

To be read in conjunction with  
the tabled evidence/statement



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**HEARD BEFORE JUDGE D SHEPPARD (CHAIR), MR K PRIME, DR J  
HARDING AND MRS J VERNON, MEMBERS OF THE BOARD**

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**THURSDAY 27 AUGUST 2009**

**HELD AT THE SEBEL TRINITY WHARF TAURANGA, 51 DIVE CRESCENT,  
TAURANGA**

**HEARING OPENED [9.31 am]**

**APPEARANCES**

Mr E Grogan, Mr N Zaman and Mr M Butler, Environment Bay of Plenty

Mr W Catto and Mr N Sadlier, Balance Agri Nutrients Limited

Ms B Malcon and Ms K Watson, Trustpower Limited

Mr J Green and Mr D Atkinson, Lakes Water Quality Society

Audio file: dpm 0139

**CHAIR:** Good morning. Thank you. Please be seated.

**MR GROGAN:** Good morning Mr Chairman and members of the Board. I'm sure you've been welcomed to the Bay of Plenty already but I'll double up on that and welcome you to our beautiful Bay of Plenty and the stunning location you're in today. My name is Edward Thomas Grogan. I prefer to be called Eddie so if your happy with that. I'm the Group Manager of Water Management of the Bay of Plenty Regional Council. I have 27 years experience in water managing within the Regional Council Resource Management framework. I've only been at the Bay of Plenty Regional Council for two years but prior to that I spent 22 years at the Auckland Regional Council, and three years at the Taranaki Regional Council the predecessor with the Taranaki Catchment Commission. My involvement has primarily been with operational hands on delivery of water management.

Supporting me today is Martin Butler the Regional Planner and Martin has been with the Regional Council here for many years, and Nicholas Zaman who is the Senior Policy Analyst.

If I could diverge from my written statement, could I also introduce one of our Councillors, Councillor Andrew von Duderson (ph) who has popped in to keep an eye on us.

**CHAIR:** Good morning Councillor. It's good to see you here as well. Thank you.

**MR GROGAN:** Thank you for this opportunity to present our thoughts on the proposed National Policy Statement for Freshwater Management. Let me

begin by saying that the Bay of Plenty Regional Council's written submission is actually somewhat critical of the proposed NPS as currently drafted. However I want to stress that this is a critique of the detail rather than its intent. We support the concept of central government providing their guidance to assist local government with freshwater management strongly. However we are concerned that the NPS in its current form creates barriers to successful implementation. Nevertheless we remain hopeful that with amendment can be an effective tool for guiding and directing the management of freshwater in New Zealand.

With the Board's agreement I'd like to take our submission as read, and use this as an opportunity to highlight the key aspects of our written submission, and suggest remedies to problems we foresee in the present drafting.

Our key comments on the drafting of the NPS centre around three areas, the need for the NPS to be consistent with its parent - the Resource Management Act. The NPS lacks clear direction with regard to some of the key issues it is trying to address. For example water allocation and the integrated management of freshwater resources. In addition the objectives and policies of the NPS need to link to each other. The difficulties associated with implementing the NPS in its current form, it will not be possible for local government to implement the Freshwater National Policy Statement in a coordinated, practical and cost efficient manner.

I'll start with the concerns we have on consistency with the RMA framework, and then go on into more detail on the areas where we feel the NPS lacks clear direction and guidance. Lastly I'll talk you through some of the issues we foresee in implementing the NPS, so firstly inconsistency with the existing RMA framework. In our opinion the intent of an NPS

should be to promote the purpose of the RMA. It should not be used to change or redefine the legislation. The NPS introduces new terms, such as matters of national significant - or new definitions such as freshwater resources. In terms of terminology that has already been defined through RMA case law or in the RMA itself. These are noted in paragraphs three and four of our written submission.

Secondly specific areas of resource management concern - Bay of Plenty Regional Council has identified the following issues as being particular areas where we as a Regional Council think that an appropriately drafted NPS could provide benefit to local government. In particular water allocation, integrated management, wetlands, and Tangata Whenua issues.

Firstly looking at water allocation - as you may be aware the Bay of Plenty as a region has been blessed with abundant water resources, in terms of groundwater and surface water. However there is variability across the (inaudible) and some areas are at or near full allocation. For example the Kaiangaroa area to the east of Te Puke where land use change for kiwifruit orchards is placing increasing demands on groundwater resources. So although we are not experienced in the intense pressure on water allocation facing some regions, this is a growing focus of our work. The effects of water quality degradation - limiting water use also needs to be taken into consideration.

As written in it's current form the NPS does not provide any guidance on the issue of priority of allocation or direction as to whether the first come first served approach is still appropriate given the competing demands for water - such as power generation, pastoral irrigation, horticultural irrigation, domestic supply, recreation, ecosystem, support and so on. I note that the policy direction indicated in central government's New Start

for Freshwater points towards us moving away from the first come first served system of allocation - toward getting the best value use for water. And at this point Mr Chairman I have been advised that we didn't provide a copy of that reference for you, so I have a copy here that I make available to the -

**CHAIR:** Thank you.

**MR GROGAN:** This intent is not reflected in the NPS. Looking at integrated management, objective two of the proposed NPS is to ensure effective integrated management, including by the coordination and sequencing of land use development with investing in infrastructure for supplying, storage and distribution of freshwater, of the effects of land use development and discharges of contaminants on water quality and available quantity of freshwater.

The policy supporting this objective is Policy 1 (j). It requires us to encourage coordination sequence in the water supply infrastructure, and control adverse effects on policy and available quantity of freshwater resources. We think that this policy should consider additional matters that impact on freshwater resources for example more direction for the assessment and control of cumulative effects. The importance of the ephemeral or fresh streams into the ecosystem functioning as streams and rivers, and some consideration to the role that artificial water bodies play. These are currently excluded from the definition freshwater resources in the NPS.

In addition integrated management should have a wider focus and consideration of adverse effects on water quality and the quantity, land use development often results in the physical alteration of water bodies.

This has the potential to affect flood protection, cultural values, recreation and aesthetic values and ecological form and function.

I note that paragraph 14 of our submission criticised the emphasis the NPS placed on use of regulatory means. And I've also noted that Policy 7 of the proposed NPS clarifies (inaudible) of non-regulatory methods. I wish to confirm that we support the inclusion of such a policy and the flexibility it provides, and I've also included a wee example here where Environment Bay of Plenty is using non-regulatory methods such as (inaudible) approaches to reduce nutrient discharges from the Rotorua Lakes catchments. In this situation we're working closely with the land owners such as farmers and forestry operators - to put in place agreements such as memorandum of understanding and memorandum of encumbrance. That will improve nutrient management and reduce discharge of phosphorous and nitrates to the lakes.

Protection of wetlands is discussed in paragraphs (inaudible) of our submission. I won't reflect this here but instead would like to briefly highlight some of the issues we have identified regarding wetlands in our region, and how our current water and land plan seeks to protect and enhance these valuable areas. The vast majority of wetlands in Bay of Plenty have been lost due to land development. And it's estimated only about three % remain. Wetlands, as I'm sure you're aware, provide many important values and these values are still at risk from inappropriate use and development activities. In many cases this is due to lack of understanding or recognition of the high environmental and economic value of wetlands. Providing more direct references to wetland within the NPS would serve to recognise the importance of this resource.

Turning to Tangata Whenua issues, there are at least 147 recognised hapu in the Bay of Plenty region and approximately 43 iwi groups.

Objective eight seeks the involvement of iwi and hapu in the management of freshwater resources, and the Tangata Whenua values and interests are identified and reflected in this management. We have commented in detail in the implications of objective eight in paragraphs 29 to 35, and on Tangata Whenua values and interests in paragraphs 41 and 42 of our written submission. In summary the NPS should further define what is meant by Tangata Whenua values and interests, in particular whether this includes economic and social interests. Collating information on values and interests Tangata Whenua will be a resource hungry exercise, which should rightly be undertaken by iwi groups. However many will not have access to sufficient funding or resources to undertake this work. We recommend that central government should develop policies and funding methods to increase the ability of the iwi and hapu to participate in freshwater management.

[9.40 am]

Turning to implementing the NPS, implementation of the NPS will impose a range of additional costs on us, and other Regional Council's. These include the technical work required to support the interpretational policies - the policy work that will be required to translate national policies into the regional context changes to the Regional Policy Statement, and use of a schedule one process to incorporate Policy 1. And changes to the relevant Regional Plans also requiring use of a schedule one process - in our regions will then change us to four plans or possibly five if geothermal water is included.

The costs of implementation do not fall on the authors of the policy central government. This separation of authority and responsibility requires the authors to ensure that the NPS policies are clear, well thought through and readily defensible. Otherwise local government becomes the fall guy in

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an expensive and unproductive process, being required to implement and impose a policy that doesn't do the job it's intended to do, and receive strong objection from local communities. Our view is that the costs associated with implementing the NPS (inaudible) justifiable being both necessary and reasonable.

I will now give you some examples of requirements within the proposed NPS that cause us concern - with regard to the significant amount of time, effort and money that would be wasted unless changes are made.

The schedule one RMA - that should be process. Policy 1 of the NPS gives Regional Council's two years to notify and change to the Regional Policy Statement, almost concurrently within 40 working days of notification of the RPS being made. Changes to Regional and District Plans are required to be notified in accordance with policies two and three of the NPS. This does not mesh with the well established RMA process of progressive implementation of the planning provisions. That is National Policies to Regional Policy Statements to Regional Plans to District Plans.

Requiring all local authorities to give effect to the NPS policies over the same two year period, will create confusion and duplication of effort. Trying to run changes to the hierarchy statutory plans through a full schedule one RMA process RPS regional and district plans, all in parallel would result in confusing and counter productive overlaps. Bay of Plenty Regional Council will also face further requirements for plan changes through treaty settlements, and potentially the Foreshore and Seabed Act agreements - such as (inaudible).

We seek that the implementation period of policies one to three be significant extended, to reduce the likelihood of overlapping processes. This extended period would allow regions to work with their districts to

best manage the introduction of the provisions of the NPS, and minimise the problems of overlapping processes.

Alternatively the NPS should allow for processes whereby the local authorities can implement the NPS without requiring the need for the full schedule one process. We also note - that it can take considerable time for plan changes to become operative due to the lengthy public consultation process involved, and the high probability of decisions being appealed to the Environment Court. There is little contained within the NPS to guide council decision making whilst plan changes remain in a proposed state. Therefore due to the lengthy schedule one process, it may be some years before the NPS as currently proposed, have any meaningful impact on the management freshwater resources.

I would venture that our second generation RPS which is currently being developed and will be publicly be notified mid 2010, will largely meet the policy requirements set out in the NPS. However under the proposed NPS we will still be required to initiate the change to the RPS through a schedule one process, opening up the potential for re-litigation, further uncertainty to the community and cost to the ratepayers. If flexibility is not afforded to local authorities planning frameworks to implement national directives such as this NPS, then it should enable local authorities to implement the NPS in a way that is exempt from a schedule one process.

Now turning to work to interpret the NPS into regional context. To translate the NPS into regional policies requires research, into what the issues mean at the regional level, in order to provide a robust and defensible base for Regional Policy and any resulting management tools. To develop such an information base - can take considerable research. Of particular concern is Policy 1 (b) which requires Regional Councils to identify notable values, including potential values of 1) any outstanding

freshwater resources and 2) integrated freshwater resources. Defensible identification of outstanding and integrated freshwater resources will need to involve a robust assessment process, to determine the relative value of different areas. Without such background work, any assessments would be open to legal challenge.

Policy 1 (b) also requires us to identify what constitutes a notable value, for those freshwater resources identified as outstanding or degraded. In this context, notable applies to: (a) scientific, ecological and biodiversity values, (b) cultural values, (c) recreational, including contact recreational for example - swimming values. While we and other Regional Councils are capable of undertaking this process, not having national guidance defeats the key purpose of having an NPS, national consistency and compatibility. And I note that we are already undertaking a similar process within Change 1 of our RPS. This includes criteria for assessment checks and Section 6 matters of national importance under the RMA. Without the national overview to create reference points, implementing this policy will be fraught with the opinions of competing experts, as to what constitutes notable, outstanding and degraded.

Further to this, the definition of “notable values” excludes some of the matters of national importance listed in Section 6 of the RMA, and the other matters included in Section 7 of the RMA, that a Regional Council must pay particular regard to in decision-making. We believe the Ministry for the Environment needs to provide comprehensive guidance and support to local authorities, and we provide examples of what that guidance should include in paragraphs 12 and 55 of our written submission. Providing robust guidance on the implementation of the NPS would both substantially reduce avoidable costs in implementing the NPS, and ensure greater consistency with regard to how to define. It would remove the duplication of effort that would occur as each region had to

figure out implementation and methodology. It would also limit the risk of legal challenge on methodology in its application.

We would like to see the NPS accompanied by an implementation plan, so that implementation capabilities are supplied by the time the NPS is consented. The plan would provide detail on how methodologies that support national coordination consistency are to be developed and applied. The Board could address this by seeking that the Minister include a new policy requiring central government to prepare such a plan, specify central government responsibility in providing national level guidance assessment criteria and methodology, specify central government responsibilities for application of assessment methodology at a national level, identify where other mechanisms aside from the Schedule 1 process could be used to implement the NPS and reduce unnecessary costs, and modify Policies 1, 2 and 3 (inaudible) to incorporate a significantly extended timeframe, to provide flexibility for local authorities within each region to sort out the best process for staging of an NPS implementation.

Conclusion: overall we are seeking that the NPS places more emphasis on local authorities' decision-making and planning instruments - that afford more flexibility to operate. We accept the NPS sets out how the necessary guidance to enable success for implementation of the NPS will be provided, but how it will ensure integrated management as a wider focus than purely consideration of the adverse effects on water quality and quantity, and how it will recognise the considerable resource costs of plan changes, and the limited ability of the current drafting to have an immediate impact on decision-making. Once again, I'd like to say - that although we have been critical of the initial drafting of the proposed NPS, we are hopeful that it will provide clear guidance to assist local government with freshwater management. I thank the Board for the opportunity to provide feedback on the proposed NPS, and I am happy to

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answer any questions you may have on this or any other aspect of Bay of Plenty Regional Council's submission. Thank you.

**CHAIR:** Thank you for that Mr Grogan. Are you expecting that Mr Butler or Mr Zaman will add to that, or shall we go to questions?

[9.50 am]

**MR GROGAN:** Mr Chairman, we would be happy to go straight to questions rather than that, although I may call on my colleagues to assist.

**CHAIR:** Of course.

**MR GROGAN:** Just before we go on, I will also introduce to you the Chairman of the Council - Mr John Cronin whose joined us as well.

**CHAIR:** Good morning, thank you for coming. Well then we'll proceed to questions, and I'll ask Mr Prime first.

**MR PRIME:** I just wanted to refer to paragraph 24 of what you've just read. Regarding the Iwi groups, are they self-defined or do you have a process for identifying, how they are identified as opposed to their Hapu.

**MR GROGAN:** I can't be definitive about that, but there has been a great deal of consultation with the groups and also tied in with the process set out in the Resource Management Act, for linking in with a government process for identifying Iwi and Hapu, so that there is a great deal of that sense of following the same process.

**MR PRIME:** So essentially you rely on the Iwi to say we are Iwi and you except that.

**MR GROGAN:** Yes.

**MR PRIME:** And it's those Iwi that define the Hapu that are within their Iwi groups?

**MR GROGAN:** Yes.

**CHAIR:** Mrs Vernon?

**MS VERNON:** Thank you Sir. Can you just, going to paragraph 21 explain what, I know what memoranda of understanding are, but what are memoranda of encumbrance?

