canterbury, New Zealand" in: Restoration Ecology, Vol 21. No 1: pp 40 – 48.

²⁴ Gerbeaux, P. (2014). A Summary of Key Points related to Riparian Management/Restoration and its Effectiveness. Unpublished paper.

- b. Apply setbacks to harvesting, pruning-to-waste, all earthworks and any mechanical operations.
- c. Ensure that to protect the likely presence of threatened freshwater fish species and to provide appropriate protection to water quality, and riparian health, ensure a minimum setback of 10 metres on small streams; 20 metres on rivers between 3 and 20 metres; and rivers over 20 metres wide, and any protected by Water Conservation Orders should have a minimum setback of 30 metres.
- d. Ensure no intrusion into setback areas from all forestry operations.

D The coastal environment

- 74. Where activities are within or impact on the coastal environment, plans and policy statements are required to give effect to the New Zealand Coastal Policy Statement (NZCPS). In a number of areas, the NESPF does not appear to be consistent with the NZCPS, which if not addressed will result in conflicting national directions. A thorough review of consistency with the NZCPS should be carried out.
- 75. The extent of the coastal environment varies between localities, but includes areas where coastal processes, influences or qualities are significant, coastal vegetation and habitat of coastal species, and elements and features that contribute to the natural character, landscape, visual qualities or amenity values (Policy 1). The landward boundary of the coastal marine area is Mean High Water Springs.
- 76. Within the coastal environment, adverse effects on threatened, at risk and naturally rare indigenous taxa, species at the limit of their natural range and protected areas must be avoided (Policy 11(a)). For other ecological values, including areas of predominantly indigenous vegetation and habitats that are important during vulnerable life stages of indigenous species, significant adverse effects must be avoided and other adverse effects avoided, remedied or mitigated (Policy 11(b)).
- 77. Where sedimentation and slash from forestry activities potentially impacts on sensitive coastal receiving environments, greater stringency will be required to ensure that Policy 11 is given effect to. This may include the ability to decline consent for afforestation or replanting in certain areas, and the ability to impose additional mitigation measures in other areas. The sensitivity of receiving environments should be taken into account both in terms of activity status, and matters to be considered where consent is required.
- 78. Activities within the coastal environment have the potential to directly affect coastal vegetation and habitat. A 30 metre setback is insufficient to manage impacts on the coast. A setback of at least 50 metres would be more appropriate.
- 79. Planting on dunes should not be permitted, as sand dunes are a National Priority for protection and as a naturally rare ecosystem type, qualify as an area where adverse effects must be avoided under NZCPS Policy 11(a).
- 80. Councils' ability to be more stringent applies only to setbacks from the coastal marine area. As the coastal marine area is only a sub-part of the coastal environment, in order to align with the NZCPS councils' ability to be more stringent should apply to the coastal environment. As set out above in relation to water quality, a mechanism is required to

enable submitters to seek more stringent measures where these are not proposed by councils and hence no Schedule 1 process occurs.

Relief sought

- a. Review the consistency of the NESPF with the NZCPS, and ensure that it is consistent with NSCPS provisions, particularly Policy 11. Provide the ability for consent to be declined where forestry activities have potential adverse effects on the coastal environment that are unacceptable under the NZCPS.
- b. Enable Councils to be more stringent in relation to any matter identified in the NZCPS.
- c. Increase the setback from MHWS to at least 50 metres.
- d. Prevent afforestation or reforestation on dunelands.

E Wetlands

81. The protection of wetlands is a matter of national importance under section 6(c) of the RMA. All wetlands in New Zealand qualify as significant indigenous vegetation as a result of their rarity (less than 10% remain nationally), and many meet other significance criteria in addition. The preservation of the natural character of wetlands, and the protection of them from inappropriate subdivision, use, and development, as also a matter of national importance.²⁵
82. Protection of indigenous vegetation associated with wetlands is Priority 2 of the four National Priorities for protecting native biodiversity in New Zealand.²⁶ The National Priorities document is intended to “help local and central government agencies coordinate their decisions and on-the-ground actions in relation to biodiversity”. Local authorities are expected to take the lead in implementing the National Priorities through their resource management policies and plans.²⁷
83. Protection of the significant values of wetlands in terms of water quality and quantity is requirement of the National Policy Statement for Freshwater Management 2014 and must be given effect to in regional plans.
84. Forest & Bird is concerned that the NESPF provisions relating to wetlands fall well short of achieving the clear national requirement of protection:
 - a. Setbacks are only required from wetlands larger than 0.25 hectares. The RMA definition of wetlands includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions. There is no minimum size. Small wetlands can have very high ecological values and there is no basis for allowing them to be degraded or destroyed by forestry activities.

²⁵ Section 6 (a) RMA.

