Submission

- to –

Ministry for the Environment
PO Box 10362
Wellington 6143

Email: environmental.reporting@mfe.govt.nz

Discussion Document on Proposed Changes to Environmental Reporting

New Zealand Forest Owners Association Inc
Level 9, 93 The Terrace
Wellington 6143
Tel 04 473 4769 Fax 04 499 8893

www.nzfoa.org.nz
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1. Introduction

The New Zealand Forest Owners Association (FOA) represents the commercial plantation forest growing sector of New Zealand.

The sector has for many years been engaged in numerous "land use" debates in New Zealand on issues ranging from water yield, water quality, erosion, appropriate hill country land use, rural depopulation, biodiversity protection and carbon and nitrogen sequestration or amelioration.

Many of these debates have surfaced through conflict arising within RMA processes. A common denominator in many of these debates has been perceptions of widespread poor environmental performance that has often been in contrast to the science as generally understood. Key to this dichotomy has been the lack of consistent, widely available and understood science based information.

As a consequence, forest growers have found themselves subject to ever more stringent legislative constraint despite 50% by area of the total sector's plantings being environmentally certified under the Forest Stewardship Council (FSC) regime and a long established track record of codes of practice and positive engagement with ENGO's through the NZ Forest Accord and other vehicles.

In recent times, the sector's concerns about the extent and complexity of the regulatory environment led forest growers to seek to achieve a standardised regime under a National Environmental Standard (NES). Also, through its research management arm Future Forests Ltd (FFR), it has engaged further research into indicators of sustainability around erosion, water quality and biodiversity.

The history of involvement in these debates has and continues to demonstrate to this organisation, that NZ's interests and particularly its land use and regulatory decision making are currently poorly served by a lack of well founded, consistent, regular and cross-sectoral (landuse) environmental reporting.

As a representative of the sector therefore, the FOA strongly endorses proposed moves to enable the development of a robust reporting framework.

2. Background

The FOA represents over 120 members with ownership over some 1.2 million ha of plantation forests. These estates comprise 69% of the total forest growing sector in New Zealand and comprise small owners represented individually or through affiliation with the NZ Farm Forestry Association (NZFFA) through to the major corporate and timberland investment organisations.

The FOA has had a long involvement in matters of environmental significance to the sector through the operation of its Environment sub-committee. Through the committee and the FOA executive, the FOA established a Forest Accord with all the leading ENGOs over 20 years ago to define protocols for the protection of indigenous ecosystems and have continued to take an active lead in positive environmental initiatives such as its 2009 Resource Management Law Association award winning "Forestry Environmental Code of Practice" and a shortly to be updated Forest Engineering Code.

Despite these initiatives, much of the committee's efforts on behalf of its membership is consumed in environmental and land use debates under RMA's process that often arise as a result of poorly constructed policy frameworks that themselves are poorly informed by appropriate science.

It is the view of this organisation that NZ has and will continue to waste significant amounts of its scarce resources, making poor long term decisions around land use unless its policy development processes and public debate are better informed. Good, consistent, long term measurement of trends across all land uses is seen as a critical step in achieving better outcomes.

3. Commentary on the Issues

The FOA believe the discussion document accurately précis the underlying problems with NZ's state of the environment reporting framework as identified by the OECD. In particular the:

- Devolved responsibilities and geographic distribution;
- lack of guidance or requirement for specific measurement protocols;
- consequential breakdown in utility and power of captured data to reveal trends or even report accurately for critical environmental parameters across all land uses in the nation;
- capacity of devolved structure to more easily vary measurement protocols for short term budgetary imperatives or to address localised or politicised issues without regard to the obligation to support the "national picture";

- the lack of a framework that ensures transparent accountability for getting the job done;

- fundamental need for such national reporting as does occur, to be and to be seen to be, independent so that adverse trends will be aired and thus underlying issues more likely to be addressed.

By way of example, in one instance of specific study by forest growers through FFR, the national water quality monitoring network has been reviewed to establish its capacity to represent the effects of the plantation forest land use within the wider landscape (Annex 1). The findings highlight many of the issues driving the proposed changes.