**MR GROGAN:** Can I get Mr Zaman to answer that question because he's been dealing with local landowners up in Rotorua.

**MR ZAMAN:** A memorandum of encumbrance is when - conditions that are actually put in the title of the property, so that if the property is passed on, those conditions remain with the property.

**MS VERNON:** And that's to do with, obviously discharge, is it mainly farms that get those?

**MR ZAMAN:** It's mainly farms. We're looking at, in certain cases we're looking at agreements with the farmers on best practices. Some of the farmers, they have gone a bit further and would actually like to, they not caring what agreements they have in the process to say there is a limit to the actual discharge, and say right we'll only carry, we'll only discharge this amount, and that will be locked into, go through a process to be locked

with the title itself of the property, so should another land use come in that might be more intensive, they wouldn't be able to farm (inaudible).

**MR GROGAN:** Mr Chairman if I could just perhaps add to what Mr Zaman said. We have been looking fairly closely at the range of options we have for working collaboratively with landowners, and not going down the strict regulatory path and this is one of the areas with some of the locals that we're having some success.

**MS VERNON:** So that's an example of a non-regulatory method.

**MR GROGAN:** Very much so, so we're not looking for a plan amendment or something like that to make this compulsory. If it does work it needs to be a small number of landowners around that will (inaudible). With the larger ones it doesn't seem to work.

**CHAIR:** So would we be right in inferring that at this stage this is a trial, or a pilot or something like that to see how these encumbrances work?

**MR ZAMAN:** That could be. This is quite new to Environment Bay of Plenty so it could be well seen as that. This does not mean that new regulation will come in, certainly not, but as Mr Grogan just said in certain areas where there are modern landowners such as willing to work with us, then this is one of the methods of (inaudible) responsibility to follow regulatory processes for the plan change. It is just a mechanism that might be used.

**CHAIR:** So it takes the agreement between the council and the owner, a step further by putting the obligation as one that's on the title, so that it binds subsequent owners and -

**MR ZAMAN:** It is strictly more binding than (inaudible) agreement and can be ended by any party.

**CHAIR:** And is there a possibility that say 20 years down the track, when the present councillors may no longer be in office, and the present owners may no longer be the owners, that the parties to the encumbrance might agree to vary it or maybe cancel it?

**MR GROGAN:** I think one of the, sorry Mr Chairman, one of the things that we have been grappling with is if the agreement parts way so we then disagree, not agree with a future owner whether there are actually enforcement, would be very difficult I think, and so as Mr Zaman said we may need to underpin this with a regulation that comes in, that doesn't cause these people to have to do more but will just reinforce the agreement. So what we have is a number of lakes which fall under a regulatory regime now, there is actually five, and some other lakes that don't. So we're just looking at other lakes and trying to be a little bit - think outside the square a little bit, rather than straight going to regulation, and all the costs and the time and the community having to have input and then the arguments and all those sorts of things. Not sure if that answers your question whether it's a trial or not. I suppose it is actually, I think in a way it is. We are very, very hopeful that it works.

**CHAIR:** I think your reference to the possibility of asking the owners to do more, at some future time might reflect your understanding of the processes, that might be achieved with further scientific work at times in the future, and so it is an interesting trial, and important for us to understand it.

**MR ZAMAN:** Mr Chairman, its as good as the memoranda that is agreed upon, and what is the content of that, so it the one's that we have put forward so

far, have had agreement it does include recognition that this does not excuse them from any regulation that might be coming in.

**CHAIR:** Right, well that might be an interesting process. Sorry to interrupt but you may continue.

**MS VERNON:** Not a problem. Thank you for that explanation. Just going on to your 32, 33 and 35, you're not obviously the first local body authority to express concern about timing and costs, and all the processes of implementation, and equally quite a lot of you are going through second generation plans and we understand all that. But I just wonder with 35 you know - how long do you think an extended period is reasonable. I notice in your original submission you also make the comment that short-term, medium-term, there would be a policy vacuum and I just I would value your comments about what you think is reasonable and in the same light, we had a submitter yesterday who suggested that perhaps when Regional Councils and District Councils are doing plans, that they actually could work more closely together instead of one having to go first then the next go, because we know they're not allowed to be inconsistent or whatever. But the submitter suggested well - why can't the District and the Regional Councils actually be a little more collaborative, and it seems quite clear that current government direction is about collaboration. So you know I wonder if you'd like to comment about that idea, and if you were given an extended period, would it in actual fact allow for greater collaboration?

**MR BUTLER:** Mr Chair, I'm thinking of the model that is provided in the Act, for when it was amended so that Regional and District plans must give effect to the Regional Policy Statement. That is the ability of the policy statement to either say when the district plan and for example, needs to be amended or with the default being when it's next reviewed at the first

reasonable time or something like that. I think that provides a model that could be useful. Now, there was a trade-off at the time that amendment came through requiring much closer collaboration between the regional council and the territory authorities in the preparation of the Regional Policy Statement. So that is already required and so that whatever timing provision is in the Regional Policy Statement can be assumed to have been through - be an outcome of that close collaboration. The amendments currently being proposed mean that district plans may not have to be reviewed every 10 years, suggest that perhaps a timeframe needs to be put in as a default. And maybe that 10 years can be that default.

[10.00 am]

**MS VERNON:** But with all due respect 10 years is only the life of the NPS and if you give 10 years what's the point of having an NPS or making any changes. We've had a lot of submitters who are seriously looking at this NPS as raising the bar, on water quality and water allocation. Some of the regional councils are some of the strongest submitters about wanting clearer direction and guidance. And that the bar should be raised caused that would make it easier for them when they're doing their plans. So, if you allow 10 years that's kind of doesn't sit very well with that does it?

**MR BUTLER:** No, and for things that require action more urgently, then the date should be set and in the NPS or alternatively in the RPS. But perhaps it could be expressed in terms, such as when the RPS becomes operative then a timeframe after that within which a consequential change to a plan would need to be notified.

**MS VERNON:** Thank you. Just interested in Objective 2, I've asked this question right round the country more or less. The term "land use" you do

make in your original submission concern that the NPS does seem to be future orientated and in actual fact it's often the existing use that is causing the concern. So that in fact Objective 2 could include catchment as well as "land use and development"? And I think your submission heads sort of and you do talk about it being wider than what it is. So I assume that's what I meant, "catchment".

**MR BUTLER:** Yes.

**MS VERNON:** And that the term of "land use development" as it sits at the moment really does talk about the future, I agree. And that if you've got that word "and" in, it kind of catches the current as well.

**MR BUTLER:** I agree.

**MS VERNON:** Thank you. And just one further or two small questions. I assume that the Environment Bay of Plenty supports the Local Government of New Zealand's submission largely? You don't make any comment of it in your submission.

**MR GROGAN:** Sorry, I'm not familiar with it.

**CHAIR:** Well, don't think you should feel that we're pressing you.

**MR GROGAN:** No.

**CHAIR:** If you're not sure you know what's (inaudible) presenting on behalf of (LGNZ) then you're probably wiser to stand back.

**MR GROGAN:** I'm not familiar with it and it appears my colleagues aren't either so we don't feel qualified to comment.

**MS VERNON:** That's no problem. And just one final question, in your Bay of Plenty Regional Water and Land Plan you gave us an Attachment 1, where it talked about the integrated management of land and water. We've had some suggestions from some submitters, and I don't have your whole plan so I'm not quite sure how you've dealt with it, but that it would be a good idea in the NPS to separate surface water from groundwater that in fact, the way the current NPS is written is confusing in that area. And that some things may not necessarily apply to groundwater as they do surface water. And I just wondered in your regional plan did you have them separated and what would be your comment if the NPS did look at separating it, should they decide to.

**MR BUTLER:** I can't give you a good answer on that, I'm sorry.

**MS VERNON:** And your plan doesn't separate them?

**MR BUTLER:** It treats discharges onto land in their own right regardless of whether the run-off from those discharges goes through the surface or through the ground.

**MS VERNON:** Thank you for that. Thank you sir.

**CHAIR:** All right then.

**DR HARDING:** I'd just like to follow on with those comments about groundwater then. So, you made reference to the fact that in part of your region you have increasing demands on groundwater resources. So have you invested quite a bit of effort and modelling groundwater's in part of the -

**MR GROGAN:** I'm glad you asked that question, yes we have. And we have a program of working through the region starting with those areas that we believe which were under greater pressure and then extending out. And so, we've just reported to Council I think a couple of months ago the progress on that program. We've got, during this contract (inaudible) to assist with that, in addition to our own groundwater scientists. We have a program that's not yet completed but with the areas with the greatest pressure that we're aware of have been done. There's modelling and looking at, I guess smarter ways of allocating the available resources there. And the program, I think it completes in about a thousand (inaudible) of the last area (inaudible) which is on the sort of eastern part of the (inaudible). At the moment there's (inaudible).

**DR HARDING:** So would the main issues be, takes from groundwater?

**MR GROGAN:** Yes and some areas we believe the aquavits are not over-allocated but certainly need (inaudible) to be careful. There are some areas where (inaudible) is potentially an issue as well, so lower lying coastal areas and we've got a report coming back to Council next month on that issue.

**DR HARDING:** So, do you have a view on how you deal with issues like groundwater quality in the proposed statement? At the present moment, it's sort of lumps all freshwaters together and it's about improving water quality standards in freshwaters, regardless of whether they're surface water or groundwater. Does your Council have a view on that? Would you consider that it's essential to improve groundwater quality as well? Would you have any ideas on what sort of standards there might be?

**MR GROGAN:** I mentioned in my presentation that we're blessed with abundant resources and intensive groundwater. My understanding is the quality is

actually very good as well. Our problems with water qualities are more in our lakes as you might be aware of the lakes restoration protection action plan. And so the effects of discharges are being expressed there.

There's growing concern about rivers and water quality as well and contributions from agricultural and other land use run-off, sedimentation and other set of issues. So, our groundwater quality might be seen as relatively good and our focus is, in terms of policy, is more on the streams and rivers and our lakes and particular our lakes.

**DR HARDING:** And you also mention in our submission this morning on page 3, number 14 about the NPS doesn't provide guidance on the issue of priority of allocation. So, does your Council have a view on what priority should be?

**MR BUTLER:** The Council doesn't yet have a view on that but is endeavouring to address that issue and with preparation at the next meeting of policy statutory and are taking a vote to a recent amendment that allowed for an allocation priority to be set or rules relating to that so that goes beyond the first come, first served principal.

**DR HARDING:** In your original submission on page 10, number 51. You draw attention to the fact that Policy 2 (c) and 3 (a) seems to set a more rigorous requirement than the RMA. So it's somewhat silent on the issue of avoiding remedy and mitigating and you ask that whether this is, sort of changing the standard a little bit. But I guess some submitters have interpreted the draft statement as actually attempting to raise the bar in some way. Does your Council have a view on that?

[10.10 am]

**MR BUTLER:** I think that the view that's coming through again in the preparation of the Regional Policy Statement is that there is an assimilative capacity of water bodies within which, there aren't adverse effects and so that's a resource that can be used. The policy in the NPS about protection against degradation confuses that potentially I think as to whether that assimilative capacity is available to be used or whether the water needs to be kept pristine.

**DR HARDING:** Yes I mean that's an interesting question we've got a lot of other submitters that talked about this and called it "assimilative capacity". Which I have some difficulty understanding how that is actually scientifically understood. Correct me if I'm wrong, this is, in simple terms, dilution is a solution. Am I correct or is there something more to this?

**MR GROGAN:** That's certainly the way it seems and certainly the way it's handled by councils. And if I might continue, the easy bit is the on-point source discharges, where you know the location and have some concept of what the concentrations might be and when waterways can actually handle that's given the range of flows that it's going to experience over time and these sorts of things. Cumulative impacts of multiple discharges, that becomes harder and harder and we were talking about contributing (inaudible) sources as well as that that's when it gets very, very difficult to really work out the assimilative capacity. And you're trying to mix extraction for use as well and having to have some idea of that those are and it's actually a very complicated situation. And we talked a little bit again about whole catchment understanding, if you like, and that's what it's implementing. But assimilative capacity is a fairly hard thing to work out unless you're dealing with point sources.

**DR HARDING:** And the reality is many catchments around the country will have cumulative impacts, that's been brought up obviously, and non-point

discharges. So relying on a concept of assimilative capacity means that we're relying on something that, by your own comments, are extremely difficult for us to quantify in any accurate way.

**MR GROGAN:** And that's where we get into the quality of our monitoring information and you'll be aware of regional councils around the country is getting a fairly large whack of those (inaudible) dollars on monitoring of waterways and that is the feedback, if you like, to saying, "Well are all those discharges too much for this waterway, are we seeing changes in water quality, are we seeing changes in the sort of biological communities that survive and those sorts of things?" So that's why monitoring is actually so important of our waterways as well not just for should I say, recreational use, or at a bacterial level from those sorts of things. But do we have the nitrogen levels for example, or phosphorous or any of those other containments that might be causing problems.

**DR HARDING:** Thank you. My final comment or question, in essence, probably not the question you reach, in both of your submissions that issues of ephemeral waterways and off-shore waterways and interestingly the current definition doesn't include those. So am I current in assuming that the Council doesn't support the addition of "ephemeral waterways" and other waterways?

**MR GROGAN:** You can see by the large area of our region, it's a very ducted area which our waterways have been installed to make the land productive for (inaudible). They over time become a biological system in their own right. The NPS doesn't cover those so we think that that's important. And then ephemeral waterway side of things I think is a growing body of information I know there's a lot of work being done around the country on the value of those areas in terms of the quality of what happens downstream. The original point of the filter except if we

don't look after those we're going to have those cumulative adverse effects.

**DR HARDING:** Thank you very much.

**CHAIR:** Coming back to the assimilative capacity of waterways is a resource to be used. I wouldn't want to put too much emphasis on an advertising slogan such as "100% Pure". But does there come a time when the nation might say that its national policy is to phase out using freshwater resources as a way of disposing of waste?

**MR GROGAN:** I think Mr Chairman that we've actually been very good at looking at our point sources, and certainly in the organisations I've been in, at looking at them and making sure over time that they progressively improve as technology does to not impact our waterways in the way we used to. I think there might be always be a case for sensible use of waterways for discharges.

**CHAIR:** Well many submitters are saying to us the contrary and so I put it to you, so that you're having the opportunity to explain why that shouldn't be a national policy, a phasing out. Of course it would take a good time but it could be done progressively.

**MR GROGAN:** There is very good science Mr Chairman that suggest that that's not actually necessary and we would be imposing significant costs on our community, not just industry. Perhaps make some of them unviable if we were to do that. Well, as speaking as a scientist.

**CHAIR:** Yes, well thank you Mr Grogan and we always appreciate the scientists point of view as well as the economic point of view. But sometimes there's other points of view as well. And so we need to get as much

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information and as many view points as we can on these important themes. And that's why the Board values the submission that Environment BOP made originally and your presentation of it today, we're very grateful to you. Thank you very much and thank you to members of the Council who've come to attend and observe that's an important part of our process as well.

**MR GROGAN:** Thank you very much.

**CHAIR:** Good morning and a warm welcome to you both. Thank you we understand that you're going to be presenting the submission of Agri Nutrients Balance. You've seen from the part of previous presentation that we can be quite informal. We'd like you to feel that you can just present your submission in the way you'd like to do and we hope that you'll be agreeable that when you've done that we can have a bit of an exchange of questions and answers to tease it out a bit. Is that all right?

**MR SADLIER:** Yes, that's fine thank you.

[10.20 am]

**CHAIR:** So you don't need to be standing to address us or anything like that you can just present it as you'd like to. And of course we have your submission in front of us as well as the notes that you're going to present now.

**MR SADLIER:** Thank you very much sir. Of course today I don't plan to do more than just read through the presentation that's just been put in front of you.

