

## **SUBMISSION TO THE MINISTRY FOR THE ENVIRONMENT**

### **ESSENTIAL FRESHWATER – ACTION FOR HEALTHY WATERWAYS**

#### **Introduction**

1. Environment Canterbury appreciates the opportunity to comment on the latest programme of initiatives for freshwater management in New Zealand set out in the *Action for healthy waterways* discussion document.
2. This submission is presented in relation to Environment Canterbury's roles, functions and responsibilities under the Resource Management Act 1991 (RMA) and the Local Government Act 2002 (LGA).

#### **Summary**

3. Feedback has been sought on
  - initiatives for freshwater management in New Zealand set out in the *Action for healthy waterways* discussion document,
  - the draft National Policy Statement for Freshwater management,
  - the draft National Environmental Standard: Freshwater,
  - the proposed updates to S360 stock exclusion regulation.
4. Environment Canterbury supports Government's ongoing reform of freshwater management in New Zealand and welcomes the latest announcement of initiatives.
5. In Canterbury, freshwater management is coordinated through the Canterbury Water Management Strategy (CWMS). We have established ten zone committees to reach consensus on water management within their zones. We also have a schedule of sub-region planning processes under the Progressive Implementation Programme to implement the NPS-FM and its amendments. These are already well advanced. Our region-wide planning framework is in place, supplemented by catchment-specific planning frameworks in place for most zones.
6. We support the main objectives to: stop further degradation of waterways and start making immediate improvements so that water quality is improving within 5 years, and to reverse past damage and bring waterways and ecosystems to a healthy state within a generation.
7. There are significant costs to councils, communities and individuals in meeting these objectives that are yet to be quantified. The 5-year aspirational timeframe will need to be weighed against these costs. We agree that there are also capability and capacity issues across all sectors – industry, government and iwi – which may limit the ability for these sectors to respond within these timeframes, particularly given the need for every council to meet the requirements.

8. In this submission, we highlight areas where further clarity is needed to understand the implications for freshwater management in the Canterbury region. This is predominantly regarding: the key attributes, specifically the Dissolved Inorganic Nitrogen (DIN) and Dissolved Reactive Phosphorus (DRP) attributes, the freshwater planning process, timelines and collaboration and, stock exclusion and farm planning. In highlighting these areas, we have proposed suggestions that could reduce the impact of unanticipated consequences.

### **Te Mana o te Wai**

9. We support, in principle, establishing the hierarchy of obligations under Te Mana o te Wai and the general intent to prioritise the health and well-being of waterbodies and freshwater ecosystems. However, we note this may have implications for consenting activities for other uses. For example, imposing higher minimum flows to achieve mahinga kai outcomes may impact on the ability of some territorial authorities to supply water for human health needs.
10. We support Proposal 1 of the two proposals for strengthening Māori values including mahinga kai as a compulsory value to be considered in limit-setting processes. We also support providing for local expression of the concept of Te Mana o Te Wai, and the development of a monitoring framework that incorporates mātauranga Māori.

### **Ecosystem health and human contact attributes**

11. We support the need to maintain or improve water quality and ecosystem health. However, for some catchments where water quality improvements are required, implementation and changing current practice will take time and in some cases may not be achieved within a generation.
12. We support **current** attributes requiring limits:
- Lakes: phytoplankton; total nitrogen; total phosphorus; and cyanobacteria
  - Rivers: periphyton; ammonia toxicity; dissolved oxygen (point source); *E. coli* (all year round); and cyanobacteria.
13. We support the proposal that councils be required to implement action plans to drive improvements where attributes are declining or are below national bottom lines. We support this approach as it reflects that there may be a wide range of reasons for a deterioration, and the variety and specificity of actions that might be taken will depend on the catchment and situation. We suggest these action plans sit outside any planning framework to provide flexibility for updates to plans based on progress towards monitored outcomes. We suggest there needs to be greater clarity regarding the definition and composition of action plans and how councils will be held to account for them.
14. We support **new** attributes, national bottom lines and requirements for action plans including for:

- Macroinvertebrates with three measures (noting that the national bottom line for MCI has increased)
  - Fish monitoring (noting that this imposes a new monitoring requirement on councils, requiring additional resources)
  - Submerged plants
  - Deposited fine sediment
  - Dissolved oxygen - seven-day continuous monitoring at least once during summer
  - Ecosystem metabolism
  - *E. coli* at primary contact recreation sites (noting that the timing of the bathing season differs around the country and should be set by councils).
15. We have particular concerns about the new nutrient attributes requiring limits to be set to manage eutrophication (Dissolved Inorganic Nitrogen – DIN and Dissolved Reactive Phosphorus – DRP). We question the science underpinning the setting of national bottom lines for DIN and DRP based on separate correlation of these attributes with ecosystem health measures such as Macroinvertebrate Community Index (MCI). The scientific evidence we have seen points to eutrophication and MCI being driven by multiple factors, including flow regime, nutrient concentration and physical habitat. The ways that these factors interact are catchment specific and do not easily lend themselves to national attribute states.
16. We acknowledge that eutrophication is an ecosystem health driver that needs to be managed. In Canterbury’s alpine and hill-fed river systems eutrophication can be seen in periphyton growth where the dissolved nutrients directly affect the amount of periphyton growth. For this reason, nearly all DIN limits set in our hill-fed and alpine rivers have been well under 1 mg/L.
17. In Canterbury’s spring-fed streams (i.e. fed from groundwater) eutrophication is dominated by plants rooted in the streambed and banks. In this case plants can obtain nutrients (nitrogen and phosphorus) from the sediment. Drastically reducing dissolved nutrients in the water column may have very little impact on overall eutrophication. In these cases, we have concentrated on limiting sediment inputs and using shade and other aspects of physical habitat to improve ecosystem health.
18. This difference in eutrophication response between river types highlights the difficulty in setting national limits for single attributes in ecosystems that vary considerably across the country.
19. In recognising the need to manage eutrophication effects we suggest two alternative approaches to manage DIN:
- Keep the current attribute structure but include an exception for spring-fed systems where nitrogen is managed via the nitrate toxicity attribute. Or:
  - Move the DIN attribute from a limit-setting attribute to an action plan attribute with clear direction that for spring-fed systems the action plan needs drive overall improvements in ecosystem health rather than drive reductions in DIN.

20. We see similar difficulties for setting DRP limits using national attribute states when we know there are natural variations around the country. In Canterbury we see DRP concentrations above the suggested national bottom line in catchments with volcanic geology (e.g. Banks Peninsula and Timaru volcanics).
21. We note that under the provisions for exceptions for naturally occurring processes (part 3.23) an improved attribute state is still required (“to the extent feasible given the natural processes”). It is extremely difficult to ascertain the “extent feasible” and therefore we suggest that under the “exception for naturally occurring processes” it is amended to “maintain or improve” rather than solely improve.
22. We support the inclusion of an attribute for suspended fine sediment but note that turbidity as a proxy for suspended fine sediment has several difficulties, notably:
  - The measurement of turbidity is sensitive to the type of instrument used and therefore national attribute states could be breached through instrument changes as well as land management practices.
  - The natural colour of water can influence turbidity, in addition to the amount of suspended fine sediment.
  - We also note that table 10 (the suspended fine sediment attribute) does not specify the statistic used. In the background documentation it is “site median”, which we support.
23. We support the inclusion of the lake attributes (table 20 and 21) as we recognise dissolved oxygen as a key component of lake ecosystem health. However, we suggest there should be further information provided on how lakes should be considered in a freshwater management unit (FMU) context. As written at present the monitoring of the attributes in tables 20 and 21 could add considerable cost where there are multiple lakes within an FMU.
24. While we support the inclusion of the human contact attributes we do not support the mandatory improvement of these attributes (part 3.9 (2)). Where there is very good water quality for human contact (e.g. the risk of infection is less than 0.1%; the A band) it is difficult to imagine what steps could be taken to improve the quality, let alone the need for it.
25. In the proposed ecosystem metabolism attribute table and in policy 3.14 there is reference to detection of deteriorating trends. We ask that Government support is given to research around disentangling long-term climate signals (e.g. climate oscillations) from management actions in trend analysis. This will allow greater confidence in setting action plans when declining trends are found.
26. As a general note we have observed that as the national objectives framework has become more prescriptive it becomes more difficult to match it within an FMU context. An example is the suspended and deposited fine sediment attributes which are split into classes based on the River Environment Classification (REC). This lends itself to setting limits by river type rather than FMUs with multiple river types. We ask for further guidance on how to treat different river types within FMUs.