In general terms, information published from a number of studies over the years and trends extracted from the national network by NIWA for MFE have tended to indicate consistently high water quality from plantation forests albeit with a recognised, usually brief downward trend over the period of harvest. Despite this, the recently completed FFR study showed among other things that:

- The forest estate was significantly under represented within the national and regional water quality network;

- many sampling sites were not pure plantation sites and may be strongly influenced by other land use;

- some of the largest forestry regions had very low sampling representation;

- sampling regimes and methodologies were highly variable;

- some measures were of questionable value while others considered important across all productive land use were often not being measured;

- there was a strong case for some measures that were generally unlikely to have high specific sectoral relevance (e.g. E coli) to be collected because they were critical to informing relative environmental performance across land uses at a landscape scale

In response therefore to questions 1-3 posed on page 14 of the Discussion Document, the FOA contends:

1. The main issues that need to be addressed have been correctly identified.

2. The issue of added cost has not necessarily been fully identified – It is plausible that an added intensity and or frequency of data collection may arise from a national framework in some aspects and /or some regions, in addition to regional measures that may be deemed necessary to establish datasets for locally significant issues. Some of these costs may be offset by the benefits of standardisation, bulk contracting and centralised processing and reporting that may become possible.

3. To the extent that costs may increase this has to be offset by the benefits that will accrue to the nation long term from better informed policy formulation, public process and land use. It is suggested that the current costs of sub-optimal results are imposing significant costs and often, through lack of transparency, economic distortions that do not serve the nation's economic or environmental objectives well.

4. That of the underlying issues, the inconsistent state of environmental monitoring is the greater problem as with consistent well-structured datasets and data acquisition, reporting at any time over any period can be feasible and meaningful. However FOA believe the impetus given by a statutory obligation and independence will be important measures to drive the change that is necessary including ensuring public access to data that is gathered.

4. Objectives of Proposed Reform

FOA fully endorse the objectives of the proposed reform. It is believed essential that responsibility must be clear and that as, almost by default in current modern circumstances, environmental trends reported may not always be positive, transparent independence from the Government of the day is essential if public policy is to be properly informed.

As already noted, the requirement for high quality environmental statistics that also form part of nationally available datasets is the most important objective. Failure here means little value will be obtained for the money that is spent and good policy formulation is likely to remain elusive.

FOA seeks that the proposed reform ensures that the Regions capture sector specific data of utility for central government reporting , including MAF's Montreal Process reporting for temperate forests, which combines plantation forests and the national indigenous forest estate as managed by DoC.

5. Options for Reform and Assessment Criteria

FOA support the principles encapsulated in the assessment criteria as listed in pg 15 Q5, of the Discussion Document.

It is noted however, in relation to our previous comment about the potential for increased total costs, that the terminology of "cost efficiency" used in the assessment criteria is very important. We would expect that the relative unit costs of acquiring data under the proposed framework should be able to be improved providing more data and more utility for the public dollar spent.

In relation to the proposed route to achieve the objectives and in answer to Q's 6-10 generally, FOA are:

- Supportive of the option of amending the Environment Act to require the Parliamentary Commissioner to undertake 5 yearly SOE reporting;

- we find an alternative option of achieving the goal though the Environmental Protection Agency as also viable but less attractive due to the lower level of independence and the greater risk of financial dilution of appropriations for the purpose of SOE monitoring;

- partially supportive of amendments to the RMA requiring certain elements of the environment to be monitored to standardised methodologies and protocols; BUT

- concerned a potential conflict may arise where by requests for the types of data sought by the Parliamentary Commissioner are not supported by recommendations from the Minister for the Environment to adjust the requiring regulations of Regional Councils. This could leave the way open for actual or perceived political manipulation of the SOE reporting structure, for financial (cost saving) or other political motivations. We believe this potential issue must be addressed or alternatively the PCE must be empowered to specify the type and level of monitoring to be implemented;

- support – subject to adequate funding streams, amending the Environment Act to enable and require the PCE to undertake SOE reporting but prefer the PCE to be also empowered to require consistent reporting unless the potential conflict noted above can be resolved. We believe such a structure will provide a solution that will address the identified problems;

- accept that some more costs (in total) may arise from the proposed changes but that on an efficiency and quality for dollar spent basis, those costs need to be incurred;

- believe that without independence and compulsion, including on monitoring protocols, there will be little net benefit.

6. The Environment Reporting Bill

In response to the questions 11-13 on page 24, FOA support the purpose of the Bill.

In terms of the proposed frequency of reporting FOA believe that 5 years is an appropriate timeframe for most elements that might be required. In the realm of natural processes, shorter timeframes will often not yield meaningful trends and the changes that may arise from any particular round of measurement may be lost in the "noise "of natural variation. This could cause loss of understanding amongst the public and also represent substantial unnecessary expenditure. Longer timeframes e.g. 10years, runs the risk of results becoming almost intergenerational and unable to galvanise any real momentum to respond or investigate identified changes.