²⁶ DOC, MFE: Protecting our Places – Introducing the National Priorities for Protecting Rare and Threatened Biodiversity on Private Land,

²⁷ Page 6.

- b. The setback from wetlands is only 5 metres. This is completely inadequate to protect wetland habitat, particularly when combined with the permitted status of riparian disturbance. The Scion report states that there is limited scientific information on the performance of a 5 metre riparian buffer in mitigating the effects of forestry activities on riparian areas and stream environments, and discusses the inadequacy of buffers of <10 metres in resisting adventives pioneering species.²⁸
- c. The setback from all wetlands should be 30 metres. Wetlands, almost more than any other water-based natural feature, are particularly susceptible to forestry operations, including any changes in patterns of water input and drainage, sedimentation, shading, and mechanical damage²⁹.
- d. Inability to adhere to wetland setbacks should result in the activity classification as non-complying.
- e. Permanent crossings may be installed in wetlands of less than 0.25 hectares as a permitted activity. The rationale is to prevent permanent crossings being installed on large wetlands, so as to protect the significant values of these wetlands. The reasoning behind only protecting the values of large wetlands is not clear. Permanent crossings will have very significant impacts on the hydrology and ecology of small wetlands – possibly even more so than larger wetlands.
- f. Temporary crossings also have the potential to damage wetlands, and should only be allowed where the operator has demonstrated that they will not harm the wetland's values.
- g. Activities that alter a wetland's hydrology (for example by altering water flows or the water table) are permitted by implication, and Councils are not able to be more stringent in order to protect wetlands from such activities.

Relief sought

- a. Review all aspects of the NESPF to ensure that it gives proper recognition to the importance of wetlands and is consistent with the requirement to protect them.
- b. Require wetland setbacks of 30 metres for all forestry activities. Apply setbacks to wetlands of any size. Failure to comply with wetland setbacks is a non-complying activity.
- c. Require consent for permanent crossings in a wetland of any size. Provide that temporary crossings in wetlands are a restricted discretionary activity, and set out assessment criteria which require operators to demonstrate that the temporary crossing will not adversely affect the wetland's ecology, hydrology and natural character.
- d. Enable Councils to be more stringent in relation to measures to protect wetlands, including wetland hydrology.

²⁸ Scion report, pages 18-19.

²⁹ Department of Conservation, Threats to Wetlands,
<http://www.doc.govt.nz/nature/habitats/wetlands/threats-to-wetlands/>

85. Forest & Bird has serious concerns about the permissive approach to forestry impacts on riparian vegetation, significant indigenous vegetation and significant habitat of indigenous fauna and under the NESPF.
86. The NESPF is also silent on the impacts of forestry on adjacent or nearby public conservation land, and has not addressed how the protection of the conservation values will be retained.

Provisions permitting vegetation clearance

87. The maintenance of indigenous biodiversity is both a district and regional function under the RMA. Protection of significant indigenous vegetation and significant habitat of indigenous fauna ("significant natural areas" or "SNAs") is a matter of national importance. Protection is an important element of the RMA's sustainable management purpose.³⁰ Yet the NESPF anticipates and provides for destruction to SNAs as a permitted activity.
88. Riparian vegetation also deserves special protection because of its contribution to natural character of water bodies. Protection of natural character of rivers and their margins is a matter of national importance.
89. Public conservation land (PCL) may not be identified by Councils as SNAs per se (either mapped or unmapped), even though their high natural values are readily appreciated. Usually this is because Councils may choose to focus their SNA surveys outside public conservation land for priority reasons especially on limited budgets. The NESPF does not address proximity to public conservation land.
90. The document also fails to take into account the Department of Conservation's Protected Natural Areas (PNAs), QE2 covenants and other land identified as having high natural values. Some Councils, e.g. Marlborough District Council, have used the PNA surveys to supplement their SNA survey information (both of which remain unmapped in their resource management plan).
91. Furthermore we are aware that SNA surveys in some Council areas are scheduled to be surveyed over at least a decade; given large geographic areas and budgetary constraints, e.g. Tasman District Council.
92. The general condition for vegetation clearance and disturbance provides that indigenous vegetation may be damaged, destroyed or removed if it is incidental damage to riparian vegetation or other adjacent vegetation (including vegetation at the edge of an SNA) that will readily recover within five years. "Edge" is not defined. "Incidental damage" is not defined. "Readily recover" is unhelpfully defined as "refers to the recovery of the vegetation within the area". Criteria or methods for determining whether vegetation will "readily recover" within 5 years are not provided. The only way of being confident of recovery within 5 years would be to ensure that all vegetation that is damaged is less than 5 years old. That is, in biological terms, the only way that something could recover (i.e. return to its previous state) within 5 years.
93. So long as the vegetation will "readily recover", longer-term and even permanent damage to significant habitat of indigenous fauna is permitted.

