In the matter of	the Resource Management Act 1991			
and in the matter	An inquiry pursuant to Schedule 1 RMA into the provisions of the proposed One Plan notified by Horizons Regional Council.			

## INTRODUCTORY SUBMISSIONS FOR HORIZONS REGIONAL COUNCIL



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- 1. Today is the start of your inquiry into the water related chapters of the proposed One Plan. The chapters under consideration address two of the 'big four' environmental issues identified by the community through its regional council, Horizons Regional Council. This hearing will consider the chapters in Part 1 (the proposed RPS) and Part II (the Regional Plans) in POP that provide a planning framework for the management of activities under sections 9, 13, 14 and 15 RMA. In other words:
  - (a) Managing activities that affect the beds of rivers and lakes.
  - (b) Managing activities that involve the take, use or diversion of water.
  - (c) Managing land use and discharges that affect water quality.
- 2. POP is a composite planning instrument and therefore enables a coherent strategy to be implemented to achieve the overarching purpose of the Act of sustainable management. This strong vertical integration between the regional planning instruments is now a model nationally. For example, the unitary Marlborough District Council initially proposed in its review process the review of the RPS as the first step but is now proposing a combined RPS, Regional Plans and District Plan.
- 3. At the outset it is important to acknowledge the extraordinary efforts that have been made by council officers and consultants to present you with a mosaic of evidence that collectively satisfies Horizons Regional Council officers that the planning framework proposed in POP (as amended by supplementary evidence) contains objectives that achieve the purpose of the RMA and policies and rules that implement efficiently these objectives in a manner that best achieves the purpose of the RMA. Special mention is of Dr

Roygard who has coordinated the provision of reliable science that is the foundation for the planning framework. Helen Marr has managed the coordination of experts so that a robust evidential basis for the planning framework is established. Clare Barton has courageously stepped into the role of reporting planner in the latter stages of this process in respect of all chapters except that relating to beds of rivers and lakes which has been dealt with by Natasha James.

- 4. Plan making under the RMA is *par excellence* an inquisitorial process. It is a process for decision makers to inquire into and decide on the most appropriate regulatory framework. HRC's witnesses have been briefed on the basis that their role is to assist you in that function and it is hoped that the culture of the hearing from all participants is one directed at the earnest pursuit of sustainable management. Witnesses have been instructed to acknowledge that their evidence is given in accordance with the Environment Court Practice Note and that the obligations contained therein are owed to the Hearing Panel. In accordance with the directions of the chairperson, witnesses will reiterate their executive summary and/or identify key elements in their evidence or supplementary evidence where appropriate.
- 5. Helen Marr and her team have been, and continue to work assiduously to resolve issues with submitters. Plan making is an iterative process. HRC has always been, and remains willing to engage with submitters of goodwill interested in the sustainable management of the natural and physical resources of the region. If HRC considers discussion will lead to agreed changes HRC have indicated it, in all other cases any agreements are unlikely. The evidence in relation to the water hearings is of considerable breadth and scope. To some extent it is an avalanche of evidence. In these

submissions the 'major issues' are identified. There are eleven (11) and most of them relate to water quality. It will be expected that these major issues will be the focus of your inquiry and deliberations and are unlikely to be resolved by discussions.

- 6. In the *Long Bay-Okura Great-Park Society Incorporated v. North Shore City Council*<sup>1</sup>, Jackson ECJ identified the task of resource management as essentially involving four steps. These steps can be paraphrased as follows:
  - (a) Fact finding concerning the resources' (natural and physical) for example, physical boundaries of catchments and sub-catchments, biophysical functioning and ecosystemic health as well as data on activities and their historical impacts on the environment.
  - (b) Identifying the relevant law.
  - (c) Making risk predictions involving an assessment of the probabilities of adverse effects and their consequences.
  - (d) Making an overall assessment of the regulatory framework that best achieves the statutory imperative of sustainable management.
- 7. The evidence of HRC's and submitter's technical experts is largely devoted to steps (a) and (c). The evaluative evidence concerns step (d). The relevant law in this case does not appear to be a subject of dispute but additional assistance will be provided to the extent any issues are identified in the course of submissions on behalf of submitters.