**CHAIR:** Thank you.

**MR SADLIER:** I think Warwick had a comment he'd like to make as well.

**MR CATTO:** I was particularly pleased that I didn't have to drive up Wellington or somewhere else for a change. Thank you for coming to Tauranga.

**CHAIR:** Well what a pleasure it is.

**MR SADLIER:** Mr Chairman and Members of the Board, my name is Nigel Sadlier I'm the Environmental Manager for Balance Agri Nutrients Limited. And with me Warwick Catto, our Head of Agri Sciences. Now the aim of our presentation today is just to relate the main points in our submission to our business operations and then focus on the key components of the proposed NPS that we believe to be crucial to the future management of freshwater resources in New Zealand. As you'll be aware from our original submission we are one of New Zealand's leading fertiliser specialists and a 100% farmer owned cooperative. Through Fert Research we're also a partner in the primary sector water partnership with our sales staff working to meet the target set out to assist in the sustainable use of freshwater resources in the primary sector.

Our business operates throughout New Zealand with our frontline sales staff trained to provide fertiliser recommendations. And specifically train through the Massey University course on sustainable nutrient management to provide sustainable nutrient management advice. In providing this advice overseer is used to produce nutrient budgets and to assist in the production of nutrient management plans. Both of which target on farm management options for nutrient use that assist with achieving a balance of long term economic growth and viability and environmental management for the farm.

Our land use management advice, training and experience together with the use of current tools described above, support the recommendations that were put forward in our submission. I think it's important at this point to state that we favour policy that rewards innovation and efficiency while recognising the importance of and sustaining New Zealand's economy. In particular, we support an NPS for freshwater management that directs a requirement for outcome or effects based planning that achieves two things. 1 being the provision of national consistency and the

establishment of freshwater authority classifications and associated standards, and 2, an ability to enable catchment based management.

So I start here with a little bit of a current situation as we stand. And finally concern with the respect to the current proposed NPS is the lack of certainty around the establishment of nationally consistent freshwater management classifications and associated standards or limits.

Classifications that encompass all values including environmental, social, cultural and economic.

The proposed NPS places some weight on the new term “notable values”. We’re uncomfortable with this term as it does not include all the social or economic value based considerations. We are therefore worried that the current proposals to apply standards across all freshwater resources with particular regard to notable values is very uncertain. Furthermore, we believe this uncertainty may further compound the currently significant variation between the regions and the lake freshwater classifications and associated standards which are being or have been applied.

It is of course interesting to note that within some regions there are still no freshwater classifications and associated standards applied at all, as shown in the accompanying table. Just for your own information, that table is nothing more than my own review, or understanding if you like, of regional plans around the country. And something that isn’t written into that table is, while it’s clear as to whether there’s a classification and a standard yes or no, it’s not clear on that table as to the differences or the inconsistencies between each of the regions. As I’ll probably elaborate on a little bit more.

We also have concern about how standards or guidelines should be applied as we see them as two very different things as follows. A

standard is a clear limit set within a certain environment that assists with the management of effects. Whereas, a guideline is a risk based measure that provides an indication of the potential for adverse effects. In other words, the guideline maybe exceeded in some cases but there may be no measurable adverse effect within a receiving environment. Guidelines are sometimes being used or misinterpreted as standards when in fact they are not.

The way forward; we believe a combination of regulatory and non-regulatory measures are required to effectively manage New Zealand's freshwater resources into the future. Regulatory measures must be a time waited requirement to implement national consistent freshwater management classifications and associated standards. This would require the implementation of freshwater classifications where none currently exist and amendments to current freshwater classifications if they're inconsistent with the requirements of the proposed NPS.

Non-regulatory measures require a planning framework that provides for catchment based management programs that enable flexibility at a business or farm level without the restriction of over prescriptive regulatory controls. Flexibility is essential for innovation and the uptake of new technologies. I'll expand on these points further. We understand that the proposed NPS is intended to set a direction for regional councils that would require them to establish a planning framework reflecting the level of certainty about freshwater resources, their values and the effects as a result of the allocation and use.

Without the certainty of consistently applied freshwater quality standards or in other words, a peg in the ground, it's difficult for our sales staff and ultimately our customers to utilise the tools and guidance necessary to realise any regional or catchment based environmental gains. While we

recognise that the NPS sets out to implement national freshwater quality standards we don't believe it sets out a time requirement for implementation of management classifications and associated standards. Nor does it provide any direction as to which standard should be applied. Rather the proposed NPS only at this stage directs a requirement to implement a timetable to implement its standards.

If regional planning frameworks are to be directed through the proposed NPS to achieve a level of certainty about freshwater resources for all uses then we believe a consistent national set of standards must be applied relatively quickly. In other words, the regulatory approach. We understand that Schedule 3 of the RMA and Section 70 and 107, already contain freshwater classifications and standards of which the proposed NPS should not be inconsistent. We believe the proposed NPS could direct the implementation of Schedule 3 and Section 70 and 107 classifications and standards across all freshwater resources either currently not classified or inconsistently classified within a specified timeframe.

The proposed NPS would direct the implementation of default standards for all freshwater resources in New Zealand within a relatively short space of time. However, and very importantly, we recognise that such default classifications and associated standards may not be appropriate to all communities or catchments with respect to any given set of values for the resource. We believe it therefore be necessary for the NPS to enable communities with the ability to negotiate away from the default standard in some way. The non-regulatory approach.

We therefore suggest that the proposed NPS encourages regional and territorial authorities to establish a planning framework that enables catchment based management with particular regard to highly valued and

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at risk water bodies. Catchment based management would include representation and interest from all facets of the community within a particular catchment. The NPS could provide direction as to how catchments should be assessed with particular regard to all environmental, social, cultural and economic values. Thereby establishing freshwater management classifications in a consistent manner throughout New Zealand. In the absence of such direction it being deemed inappropriate within an NPS, classification assessments could be encompassed within an appropriate National Environmental Standard.

We believe this planning framework approach would provide community mandate to implement an alternative and agreed management classification and associated standards for the ongoing management of the freshwater resource, particularly outstanding or at risk freshwater resources.

Finally, we believe that it is important to recognise that achieving environmental gains not only with regard to freshwater management policy but also with regard to climate change policy should strive to involve the use of New Zealand's limited expertise in resources most efficiently by not unnecessarily duplicating requirements. Tools such as overseer, nutrient budgets and nutrient management plans are the best and only tools available for achieving environmental gains in both freshwater and greenhouse gas emissions management on farms.

[10.30 am]

Thank you for your time and I'd also like to say that in association with this proposed NPS we also look forward to the development of a national strategy on freshwater management including newly established land and water forum.

**CHAIR:** Well thank you. We welcome your presentation Mr Sadlier.

**MR SADLIER:** Thank you.

**CHAIR:** And we may have some exchange of any questions that Members of the Board may have with the two of you. Thank you.

**MR PRIME:** Yes just referring to the second paragraph on page 2 of what you provided (inaudible). What are some examples of a socioeconomic value based considerations you mentioned?

**MR SADLIER:** Okay, first of all when we assessed the term notable value, we immediately looked to the definitions for that term and note that there don't seem to be any economic considerations within the definition of notable value. As for social considerations, we note that the definition does include freshwater or recreational standard which I guess you could consider a social standard. But of course, there are other social considerations such as boating, fishing and the like as well. But that concern there in that case is that if the term notable value is given a great weight and consideration of management of freshwater resources it may not encompass all of the values sets that are necessary or necessarily given to that particular freshwater resource. If I've been clear there.

**MR CATTO:** It's essentially a new term isn't it, that certainly a lot of people is a whole new term and a whole new (concept that they don't understand) (inaudible) saying is that uncertainty to what it's defining.

**CHAIR:** Well we understand that and you're not the only submitters who've made that point quite strongly and thank you for that. But we just would like to follow further the point that you make that it does not include all

possible value based considerations. Would you like to be a bit more specific about what you think it should include or do you think it should just be done?

**MR SADLIER:** My concern would be that from a business point of view we would want to have some certainty that economic considerations are being given weight in any assessment that's being made. That being said, we recognise that there is the ability to do that through the provisions of the RMA as it is at the moment. Your question about as to whether it should be dumped, I don't know if I can answer that or not. But I guess it's just our concern is that, if it is retained that economic values such as primary, secondary industry use of freshwater resources and the associated benefits to communities from industrial use of water are taken into considerations. I'm concerned that making an assessment on the basis of notable values alone wouldn't take those economic considerations into account.

**CHAIR:** Thank you. Mrs Vernon.

**MS VERNON:** Thank you. Just onto your original submission and I start on page - I haven't got a page but anyway. It's paragraph 18, it talks about definitions and I'm just a little curious about why you don't want consumptive use to refer to effects on physical, chemical or biological quality. And you go onto say but these effects should be dealt with through appropriate freshwater classification and standards. And as you've shown in your table, and I appreciate that that's your personal summary and that's fine, but I mean we are getting quite a lot of submitters saying that even if there are standards and classifications they won't be appropriate. And if that is the case, then why would do you not want those things in there?

**MR SADLIER:** I guess my concern with regard to the inclusion of the consideration of physical, chemical or biological quality effects under consumptive use is that, in consumptive use it's volumetric. It relates to the effect that essentially the take of water and use of that water on land if you like, or on whatever way it is used. Whereas, a freshwater classification and standard deals with all of the biological, chemical, physical effects that you would normally expect need to be considered in freshwater.

**MS VERNON:** So you're more concerned that in fact by just naming three things that it's actually leaving out some other components, is that right?

**MR SADLIER:** Well yes that's my concern as to whether they are, and it was nothing more than that, as to whether they are appropriately used under the term consumptive use.

**MS VERNON:** Thank you for that. Just equally, on your original submission, paragraph 42. You believe that inappropriate water allocation has the potential to constrain New Zealand's economic development. I just wonder, is that all relating just to first in-first served? Because some regions have actually brought in processes of priority and in fact we've had quite a lot of submitters suggesting that the NPS should be giving some guidance about that. So I just wonder how you, well whether you have any comment about allocation and how the NPS may handle it or not as the case may be.

**MR SADLIER:** We purposely, you would have noticed through the submission that we report today, that we purposely hadn't addressed allocation.

**MS VERNON:** I know but it does effect farming and it effects your industry I would of thought.

**MR SADLIER:** We recognise that one of the things that we have put forward and (inaudible) that was picked up earlier, is that we do strongly advocate the ability for catchment based management. And in saying that, we're also aware that, now I'm not saying we support it, but we're aware that the New Zealand Business Council strongly approach to management of water resources, allocation of water resource in New Zealand, they advocate a catchment based model as well. So in that way, we believe that we're not inconsistent with the proposals that are being put forward. We are just concerned that, no more than as I have said here at the time, that the first in-first served basis as made against first generation policy statements is of concern to us. And that there are a number of constraints in future economic development of New Zealand. Is there anything you'd like to add to that as well Warwick?

**MR CATTO:** No.

**MS VERNON:** And then finally on your original submission again about monitoring and reporting of costs. And you have a whole series of comments there and certainly we all know that in an international recession. But given that the lifespan of this NPS could be, hopefully longer than the current recession, I mean well hopefully. When do you think or do you think it's reasonable that we keep going on, on about that we can't afford to do something where in actual fact we trade on clean, green image. And I just noticed there, when do we acknowledge that using water is actually a privilege not a right?

**MR CATTO:** Well I think it's important to make the costs transparent because there's a community cost there, so that's the point we want to make. I actually think one of the biggest costs is going to be the implementation of servicing cost which is where our organization often fits as an enabler.

If you go back to the comment about the water quality one; we're not like Federated Farmers where we have a corporate structure to mandate policies. So our role often is that these other groups determine the agricultural policy framework. We often come in and say, well we actually have to implement it because we have about a hundred tertiary qualified extension agents out there who are primarily involved with behaviour change.

So to us, the issue around some of the monitoring reporting costs and things is actually designing systems that you can each deliver and are realistic. You know, we had one the other day it was essentially with DW was a discussion with some people and they're talking about getting five hundred extension agents and there's no way we've got agricultural graduates to do that. And so, we had to come up with something that achieves your outcomes but is actually based on feasible (inaudible). So, we see some of the people we have with key skills sets but they're going to have to deal with the ETS issues on farm and a range of other matters. That's probably a bigger compliance cost than potentially what some of these could cost.

[10.40 am]

**MS VERNON:** Well when I looked at something like (Nate) I thought that's going a little bit below where it probably should sit. So really want you talking about is that transparency is important, upfront and so that people can see what it's about. That's fine, thank you very much, thank you sir.

**DR HARDING:** I just want to investigate talking about this standards and classifications. So, if you can help out if I've got this right; you're talking about a vision where all the catchments in the country use default classifications (inaudible). And what the definition of a catchment might

be and it might be quite tricky too but we'll start on that. And then, where stakeholders within that catchment want to set some differences and they all get together and they argue about or come to some mutual conclusion about what that standard might be across the whole catchment in their area. I'm talking primarily about water quality here. So you could end up with a scenario, I mean I don't know the exact figure, but I think you know, under one of the NEWA classifications they talked about tens of thousands of catchments in this country. Again, depending on what scale you look at for a catchment. So, you could have a scenario here where you have to - suppose a default situation which actually applies to about 2 catchments out 10,000. And then all the others, there's all these different standards going on.

**MR CATTO:** Right so, what was behind our thinking around that, is that there's two approaches to obtain a water quality standard. There's a community consultation process to deriving one or there's one where you had one and the community might raise away from it. And I suppose we just wanted to raise that as a potential way around how the communities actually establish a water quality standard. You know, they can be extremely polarising processes for communities and particularly if went through another high dairy pay-out period, if the process took ten years, the land use issues we were trying to deal with in ten years you could have the whole catchment changed significantly on land use.

And so we felt it was important to put out a (inaudible) to think about it saying, from the community basis it may be better that they actually are compelled to say, if the community is so polarised and can't agree there actually is a functional system in place. That they have to work out how they move away and so if you can community consensus to move away to either higher or lower standard they're enabled to do that. So as a community, you think about how that would happen in a community in

practice and I see that in my home farming community in Southland. Where you know, we've got a mix of sheep and beef and dairy farmers and how polarising some of those equity issues of water quality can become in this communities. And so it was a bit of a personal belief about how do you deal with those, how can you try and manage some of the social collateral damage that happens when you can't go through that and we felt one scenario was by saying, there is it guys you know, you need to agree to move. If you want to move away then you have to design a process (inaudible) move away or negotiate a way.

**DR HARDING:** No I mean that's very interesting, it's very helpful that you've come up with this suggestion. Do you think under this sort of scenario, if the community couldn't reach agreement that it would default to the standard (it seeks)?

**MR SADLIER:** Our intention, our belief at the time was that that default would be there first and foremost. Probably just elaborating a little bit more on your point about 10,000 catchments. I mean, my understanding, and concern probably about that as well, my understanding is that a number of the regions have already implemented freshwater classifications throughout the region that are consistent with Schedule C and Section 71 (a) of the RMA as it now anyway. Many others haven't they're doing something all together different. So, I don't think in that respect what we're proposing would be anything significantly different than what currently exists.

For some councils there would be no change requirement for other councils it would be a need perhaps to lift their game if nothing is currently in place or to revisit what they have put in place. And ask themselves, how do we change it to a more national and consistent approach. That in itself is the default across the region. In Southland, as you mentioned

Warwick, is an example because that has already happened through their proposed water plan anyway.

The next step if you like in dealing with what are often called at risk water bodies or hot spots with regard to any particular issues that maybe occurring. That's where we would perceive the need for community engagement to look at the land use activities that are occurring and how do we better manage what is effecting us within a specific catchment in this region. And as you say to limit any social complications or otherwise that may come about from a default that doesn't best suit the (inaudible).