³⁰ *EDS v New Zealand King Salmon* [2014] NZSC 38

94. As set out above, we consider that this provision is invalid for uncertainty, and unenforceable. It is also inappropriate in terms of section 6(c), and the RMA's sustainable management purpose as rather than avoiding, remedying or mitigating adverse effect on the environment, it provides forestry operators with the right to destroy significant vegetation and habitat wherever it suits them to do so, without any onus to avoid these impacts through prior planning, or to minimise unavoidable impacts.
95. No setbacks from SNAs are required for any of the forestry activities authorised by the NESPF. Earthworks and mechanical land preparation including root raking, afforestation, harvesting and reforestation can all have significant adverse effects on adjacent vegetation and habitat. The lack of setbacks does not protect significant vegetation and habitat.
96. The following photos are images of current forestry practice occurring within indigenous vegetation. These include photos of damage by large corporate forestry companies.



Figure 5: Image caused through harvesting practices adjacent to an area of high natural value. This is known as 'incidental damage' and would be permitted under the proposed rules as the site is not identified within the relevant RM plan as an SNA. Note the damage to trees that are significantly older than 5 years old.



Figure 6: The practice of felling trees into areas of indigenous vegetation is routine and is proposed within the NESPF. These matai have been stripped of vegetation as a consequence of felling.



Figure 7: This roadside reserve including toe-slope and alluvial forest has been significantly damaged by the act of stockpiling logs up against an area of native vegetation from logging the slopes above. Similar situations have been witnessed at the edge of skid sites above indigenous vegetation.



Figure 8: The impacts of bulldozing new haul roads through indigenous vegetation is very significant. Not only does it dissect the native vegetation, thereby creating issues of 'edge' viability, but the spoil from the road is frequently pushed into the bush below, where it can smother the understorey, including threatened plant species and invertebrate communities.

97. Additional standards should be included which provide for maintenance of wildlife corridors and avoidance of edge effects.
98. The potential impacts of forestry on SNAs should be considered and minimised at the outset through the preparation of a Forest Management Plan at the time of afforestation and reforestation, which:
 - e. Identifies SNAs by a suitably qualified person, areas of riparian vegetation and areas of predominantly indigenous vegetation within (i.e. patches or gullies, not understorey) and adjacent to plantation forestry.
 - f. Identifies where setbacks from SNAs and riparian areas are required and maps them (whether or not the SNAs have been mapped in the plan).
 - g. Describes how activities will be undertaken in a manner that ensures that any more than minor adverse effects on SNAs and riparian areas (including edge effects, and loss of connectivity) will be avoided.

Other matters

99. The relationship between the general conditions and the activity –specific conditions is not clear. The general condition states that “Notwithstanding specific activity rules, all forestry activities are permitted provided the following conditions are met” (which means “despite” the specific rules). We assume that the intention is to apply the general conditions in addition to the activity-specific conditions, in which case this wording needs to be reviewed.
100. Mechanical land preparation is defined as including “associated removal of vegetation”. This aspect of mechanical land preparation should be deleted. It appears to authorise the establishment of forestry on areas of predominantly indigenous vegetation

(other than SNAs). Large areas of indigenous vegetation – such as tussockland in Canterbury and Otago - are not mapped as SNAs but are subject to indigenous vegetation clearance rules that would presently apply to land preparation associated with forestry establishment. Providing for “associated removal of vegetation” for mechanical land preparation as a permitted activity would override such rules.

101. Vegetation clearance that does not meet the permitted activity standard is a restricted discretionary activity. That activity status is inappropriate for indigenous vegetation clearance within SNAs. Non-complying status should be used.
102. Animal pests in production forests are a serious concern, especially pigs and wallabies. In South Canterbury production forests provide an ongoing source of animal pests moving into adjacent stands of native forests at Kakahu Bush in particular, but also onto public conservation land administered by DOC, where they cause damage to the native habitat. Other areas in New Zealand are also affected, especially along the foothills of the Hunter Hills, the Pelorus catchment, Coromandel Peninsula, etc.
103. Just as the NESPF addresses wilding conifer control, it should address impacts of fauna pests on adjacent areas. Standards for pest fauna control by forestry operators should be set out in the NESPF, and the Forest Management Plan should be required to demonstrate how the standards will be met.