<sup>&</sup>lt;sup>1</sup> EnvC A 0878-2008 (16 July 2008) JWM-030235-24-560-V2:LGS

- 8. Obtaining sufficiently detailed information to complete step (a) above has been a substantial task in its own right. You will appreciate that the Horizons region spans three major catchments and within these catchments, because of their size, there are many sub-catchments and reaches of diverse character and quality. Horizons has established water management zones (44) and sub-zones (117) as the essential planning units for management of surface water quality and allocation. These zones and sub-zones are based on a combination of factors including:
  - (a) Natural catchment boundaries.
  - (b) Geology.
  - (c) Monitoring information.
  - (d) Existing water quality.
  - (e) Patterns of human activity.<sup>2</sup>
- 9. This spatial framework is more finely grained than in previous plans and enables a more effective, focused and regionally relevant water management regime.
- 10. Each water management sub-zone is assigned values. These values apply to all bodies within the water management sub-zone except where they are identified to reach specific values. There are 22 values in total. The values are the foundation for management objectives for each water management sub-zone and inform the regulatory framework for land use, water guality

<sup>&</sup>lt;sup>2</sup> See Roygard SOE Box 1 para 24 and the Technical Report McArthur K Roygard J at, Ausseil A and Clark M (2007) "development of water management zones in the Manawatu-Wanganui Region". JWM-030235-24-560-V2:LGS

and allocation. The water body values taxonomy is dealt with in the very comprehensive evidence of Mrs McArthur.

- 11. Based on the values for each water body, POP sets (in Schedule D) numerical standards based on 11 water quality parameters. The framework is different from past frameworks in providing more specific parameters of water quality necessary to achieve the assigned values. It also sets some parameters not previously used such as SIN concentrations to manage periphyton biomass at a level consistent with the assigned values.
- 12. The values assigned to each water body were not derived from a desktop exercise. They represent the product of significant field work, monitoring data sets, institutional knowledge and consultation and community input. In large part the values are not contested, nor is the science behind the water quality parameters necessary to fully achieve these values. What are more often contested are the standards applicable to water bodies that presently do not achieve the requisite standards. The arguments in essence concern:
  - (a) The practical achievability of those standards.
  - (b) The rates of change in land use and discharge activities that is required and the consequences.
  - (c) The benefits and costs of achieving those standards.
- 13. These concerns bring in to focus the way in which the policies, rules and standards function together in POP. The standards are not rules. Rules may not be broken. The standards are part of the policy toolbox based on 'goal based' planning. The overall policy framework is described in policies 6-3, 6-

4 and 6-5. Goal based planning is the essence of the RMA. As Hammond J said in *TV3 Networks Limited v. Waikato District Council*:

"But now, planning theory has come to recognise that 'goal formation is not only the most important, but also the most neglected part of the planning process" (Chadwick, *a Systems View of Planning*) (124).

- 14. The standards essentially perform three functions:
  - (a) To provide a measurable framework for assessing progress in maintaining water quality where standards are already met and in achieving better water quality where the standards are not met. Without a meaningful and measureable framework, progress towards ones goal is not achievable (see Anticipated Environmental Results section 6.6 POP).
  - (b) A standard for permitted activities which, if breached, triggers another activity classification.
  - (c) A policy tool for assessing activities where a discretion exists so that decision makers have clear guidance that where the water quality standards are already met, the activities will be managed to ensure they continue to be met and where the water quality standards are not met, then they will be achieved over the life of the plan (20 years). In relation to particular activities that exceed those standards there are specific policies hence which the activity will be assessed. For example, policies 6-8, 6-9 and 6-10 for point source discharges. These policies collectively allow decisions on discharges to be made on a case by case basis taking into account the particular

circumstances of the discharge to the river that provides strong guidance about whether or when a discharge can be considered to be consistent with sustainable management.