While 5 years is considered an appropriate reporting timeframe this does not require that every parameter be measured at such intervals. In many cases near continuous monitoring may be completely appropriate while in others, such as indigenous forest condition (if measured by traditional plot based methods) may need extended timeframes to reveal trends.

FOA would support reporting on the domains as suggested with the following caveats:

1. All land uses, from conservation lands through to rural commercial to urban environments must be included within the sampling strategies.

2. Whilst reporting by domains provides for reasonably manageable conceptual divisions, the reality is that land use and water quality and biodiversity are inextricably linked. It will be essential that data is gathered within frameworks that are able to infer effects from those relationships and that these are reported irrespective of the "fit" within a domain.

3. FOA are concerned that within the "Land Domain" the ability to monitor and report erosion is methodologically constrained at present. New Zealand has high levels of natural and land use induced erosion, the latter causing significant productivity costs and transfer costs to the wider community. Climate change scenarios suggest a prospect of further acceleration. Despite years of research and accumulated knowledge, There is presently no way of monitoring trends nor landscape or regional scale benefits of any particular response. This needs to be rectified but funding streams and platforms are surprisingly unfocussed on this problem.

4. The open access NZGOAL framework is strongly advocated.

5. FOA believe that one area that requires careful thought (Q14) will be the way in which the relationship between the PCE's office and the Ministry for the Environment and other Government Departments (e.g. LINZ Geospatial office) is managed. By their very nature, monitoring strategies will tend to be quite long term and once key parameters established, change difficult to introduce without adverse impact on some datasets. Conversely, new technologies are constantly evolving and FOA urges that a very long term view be taken to establishing the best possible technological advantage now to future proof the monitoring framework. This implies considerable planning and liaison between the involved parties and possible upfront costs to complete partially established data sets that can benefit wider NZ on many issues beyond the SOE reporting objective. Some remote sensing technologies such as LiDAR would be examples of this.

6. Of the Environmental Domains to prioritise (Q15), water and biodiversity would both seem to offer initial low hanging fruit for rapid reorganisations and standardisation. Issues such as erosion mentioned above are likely to take longer to resolve a methodology but the need to get started is urgent.

7. Costs & Benefits

FOA believe that many of the potential cost benefits (Q16 – 18) have been correctly identified in the discussion document.

Noted at the start of this submission however, was the warning that issues of added cost had not necessarily been fully identified – It is plausible that an added intensity and or frequency of data collection will arise from a national framework as will introduction of new measures or technologies. These would incur costs, particularly at start-up, and are likely in addition to regional measures that may still be necessary to establish datasets for locally significant issues. Some of these costs may be offset by the benefits of standardisation, bulk contracting and centralised processing and reporting that may become possible. It is also plausible that such increased costs may be significantly offset by the benefits that will accrue to the nation long term from better informed policy formulation, public process and land use.

FOA also notes that added benefits should be accounted for in terms of the economic leverage obtained by establishing nationally significant datasets and implementing new technologies for deriving them (e.g. LiDAR). Implementation of such free access national datasets will often have significant wider economic value to NZ and the opportunity to establish them as part of a comprehensive review on NZ's national land-based data needs should not be overlooked.

Other upfront resourcing to implement the proposed changes, ranging from technical design to standardised input and processing infrastructure can be expected. However if such objectives are achieved, on-going reporting costs at both national and regional levels should be easier and cheaper, and more meaningful.

Finally if monitoring design facilitates integration into other reporting processes that reflect national or specific commercial obligations (e.g. FSC in support of certified exported wood products or NZs "clean green" brand for Tourism), then there are further significant economic benefits to be accounted for albeit diffused and hard to quantify.

8. Further Discussion

FOA appreciate the opportunity to comment and would be happy to be involved in further discussion or elaboration should that be deemed desirable.

Yours faithfully,

Glen Mackie
Senior Policy Analyst

Annex 1

Extract from the Future Forest Research Draft Report

"Water quality monitoring and water quality indicators for plantation forests"

Author(s): Brenda R Baillie, Marie Heaphy. Research Provider: Scion

EXECUTIVE SUMMARY

Water quality data from national and regional monitoring networks is used in New Zealand's State of the Environment (SOE) reporting. However, a 2010 report by the Parliamentary Commissioner for the Environment has highlighted the lack of robust, standardised, reliable and independent SOE reporting in New Zealand. The Ministry for the Environment (MfE) is currently reviewing the existing national and regional freshwater monitoring networks under its National Environmental Monitoring and Reporting Project (NEMaR), with the objective of producing a statistically valid and consistent national freshwater monitoring programme for New Zealand.