Relief sought

- a. Review the permitted activity standard for vegetation clearance, and:
 - i. Delete aspects of the standard that permit adverse effects on significant indigenous vegetation and riparian vegetation, in particular the “incidental damage” provisions.
 - ii. Ensure that the standard protects significant habitat of indigenous fauna.
 - iii. Remove uncertain terminology such as “readily recover”.
 - iv. Incorporate additional standards that provide for connectivity and minimisation of edge effects on SNAs.
- b. Apply new activity standards requiring that afforestation and replanting is non-complying in an SNA (including DOC PNAs, all public conservation land, and QE2 covenants) or within 20 metres of an SNA comprising forest with a canopy height of 6 metres or more; or within 50 metres of any other SNA habitat, e.g. dunelands, tussocklands.
- c. Ensure that any activity associated with mechanical land preparation, earthworks, quarrying, harvesting, pruning and thinning-to-waste, is also non-complying within the abovementioned setbacks.
- d. At afforestation and replanting stages, require all forest operators to provide a Forest Management Plan showing how the permitted activity standards for indigenous vegetation will be complied with throughout the forest life cycle.
- e. Consider the relationship between the “general conditions” and specific activity conditions (we suggest that the term “in addition to” rather than “notwithstanding” is used).

- f. Delete the reference to “associated removal of vegetation” from the description of Mechanical Land Preparation.
- g. Provide that clearance of indigenous vegetation within SNAs is a non-complying activity rather than a discretionary activity.
- h. Activities that impact on indigenous vegetation or habitat in the coastal environment should be separately addressed, as discussed above.

Greater stringency

104. Councils’ ability to be more stringent is limited to mapped SNAs. Many districts and regions have not included mapped SNAs in their district or regional plans, and may not intend to for a range of reasons (for example, the Nelson Resource Management Plan, Tasman Resource Management Plan, Marlborough Wairau-Awatere Resource Management Plan, Marlborough Sounds Resource Management Plan, Horizons One Plan do not include mapped SNAs). The ability to be more stringent should apply to all areas meeting significance criteria in the applicable regional policy statement, regional plan or district plan in order to avoid exposing these areas to clearance.

105. The same applies to Outstanding Natural Landscape and Outstanding Natural Features and Landscapes. For example, Tasman District Council has recently undertaken a community process to identify ONLs in Golden Bay, but these are still some way off being incorporated in to the Tasman Resource Management Plan, and Tasman does not intend to undertake a process to identify ONLs in the rest of the district in the foreseeable future.

106. Councils’ ability to be more stringent is described in the Advice note as:

Councils retain the ability to be more stringent where indigenous vegetation clearance (other than the listed permitted clearance activities) occurs within areas of significant indigenous vegetation or significant habitat of indigenous fauna as identified in district or regional plans, including SNAs. (emphasis added)

107. This provision means that Councils are not provided with greater stringency in relation to the matters that are permitted by the NESPF, they simply retain their ability to regulate the impacts of activities on SNAs that are outside the ambit of the NESPF. Councils should be able to provide greater stringency in relation to the listed permitted clearance activities – for example, where vegetation that would “readily recover” in 5 years should not be removed because it is significant habitat for indigenous fauna that would be adversely affected by the temporary impact.

108. Some SNAs are not “indigenous vegetation” (for example some dunelands) but are nonetheless important habitat for indigenous fauna. The NESPF should ensure that such areas are not able to be adversely affected by forestry operations.

109. Councils’ obligations to maintain indigenous biodiversity, and to achieve other goals such as the matters to be found in ss 5(2)(a), 5(2)(b), 5(2)(c), 7(c), 7(d) and 7(e) may require them to protect areas of indigenous vegetation that do not qualify as significant.³¹ Councils should be empowered to incorporate more stringent rules where areas of indigenous vegetation or habitat that are required to be maintained for reasons other than their significance (for example, ecosystem services, coastal hazard mitigation, amenity value).

³¹ *Minister of Conservation v Southland DC* A039/01

Relief sought

- a. Enable Councils to apply greater stringency where forestry activities impact on:
 - i. SNAs – whether mapped in a policy or plan, or not.
 - ii. Areas of predominantly indigenous vegetation that are not SNAs.
- b. Enable Councils to apply greater stringency to the activities that are permitted under the NESPF (i.e. in relation to the listed permitted clearance activities).