- 15. In accordance with directions and memoranda from the overall plan hearings, HRC has:
  - (a) Set specific objectives for regional plan chapters in Part (II) that relate back to Part (I).
  - (b) Transferred some policies formerly in Part (I) to Part (II) because they were more closely related to the assessment of resource consents.
  - (c) Ceased to refer to some schedules (e.g. Schedule B surface water quantity) in Part (I) as this would prevent a private plan change. This does not apply to Schedule D as it is part of the goal based framework and therefore appropriately located in Part (I).
  - (d) Included Schedule H concerning the Coastal Marine Area in the provisions for consideration in this water hearing.
  - (e) Providing economic evidence on the impact of rule 13-1.
- 16. Barry Gilliland has in his statement of evidence, described the history of steps taken to improve water quality in the Horizons region since the 1970's. This has been an incremental process and while many of the manifestations of poor water quality described in section 107 RMA, have been remedied, it remains the case that there has been an ongoing decline in water quality in some catchments. The Manawatu River is one of the most polluted waterways in New Zealand. Dr Roger Young, a freshwater ecologist, in his statement states that using an ecosystem metabolism methodology, the

results for the Manawatu River for rates of gross primary productivity (GPP) and ecosystem respiration (ERM) are of the highest ever reported internationally and well above the thresholds considered to represent the transition from satisfactory to poor ecosystemic health<sup>3</sup>. You should be under no illusion that the state of the Manawatu River is recognised as an unacceptable state of affairs nationally and regionally.

- 17. More detailed analysis by eminent scientists including Drs Clothier, Biggs, Wilcock and Quinn demonstrate the link between intensive farming activity and the eutrophic status of waterways which in turn directly affects periphyton biomass. As a result of their science (and that of their associated CRI's) and robust modelling using the Overseer model, it is possible to establish the contribution of intensive farming to elevated nitrogen in water bodies through nitrogen loss. Leaching of course is the pathway of nitrogen loss. You will be aware from the evidence that soil particles do not hold onto the nitrate very well because they are both negatively charged. As a result nitrate easily moves with water in the soil. The rate of leaching depends on soil drainage, rainfall, amount of nitrate present in the soil and crop uptake.
- POP proposed controlling nitrogen loss from intensive agricultural land uses by:
  - (a) Specifying maximum nitrogen loss values for all new intensive agricultural land uses in all water management zones.
  - (b) Phasing in maximum nitrogen leeching values for existing uses in specified water management zones.

<sup>&</sup>lt;sup>3</sup> See Dr Young SOE para 11 JWM-030235-24-560-V2:LGS

- 19. The nitrogen loss limits are assessed based on the natural capital of the soil. The natural capital of the soil is assessed using the land use capability classification system. The science behind the use of the LUC as a method of determining appropriate nitrogen loss limits is that the more elite soils have a greater ability to retain the nutrient. Dr McKay sets out the science behind this approach and believes such an approach provides for the most effective and efficient outcomes in terms of land use and economic vitality for the region.
- 20. The need to address nitrates from agricultural sources is a worldwide phenomenon and a regulatory response is not unique to the Horizons Region.
- 21. The European Union Council Directives 91/676/EEC from 2001 requires member states to legislate and regulate in accordance with the directives within the following two years. These Directives identify nitrates from agricultural sources as a main cause of pollution of the community's waters. The preamble to the directives identifies:

"It is therefore necessary, in order to protect human health and living resources and aquatic ecosystems and to safeguard other legitimate uses of water, to reduce water pollution caused or induced by nitrates from agricultural sources and to prevent further such pollution; whereas for this purpose it is important to take measures concerning the storage and the application on land of all nitrogen compounds and concerning certain land management practices."

- 22. Furthermore, in 2000 the EC adopted the Water Framework Directive. This directive acts as an umbrella for a number of related directives, and its main goal is that all European water bodies should achieve "good ecological status" by 2015<sup>4</sup>.
- 23. Manitoba in Canada has recently instigated a natural capital approach to land use and management. The key driver for a natural capital approach in state of Manitoba is the highly eutrophic state of Lake Winnipeg. It is choking on excessive algae growth, caused by high phosphorous and nitrogen loads. Lake Winnipeg is the most eutrophic of the world's largest freshwater lakes.