**MR CATTO:** Because if you go to a catchment based then how you know I can tell (inaudible) they're grand-parented it in. But is that the model that you're going to use nationally and how does the (inaudible). So it's one of those issues, how do you actually do that if you're going to do a national standard and essentially if you're going to have (inaudible) constraints throughout the country. How are those equitably going to be distributed through the community. And that's why we felt the default position delivered at a national level would be a useful way of saying well, in a situation where a community can't agree then it's a default processes. (Inaudible) you know, you have an agreement (in) business you know that if you never talk to each other you know what's the outcome is going to be 'cause the process is actually outlined there.

**MR SADLIER:** And important thing for us is the ability, as Warwick said before, enabling our frontline sales people to be able to actually start recommending particular uptake of tools or technologies relevant to the out-putter effects based targets that have been put in place through that default standard. So regional councils have a requirement, an output based requirement, for that freshwater body. We're able to in that case then start advising different technologies, different tools than can be used

that will enable any particular farmer to manage their property in a way that gives them certainty that they'll be meeting or playing their part of achieving that catchment based output target if you like.

**DR HARDING:** Okay, thank you very much for sharing that. So my last question is a somewhat minor point but in your submission today on page 4, the second half of paragraph (inaudible) about tools such overseer nutrient budget, nutrient management plans are the best and only tools available. So you're saying that those are the best practices, if I can use that term, you have available to you at this moment?

**MR SADLIER:** (Inaudible).

**MR CATTO:** Yeah so I think the important - you often hear the debates with farmers about some of these tools and they are imperfect tools. So the discussion often goes; you need to decide first if you want input or output (space) regulation. And you have to answer that question first. Then once you've answered that question then that automatically leads to some of these tools coming into place. So, you know, if you're wanting to have an effects based thing and you basically have to model farm system and essentially there's probably 10 or 20 million dollars worth of investment going into developing and overseer.

So it's essentially only going to (inaudible) most of the primary sectors accepted that. It does greenhouse gas so the ETS means that you know - so it goes a wee bit to that capability. You know, if we're going to do that we really only can afford to have one tool. We don't want fourteen different regulatory bodies with the tools and this sort of thing 'cause (nine OH) trained staff and there's no way we can have the capability to deliver that. We want a universal benchmark, imperfect as it maybe for (inaudible) the regions.

And in fact, we around some of the regional councils recently and one of the things we said to them is what one tool but (we might define) some of the defaults about how it's used but stick to one tool. And so for us it's more about the practicality of what can be implemented.

[10.50 am]

The one issue about how these tools are used is at the moment, and it goes a wee bit about the need for standards. Is how these tools are currently used at the moment is; is business as usual. We do a nutrient management plan that defines how the farmer's currently operating his business and how he wants to operate in the future. And the problem is that because there's no constraints it's very difficult for us to introduce them and say, therefore you must do this practice or that practice. It goes a wee bit of - unless we go back to partly back to being a mandated organisation not just to say you must do this or do that or the other. And so these tools are again, probably the best enabling tools in the nutrient management space. But we're spending a million dollars a year trying to develop to make them better.

**DR HARDING:** So do you have just a rough idea of what sort of percentage of farmers are using overseer for example?

**MR CATTO:** 97% of dairy farmers are and we just started to roll out of sheep and beef. So if you look at the water program (inaudible) we'll probably have 90% of the primary sector covered by 2013, I think it is. And obviously if there's regulatory pressure we could accelerate it. So at the moment the milestone, well (if I can be candid about that), could we accelerate it. It goes back to the issue of we've got 70 people if we want to do that we may end up having to recruit 120 or 130 people. And when

there's only 20 graduates coming out a year it's going to take you three or four years to even have that capability, assuming none of them leave. So becomes quite a challenge to meet these targets and that's why we need some lead time. But also goes back to why you need standards is because you know, it's going take you know, these visitations (advise) will probably be on a three or four yearly cycle. So, whatever we do has to be realistic in terms of (inaudible).

**DR HARDING:** So we need some heads up basically to start providing guidance is probably what you're saying, isn't it?

**MR SADLIER:** Yes.

**DR HARDING:** Thank you very much for that.

**CHAIR:** Particularly valuable (inaudible) exchange that we've been having has added a good deal to what's been prepared and presented in your submission. So, I'd just like to go back one step to the previous topic that you were discussing with my colleague. Where you were placing quite a bit of expectation, it might be the word, on communities reaching agreements or least the possibility of that. And the different languages used but the concept is quite (inaudible) for the moment. And what I'm trying to envisage is the process by which community agreement can be identified on a topic such as the departure from the defaults (inaudible) on contamination of water. Is there anything further you'd like to add about that?

**MR SADLIER:** I have to (admit) a bit of thought and I've attempted to try and draft, if you like of my own, what policies may look like and (inaudible) not brought them today on the basis that I'm not a policy writer and we're not here to do that. But yes, I definitely do recognise that that won't be easy

other than - the only thought I have that I potentially offer today is the NPS needs to be able to offer guidance as to how or what considerations, what value based considerations would need to be given effect at a regional basis. That a catchment basis within any particular region to ensure that whatever negotiation away from the default occurs has taken on board the same considerations, same value based considerations, if you like, throughout the country.

**CHAIR:** Well that is a very important part and thank you for mentioning that, I agree. But it's also a matter of a process and the identification of an agreement. I mean, this is with a small p, is politics isn't it. And unless you've got some reasonably formal kind of structure how do you know that the outcome catches the opinion of the community rather than the opinion of perhaps the sections of the community with the loudest voices or the most at stake.

**MR CATTO:** But that's that you actually have even more so at risk by not having the default scenario is if that -

**CHAIR:** I don't disagree.

**MR CATTO:** So there's evil on both sides but that's -

**CHAIR:** I'm not saying it's evil I'm just saying, what's the answer. How do you know it's there and that it's truly your community opinion or you're leaving that bit outside the company's concerns.

**MR SADLIER:** Yeah well it's sort of getting into personal opinion probably if you develop that further rather than formal company position I should (inaudible). I guess that's a key challenge that maybe that's (inaudible).

**CHAIR:** Is it something that the existing small p political structures would be entrusted?

**MR CATTO:** I think that's what we see that the regional councils would manage that process. That they will actually have to come up with that structure of how they would migrate away from it. 'Cause they're presumably used to doing that as part of their role anyway getting community consensus and pulling it all together. So that's why we felt that that would be better for them to manage that and come up with it.

**MR SADLIER:** Well essentially that's what I'm saying but also saying that that guidance needs to be provided at national level. I guess, I'm uncertain at this point as to whether, how detailed that guidance should be within the NPS or within an NES or within or any outcomes that come out of it, that may come out of a national strategy from the land and water forum.

**CHAIR:** Our experience is that regional councils want flexibility. (Inaudible), is that right?

**MS VERNON:** Yes.

**CHAIR:** All right well, can I say again how grateful we are and how much has been added by your attending in person to help us to understand your experience and that's very valuable to us. Thanks indeed.

**MR SADLIER:** Thanks very much for your time.

**CHAIR:** So we're going to take a break now and start with the next submitter after that.

**ADJOURNED** [10.59 am]

**RESUMED [11.34 am]**

*Audio file: dpm 0140*

**CHAIR:** Good morning, a warm welcome to you. We're very glad that you've come to address us on this lovely day.

**MR WATSON:** Yes it's good that we've turned the sun on for you as well.

**CHAIR:** You certainly have. We've been so happy to be here in the Bay of Plenty.

**MR WATSON:** I actually thought it might take a while for you to come out of your morning tea - a few minutes sitting out on a veranda some where.

**CHAIR:** Yes. Now we don't have any particular formal formality requirements. We are very happy for you to present just as you've planned and wish to do, and then when you've done that we'll have questions and answers.

**MR WATSON:** Okay.

**CHAIR:** Thank you.

**MR WATSON:** Just by way of introduction, my name's Kerry Watson I'm TrustPower's Environmental Manager and with me today is Bridget Malcon who's with Ryder Consulting, who's a planner that does a fair bit of work for us. We're going to try and do a bit of a tag team through the policies and objectives, so we try and keep everything at the same place so we're not sort of bouncing back from one to the other.

**CHAIR:** Thank you.

**MR WATSON:** So please feel free to jump in and interrupt us if there's question's that you'd like answered straight away.

As I said my full name's Kerry James Watson and I'm TrustPower's Environmental Manager, and I'm responsible for TrustPower's environmental portfolio which sees me managing the company's interest in resource consent applications, Regional and District Policy Statements and plans, legislation, optimisation, Treaty of Waitangi matters, environmental compliance and hazardous substances programmes. I've also managed a number of TrustPower's involvements in National Policy Statements including the NPS on Renewable Energy and the NES Ecological flows.

I'll just take my qualifications in explanation there as read, and move on to paragraph eight if that's all right with yourselves.

**CHAIR:** Okay.

**MR WATSON:** Just to give you an overview of TrustPower. TrustPower is a publically listed company on the New Zealand stock exchange and currently employs about 400 people. The company remains predominantly New Zealand owned, and is about 90 % New Zealand shareholder's. It's head office here in Tauranga. It was established or grew out of the Tauranga Electric Board, which was established in 1924 so has a long association with the Tauranga region. TrustPower was formed pursuant to the Energy Companies Act in 1992 as part of the deregulation of the electricity supply industry, and subsequently and pursuant to the Energy Reform Act in 1998 TrustPower elected to become a generator and retailer.

To be read in conjunction with  
the tabled evidence/statement

The company is currently the fourth largest retailer of electricity with approximately 230,000 customers and the fifth largest electricity generator in New Zealand.

Within New Zealand TrustPower are the owners and operators of 36 hydroelectric power stations and one wind farm. They are geographically spread throughout the country from the Kaimai Ranges here all the way down to Dunedin. In addition we also now currently own and have built one wind farm in Australia.

TrustPower's hydroelectric power schemes are typically small to medium in scale, and embedded in the local supply network meaning electricity is located close, sorry is generated close to the local demand. As it's schemes are predominantly hydroelectric, fresh water and it's management is of fundamental importance to us.

The company is committed to responsible and effective energy generation, and to applying best industry practices to its activities. It acknowledges the importance of the environment to its continued operation, and has adopted a set of environment policies which encourage the practical minimisation of adverse environmental impacts with its activities.

Three key features of TrustPower's generation philosophy and portfolio which distinguish it from the other four large generators in New Zealand, and I must add that we are the smallest of the - we say we are the fifth largest, where four very large ones then there is us, and then there is a reasonably large gap down to the next largest generator. So we are committed to small to medium size hydro and wind generation. Committed to renewable generation, and committed to local supply. The value of TrustPower's generation assets are inherent within it's resource

consents, and at present we have about 481 resource consents which is just over 3100 conditions. Which is a reflection of the number of schemes - that we operate.

In response to the apparent shortfall in renewable electricity supply within New Zealand. TrustPower is actively pursuing a number of renewable generation development opportunities, which are mostly located near existing TrustPower owned infrastructure - and in locations where increasing demand versus supply pressure exists. There are a number of areas in New Zealand, which are net importers of electricity, such as the Marlborough region where we currently have the Wairau hydroelectric power scheme moving through and Environment Court process. And also the West Coast where we have Arnold hydroelectric scheme, which is also moving through the Environment Court process. Both of those regions currently import 70 to 80% of their electricity.

[11.40 am]

Generating power at a distance from where it's consumed incurs costs. Transmission losses and reduces efficiency, and that's why we try and generate closer to where we distribute.

I will now take you just - to some general comments at paragraph 17. There is a concern with some of the new terminology introduced in the proposed NPS including for example that contained within Objective 8, and Policies 4 and 5. TrustPower requests in its submission that such terminology be amended so as to avoid ambiguity. Consistency with the Resource Management Act where possible - could minimise this uncertainty. The introduction of subjective and unqualified terms will add significant cost and time, and ultimately frustration to the implementation of the proposed NPS.

The terms which TrustPower considers needs further definition, or amendment are discussed within the evidence in particular Objectives 2, 3, 4 and 8, and Policies 1 and 4. And we'll get onto those after.

The proposed NPS contains sufficient timeframes - insufficient timeframes sorry, in which local authorities - that's a slip of the tongue - are to give effect to the objectives and policies. A significant amount of work will be required to implement a NPS. If inadequate time is allowed there, is likely to be limited consultation and feedback, with notification of overly conservative provisions as a lack of information. While TrustPower appreciates the intent of setting timeframes, the terms set out in the proposed NPS is likely to seriously impede the ability of these documents to result in positive outcomes for the fresh water management, or for existing users of fresh water. I will explain TrustPower's concerns with these in relation to Policies 1, 2 and 3.

Further the propose NPS does not sufficiently recognise the high values of investment associated with fresh water resources, and the values of existing investment. Nor does it recognise the contribution users of water, and physical resources make to the economic and social wellbeing of people and communities.

At this point I'll hand over to Ms Malcon who will take you through the objectives.

**CHAIR:** Thank you very much.

**MS MALCON:** Good morning my turn to lead the case for a bit now. What I'm going to do is concentrate on my opinions expressed in the objectives and policies with Mr Watson jumping in to provide examples from a company

perspective along the way. So I'll start by introducing myself. My full name is Bridget Marie Malcon and I'm employed by Ryder Consulting Limited as an Associate Director.

Turning now to my role at section five, I've been commissioned by TrustPower to prepare planning evidence in support of the company's submission to the proposed National Policy Statement for Fresh water Management.

**CHAIR:** Now am I looking at the right place to follow this?

**MR WATSON:** You can have two separate briefs. Just -

**MS MALCON:** You've had my brief for a while, and you received Mr Watson's today.

**CHAIR:** Oh okay. Thank you I'll just make sure I can turn that up. That's the submission.

**MS MALCON:** Sorry to attach from our confusing manner.

**CHAIR:** That's fine. It's no trouble - I was just a bit slow in catching up - but I should looking at. And it seems I was the only one. Yes thank you.

**MS MALCON:** Okay. Starting at section nine - Objective 1, TrustPower supported Objective 1 to the proposed National Policy Statement, and sought that it be retained unmodified. And it's just discussed within section nine of my evidence. I too consider that the objective is appropriate. This objective is consistent with the Act, and allows for a balancing affect. I first considered that the objective should be retained unmodified.

Section 11- Objective 2, TrustPower sought amendment to Objective 2 considering the objective to be unclear and highly uncertain, as discussed further in section 11 of my evidence. I agree that Objective 2 lacks clarity making it purpose confused, and more complex than is warranted. No explanation has been provided to Objective 2 to assist in providing guidance as to how the objective is to be interpreted, and terminology within the objective has not been defined. I understand that land use development and discharges of contaminants associated with the drain, have a greater effect on the impact of water quality than they do on water quantity. Given this I agree with TrustPower's submission, and consider that the objective - and consider that an objective which focuses on water quality, when related to land use development and management is logical and appropriate, and also more suitably fulfils the intent of the objective. For completeness TrustPower's release sort to Objective 2 is set out within my evidence at section 15.

**MR WATSON:** If I may just jump in there. I mean it's our experience that the most tangible benefit for integrated land management, is the quality of the water during recent re-consentings we've often confronted with nuisance weed growth, which through the re-consenting process we're expected to deal, with however the cause of that is the nutrient loading in the water, and through site visits we often see that cows etc are allowed free access to the lake to drink. So there is actually no fencing and yet when we come to the  
Re-consenting it's an issue that's associated with our scheme in the lake where the water is. So that's from our view is where the quality versus quantity where the quality focused on.

**CHAIR:** I believe you lean for both, in the National Policy Statement.

**MS MALCON:** Section 16, Objective 3. TrustPower sought to have Objective 3 amended as discussed within section 16 of my evidence. I agree with TrustPower that Objective 3 is both unclear and overly restrictive. In particular I consider the need to exceed a swimmable water quality standard as inappropriate. While a resource consent applicant may be able to exceed a prescribed standard, this should not be a necessity. A requirement to exceed standards creates ambiguity and potentially unnecessary uncertainty for an applicant.