G Native fish

Fish spawning permitted activity standard

110. The fish spawning indicator is based on incomplete data. It needs to be revised to include all native fish (especially threatened taxa).
111. The list of species which trigger the permitted activity standard precluding bed disturbance is also incomplete. Excluded species include inanga, banded kokopu, short-jaw kokopu, lamprey, bluegill bully, giant bully, common bully, upland bully, Crans bully, alpine bully, common smelt, longfin, shortfin and Australian longfin eel, and torrentfish. Many of these are at risk or threatened, and the protection of their habitat is therefore a matter of national importance.
112. Freshwater mussels should be included in the spawning calendar in the permitted activity standard. Mussels spawn during summer (November-January). All three mussel species are classified at risk and are highly susceptible to the effects of sedimentation, not only during spawning.
113. The fish spawning permitted activity standard is uncertain: must standard 1c be triggered before 1a applies, or is standard 1c only required to be triggered where 1b applies? If the peak fish spawning period (standard 1c) must always apply, then the standard provides no protection for the habitat of threatened native fish outside the spawning period, for example destruction of riverbed habitat used by the fish's invertebrate food sources. Sedimentation prior to the spawning period also has the potential to clog habitat for benthic spawners.
114. Under permitted activity standard 2, the definition of bed disturbance does not include disturbance of intermittent streams, less than 20 stream crossings per day, or hauling partially suspended logs across rivers <3m wide. These activities have the potential to wipe out spawning fish and significantly degrade their habitat, and should be controlled. The narrow definition of bed disturbance is not appropriate.
115. Permitted activity standard 3 also significantly narrows the effectiveness of this standard. Where a freshwater fish survey has been undertaken within the past 12 months at the site, and the species has not been found, 1c does not apply. This activity standard should be deleted or if it is retained, appropriate methodology should be set out to avoid absence of evidence, being evidence of absence. It is unclear how this provision impacts on standard 1b given that it operates conjunctively with standard 1c.

116. The standard should ensure that downstream habitat of threatened fish is also protected, particularly during the peak fish spawning period.
117. The activity status of bed disturbance that does not comply with the fish spawning site standard should be non-complying rather than discretionary.
118. Compliance with these important permitted activity standards should be demonstrated in a Forest Management Plan, and particular impacts should be addressed in the Harvest Plan.

River crossings

119. The river crossing provisions do not adequately address fish passage.
120. For single culverts, the minimum culvert diameter is 450 mm. The minimum size should be 1.2 x stream bed width as per ARC and WRC guidelines. The controlled activity rule should be to demonstrate velocity in the 50% AEP event is less than either 0.3m/s or natural stream flows.
121. The culvert invert is at least 100 mm below the level of the bed of a river or lake. A minimum of 20% of culvert diameter below bed level (as per ARC and WRC guidelines) should be used.
122. For battery culverts:
- a. The diameter of each culvert is 450–800 mm. Total culvert diameter should be 1.2x stream bed width as per ARC and WRC guidelines (for example: a three culvert battery with 450 diameter culverts would sum to 1350mm which should be more than 1.2x stream width which will adversely affect fish passage). Again the controlled activity rule should be to demonstrate velocity in the 50% AEP event is less than either 0.3m/s or natural stream flows.
 - b. The invert of at least one culvert pipe is at least 100mm below the level of the bed of a river or lake to carry base flow. All culverts should be a minimum of 20% of culvert diameter below bed level, similar to ARC and WRC guidelines. Only having one culvert low will result in concentrated flows and velocities and likely adversely impacts on fish passage. Having all culverts low would approximately mimic natural bed width and form.
 - c. The culvert is sized to pass annual average flow. It must be constructed to allow greater flows to pass over it without structural failure. The average annual flow is too small to reliably and consistently allow fish passage. For all events above the average annual flow (i.e. for 6 months every year) this arrangement would act like a ford and the culverts would be surcharged resulting in increased velocities and adverse impacts of fish passage. This is far more permissive than, and inconsistent with, the single culvert rules which require no heading up (surcharging) in the 20% AEP event. International literature allows a wide variety of flows for fish passage and little or no NZ specific research on the topic is available. Without NZ specific research the permitted activity standard should be limited to 50% AEP flow with no surcharging.
123. The standards for drift decks and fords also need to address fish passage. Fords are more likely to adversely affect fish passage than culverts. Fords should be at least

a controlled activity, with specific provisions requiring design to avoid impedance of fish passage.

124. The controlled activity matters for culverts do not refer to fish passage. “Fish passage” should be included as a matter of control under clauses 2 and 5.

Relief sought

- a. Revise the fish spawning indicator to include all native fish and freshwater shellfish.
- b. Revise the list of species which trigger application of the permitted activity standard to include all native fish and freshwater shellfish.
- c. Address uncertainty in use of “and” and “or” in standard 1a, b and c. Only one of these matters should need to be breached for a consent requirement to apply.
- d. Analyse the effect of bed disturbance activities like vehicle crossings on aquatic habitat, and revise the definition of bed disturbance to only exclude activities with very minor impacts.
- e. Preferably delete standard, or if it is retained, set out methodology for the fish survey described in standard 3 (such as a requirement for repeated surveys) which ensure that the survey is effective in identifying the presence/absence of particular species.
- f. Address downstream fish spawning habitat in the permitted activity standards.
- g. Change the activity status of bed disturbance that does not comply with the fish spawning standards to non-complying.
- h. Revise the vehicle crossing permitted activity standards and matters of control to better address/provide for fish passage as described above. Make fords a (minimum) controlled activity so that the consent authority can ensure that the ford design avoids impedance of fish passage.