"Addressing the eutrophication of Lake Winnipeg is a unique challenge that could be realised by preserving and restoring environmental assets at the watershed scale. Similar to a death by a thousand cuts, Lake Winnipeg's water quality is being degraded by a multitude of human activities influencing water and nutrient flows on its enormous (approximately 950,000 km2) multi-jurisdictional Due to the landscape processes of its watershed, watershed. nonpoint sources account for approximately 75 to 90 per cent of the nutrient loads that make their way into the Lake... In contrast, Lake Erie, which was declared a "dead lake" in the 1960s and 1970s, has a watershed approximately on 12<sup>th</sup> the size of the Lake Winnipeg Watershed with nutrient loads dominated by point sources as opposed to nonpoint sources were largely responsible for its Preventing the further degradation of Lake eutrophication...

<sup>&</sup>lt;sup>4</sup> European Council, Directive 2000/60/EC if the European Parliament and of the Council of 23 October 2000, *EC Official Journal*, (OJ I 327), 72 pp. JWM-030235-24-560-V2:LGS

Winnipeg will require novel approaches to influence landscape processes and mitigate nonpoint nutrient loading.<sup>5</sup>"

24. The restoration agenda for the Winnipeg Watershed requires co-optimization of agricultural and 'ecosystem services' production.

"Finding the right balance between human altered landscapes such as agricultural land and natural environments such as riparian areas, wetlands and forests can lower nutrient loads into water bodies and attenuate climate change thus ensuring the long-term viability of local livelihoods.<sup>6</sup>

- 25. Rather than set a nitrate loss limit, Manitoba regulations set a limit on the residual soil nitrate, or nitrogen limits within the top 60cm of soil. In determining the limit they use a soil classification system (Canada Land Inventory, "CLI") similar to the Land Use Capability classes but with 7 classes (and a few sub-classes). The land inventory classes are then categorised into 5 zones. Part 3 of the regulations provides limits for the levels of nutrient in each of the zones.
- 26. The practical implementation of a nutrient's leaching limits in POP is in table 13.1 and 13.2 as well as rule 13-1. As a result of a legal review several weeks ago, Mrs Barton and I have agreed on amendments to table 13.1 and table 13.2 so that they better relate to rule 13-1. There have also been amendments to rule 13-1 including the fact that completion of the Farm Strategy is no longer a performance condition. The Farm Strategy has been the primary tool used by Horizons for the voluntary implementation of nutrient budgets and for farm testing purposes. It remains a useful tool for

<sup>&</sup>lt;sup>5</sup> Voora, V and Venema, H. An Ecosystem Services Assessment of the Lake Winnipeg Watershed. International Institute for Sustainable Development, <u>www.iisd.org</u>. Page 6

farmers to understand the primary causes for nitrogen leaching and how best farm management practices can minimise nitrogen leaching. Nevertheless, the requirement to complete a Farm Strategy in Rule 13-1 as notified is not really a performance standard within the meaning of the RMA but would be usefully expressed as an information requirement.

27. Set out in the table below are the major matters of contention. To qualify, the issue needs to be a substantial one on which there is a body of technical evidence.

Торіс	Submitter	Matter in contention	HRC Witnesses
BRL.	Department	Under POP, HRC is permitted to	James Lambie and
	of	carry out river management and	Allan Cook.
	Conservation	flood protection works provided	
	and Fish and	HRC meets the relevant Code of	
	Game New	Practice. The submitters	
	Zealand.	consider that such work has	
		potential for significant effects	
		on river morphology and	
		consequently habitat and that	
		the Code of Practice is not	
		sufficient to address all potential	
		effects.	
Allocation/use	Federated	The submitter contends that	Jon Roygard and
(chapter 15).	Farmers and	takes permitted by section	Clare Barton
	Fonterra NZ	14(3)(b) confer statutory	
	Limited.	entitlements that may not be	
		circumscribed by plans. POP	
		provides a measureable	

## **Major Areas of Contention**

<sup>&</sup>lt;sup>6</sup> Voora, V and Venema, H. An Ecosystem Services Assessment of the Lake Winnipeg Watershed. International Institute for Sustainable Development, <u>www.lisd.org</u>. Page 9. JWM-030235-24-560-V2:LGS