National and regional water quality data is also used to report on the state of water quality from plantation forests. It is important then to ensure that the water quality monitoring sites and the water quality information collected on plantation forests is a fair representation of the planted forest estate in New Zealand.

The purpose of this project was to evaluate the representativeness and robustness of water quality monitoring sites in plantation forests. The evaluation also included an assessment of the suitability of water quality variables currently used to measure water quality for plantation forests. The outcome was to identify any shortfalls in the number and location of water quality monitoring sites and the water quality indicators used in reporting on forest plantations, and provide recommendations to promote the accuracy of reporting on water quality from plantation forests in New Zealand.

The first step was to compile a database of the location of the national and regional water quality monitoring sites used in SOE reporting, and a list of water quality variables measured at each site. Information was collected from a total of 856 national and regional water quality monitoring sites across New Zealand. Regional information was not available for Canterbury. Based on the Rivers Environment Classification (REC) plantation forests were the dominant land cover for 38 of these sites. This equates to 5% of the total number of water quality monitoring sites slightly lower than the land area in plantation forests (7%). While plantation forests were the dominant land cover in these catchments, factors such as other land uses, discharges from processing facilities and restricted access at some sites limiting sampling to more accessible locations several kilometres below the boundary of the forest, reduced the number of sites accurately reflecting water quality from plantation forests. A closer examination of the 38 water quality monitoring sites in plantation forest indicated that the number of sites suitable for representing and reporting on water quality from plantation forests may be closer to 25.

The density of water quality monitoring sites in plantation forests averaged one site for every 48 450 hectares, compared with the national average across all land covers of one site for every 27 213 hectares. Plantation forests were under-represented in most regional water quality monitoring programmes, particularly those that contained most of the plantation forest estate. The exceptions were the Auckland, Nelson and Tasman regions. A desktop exercise indicated that additional sites were potentially available across New Zealand to capture both the spatial and temporal variation inherent in plantation forests and improve national representativeness. However, many of the suitable locations for monitoring water quality from plantation forests are often in smaller, less accessible catchments, requiring additional travel and cost to measure.

An upgrade of the land cover database used in REC is currently underway with Landcare Research and will improve the accuracy of this tool as it is currently around 10 years out of date. However, as this review has shown, while REC is a good first cut at classify all water quality sites within a monitoring network into a dominant land cover, due to complex land use patterns only a percentage of these sites will be suitable for comparing water quality between different land uses.

If forest growers want to improve the representativeness of plantation forests in SOE reporting there is the opportunity to work alongside MfE and the district and regional councils during Phase II of the NEMaR project, to ensure that plantation forests are adequately represented in the review and that the sites and variables used to measure water quality are pertinent to plantation forestry.

This review showed that approximately 60 different water quality variables were being measured by regional monitoring networks, including 13 variables of nitrogen. Plantation forests differ from other land uses in that the cyclic nature of this land use can result in marked changes to some water quality variables during the forestry cycle. We identified a core set of 13 water quality variables suitable for monitoring spatial and temporal variability in plantation forests streams and for comparison between land uses. Most were being measured by councils and as part of the national water quality monitoring network. The exception was suspended sediment which wasn't measured by some councils, neither is it part of the current national monitoring programme and has not been identified as a core variable in Phase I of the NEMaR project. Suspended sediment is an importance water quality variable across all land uses and we recommend further discussion in Phase II of the NEMaR project, on the inclusion of this variable as a core indicator in New Zealand's future national water quality monitoring network.

The main recommendations in this report support the concept of a robust, standardised national water quality monitoring system for New Zealand, based on a core set of water quality variables.

More specifically, as part of the national network design, it would be beneficial to undertake an exercise to determine the minimum number of sites required nationally in plantation forests to capture the spatial and temporal variability of water quality in plantation forests for statistically valid analysis.

A robust, standardised, publically available national water quality monitoring programme would be advantageous to forest growers. Along with the direct benefits of consistent and accurate reporting on water quality from plantation forests, indirectly the information could be used for a range of other purposes including Montreal Process and FSC (Forest Stewardship Council) reporting, water quality modelling, valuing ecosystem services from forests and water footprinting of forest products.