H Native birds and bats

125. The general condition relating to bird nesting times has several shortcomings:
- a. By limiting the condition to Nationally Critical and Nationally Endangered birds, the NES has excluded consideration of Northland brown kiwi (Nationally Vulnerable), North Island weka (Nationally Vulnerable) and NZ falcon (Nationally Vulnerable). These species are known to nest in plantation forestry. We seek that all threatened bird species (i.e. Nationally Critical, Nationally Endangered, and Nationally Vulnerable) are included.
 - b. The condition is limited to bird species “known to nest in areas where forestry operations are planned or underway”. The meaning of “areas” is unclear, and could be interpreted as referring to a specific forestry block. In that case, if forestry operators are not aware of the presence of these species and choose not to carry

out bird surveys this condition will never be triggered. The condition should refer to Ecological Districts rather than areas.

- c. Rather than simply requiring operators to “have procedures to identify nest sites and the nesting season”, the standard should specify that a bird survey must be undertaken by a suitably qualified expert, and that where the presence of nesting birds is detected, that disturbance during the nesting period is avoided.
126. Native bats are known to inhabit pine forest³² and may utilise trees for roosting. Where harvesting is proposed in an Ecological District where bat activity is known to have occurred, a bat survey by a suitably qualified person should be required prior to harvesting. Where bats are detected, harvesting should be undertaken outside the period when bats may be in a state of torpor, i.e. with repeated overnight temperatures of less than 5 degrees. Outside that period, tree felling protocols to detect bats and avoid felling roosting trees should be adopted. These matters should be required to be addressed in a Forest Management Plan and compliance specifically demonstrated in the Harvest Plan.
127. Other indigenous native fauna, particularly land snails, may also inhabit pine forest. Some of these species are threatened. In line with the protocols for detection of bird species, the standards must address the possible presence of other threatened species if they are known from within the Ecological District. If they are known, advice should be sought from the Department of Conservation on the need for surveys and any management conditions that should be employed to ensure the protection of the species. Matters should then be addressed in the Forest Management Plan and compliance specifically demonstrated in the Harvest Plan.

Relief sought

- a. Redefine the nesting time provisions to identify all threatened bird species, i.e. Nationally Critical, Nationally Endangered, and Nationally Vulnerable.
- b. Add an additional condition to protect all New Zealand bat species as identified above.
- c. Incorporate a new condition around the identification and protection of other indigenous threatened fauna.
- d. Redefine “areas” as “Ecological Districts”.
- e. Require that surveys be undertaken by a suitably qualified person.
- f. Require that measures to protect the species are included in the Forest Management Plan and compliance is addressed specifically in the Harvest Plan. Include measures outlined above, i.e. avoidance at certain times of vulnerability.

I Wilding conifers

128. Wilding conifer control is a matter of serious conservation and economic impact to New Zealand, with the recent NZ Wilding Conifer Strategy estimating current spread of

³² Lloyd (2015) Bat Surveys on D’Urville Island for Royal Forest & Bird Protection Society of NZ Inc.

around 1.7 million hectares, with control costing \$6million in 2007. It is unfortunate that radiata pine and douglas fir, totalling 96% of the plantation estate, are two of the worst contributors to wilding spread.

129. It is appreciated that wilding conifers are included in the NESPF, however there are serious deficiencies with the application of the index, and its flow-on effect on the rules structure.
130. Ledgard (1993)³³ was one of the earliest developments of the Wilding Spread Risk Calculator. In the NESPF, the score states that there is a 'high risk' if the total score adds up to 12 or more, and then allows all afforestation to be a permitted activity. There are significant problems with this approach.
- a. It fails to recognise that a scale score does not mean that anything 11 or below is of low risk – the real situation is that as you go below 12, there is a decreasing level of risk.
 - b. It ignores the other calculator recommendation: "A high risk is also likely if a score of 3 or 4 in 'Siting' is followed by a 3 or 4 in 'Downwind land management' (a) or (b)." (ibid, p17). The 2012 version³⁴ cites it slightly differently (albeit with the same intention) with respect to the risk of long distance spread. It states "the need to test long distance spread risk from exposed sites (scoring 3 or 4 in 3 – Siting)", and then goes on to recommend assessing grazing and vegetation cover out to a distance of 2km, or 5km in the drier hill and high country areas of the eastern South Island.
 - c. It does not apply to replanting.
 - d. It does not have any provisions that provide for setbacks from areas of high conservation value, including public conservation land, or SNAs (particularly those of low stature; or all SNAs when the planted species is douglas fir, due to its shade tolerance).
 - e. It does not allow Councils to set more stringent controls, e.g. adjacent to high value public conservation tussocklands.
 - f. It does not address responsibility for any management of future wilding control. Standards and conditions of consent should be set in line with the recommendations of Ledgard and Langer (1999)³⁵ which includes a downwind survey and removal of any wilding pines every 5 years. The cost of any wilding spread must be borne in accordance with the New Zealand Wilding Conifer Management Strategy 2015 – 2030³⁶.