Торіс	Submitter	Matter in contention	HRC Witnesses
		standard as to what constitutes	
		reasonable consumption without	
		having (in combination with	
		other permitted takes) potential	
		adverse effects.	
Use/Allocation	Genesis	The contention of the submitters	Jon Roygard and
(chapter 6 and	Energy Ltd,	is that the policy framework is	Clare Barton
15).	Mighty River	insufficiently enabling of new	
	Power Ltd	development and fails to provide	
	and Meridian	sufficient policy support for the	
	Energy Ltd.	consenting of existing	
		developments and thereby pays	
		insufficient regard to the	
		benefits of renewable energy.	
Use/Allocation	Genesis	The submitters contend that the	Jon Roygard and
(chapter 6 &	Energy Ltd,	common catchment expiry date	Barry Gilliland (in
15).	Mighty River	should not apply to large	relation to
	Power Ltd	developments that require long	evidence given in
	and Meridian	term consents to justify capital	the General
	Energy Ltd.	expenditure associated with the	Hearing).
		maintenance and development	
		of renewable energy projects.	
Use/Allocation	TA Collective.	The water efficiency	Gordon Stewart.
(chapter 6 &		requirements on townships	
15).		including in periods of low flow	
		are too onerous.	
Water quality	Fonterra NZ	The degree of ongoing decline in	Jon Roygard, Kate
(chapter 6 &	Ltd.	water quality and therefore the	McArthur, Dr
13).		risk of ongoing water quality	Graham Macbride
		decline associated with intensive	and Dr Barry

Торіс	Submitter	Matter in contention	HRC Witnesses
		farming.	Biggs.
Water quality (chapter 6 & 13).	Fonterra NZ Ltd.	Questions regarding the causal connection between nutrient loading and farming systems and adverse effects associated	Kate McArthur and Drs Quinn, Biggs and Wilcock.
Water quality (chapters 6 & 13).	Fonterra NZ Ltd.	with periphyton growth. The submitter contends that there should be a longer lead in time for Rule 13-1 that the framework should initially provide for voluntary compliance that there should be a mix of the natural capital approach and a grand parenting arrangement for existing farmers.	Clare Barton.
Water quality.	TA Collective.	The TA Collective consider there should be no standards in the plan against which a proposal should be measured although there is a lack of detail in the relief requested.	Drs Biggs and Quinn, Kate McArthur and Clare Barton.

- 28. Concerning section 14(3) RMA, HRC's position is that any take or use of water caught by section 14(2) is prohibited unless section 14(3) applies. Section 14(3) authorises, amongst other things:
  - (a) The taking or use expressly allowed by a rule in a regional plan.
  - (b) Taking or use allowed by a resource consent.

- (c) Taking or use to which section 14(3)(b) applies.
- 29. There is a debate amongst people interested in water bodies in the region as to what section 14(3)(b) authorises. This is because section 14(3)(b) has two non-numerical qualifiers; 'reasonable' and 'not likely to have an adverse effect'. 'Effect' can include cumulative effects of activities in combination with other permitted activities. This uncertainty has two negative consequences. First it places the community in a position of uncertainty as to the application of section 14(3) and how the water allocation framework will be applied. Secondly, in the absence of an express rule authorising a take, any use beyond that justified in section 14(3) could result in enforcement action. HRC decided to provide an allowance for activities to which section 14(3)(b) applies. This provides greater certainty for farmers. It is accepted that the permitted activity rule cannot override the express provisions of section 14(3)(b). However, the allocation in HRC's rule is sufficient for it to be able to say that if there is evidence that the amount is exceeded, then enforcement action in the absence of an authorising consent may be warranted. The enactment of the rule does not preclude a defence under section 14(3)(b).
- 30. In relation to the contention the TA standards should be removed, it is considered that such an approach is inconsistent with the requirement for 'goal based' planning. HRC's caucusing with some individual TA managers indicates some uncertainty as to the function of the standards in the policy framework. These functions are clarified in these submissions and are consistent with the position articulated to TA's by Helen Marr. TA's are concerned that they will be asked to improve their wastewater systems too fast. The policy framework provides for incremental improvements. The rate

of improvements by TA's in their performance has not been optimal in the past. There remains room for improvement particularly in relation to land based disposal during periods of low flows when phosphorus is a limiting nutrient. The evidence of Mr Lowe shows that the levels of expenditure by districts in the region on wastewater are not high by national standards.