Using the words or exceed, as in Objective 3 could result in more restrictive and or ambiguous rules developed within local government planning documents, which resource consent applicants require to exceed particular standards or exceed standards by a specified quantum, that has no scientific basis or cannot be robustly defended. In my opinion if a particular standard provides insufficient protection to maintain a particular resource, then it is the standard that should be amended rather than the resource consent applicant that is required to exceed the standard.

Dr Greg Ryder, who's an aquatic ecologist with 18 years experience around New Zealand, states that appropriate swimmable quality - sorry I'll start that again - states that appropriate swimmable water quality standards will depend on the individual characteristics of a locality. Further water quality standards should be developed for the particular river types, and derived through a consultation process. I agree that this approach is appropriate. I further understand that not all fresh water resources are able to achieve a swimmable standard. Indeed Mr Ryder advises that from the search he has undertaken in Southland, not all lowland streams would be able to achieve bathing or swimmable standards, unless there was a radical change to land use. And that in some cases in Southland it has been more appropriate to link provisions to other water quality standards, such as stock drinking water standards.

Dr Ryder also notes that many lowland streams are unsuitable for bathing, due to low clarity, nuisance algal growth, soft bottomed beds and weeds. Therefore it is unreasonable to apply blanket standards without strong justification for doing so.

I consider that TrustPower's relief sought is appropriate - however I suggest a minor amendment to include reference to appropriate water quality standards, as opposed to swimmable standards. The relief that I've suggested is set out within section 22 of my evidence.

Section 23 - Objective 4, TrustPower submitted that Objective 4 required significant modification. The company stated that the objective was unclear in particular in relation to how the term ecological values - was to be interpreted and applied. TrustPower's concerns are further summarised within section 23 of my evidence.

[11.50 am]

As drafted Objective 4 is more restrictive in part two of the Act - and that it requires the recognition and protection of life supporting capacity, and ecological values rather than significant ecological values. Given this I question the appropriateness of the objective. And during this conclusion I have considered part two, particularly section six of the Act, further in developing this evidence I have reviewed a distance learning document, to determine if they refer to the terms ecological values. This analysis revealed an explanation contained with Environment Southland's proposed regional water plan, which is set out in section 26 of my evidence.

I considered that Environment Southland's interpretation is useful, and that it uses terminology consistent with section six of the Act. If applied in this instance, I considered that Objective 4 should be amended to be consistent with, and not made more restrictive than section six. In particular part C. Making the objective consistent with section 6C would allow a more balanced assessment of effects to occur. While all critical resources have ecological values, it is not appropriate for all ecological values to be recognised and provided for. This would be inconsistent with the principle of sustainable management. I therefore agree with TrustPower's proposed relief sought with minor amendments to the terminology used, and the explanation provided. I provide the amended relief sought to Objective 4 within section 29 of my evidence below.

Section 30 - Objective 5, TrustPower stated that Objective 5 is both onerous and unnecessarily restrictive. The company's concerns are further summarised within sections 30 and 31 of my evidence. In addition Mr Watson provides further discussion and examples within sections 28 to 31 of his evidence.

I agree that Objective 5 as currently drafted is onerous, and unnecessarily restrictive. The objective does not allow for temporary discharges, nor does it allow for any adverse effects of land use development and discharges of contaminants to be remedied or mitigated. In promoting the sustainable management of natural and physical resources, section 5C of the Act allows for avoidance for mitigation or mitigation of any adverse effects of activities on the environment. While the intent of the objective is appropriate the objective requires amendment to make it less restrictive. For these reasons I agree with the amendments to Objective 5 that TrustPower has sought, and for completeness repeat these within section 34 of my evidence.

**MR WATSON:** I'll just take you to paragraph 28 with mine. I'll just go through the implications for TrustPower. And I'll let you flip pages.

**CHAIR:** Okay - found it.

**MR WATSON:** TrustPower at times has to undertake works involving dredging, sluicing and erosion control. These works are undertaken in the interest of scheme safety, efficiency and the surrounding environment. On some occasions, such work can result in temporary degradation of the water, as a result of an increased sediment load. TrustPower undertakes AATP which is Annual Asset Task Plan which is yearly maintenance activities, to ensure the efficiency of generation assets is optimised, and that all plant is maintained in a good state for operation. For example a build up of silt or sediment in storage ponds reduces the capacity and flexibility of our schemes. Removal of this sediment and silt build up ensures that our schemes can operate more effectively.

One of the methods used to remove the accumulation of material is through dredging, at the (inaudible) scheme which is between here and Taupo. Sediment from the Rangitaikai (ph) River is deposited in the Rangitaikai (ph) canal which is part of the scheme. This is a two fold effect, with effects on the hydraulics of the race, and also with weed growth. Removal of the sediment through sections of the water race has been undertaken since 2006, and as a result we have seen significant improvements in the hydrology of the canal. This equates to an improvement of efficiency of the overall schemes performance. Sediment build up behind structures in the beds of rivers and off-takes is common. In most instances sluicing is an effective remedy for this issue. This involves the discharge of water through the structure with sediment suspended in the flow. The volumes passed in the duration of the discharge is such that the discharged material is moved through the water

course, and does not result in significant sediment deposits at other locations downstream. This is undertaken on a regular basis, and in a number of different schemes to ensure the scheme is efficiently maintained.

There are ways in which temporary discharges of water can be remedied and mitigated. The ability to remedy or mitigate effects as opposed to avoiding effects entirely is the key for efficient operation of our infrastructure. Promotion of the sustainable management of natural and physical resources in the Act, allows for adverse effects to be avoided, remedied or mitigated.

**MS MALCON:** Now I'll start at section 35, Objective 6. TrustPower sought amendment to Objective 6 as set out in section 35 of my evidence. I consider that Objective 6 could be worded more clearly, and that the objective should provide guidance on how fresh water is to be sustainably managed, when over-allocation has already occurred providing protection to existing users. I note that recognition of both positive and negative effects of water use will promote a framework that will assist in a more balanced assessment of proposals, as they arise.

In my opinion existing users should be afforded protection, particularly where the level of investment and community benefit associated with the existing use or restriction is substantial. From my knowledge of the hydroelectric power industry, even a small decrease in water available to be extracted and used by an existing scheme can have a significant effect. Mr Watson provides an overview of the Matahina (ph) scheme, within his evidence and we'll speak to this shortly. I therefore consider that the relief sought by TrustPower is appropriate, and for completeness repeat the same within section 40 of my evidence below.

**MR WATSON:** And now if I go to 35 with my evidence. Back and forward again I'm sorry. Hydroelectric power stations can operate while still preserving and enhancing many of the positive qualities of water bodies, as well as providing recreational benefits. Lake Rotorangi at TrustPower's Patea hydroelectric power scheme in Taranaki, is a regionally significant resource as the lake which is 46 kilometres long provides water skiing, wakeboarding, kayaking and camping opportunities, without having to travel to Taupo which is the closest large recreational lake. The (inaudible) canal at the (inaudible) scheme, provides an important trout fishery, and in addition there are scheduled flow releases below the Kaimai, Waipouri (ph) and Patea stations, to support recreational uses such as jet boating and kayaking. Further to this at TrustPower's proposed Arnold scheme, we plan to construct an Olympic quality white water course. In Canterbury Lake Coleridge is recognised as an important salmon fishery as well as being a popular boating and windsurfing destination.

Therefore there are a number of positive effects born from the establishment of hydroelectric power schemes, and the use of fresh water which should be considered in order to provide for sustainable management. The rights of existing users should be protected and not derogated from. This is crucial as even a minor decrease in the water available for generation can result in a significant adverse consequence. At TrustPower's Matahina scheme which is based just out of Whakatane, we have seen a considerable drop in the inflows to Matahina, and the likely cause of that is upstream extraction. This lost generation experience currently has resulted in inflows reducing between 24 megawatt hours and 36 megawatt hours per day, which translates to a significant cost.

Recognition should also be given to the level of investment and community benefit associated with existing extractions. A significant and

obvious benefit is the supply of electricity. TrustPower's schemes produce enough electricity combined to supply over 200,000 typical New Zealand households each year, and another benefit that cannot be ignored, is the reduced reliance on thermal generation.

[12.00 pm]

**MS MALCON:** Turning now to my evidence at section 41, Objective 7.

TrustPower considered Objective 7 appropriate and only sought minor amendment to the objective, as discussed within section 41 of my evidence. I consider the intent of Objective 7 to be appropriate. In my opinion it is crucial that fresh water is utilised efficiently, particularly as there are regions in New Zealand such as Canterbury and Marlborough for example, where a number of fresh water resources are reaching allocation limits, or are already over-allocated.

If the demand for fresh water continues to increase, so to does the need to ensure efficient use, thus allowing benefits for a larger number of uses and users. Transferability of fresh water should help to ensure that water is not wasted, but utilised more efficiently. However I agree with TrustPower that transferability will only be affected if it does not derogate from, or affect existing users or uses. To do so would defeat the purpose of trying to ensure efficiency - by adversely effecting an existing use. For these reasons I support TrustPower's amendment to Objective 7, with minor amendment to reference transferability, and for completeness repeat this within section 45 of my evidence.

**MR WATSON:** I'll just make one small comment - you probably don't need to turn to my evidence. It will save you flipping pages, but we are very keen on the irrigation hydro mix. We work very closely with the RDR, the Rangitata Diversion Race in Canterbury, where the water is not being

used for irrigation falls down through our stations. And that is, I guess, looking at two users who are quite often opposed to each other. And we do believe that you can work together for a more efficient use of that resource.

**MS MALCON:** Turning now to section 46, Objective 8. Within its submission TrustPower stated that it's beneficial for tangata whenua values and interests, to be identified and proposed within Objective 8 as discussed within sections 46 to 47 of my evidence. The company however sought clarification of how the terms interest and involvement were to be defined. I agree that it would be beneficial for cultural values and interests to be identified in plan dealing with fresh water resources. In my experience the cultural values attributed to a fresh water resource, are often one of the key components that determine how a project is progressed, and whether it is progressed at all.

The cultural values of particular fresh water resources are not always readily apparent, as local government planning documents may not always cover the cultural values of fresh water resources or cover them in detail. As the terms - interests and particular involvement have not been defined or explained within Objective 8, I agree with TrustPower's suggestion that reference needs to be made to the appropriate sections of the Act, being section 6B, 7A and 8. I consider that providing reference to the Act will give greater certainty to resource consent applicants. I therefore support TrustPower's proposed amendment to Objective 8, with minor amendment regarding reference to the Act. The amended relief sought is set out within section 51 of my evidence.

**MR WATSON:** Just to quickly go onto 44 of mine. As a company, we consider that the identification of the areas of specific values to

tangata whenua would be beneficial. When looking at the development proposals there is a lot to be gained from having clear information up front. Not only would we be able to identify which areas to avoid, or where a high level of mitigation or remedy would be required, but it would also assist us in identifying groups with whom to initiate discussions.

We have recently had a wind farm proposal in an area where we did our initial scoping phase. We looked at council planning maps, which were meant to identify sites of significance. We then found that the area we were looking at, did not fall into one of those categories, and then through further investigation and finally finding out which were the appropriate iwi to discuss with, have been advised that no that site is extremely sensitive. So it's having that sort of information straight up.

And we do appreciate the sensitivities and the fact that a number of iwi do not want to disclose where their sites are - for fear that others may go there. But as a practical step that would be very beneficial for us.

**MS MALCON:** Turning now to section 52 of my evidence, Objective 9.

TrustPower considered that Regional Councils and territorial authorities undertaking effective monitoring and reporting, would be both beneficial and appropriate. TrustPower's submission to Objective 9 is further discussed within sections 52 to 54 of my evidence. I consider effective monitoring and reporting to be essential. Not only does such monitoring lead to problems being identified and remedied earlier, it can lead to more efficient use of fresh water resources, and could provided useful trends and patterns that occur within a fresh water course both naturally and as a result of a particular activity or activities.

While effective and necessary monitoring is useful, as noted by TrustPower unnecessary monitoring can lead to excessive cost to an

applicant, by way of increased compliance charges, or more restrictive resource consent conditions. From my experience it is not unusual for an activity to be required to operate in accordance with a number of resource consents or consent conditions. Often it is not whether an activity is granted consent, but the type of conditions imposed which govern whether it may - whether the activity can viable proceed. In this regard it is important that any monitoring and reporting to be undertaken is both effective and necessary, and that consent conditions are not unnecessarily (inaudible), or require the same attention effect to be monitored in a number of different ways, or to duplicate monitoring being undertaken by others.

I further consider that this is important for monitoring and reporting to be able to be changed or adapted in accordance with the outcomes achieved. For example if an activity is shown to be inducing a negligible or positive effect over a particular time period, the level of monitoring required should be reduced. For these reasons I support TrustPower's proposed amendment to Objective 9 and for completeness repeat the same within section 58 of my evidence.

**MR WATSON:** The concern from the company's perspective in the (inaudible) is that we currently spend a significant amount of money on compliance, and the concern is that that compliance cost would go up greatly. So we do understand that compliance is important and that monitoring is important, but it's to have it monitoring which is necessary, which is important to us as well.

**MS MALCON:** Policies 1, 2 and 3 - section 59 of my evidence. TrustPower concerns with Policies 1, 2 and 3 have been discussed by Mr Watson in some detail within his evidence, and are summarised within sections 59 to 73 of my evidence.

So now turning to section 74, which is where my opinion comes in. Policies 1, 2 and 3 are in my opinion conceptually long, complex and overly descriptive. I believe that the policies would be less confused and clearer if they were broken down into various themes, addressed within the policies perhaps with separate, clear and discrete policies drafted.

I consider that the most appropriate seems to be to address specifically a water quality, water quantity, environment flows and levels, and water use and efficiency. The purpose of the proposed National Policy Statement is to provide provisions as to the management of fresh water resources, as a matter of national significance limited to achieving (inaudible) of the Act. I further consider the number of the (inaudible) listed within the policies will fall out of the specific water related theme, and are already provided for within part two of the Act.

While breaking up Policies 1, 2 and 3 in accordance with the themes I've identified would increase the number of policies provided within the proposed NPS. It would also help to provide certainty and clarity with regard to what is intended, and how it is to be implemented or undertaken.

Like TrustPower I considered that timeframes prescribed within the policies are inadequate. I accept that setting short timeframes is aimed at ensuring that action occurs much more quickly to enable New Zealand's fresh water resources to be managed more widely. I am however concerned in imposing unrealistic timeframes will lead to a lack of background research, and consultation being undertaken, before provisions are notified. This may in turn lead to more onerous and restrictive provisions as overly conservative approaches are adopted to compensate for a lack of robust and independent research.

Mr Watson will now discuss this further in some detail.

**MR WATSON:** If I just start at 53 of my evidence. We'll just proceed from there. Policy 1 which further informs Policy 2 and three is extremely long and over-prescriptive. Policy 1 would be more simply put if it was broken into separate and specific policies, addressing discrete topics. We consider that these discrete topics as addressed by Ms Malcon's evidence, we agree that water quality, water quantity, environment flows and levels, and water use and efficiency, are the most relevant concepts for the NPS.

[12.10 pm]

We consider that Policies 1, 2 and 3 establish inadequate timeframes for drafting of proposed regional and district policy. The consequence could include significantly increased costs, and pressure on both local authorities and applicants, and water users, inefficient implementation of policy and ultimately a failure to achieve a sustainable management purpose of the RMA.

No doubt, and I heard the comments earlier today, the local government have raised this issue with yourselves - in relation to timeframes and costs involved with the proposed NPS. I would like to highlight this as being a significant issue to TrustPower and other fresh water users such as developers, generators, existing and proposed fresh water users, landowners and iwi.