³³ Ledgard, N. (1993).

<http://www.wildingconifers.org.nz/images/stories/wilding/Articles/Wilding%20Prevention%20Booklet.pdf>

³⁴ http://www.wildingconifers.org.nz/images/stories/wilding/Articles/DSSs1&2_NES%20version%2007011.pdf

³⁵ Ledgard, N.J., & Langer, E.R. (1999). Wilding Prevention: guidelines for minimising the risk of unwanted wilding spread from new plantings of introduced conifers. Published by the New Zealand Forest Research Institute:

<http://www.wildingconifers.org.nz/images/stories/wilding/Articles/Wilding%20Prevention%20Booklet.pdf>

³⁶ Anon (2014). The Right Tree in the Right Place: New Zealand Wilding Conifer Management Strategy 2015 – 2030. Access via <http://www.wildingconifers.org.nz>



Figure 9: Recent invasion of young wildings into an area of public conservation land. Wilding pines in this area have been removed over 3 kilometres from the source (pers.comm, Forest & Bird member)

Relief sought

- a. Modify the wilding risk calculation in the NESPF to reflect a 'degree' of risk, rather than the current 'cutoff' point at which plantation forestry below 12 is assumed to have no wilding threats.
- b. Incorporate the extra provisions around caution when the score for 'Siting' reaches 3 and insert provisions around the selection of species
- c. Provide for increased Council stringency around downwind sensitive areas up to a distance of 5 kms, including for SNAs, public conservation, QE2 covenants and any other areas of conservation value.
- d. Provide for increased Council stringency if wilding conifers are included in their Regional Pest Management Strategy.
- e. Include the wilding spread risk calculator as a matter for consideration when replanting, i.e. as a standard that must be met.
- f. Insert conditions under afforestation to ensure the potential risk of wilding control is managed, by requiring a survey to be undertaken every 5 years up to 2km downwind of the planting site, or 5 km downwind in the drier hill and high country of the eastern South Island. Require that any wildings found are to be removed. Downwind landowner permission is to be requested.

J Genetically Modified Organisms

131. The NESPF would make afforestation and replanting using genetically modified tree stock a permitted activity, subject only to the requirement that the tree stock has gained the appropriate approval for deployment under the Hazardous Substances and New

Organisms Act. The rationale given for this is that the EPA is best placed to evaluate the risks of genetically modified organisms and that approval and conditions imposed under the EPA regime will be sufficient to ensure any risks associated with the deployment of the tree stock are managed.

132. Forest & Bird disagrees with this rationale, and opposes the proposal to require councils to provide for afforestation with approved GM trees as a permitted activity.

133. The differences between an approval under the HSNO Act and planning provisions under the Resource Management Act were recently considered by the Environment Court (Chief Environment Judge Newhook presiding) in *Federated Farmers of New Zealand v Northland Regional Council*³⁷. Key points made in that decision are that:

- a. In addition to protection of the biophysical environment, a regional council can incorporate social and economic development into its approach in achieving the purpose of the RMA. In doing so it could take into account the potential effects of the use or release of GMOs not only in an ecological sense, but also in economic and social terms.³⁸
- b. Regulatory jurisdiction under the HSNO Act is limited to the importation for release and/or release from containment of new organisms. If HSNO were to be treated as an exclusive code for control of GMOs, there would be a disparity under the RMA between control of new organisms on the one hand and all other organisms on the other. This could be thought contrary to the broad regulatory approach under the RMA described by the High Court in *Meridian Energy Limited v Southland District Council*³⁹ (citing the Supreme Court in *West Coast ENT Inc v Buller Coal Limited*⁴⁰):

The Act is carefully framed to provide control of the effects of resource use, including regulatory oversight given to functionaries at national, regional and district levels. In general terms, all resource use is amenable to its framework, unless expressly exempted from consideration. (emphasis added)

The overall legislative scheme of things would then be that there would be no requirement to regulate the potential adverse effects of GMOs beyond the act of approving them for release, thereby elevating animals and plants containing GMOs into a special category not amenable to regulation under the RMA as are animals and plants already present in New Zealand. Further, integrated management of them would not be possible.⁴¹

- c. There is nothing in the scheme of either Act, or the two read together, to call for a limitation to be placed on the RMA definition of natural and physical resources, which is:

“ ... includes land, water, air, soil, minerals, and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures.”⁴²