- 31. In relation to the policies and rules concerning nitrogen leaching limits, it is noted that Fonterra accepts the natural capital approach recommended by Dr Mckay for new farms. Fonterra challenges the date of introduction of nitrogen loss limits for existing farms and the rate of change required by the proposed regulatory regime. Fonterra also proposes in respect of existing farms, a 'grand parenting' approach to ensure undue hardship for individual farmers is avoided. Mr Willis, the planner for Fonterra New Zealand Limited has also proposed a policy (policy 13-2(b)) to ensure a decision maker is required to take into account when imposing conditions they need to maintain viability of farming operations that existed prior to the obligation to obtain land use consent. A policy of that nature is considered appropriate by HRC but not precisely in the form that Mr Willis proposes.
- 32. Fundamental areas of this disagreement include:
  - (a) The risk of ongoing decline in water quality.
  - (b) The effectiveness of the non-regulatory approach.
  - (c) The extent to which the proposed controls are too onerous.
- 33. In relation to the contention that rule 13-1 and tables 13.1 and 13.2 are unduly onerous, HRC considers that the standards are comparatively generous and will only seriously impact on the operations of approximately

20% of farmers and will not through the life of the plan get half way to achieving the standards identified for the relevant water bodies.

- 34. These submissions do not address the merits of the different approaches proposed by the respective planners other than to comment that Mr Willis' proposal contains so many gaps and exceptions that the collective impact of his rules and policies from a regulatory perspective is quite limited.
- 35. The question these submissions address is whether the 'voluntary approach' during a five year period from the date the plan becomes operative, is a 'method' for the purpose of the RMA available for your consideration as a means of implementing the relevant objectives and policies of POP. That is quite apart from other concerns including the fact that:
  - (a) Fonterra does not represent all industries covered by the relevant rules and policies let alone all dairy farmers.
  - (b) Fonterra is not independent. It is not an independent industry regulator such as the New Zealand Law Society. It is a farmer-owned and operated commercial enterprise.
- All of the above matters go to the efficiency and effectiveness of any proposals advanced by Fonterra.
- 37. The term 'method' is not defined in the RMA. In the Oxford English Dictionary the definition includes "procedure for attaining an object" or:

"A mode of procedure; a (defined or systematic) way of doing a thing in accordance with a particular theory or as associated with a particular person."

- 38. For a proposal to be a 'method' for the purposes of the RMA, it would appear that it must have at least the following:
  - (a) Clear objectives.
  - (b) An identifiable and enforceable plan of action.
  - (c) Mechanisms for achieving the objectives in a systematic fashion.
- None of these attributes appear to exist in respect of any voluntary arrangement suggested by Fonterra.
- 40. In addition it is considered that for something to be a method for the purpose of the RMA, it needs to be transparent and available for use by the regional council in the discharge of its functions. For example, an industry code of practice with sufficiently detailed standards could be used by the regional council as a basis for permitting an activity subject to compliance with that industry code. The regional council is using the code to discharge its functions and the code is expressly (and therefore transparently) referred to in the plan. Fonterra's proposed voluntary programme is not transparently presented by Fonterra and effectively precludes public participation in its analysis and assessment. In short there is no 'method' for the public to evaluate. In section 63(1) RMA the purpose of regional plans is defined as:

"The purpose of the preparation, implementation and administration of regional plans is to assist the regional council to carry out any of its functions in order to achieve the purpose of the Act." Regional plans may contain methods but they must, for the purpose of section 63(1) enable the <u>regional council</u> to carry out its functions. See also section 67 RMA and section 32 RMA.

- 41. It is accepted that alternative methods can include:
  - (a) Bylaws or other legal instruments available to the council.
  - (b) Funded programmes by the regional council under its other local government powers.
  - (c) Industry codes of practice as performance standards for activity classification.
- 42. A voluntary programme of the type Fonterra proposes is not a 'method' under the RMA and to treat it as such is to effectively exclude the public from the evaluation of its effectiveness and efficiency.
- 43. What Fonterra is asking for is no action as opposed to an alternative method. In that regard you are required to examine under section 32(4)(b) RMA the risk of acting or not acting. It would seem clear that the state of the upper Manawatu is so bad inaction is not a defensible option.