TrustPower's generation assets, as I explained previously, are spread geographically throughout New Zealand. As a result my team engages in over 60 District and Regional Councils - with 60 District and Regional Council's throughout the country. We are presently involved in more than ten proposed plan and policy statement processes. These include the

Canterbury NRRP which has recently completed its 34<sup>th</sup> hearing over two years, and the Horizon One plan, which appears to be going in the same direction. Which is - the first combined Regional Policy Statement and plan.

The timing - time and cost involved in being involved in these policies and planning processes are high. TrustPower spent well in excess of half a million dollars last year on planning processes alone. This cost would be significantly higher if all councils introduced such wide ranging plan changes, as the proposed NPS requires over the same period. In addition the level of engagement would need to be even higher if provisions were restrictive - which are a likely consequences, given the narrow timeframes.

We are concerned that the timeframes prescribed will not allow enough time for the necessary research and drafting of appropriate provisions. If adequate timeframes are not allowed, consultation and feedback in the early stages is likely to be limited. As a consequence impractical provisions may be notified by local authorities.

To implement Policy 1 alone Regional Council's are required to identify all fresh water resources within a region, that are considered to be outstanding or degraded. Furthermore the policy requires council to consult with tangata whenua to identify values and interests and update existing iwi and hapu planning documents. As a consequence of concerns outlined above we suggest a timetable for undertaking such research and work, behind the drafting of the provisions should be extended. A timeframe up to five years would be more realistic and effective.

Once significant concern for TrustPower, is having the ability to be meaningfully involved in having the opportunity to provide councils with

feedback on proposed changes. As mentioned previously we're involved across a wide range of New Zealand in a large number of councils. At present we do have the ability to have some informal contact on policy documents before we engage fully in them which is beneficial. And it's my experience that has led to a less adversarial approach needing to be taken, because issues are thrashed out before documents are notified. The concern is that if suddenly all 60 plus councils that we monitor and actively participate with - notify plan changes we won't have the ability to do that.

TrustPower is also unsure as to who is to decide what is outstanding and what is degraded. It considers that it is inappropriate for local government authorities to classify this. It is suggested that it is more appropriate for independent experts to be employed when fresh water resources to be assessed against appropriate criteria. This would ensure that such important analysis is completed objectively and in a balanced way. Few council's are likely to have the staff on a level of experience and expertise to undertake this research, and analysis involved with making such decisions given the timeframes.

TrustPower believes that the environmental flows need to be identified on a case by case basis. We consider that the toolbox approach should be used for setting of these flows, rather than restricting this to a specific methodology or methodologies. It is both important and appropriate to be able to adapt the toolbox of preferred options as research is undertaken and technological advances occur.

While we consider the setting of minimum flows and environmental flows are appropriate, we do not consider that the setting of upper allocation limits to be of benefit. We note that the setting of such limits or levels is something that is not universally accepted by the scientific community. In

this regard I have spoken personally to several reputable scientists and ecologists who do not support the need for universal allocation limits. TrustPower also made this point in their submission on the proposed NES.

I'd just like to elaborate on that slightly. We say universal - there may be some instances where they are appropriate - however they would be in situations where the catchments do not regularly have fresh events that provide those sorts of flushing flows. There are number of catchments that we operate and that are very flashy and those floods or those (inaudible) occur on a regular basis. We do understand that they are important for the environment to have those, but not necessarily that all of them need to occur if you're in a catchment where you get regular fresh events. So some of those may be able to be captured and having an upper allocation limit may preclude that.

If we just move to 66 - a flow regime imposed on a hydroelectric power generation scheme has the single greatest impact on the efficiency of the energy produced by the scheme, because it's the portion of generation that must occur continuously no matter what the demand is. Any increase in the residual flow which reduces the water available for generation during times of high demand also impacts on the economics if hydroelectric development in general. Any reduction in water allocation for the storage type schemes will affect the flexibility of the scheme. The flexibility is becoming very important now with the increase in wind farms, where hydroelectricity is now offsetting times where wind is not generating. So it's reverting to more of a peaking capacity to pick up times when the wind isn't blowing.

By way of example TrustPower owns and operates the Patea hydroelectric power scheme. It was commissioned in 1984. The scheme has a total capacity of 30.7 megawatts and an average output of 118

gigawatt hours. The residual flow machine is designed for a current residual flow of 1.4 cumecs. If the residual flow was to be increased a replacement would need to be installed at significant cost. And we've placed that cost between two and four million dollars. And that is because the current residual flow machine cannot take any more water than it currently does. The other alternative to that is opening the spillway to provide extra water as an environmental flow which is, we believe an inefficient use of the resource.

The policies of the proposed NPS are likely to result in objectives, policies and rules at both district and regional levels, which impose additional restrictions on existing activities. These activities would have gone through rigorous consenting and re-consenting processes. Existing schemes are often subject to conditions that impose a detailed residual flow regime, and these are generally the result of thorough assessment and a public notified consenting process.

In 1999 TrustPower's Hinemoa, Waipouri (ph), Motokawa (ph), Highbank Montelso (ph) branch, Waihopai (ph), Wahapo (ph) and Dillmans (ph) hydroelectric schemes have been - sorry since that date have been through their renewal process. Currently we have the Coleridge - sorry and just prior to the acquisition Coleridge, Arnold, Peirau (ph), Pateroa (ph) schemes were consented. Currently we are consenting the Matahina, the Patea and the Canary Mackay (ph) schemes.

Examples of where the consent renewal process has reduced TrustPower's generation output included the branch hydroelectric scheme, where the imposition of a flow sharing regime could result in eight percent reduction of output, Oahapo (ph) electric power scheme, where there was a 4.2 percent reduction in output, the Waipouri (ph) hydro-electric scheme, where there was a 1.2 reduction and output and reducibility to generate

during national and regional power shortages. And in saying that last year we had to go to council for a dispensation due to the low lake levels - around New Zealand in an attempt to access a portion of the water for generation purposes.

[12.20 pm]

When activities such as existing hydroelectric power generation schemes have demonstrated a sustainable flow regime, then such flows should not be adjusted unless there is a robust reason to do so.

I'll just take you down to 73. The "first in first served" approach when coupled with the efficient system of consent transfer is environmentally appropriate and efficient. It also recognises the value of existing investment and a principal of non-irrigation. The proposed NPS needs to be amended to recognise this. TrustPower has concerns around the effects of attempting to establish new case law, and the impacts of security of supply of existing and proposed hydro and electricity generation if there is a departure in the "first in first served".

TrustPower is concerned that the timetabling of priorities to determine when fresh water quality standards and environmental flows and levels are set mainly to councils granting consents for shorter terms, together with catchment wide common expiry dates. This could lead to greater cost and more regular consenting. This is particularly onerous on large scale projects and leads to a greater level of uncertainty, particularly in over-allocated catchments where a number of resource consents are due to expire in the same time. TrustPower based on its recent experience in consenting and re-consenting schemes, consider that the cost faced during these processes are already extremely onerous and extremely costly.

Common expiry dates will only add to this cost, as we would need to re-consent more often and the cost of a re-consent I don't think would change whether you were consenting for a period of 35 or 10 years. The council hearing phased for the TrustPower Wairau hydroelectric power generation scheme, for example, extended for six months. If a number of consent, re-consent applications were required to be heard at once there would have to be a significant amount of resources dedicated to process these. For regional authorities with jurisdiction over a large number of catchments this would be a significant issue.

TrustPower is also concerned that Policy 1 - seeks to prioritise allocation for consumptive fresh water takes. This amount's to different District and Regional Councils picking winners, and leads to a great deal of uncertainty for users of fresh water resources. TrustPower seeks an amendment to this provision so that the prioritisation of consumptive fresh water takes can only occur on a "first in first served" basis.

I will now move to Policy 7 which is my paragraph 85. And I would like to qualify this by I'm not a lawyer and I don't have any legal background, but we are concerned with the reference to financial and development contributions within Policy 7. In discussing this policy with Miss Berkhardt (ph) a local solicitor who provides advice to us, the company does not believe that such a condition is strictly non-regulatory. The circumstances in which conditions can be imposed seek financial and development contributions are limited by the RMA and the Local Government Act respectively. And those are highlighted in those passages.

Can we go to 87 - given the above and the advice provided from Miss Berkhardt (ph) TrustPower finds it difficult to see how financial and

development contributions have been included in a policy dealing with non-regulatory methods.

And we will just move to the last page of my evidence, and under the heading of "Consumptive Use". Whilst TrustPower recognises that hydroelectricity generation is consumptive, in that it temporarily prevents water from flowing downstream we consider that the definition of consumptive use should be amended to recognise the special circumstance of hydroelectricity generation. While water may be stored for a certain amount of time, which may in turn result in some modification of the downstream flow characteristics, it remains ultimately available for a number of downstream users subsequent to its use. It is therefore fundamentally an efficient use of a resource. Clarity should be provided between those consumptive uses that take and use water without returning it to a water course, and those that do return it albeit at a different location and after a time delay.

While TrustPower is generally supportive of the intent of the proposed NPS it has a number of concerns which have been outlined above. TrustPower considers that as currently drafted the proposed NPS could unnecessarily impede and therefore make the operation of its existing hydroelectric power generation schemes less efficient. It also considers that new development and enhancement of the same in New Zealand could be adversely impacted. Therefore TrustPower seeks the proposed NPS is amended in accordance with the relief requested in the evidence of Ms Malcon.

Thank you very much for your time today.

**CHAIR:** Well thank you Mr Watson and of course Ms Malcon. And we have 20 minutes or so. If you'd agree we could have some exchange of questions

that would help us to understand more clearly what the submission is seeking. May I start with Mr Prime?

**MR PRIME:** I have no questions.

**CHAIR:** No questions. Mrs Vernon?

**MS VERNON:** I just want to explore a little bit further your annual policy line on your paragraph 90 Consumptive Use, and then also 76, paragraph 76 on your presentation today about that prioritisation of consumptive use fresh water takes can only occur on “first in first served” basis. We have had some other generators suggest in actual fact, in their submissions that hydroelectricity is actually not consumptive but non-consumptive. Now if that was the case then in actual fact I would assume that TrustPower would have no difficulty with that. Would that be correct?

**MR WATSON:** That would be a fair assumption.

**MS VERNON:** Fair assumption? That’s right. And then that leads to your 76 if again that you were - if again the Board decides or whatever, that things like hydroelectricity are non-consumptive that is it then so important that it is “first in first served”? And I’m a little curious about your 76, because other generators have suggested that perhaps municipal and domestic supply does actually have a priority over hydro.

**MR WATSON:** We accept that for drinking water. We do have some issues that we have come up against in a number of locations, where municipal take has - applications have gone through for it to be increased purely to supply industry, because of the water rates that they receive for doing that. And in one case the municipal take was put forward to be doubled. And the reason for that was to be supplied for a large industry to take that

water. So that is the concern. We do not have any issue with it being made available for domestic supply.

**CHAIR:** Or fire-fighting.

**MR WATSON:** Yes or fire-fighting. Any of those - but what we're saying that there is a concern that does sneak into that municipal when it suddenly starts going to other big players, big industry players who we believe should be after their own resource consents to use the water.

**MS VERNON:** Fine. That's fine. Thank you very much - thank you sir.

**CHAIR:** Dr Harding?

**DR HARDING:** Mr Watson on page 4 of your evidence today number 11 you make reference to applying industry best practice etc, and that's (inaudible) referred to in the proposed NPS. We've had other members of your industry balk at this idea of using (inaudible) best practice. Do you - I think that you explained later on that you have a set of environmental policies. Do you consider that you already have best - some form of best practice?

**MR WATSON:** A lot of the best practice I guess is more related to the dam safety which I'm not heavily involved in. And I know that there own guidelines which are followed, which are put through by the likes of (inaudible) and New Zealand Society for Large Dams. And those are the standard by which New Zealand goes through. I know there is a lot of issue's at the moment with the Building Act over dam safety. And who enforces those and those involved with Regional Council's probably have an understanding of that. The industry best practice I guess we're

referring to is more along the safety lines - which then brings into the sluicing and maintenance.

**DR HARDING:** So there is no best practice as far as say water quality is concerned?

[12.30 pm]

**MR WATSON:** Well water quality I mean, I guess hydro we tend to think we don't have an impact on the quality per se. It is other factors which influence the water quality. We simply pass it through from one end to another. We are heavily involved though in a number of ecological enhancement projects that we go out and do as part of our consenting and re-consenting processes. We do carry out a lot of monitoring as well on things such as dissolved oxygen levels. As I say you know (inaudible) that can occur is in some of the lakes where you don't get turnover or the lakes are deep. And normally these lakes are formed on old forestry which has just been felled to allow for hydrogenation. So there are some issues around those as well.

**DR HARDING:** Okay. Thank you. So I think - I've got a series of questions on Ms Malcon's evidence, and so if we could have a look at that. Turn to page 3 for example your relief sought on Objective 10. I noticed that in particular that you may have a explanation there for 15 - page 3 fresh water resources will only be enhanced where practical. So this sort of opens the gate doesn't it? I mean a number of our submitters have expressed serious concerns that perhaps the intent of this proposed statement is to raise the bar, to not allow business as usual - but to get an improvement. So by adding (inaudible) where practical this does create an opportunity for business as usual doesn't it.

**MS MALCON:** It did create some opportunity for business as usual, but I don't think that every fresh water resource needs to be enhanced. That's I think - yeah this is allowing for some enhancement to occur but not saying that it needs to occur on every occasion I guess.

**DR HARDING:** Well I guess that goes on to - ties in with your comments over the page, on page 4 for example. You made mention of this swimmable issue and that - that standard might be inappropriate.

**MS MALCON:** Appropriate in some circumstances, not appropriate in all circumstances. Not appropriate nationally today - only because some water courses just can't reach swimmable quality standards.

**DR HARDING:** Some submitters would say that's exactly the problem we have in this country, because - that many systems have been degraded by our activities to such an extent that water quality is no longer swimmable. And that they would say that that's not acceptable in this country.

**MS MALCON:** They might very well say that. I think that there's always going to be some water courses that aren't necessarily used for swimming or that you can get to for swimming anyway. Like in a, I guess in a deep - what am I thinking - something that you know you can't generally get to.

**DR HARDING:** And I accept that and other submitters have said well ground water, wouldn't necessarily be swimmable. So let's leave aside the issue about the practicability of being able to physically swim in a system, how about the idea of a standard. How does TrustPower feel about having some sort of minimum water quality standard in this country?

**MR WATSON:** I mean we are obviously keen on the environment, so you know that is accepted, but needs to be something that we know what it is. And then assess the effects of that, once we know what it is.

**DR HARDING:** With some certainty -

**MR WATSON:** it is, it's about certainty.

**MS MALCON:** And I think that's what the evidence is trying to say as well. It's not against a standard per se, but it's the correct standard or standards.

**MR WATSON:** And I think some of the point earlier, was some of the low lying, sort of the wetland type water courses may not even in their hay day been at a swimmable standard, depending upon what was around.

**DR HARDING:** I guess it always depends on how far back it -

**MR WATSON:** That's right, absolutely it does.

**DR HARDING:** Sure. So I guess this, you know, follows on a little bit with - on page 5 sorry your relief sought on Objective 3 where it - the wording by having things like progressive enhancement, may imply to some that this is expecting a continual improvement, whereas you have replaced with the word improve, which might be a small increase and then again, it does need to be -

**MR WATSON:** As a company if we are causing an effect on something, it is our responsibility to rectify that and improve it or fix it up. The issue that comes I guess that we are slightly concerned about is if an overarching statement is put that you know, water quality when be improved. We're not having a natural impact on it, it is some other activities in the region

that are, and yet come re-consenting that's sort of put upon us as a big player, to actually step up and take the responsibility for that, and it's how that sort of responsibility is divided amongst society in general, rather than lumping it onto a corporate because they are perceived to have money to deal with these issues.