³⁷ [2015] NZEnvC 89

³⁸ [35]

³⁹ [2014] NZHC 3178

⁴⁰ [2014] 1 NZLR 32

⁴¹ [45]

⁴² [47]

- d. There is a readily identifiable policy reason for that. Once having been approved for import and release into New Zealand under HSNO, regional authorities can provide for use and protection of new organisms together with other resources in a fully integrated fashion, taking account of regional needs for spatial management that might differ around the country for many reasons, not the least of which might include climatic conditions, temperatures, soils, and other factors that might drive differing rates of growth of new organisms and/or of other organisms, as just a few of perhaps many examples. The RMA and HSNO Act offer significantly different functional approaches to the regulation of GMOs.⁴³
- e. It is true that the HSNO Act has an environmental protection purpose, as does the RMA, however that *prima facie* wide purpose is to be read in the context of its subject matter and specifics. It is to protect the environment against hazardous substances and organisms, and not on a wider scale. The wider scale is the role of others under general legislation in the RMA (citing *Bleakley v Environmental Risk Management Authority*⁴⁴).
- f. In *Bleakley*, the High Court found against excluding the jurisdiction of a local authority should it deem it appropriate following an evaluation under s 32 RMA, to, for instance, identify areas more (or less) suited to the establishment of activities involving approved GMOs. For instance, regional authorities might, with community input, consider particular regional approaches acknowledging social, economic and cultural wellbeing (amongst other things), somewhat beyond the more limited policy considerations for regulation of import and release of new organisms under HSNO. These aspects in s 5 RMA are underpinned by the statutory requirements for preparing and publishing evaluation reports under s 32, including by way of just one example, the requirement for assessment of benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of proposed provisions, including opportunities for economic growth and employment. Particular regional considerations come in for study under the RMA in a way not anticipated by HSNO.⁴⁵ Further examples include policy positions representative of strong cultural concerns of Māori, and if thought appropriate “marketing and branding advantages” based on an approach to limiting the use of GMOs in an area, for instance by encouraging price premia for agricultural production and tourism activities in the locality.⁴⁶

134. The Environment Court in *Federated Farmers v Northland RC* and the High Court in *Bleakley* have carefully considered and rejected the argument that HSNO Act evaluation and approval is sufficiently broad that regulation under the RMA is not also required. The findings in those decisions are contrary to the NESPF assertion that approval under the EPA regime will be sufficient to ensure any risks associated with the deployment of GM tree stock are managed.

135. The Supreme Court has held that all resource use is amenable to the RMA framework. It is doubtful whether it is lawful for a NES to effectively oust the operation of the RMA in relation to GMOs where this is not done for a valid resource management purpose.

⁴³ [49]

⁴⁴ [2001] 3NZLR 213 at paragraph [243]

⁴⁵ *Federated Farmers* at [51]

⁴⁶ *Federated Farmers* at [52]

136. There are valid resource management reasons for local policies and plans to control the use of GMOs in a particular district or region. Communities should have the ability to make decisions regarding any outdoor use of GMOs, given the serious risks of GMOs to locally unique biodiversity, existing non-GM sustainable primary production including forestry and agriculture, local economies and public health. A precautionary approach to GMOs is consistent with sustainable management and the RMA definition of effects⁴⁷, and should be open to councils and communities.

Relief sought

- a. Retain the ability for local authorities to make community decisions on whether outdoor use of GMOs should be allowed, and on what terms.

K Effects of forestry not able to be managed under the NESPF

137. The NESPF does not appear to give local authorities scope to manage the traffic effects of harvesting, or amenity impacts of forestry activities other than noise. This will no doubt be addressed further by local authority submissions on the NESPF.

138. Water Yield is identified as another matter that is out of scope of the proposed NESPF. The rationale includes the comment that “it is intended that regional councils retain the ability to manage afforestation in catchments that have been assessed as being water sensitive”. Because of this rationale it would seem appropriate to treat Water Yield as a matter over which Councils may exercise more stringent controls. As a result of this inconsistency there is a degree of confusion with respect to this matter remaining out of scope.

Relief sought

- a. Include Water Yield as a matter over which Councils may exercise more stringent controls
b. Provide the ability for local authorities to address traffic and amenity effects of forestry



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Royal Forest & Bird Protection Society of New Zealand Inc 14 August 2015

⁴⁷ In *New Zealand Forest Industry Council v Bay of Plenty Regional Council* [2013] NZEnvC 298 at page 10 the Court held that “subpara (f) [of the definition of “effect”] most certainly points to taking a precautionary approach – indeed it may go further than a precautionary approach would ordinarily be thought to require because it is premised on a given effect having a known low probability of occurrence and an unknown likelihood of a possibly high impact”.