### **Freshwater Planning process**

27. We support the Government's new freshwater planning process anticipated through the Resource Management Amendment Bill and welcome the proposed support from the Ministry for the Environment to update existing plans and work-in-progress to include requirements of the new NPS-FM.
28. We support restrictions on appeals on decisions on freshwater plans and a mixed model for the appointment of hearing panels – a mix of government, local and tangata whenua appointments. We suggest that elected councillors are not appointed to freshwater panels to provide for greater independence in the process.
29. We also support appeals only being available to the Environment Court where a council does not adopt a recommendation of a freshwater hearing panel. This would encourage community participation at the front-end of the process and avoid costly *de novo* hearings on matters that have already been debated. We also support allowing appeals to the High Court only on points of law.
30. We propose that the new planning process apply to all plans (not just freshwater). In practice it is difficult to ring-fence freshwater issues. Doing so could lead to less integration. For example, near the interface with the coastal environment it would be difficult to compartmentalise freshwater matters.

### **Timelines and Collaboration**

31. In general, we support the requirements to implement the NPS-FM 'as soon as reasonably practicable' but not the requirements to notify decisions on freshwater plans by 2025. We note throughout the discussion document an emphasis on 'urgency' but at the same time a recognition of the costs, the need for investment and the need to build capability and capacity to deliver in both the short term and long term. The need for urgency must be tempered by recognising that long term commitment to freshwater management happens through behaviour change gained through early and on-going community participation in the plan-making process. We propose that longer timeframes are needed to support a more collaborative approach which achieve actual on-the-ground actions at a local level. Compressed timeframes may result in poorer outcomes, affected by reduced community engagement or buy-in and fewer opportunities for regional councils to pilot or trial solutions with communities.
32. We request that more time is provided to councils already implementing the current NPS-FM. We propose that where a council has a freshwater plan in place, timeframes are allowed to be extended until plans are due for review.

### **NES-FM and Stock Exclusion regulation**

33. We support, in general, the new rules and timings for stock exclusion and setbacks from waterbodies.

34. We request that the stock exclusion regulations specify the effect of these regulations on existing resource consents, and whether councils can include rules in their regional plans that are more restrictive than the regulations. Our operative Land and Water Regional Plan (LWRP) includes rules to exclude livestock from waterways that are more restrictive than the regulations. We feel this is necessary and appropriate to ensure cultural, social and ecological outcomes are achieved, and the health of communities is protected. We would also note that these more restrictive rules have been tested in public hearings and recommended by an independent hearings panel.
35. We support Clause 31 of the NES Freshwater which states that the 'intensification' rules do not apply where a council has developed a freshwater plan that fully implements the NPS-FM 2014 (as amended 2017) which includes rules to limit intensification.
36. We support the new rules for stockholding. However, where there is infrastructure in place that meets an existing regulatory standard, we suggest it is not reasonable or justifiable from an effects perspective to require movement back 50m from waterways given the design of the structure or the mitigation employed may be sufficient to limit environmental effects. This requirement should be set for new stockholding areas but should not apply to existing infrastructure.
37. We support the 'exemptions' and 'extensions' referred to in the stock exclusion regulations. The stock exclusion regulations provide an opportunity for farmers to seek an exemption from the stock exclusion requirements or an extension to the phase-in timeframes. But it is unclear what form these requests will take, which agency will receive and process the applications, and what matters may be taken into account when deciding whether to grant the application. These matters need to be clarified.