**DR HARDING:** Okay, thank you. On page 6, you've done some research on ecological values, which is interesting to see that, and I guess I was focusing on this - the term ecological value refers to the value of all vegetation and fauna that may be present within the settlement of a water system. So this is dealing very much with the flora and fauna if you like.

**MR WATSON:** I think we had an actual example where we were dealing this - we actually had a look at it, then we could be calling weeds infestations as an ecological community.

**DR HARDING:** Right.

**MR WATSON:** And that's where it's prefaced by "it's a significant" then that sort of infers more that it's the indigenous or it sort of moves away from that catch everything, it's limited, because some of those living things we don't want there.

**DR HARDING:** That was going to be my next question because I don't think - let's just finish this for a second, so again we've had a number of submitters, including some yesterday, who talked about what might be important in these systems, are not just the organisms if you like, but the processes, ecological processes and functions and services that these systems provided, do you consider that that might be worth considering under this - the ecological values?

**MR WATSON:** Sorry can you just further elaborate on that.

**DR HARDING:** Okay, well I mean I recognise that you're not ecologists and you don't -

**MR WATSON:** Yes.

**MS MALCON:** No.

**DR HARDING:** -- have an ecologist present here, that's fine. I guess, maybe I'll park that, and ask you about the point you've mentioned before which was you mentioned the word indigenous, so in Objective 4 the relief sought, you've actually now started referring to significant indigenous ecological values, is there a particular reason why you highlighted indigenous there?

**MS MALCON:** Just more consistency with the Act.

**DR HARDING:** Okay. Right, I think those are the main points thank you.

**CHAIR:** Thank you. I think it's paragraph 24 of Ms Malcon's piece, but either may answer. You're suggesting or you're raising the point that Objective 4 is more restrictive than Part 2 of the Act, and my question is, is it permissible for a National Policy Statement to be more restrictive than the Act is generally, for the particular subject area of the National Policy Statement? Perhaps it's really one for Ms Malcon, it's a planning question isn't it.

**MS MALCON:** Well the Act does allow for you to be more restrictive, or for policies to be more restrictive than the Act, but I think it needs to be - as long as the appropriate justification is provided I guess.

[12.40 pm]

**CHAIR:** All right, yes, well thank you. Now I did have a question or two that arose from Mr Watson's contributions, but again I say I'm not specifying which of you will answer, and you can both do so if you wish.

On paragraph 30, the question of sediment behind dams, and sluicing and one knows that that's the traditional process and as you say it's effective.

**MR WATSON:** Yes.

**CHAIR:** But should it be continued if it's at a cost to the environment?

**MR WATSON:** We actually undertake a - we do dig out sediment as well and stockpile and remove that way, and we would probably argue with that, in certain circumstances that is not, because if you get the flows at the right time, the suspended sediment is probably not going to be any more than is already there, so I guess it's about timing as well, for when those releases occur. We do look at other alternatives, and we do consider that environmental impact as well.

**CHAIR:** You do. Of course you can proud of that. But there would need - there would be justifiable in there something that expects that, even from your own business point of view, you don't want your competitors to not have the same standards as you have yourselves.

**MR WATSON:** I guess that's where it's sort of trying to divorce ourselves from New Zealand as a whole given that we normally have consent conditions, which are very tight around all these things anyway and basically set those sorts of requirements as to when you can do it, what the flow must be in the water, what impact you can have, so I guess -

**CHAIR:** So it's industry good practice again, is it?

**MR WATSON:** Well and as stated, it's put around consent conditions, consent conditions dictate a lot of those things I think that you're alluding to.

**CHAIR:** Yes, all right, thank you. Then in the next paragraph you remind us that promotion of sustainable management, and that's our test isn't it, allows for adverse effects to be avoided, remedied and mitigated, but would you agree that that's only part of it, you've also got to look at paragraph A and paragraph B of sub section 2 as well, and you can't just say, oh well we're doing good enough if we mitigate, maybe you'll have to avoid in some circumstances so as to meet the expectations of paragraphs A and B.

**MR WATSON:** I guess the issue if we avoid some of the dredging type situations is that we end up in a situation where the scheme is ineffective and will not function.

**CHAIR:** But if that's going to be at the cost of the sustainability of the media, and needs of future generations, maybe that's what's got to happen -

**MR WATSON:** And those are normally the things that are considered through the resource consent application process, and we look at the Environment Court processes where the experts debate that and determine what the effects will be, and whether they are acceptable or not.

**CHAIR:** Well it's not only to be measured against the effects, it is also to be measured against the expectations of - A and B hasn't it, and they can be independent on effects, that's where a slogan about effects based legislation is incomplete isn't it. Is that how you see it?

**MR WATSON:** Oh I must admit I -

**CHAIR:** You haven't thought about it.

**MR WATSON:** No.

**CHAIR:** No, that's all right.

**MR WATSON:** No.

**CHAIR:** You see it's probably Ms Malcon's area. Is there anything you'd like to add on that topic?

**MS MALCON:** I think and just referring back to Mr Watson's evidence, he is generally talking about effects that are probably not great effects, they're effects of sediment and not necessarily (inaudible) of contamination of a waterway or something along those lines and generally temporary in nature, so perhaps -

**CHAIR:** Well, thank you - small and temporary, that brings me to your paragraph 35 and also to your paragraph 90, which are the effects on the environment of damming, and I'm going to suggest to you that it seemed to me that particularly in paragraph 90 you were rather seeking to belittle the adverse effects of damming on the natural pattern of flows, or what they say the hydrology of dammed rivers. You see in paragraph 90 if I can pick it up again -

**MS MALCON:** So is that - of my evidence or Mr Watson's?

**CHAIR:** Well it's really Mr Watson's evidence, though I'm excluding you from participating in the answer, but you see in paragraph 90 there's reference

in the second sentence of the section on consumptive uses, while water may be stored, which may in turn result in some modification of its pre-flow characteristics and at the end of it, without returning it to the water - those who do return it, albeit at different location and after a time delay, now some of us on this Board have had experience of hearing about the scope and extent of the effects of damming on important rivers, and my own response was to write in the margin, belittling, question mark, because really the effects on the natural flow regime and therefore on the life, including the life of what's in the river seems to be major rather than minor.

**MR WATSON:** Well that's all debated and looked at during the scoping studies, and that's why we spend such a vast amount of time and energy looking at what effects will be occurred, and whether that is going to have a small or a large effect and then how to mitigate those effects. So I guess without - if we were to go to that extent, that it would almost preclude hydro development. As I say I does - well, I mean it does have that effect and that's something we are conscious of and we do look at.

**CHAIR:** All right.

**MR WATSON:** So I wouldn't be - sorry, but that is not meant to be belittling the effects, because that's not something that we would entertain. However, it's more that recognition that the water is available at a later time.

**CHAIR:** Yes.

**MR WATSON:** But I do understand what you're saying about the effects.

**CHAIR:** Then of course if you go to the shared irrigation as well as generation scheme, then the water isn't necessarily available.

**MR WATSON:** But it's more we are making use of the resource that otherwise may just pass straight back out into the river, that was the - using the efficiency that if it's there and it can be used for something else when it's not being used by one thing.

**CHAIR:** Yes, all right, thank you. Now in paragraph 36, you make a statement on which TrustPower is standing - the rights of existing users should be protected and not derogated from. Is that statement limited to the current term?

**MR WATSON:** We would like some recognition of the investment that has gone into these schemes. The hydro schemes can run in excess of a hundred years, so I guess when we do build these, we definitely see them being in existence for more than a 35 year or whatever the consent period is, so we would like to think that there is at least significant weight given to that value of the investment, and the generation potential as a renewable resource. We have asked and a number of others with the renewable NPS, that there is some consideration given to controlled activity status for re-consenting so that the conditions can be tweaked, but the actual ongoing operation of the scheme would be allowed.

**CHAIR:** Thank you. Under the law as it is at the moment --

**MR WATSON:** Right.

[12.50 pm]

**CHAIR:** -- this NPS must be written and I don't know about the other one, but this NPS is written under the law as it is now, the protection that you are speaking of in that first sentence of paragraph 36, against derogation, is a

protection for the term of the current consent, and the scheme of the Act is that when a replacement consent is sought, that's the opportunity when an up-to-date measuring against the section 5 benchmarks has to be done again.

**MR WATSON:** Well I'm not up to play with all the legal argument around those - and I wouldn't trade that away but -

**CHAIR:** Perhaps Ms Malcon can add to that bit.

**MS MALCON:** I think it's talking about during the term of the consent.

**CHAIR:** All right, yes.

**MS MALCON:** 35 year term normally.

**CHAIR:** Thank you, well now I'm sure that I haven't misunderstood then, thank you. I was - I also noted your paragraph 71 Mr Watson, but I think that really was the same question, you say, existing schemes have demonstrated a sustainable flow regime, and that's a matter on which there will be controversy always and my colleague on my right as well, on my extreme right, as well myself certainly are aware of controversy around the Wanganui part of the TPD and how sustainable that is, but - and you say such flows should not be adjusted and that's really on the qualification that while the current consent lasts -

**MR WATSON:** We're currently going through that with our Patea re-consenting, and there's the reason for an appeal because we've got ourselves, and another group's who are wanting polarised outcomes, and - so yes, definitely we reconsider that at the end of the re-consenting, or during the re-consenting.

To be read in conjunction with  
the tabled evidence/statement

**CHAIR:** Yes. Well I think that we've been able to understand rather more clearly what the submissions are, and as usual we've found the exchange such as we have been having an important part of the process, so we're very grateful to you both for coming and taking part in that, as well as taking the trouble to prepare your evidence statements so fully. Thank you very much indeed.

**ADJOURNED** [12.51 pm]

**RESUMED** [1.53 pm]

*Audio file: dpm 0141*

**CHAIR:** Thank you. Now a warm welcome to the Lakes Water Policy Society. And we're very much looking forward to hearing your presentation and your submission. There's no formalities, you can just present it as you would like. And we hope that we'll have an opportunity after that to have some questions and answers.

**MR GREEN:** Well thank you judge. I didn't realise being so informal we could maybe have brought a bucket of water down from Lake Rotorua, show you what it really looks like.

**CHAIR:** We've had a few samples like that but we're not all that enthusiastic.

**MR GREEN:** Oh well thank you very much. I've Don Atkinson with me and we've got a lot of our members here. We've also got Chairman John Cronin from Environment Bay of Plenty wants to make sure that we're saying things that we normally say.

**CHAIR:** Thank you.

**MR GREEN:** But we've got some handouts. We've got the slides which we're going to take you through. And we've got a letter just showing our frustration about one plan which just shows you us in a working action situation. And we also have copies of the proceedings of a symposium that we ran last year on nutrient sensitive science. And that really had world experts coming to New Zealand. And we had two days of presentations and deliberations. So without any further a do I'll start. And please stop me and talk to me if you want to on any matters.

**CHAIR:** Thank you. It may be that we'll restrain ourselves until you've completed your presentation.

**MR GREEN:** That's fine. Yes that's fine.

Well you may or may not be aware but (inaudible) Rotorua Lake district there are 12 lakes, Lake Rotorua being the biggest and arguably the most problematic to the region. Lake Tarawera and Rotoma are the clearest of our lakes. And the rest are sort of in between. So we have multi stages of water quality and grades. So it's just not one level. So I'll move on.

The lakes actually are an economic, social and cultural and an environmental wellbeing to the whole community, as you can imagine. The lakes drive the tourism. The lakes drive the recreation and they are very much part of that whole region. In fact it's arguably one of the most beautiful regions in the country. And here's an example of the classic wooden boats, regatta, on Lake Rotoiti. They hold it every year and we have a photo.

**MR ATKINSON:** We have about 80 classic boats turn up and we're now getting international visitors (inaudible) events.

**MR GREEN:** There's the local Tangata Whenua. And they lead the parade (inaudible) wooden boats (inaudible) and they're very much part of the whole process.

The threats to our lakes I assume that you are aware primarily come from nutrients. And nutrients feed the algae blooms and obviously weed. We have natural weed and we have artificial weed or imported weed. And that is resulting more and more becoming evermore prevalent in a lot of

To be read in conjunction with  
the tabled evidence/statement

our lakes. And (inaudible) has quite a more destructive aspect to it that it sits on the surface of the lake. So we do you have significant environment issues coming from (inaudible) which we'll get into.

But we thought we'd show you some photographs of just in recent times of - I'll just go back to that one. That is a full algae bloom at Lake Rotoehu. And that picture would have been taken two years ago. But I could have taken it this year. And if I take it next year it will be the same.

More Rotoehu. And that's an example of the discoloration and the type of impact that the algae bloom causes to the local.

This is Lake Rotoiti. In 2003 we had for the first time an algae bloom right across the lake. And those are the hot pools, if you've ever had the opportunity to go to the hot pools. You should do. And that's about half way down the lake. You can only access it by boat.

That's a consequence of the signs that we have. We had a lot of public discourse over the algae and as a result of it the authorities said that we must have these signs which obviously the local residents weren't happy to have around because it sort of impacts upon property values and a lot of other values that we all hold highly.

There's an example of a boat trail which has just pulled out of the lake, Rotoehu in this case. And that's the example of the weed getting onto the trailers and then transported round the region so lake transportation is a real problem for us.

There's a reaction to the Lake Rotoiti 2003 algae bloom and maybe (inaudible) you can read some of the comments that are in there. But it's

just generally a public reaction to just - that it's not good enough, we've got to fix it sort of approach.

Now we really taking the view that the farmers and the landowners are the principal causes of our problems. Obviously lakeside residents as well with sewerage, local sewerage and we'll talk about that later on.

Local and central government policies have been a very significant influence to the issues that we face in Rotorua Lake District. And obviously the legacy pollution is something which the public has a lot of difficulty dealing with because any actions that have been caused in the past and pollution that comes from the past is very difficult to attribute to the current generation because if we say let's have a polluter pay principal that the polluter must pay for the cost of the pollution they're causing, it's very hard to go back and argue what was caused 15 or 20 years ago we all have to pay for.

[2.00 pm]

So we have a symposium based on that principal and by in large the concepts that came out were that that is a general good and that the charge and cost goes to the community as a whole. And so if you're going to get action and reaction the best approach to take is a polluter pays system. Whether that's through a tax or whatever but it's very difficult to deal with a legacy pollution where it's existing in the waterways. And we have, in most of our lakes, most of the pollution that has come from the land from about mid 1960's through to now is still coming through the land; hasn't reached lakes. So it's in the waterways. So that's all coming at us. And we'll talk about that later.

Here's an example in Lake Okareka (inaudible) - (inaudible) of a local farmer using aerial properties and techniques on their farm. And needless to say in that particular example the wind did catch it and divert it slightly into the lake. But you can see how close to the edge of the lake they are and that has constantly been a problem on Lake Rotoiti as well.

This was going back - sorry keeps jumping forward - going back five years ago this was a very prevalent site in Rotoiti and many of the other lakes, Rotoehu, but since then we'd have to say that Environment Bay of Plenty have done a fantastic job by putting fences right around all the lakes and keeping stock out. So that's the cause of the problem in the past, it's now been fixed. But that's an example of farmers really, not really taking much interest in what happened with the animals.

Here's an example on Lake Rotoiti. Clear felling of the forest. And you can see the impact on the fauna in the lake. And at that time we've had enough studies to demonstrate that after clear felling there is a significant release of nutrients into waterways. Obviously once they replant then the uptake improves.