### **Farm Practice Improvements, Farm Plans**

38. We support in general, the management of the effects of farm practices via audited Farm Plans (FPs). This is largely consistent with the LWRP where our approach has been to require audited FPs for high risk farms via consent. We believe this is an approach worth adopting nation-wide. Because our own audited Farm Environment Plans (FEPs) are required by resource consent, maintaining a 'passing grade' is a condition of the consent, so we have the regulatory mechanism that allows us to take compliance/enforcement actions through the consent if an audit is failed.
39. We seek clarity on the repercussions of a failed Farm Plan audit. We suggest that 'passing' an FP audit should be a requirement. The NES proposes that it is merely necessary to have an audit completed and to inform the council of the result. It is unclear what regional councils are meant to do with that information as passing is not a requirement.
40. We support the direction to require FPs to be certified by an approved farm environment planner and support also the requirement for FPs to be audited by an approved auditor. We note and support the need for a step up in investment nationally



to build on-farm advisory capability and capacity in the preparation of nutrient budgets, preparation of farm plans and auditing.

41. We agree that over time, farm audit programmes should not be driven by regional councils and regulation but by market and consumer demands for higher environmental standards managed by industry alongside certified quality assurance providers with the regulatory regime as a back stop.
42. We support the inclusion of offal pits and farm dumps as potentially hazardous sites requiring risk assessment in FPs. However, we have concerns over the inclusion of Hazardous Activity and Industries List (HAIL) information in farm plans. HAIL identifies hazardous activities and industry that may lead to contaminated land but is not a record of contaminated land. We are concerned that HAIL information will be taken directly from HAIL registers held by councils and farmers will be required to carry out risk assessments when there has been no confirmation of contamination.

### **Wetlands and Streams**

43. We support strengthened protection for wetlands, streams and indigenous ecosystems including fish passage.
44. The Environment Canterbury experience of working on wetland protection points to having tight and consistent definitions of wetlands.
45. We seek a more enabling framework for activities related to the enhancement of wetlands. Additional regulatory requirement is likely to discourage people from undertaking enhancement activities such as earthworks and vegetation clearance, and redirect investment into getting consent rather than doing the enhancement.

### **Other Matters**

46. We support the inclusion of threatened ecosystems and mahinga kai values as compulsory values that should be considered in limit-setting processes.
47. We support the recognition of renewable energy targets. This should be amended to allow targets to be set below national bottom lines only where current water quality is below a national bottom line. The NPS-FM allows for setting of target attribute states below national bottom lines if a waterbody is impacted by a hydro scheme. It should be clear that the ability to set these below national bottom lines can only occur if the waterbody is currently below the national bottom line.
48. We support in principle the use of offsetting for urban waterways. However, piping a waterway and offsetting effects by enhancing another waterway could result in localised degradation and/or have significant adverse cultural impacts – for example, how appropriate is it for the mauri of a waterway to be impacted in one location and offset by enhancements in another location?

49. We support in principle the thresholds for winter grazing and suggest a more conservative limit is appropriate given this is a permitted activity rule.

50. We suggest that improvements that could be made to the drafting of documents including:

- Alignment with other planning documents (e.g. National Planning Standards),
- Clear connection between objectives and policies
- Limit ambiguity, particularly around definitions.
- Limit subjectivity – particularly around rules to assist enforcement. For example, the winter grazing rules 'resow paddocks as soon as practicable', rules relating to the infilling of riverbeds include entry conditions that require subjective assessments regarding the practicality of alternative methods.