So what's causing the problem? I mean at the end of the day it's our scientists have taken us through to say it's the inflows of the nutrients and organic matter leading to excessive productivity in the lakes. And that leads to excessive organic productive in - leads to de-oxygenation of the (inaudible) in the warmer months. And then that leads to nutrient releases from the sediments. And then we have the sino bacteria (ph). So that is really the process of where sino bacteria (ph) actually get what they feed from so it is a long drawn out process but it's all happening now for us at the lakes.

To be read in conjunction with  
the tabled evidence/statement

Here's an example of the nutrient sources. On the left we've put easier because they're easier to deal with. The sewerage and stormwater, erosion and perhaps land use activity of fencing off cattle. The easier - a lot of the easier projects around the lakes are now happening or have happened. Obviously the really big one that concerns the community is the putting in of reticulated sewerage in and around Lake Tarawera, Lake Okareka, Lake Rotoiti, Lake Rotorua because previously the septic tanks were leeching into the lakes. But still not a huge impact when you compare it to what's happening around the land. But to put it in context the sewerage scheme - they had an upgrade in Rotorua of over 30 million and in the plans they talk about spending over 100 million of reticulating sewerage. So to take any of those nutrients away from the lakes.

And we've had - and Don you could give a quick example of the impact that it had on Okawa Bay?

**MR ATKINSON:** Well in Okawa Bay we were the first to get the sewerage, thanks probably due to our act of (inaudible) but it's been in now for a bit over two years. And for the first time - and I've lived in the Bay now for about 12 years - we can see the bottom of the bay. It is crystal clear. So the impact we thought was going to take at least five years to see a response in turning off the tap. It was visible within six months. And it's been dramatic. So certainly well we are most heartened by the fact that if you address problems you get responses. And a lot quicker than the scientific expertise advised us. They might have been cautious.

**MR GREEN:** And the interesting thing was federated farmers said you will not see any benefit or impact for a long time. And I don't know what's behind their thinking but it seems to us that they will say any activity to stop nutrients will not impact upon the (inaudible). Well this was a classic example in Okawa Bay. And we'll talk about the wall in Lake Rotoiti within

two months of putting it in you could see the difference. And we're going to show you in a slide.

But on the right hand side is the more difficult one and obviously (inaudible) fertiliser and animal waste are the ones that concern us most. It's very difficult to deal with the springs, the geothermal and the rain and therefore we have to take them as almost given. But there are things that - where man can change their behaviour and certainly it's in fertiliser. There's a general view that we take that our farmers generally will land bank at least 20 to 30 percent more fertiliser than they need. Just to protect, just in case the farming conditions aren't good for them. So in which case they're safe. So there's a tendency to over-fertilise in this country and particularly in lakes catchments because in the Rotorua area as you know we have hugely porous soils. They were chemical deficient what with -

**MR ATKINSON:** They were chemical deficient and it wasn't until after the war that that was understood and therefore farming intensification really didn't happen until the (inaudible).

**MR GREEN:** And the one area that concerns us most of all is the animal waste. And I think the science now is really getting its head round it and they're putting in systems like overseer to be able to track down what the leeching loads are on land. But typical cow, she pees 47 litres of urine a day. That's a lot of bottles of wine. And each time 7 litres and stays in one spot so in porous soils just goes straight through. And the equivalent - the studies that we've read is the end equivalent of cow urine is 1000 kg's of nitrogen per year.

**MR ATKINSON:** Per animal.

**MR GREEN:** Per animal. 1000kg's of nitrogen per hectare, per year. That's the equivalent of it. When a normal fertiliser load of nitrogen, Don?

**MR ATKINSON:** Well they would put normally up to 200 kilograms of nitrogen on spread over five or six applications a year in an intensive farming (inaudible).

**MR GREEN:** So that's five times. Just coming from the urine alone. So you can see why the dairying has a very significant impact.

Now here's an example of the nutrient loads on the Rotorua lake catchment. It's just over 40,000 hectares evenly spread between pastoral farming and forestry. Now we'll just show you the nutrient loads coming from those same activities. So pastoral farming's putting on 563 tonnes and it comes from the lake plan. And 70 tonnes from forestry. So you can see quite a dramatic change in the load coming from pastoral farming.

Now here's a study that was done which really to us is scary. This really worries us. And it's in two parts. I'll try and - I'll have to do the input load first and then the export load second. And this is actually happening. Palm kernel now is being imported into this country. Now this study starts from 2001. And then it does a 2020 and then 2050. This is saying that if pastoral farming increases at a rate of three percent per year what will it look like in 2050 and 2020. Well we know now that palm kernel plantations have been planted in Indonesia at a huge rate destroying all the orang-utan environment and you no doubt read the article in the Auckland Herald last week. But look from 2001 very little imported. 2050 it would say to sustain pastoral farming they've got to import 1.6 billion tonnes from nothing. Now at the moment New Zealand imports 24 percent of the worldwide palm kernel production. So that's interesting.

Now why do they do that? Because the fertiliser, they can't keep putting fertiliser on. It would just destroy the land. They can only so much grass. So that level at one billion tonnes of fertiliser is still five times higher than where it was in 2001. So up to 2001 from 1960 the environment - the Commissioner for the Environment in his report showed that the fertilised application in the country had gone up 20 fold. So you can see what's happening. Unless government policy was to encourage - and the farmers did a good job. But it's that fertiliser which increases the loads on the land. The increased load come from the cows and the cattle beast and that then is the diffuse pollution coming from the urine.

[2.10 pm]

But you can see even in that projection to 2050 they can't keep up with the production demand of the animals. Therefore they've got to bring in kernel, palm kernel or external feed in to keep the farming going. So there's a huge impact on the system.

But now lets look at what happens to the leeching. Leeching goes from 250 kgs of n per year - well 250 tonnes. Sorry lets get this right 250,000 tonnes in 2001 up to 1.4 billion tonnes by 2050. So you can see the - and look at the production. Look how that falls behind. It's just not getting there. So there is obviously going to be a period of time where that three percent growth per annum that you read is not going to achieve the production outcomes that they want anyway. But all it's going to do is absolutely destroy our environment. So I encourage you to look at the impacts of the inputs and the outputs on that study.

We are a real live case study of the National Policy Statement, Regional Policy Statement, District Plan and we're going through that right

now. But at the moment we have the cart before the horse. We're having the Rotorua District Council doing the District Plan and they're wanting a Regional Policy Statement but they don't have it because EBOP tell us that they have - and that they'll try and get it done by the end of the year if not a little bit later. We're not quite sure when that's going to come through but to us one of the most important things that has to happen is change on the land. Land use change. And it can only be the District Plans that bring that about. And therefore they must get strong guidance from the Regional Policy Statement. They're not getting it now because the Regional Policy Statement is what ten years old. They're reviewing it now. That's their process. So we have an order of things here and we think the order of things should be the other way round. National Policy Statement first. That then drafts Regional Policy Statements. And then that drafts District Plans.

And Mrs Vernon I'm sure at one of our symposiums last year your people in the Waikato Environment actually did a paper. And it's in that book which we've copied you on the symposium. Basically saying how Environment Bay of Plenty and the District Plans of Taupo were also out of sync. And set the councils back years and years and years. So because of the review periods that they have. So these - one of the things in the National Policy Statement should be that all councils must follow the National Policy Statement and get everything in order because with the consultation and all the time involved that the public have to go through it takes a huge amount of resource and time. So it is important to try and get the events in the right order of things.

And I suppose the only other major comment we'd like to make is that the National Policy Statement, RPS and District Plan in our mind suffer from a huge level of political influence. And Federated Farmers in our context because we're concerned about the leeching in the lakes, Federated

Farmers have been a very effective lobbyist. And they can do that with so much more resources than organisations like us have. So we would be looking for the National Policy Statement to really take a hard line and basically not force but in the right way bring about change, measured change and the right change so that the political influence is negated to a certain extent and the full and proper debate can be achieved without having one sided views on things.

Don do you want to make any comment anymore on that political influence?

**MR ATKINSON:** Well perhaps if we go to the next (inaudible) and we really start to think about the impacts of our own current plan. And what we've got out at the moment is - and really probably - you will see this handout that we've given you and it really just details some of the issues. But those summarised pretty much in front of you with this (inaudible) here. And from the Lake Water Quality Society's point of view, it started this process of trying to have increased public awareness of the problems right back in the year 2001 when we had our first international symposium. And we brought out to New Zealand, Willie Ripple (ph) from Germany. Professor Willie Ripple (ph). And he said you have to look to the hills to see your problems. And unless you talk about the hills and the entire catchment you will never address the problem. And it kind of came as a bombshell because at that stage I was agitating to get sewerage into Okawa Bay. He was wanting to get us up on the hills.

Well he was absolutely right and his message has never been lost on us. But the process has been so long and protracted without having strong national guidelines. We effectively started the process - or EBOP started the process I think in 2004 to sit down and try and work out an action plan for the lakes. And about 2007 it was formally advised to the community

and a request for submissions were made and those submissions were heard late 2007. And we've had (inaudible) nearly two years later or 18 months later the plan published for final adoption without effectively coming back again for further discussion.

In that intervening period we've found that there've been significant variation to the original objectives. And we've got a plan now that we fully understand and to our knowledge is better too. There's no doubt about that. But we've got a plan that basically says we're going to get our lakes back to (inaudible) target level in 240 years time. And over the next hundred years the plan in actual fact is for the lakes to get worse. And after a hundred - this is focusing on Lake (inaudible), so this is the Rotorua Plan is - it's for Lake Rotorua.

So the plan effectively will see the lake quite degraded. And we know that's - we've got a huge problem because of the groundwater that's coming through. But because we haven't got strong national ground we're having this huge political argument effectively within the community and the economic community around the lakes about how we ought to really - or whether we ought to save the lakes. That's what really the argument is about. It's not about how to save them it's about whether we should save them. And clearly there are two very strong positions. Everybody says, "We love the lakes". But when you come to fix it everyone unfortunately has to look after their own (inaudible) they would argue and therefore it would take a very intense position on (inaudible) in respect of their own requirements.

And the process has been one which has really turned community against community. It hasn't been a pleasant process. And if you have to fight as hard as we are having to fight to save your lakes it's going to be (inaudible) parts of New Zealand that haven't got a passionate group like

Lake Water Quality so - because I think we're quite unique. They're going to get run over and we're just going to have degraded waters all over the place.

We move on John and the impacts effectively are up there. We've got lake issues etc I don't really want to talk further about those things. But I think John if we could just have a quick look at those slides (inaudible).

**MR ATKINSON:** Okay. Here's the Rotoiti wall. And it's just giving an example on the right side there's some water coming down the (inaudible) channel from Lake Rotorua. And that's there. And then on this side that's the Rotoiti water. It's mixing at the rate of 75 percent this side, 25 percent this side. But you can see the difference in the discolouration of it.

Now from a discolouring point of view Lake Rotorua had a full algae bloom over level four which is a health hazard level for how many months?  
Three and a half? Four?

[2.20 pm]

**MR GREEN:** Lake Rotoiti?

**MR ATKINSON:** Sorry Lake Rotorua.

**MR GREEN:** Lake Rotorua had it from March through till end of June.

**MR ATKINSON:** That's this year. So that water there is quite contaminated. And then that goes down the Kaituna river and through into the Makatu. And they get that water. So the wall has been, I would say an outstanding success for the balance of Lake Rotoiti. The clarity throughout the rest of the lake is - I don't - everyone rings us up and says we've never seen it

like that for a long time. So just goes to show how quickly you can - I mean this is a silver bullet for the Lake Rotoiti. But it's not a silver bullet for Maketu, or the Kaituna river, or even the - this little - the Okere (ph) arm here of Lake Rotoiti. They all thought that they were going to have a clean lake too. They just have to get into a boat now to go to a clean lake.

Here's the algae at the Ohau (ph) channel at Lake Rotorua this year. And there's the channel. That's the outlet and that's the - can see the water coming through. So directly influences Lake Rotoiti.

**MR GREEN:** The symposium that we ran effectively, about a year ago now - it was this nutrient sensitive (inaudible). And certainly I think, and the society thinks that there are iconic waterways in New Zealand. And they need to be recognised and national protection needs to be given to those iconic waterways. I suspect it is impossible to restore all of our waterways to crystal clear water that we all would like to see. If you take it from an environmental point of view. But the economic drivers basically say, to me anyway, that we're never going to have all of our lakes or all of our waterways restored. But there are areas of national importance. Our Rotorua lakes, Lake Taupo and some of our South Island lakes, which clearly are icons as far as New Zealand is concerned. And really if we had a recognition of that iconic status within the national statement, the NPS, it would allow them, I think our regulators, to address the issues with far more clarity. Recognising that we're not going to impact the whole of the country economically if we have to have some land change within those catchment areas, just to help with our waterways. The diffuse pollution effectively drives that, which is the urine that John's talked about.

So we're not going to talk about our policy statement in any detail because we've sent it to you. We had expert advice given to us. We spent quite a lot of time and effort putting it together and we feel it encapsulates the

views that we would like to see in a National Policy Statement. We don't talk about nutrient sensitive zones and we do believe that the nutrient zone is a huge opportunity for being - as John was saying before, it is a huge opportunity to be able to selectively identify areas where we know from the science that if an activity above a certain level occurs then degradation to the waterways would occur. So we believe that the nutrient sensitive zone approach is one which should be embraced in the National Policy Statement and that is quite capable of being defined. The symposium papers that you have behind you give you good evidence from world experts as to the impact of farming and how they've dealt with them around the world. The Americans tend to lean on the voluntary method and the Europeans tend to lean on the regulatory method and that is - and that came out very strongly in the symposium, both - both measures work because on the other hand, you can also say to somebody we want you to get your loads down to this level and if you don't then we will regulate, so maybe there's a bit of - mixture of voluntary and regulatory, but we do believe that the stick has to be there in order to get behaviour and you'll be very interested in the paper given by Professor Eric Jepson (ph). He does really explain the process by how they dealt with dairy farming in Denmark and it is a fascinating little story. So it's in the front and it's there for you to read at your leisure or pleasure or whichever way you want to take it.

So what we're going to do now is just comment on the existing National Policy Statement draft and we're going to be very simple in that. We're going to say it does not recognise that there is a problem right now and that is right throughout New Zealand and I'd say that's a very strongly - strong approach for Federated Farmers to avoid the recognition of the problem that we have and the major cause of the water pollution comes from intensive farming. There are a lot of other areas we could pick out, but those are the two that we really do want to leverage off our experience

that we've had in the Rotorua lakes and basically say those are the two areas that we really do need the National Policy Statement to focus on.

It fails, the draft fails to set that deadline for fixing pollution. It fails to require values to be assessed and taken into account. It fails to provide a way to deal with the degraded waters and it fails to recognise the need to facilitate land use change. Again, those are the areas that we believe your committee should very carefully look at and hopefully put in a strong policy statement which deals with them.

That's all we've got Mr Chairman. Thank you very much for giving us the opportunity to speak with you and we wish you good luck and to show the leadership that we are actually asking you to do, so we look forward to seeing what the outcome of your committee's deliberations.

**CHAIR:** Thank you very much. Thank you for all the trouble you have taken in selecting the slides. May we see if there are some questions that might help us further and if I can start with the farming members of the Board, Mr Prime?

**MR PRIME:** Thank you Sir. Regarding nutrients, nutrient sources, what nutrients are brought down by rain? You've got that in your slide.

**MR GREEN:** There is nitrogen. Obviously we've got - 85% of the atmosphere has nitrogen in it so it would be nitrogen.

**MR ATKINSON:** Nitrogen is the one that we are concerned about so it would only - and it does represent - when it rains the grass always grows better and that's partly the reason, because there is in actual fact in that rain, nitrogen, that's why it's always better than irrigation.

**MR PRIME:** But hasn't rain always (inaudible) use?

**MR GREEN:** Oh absolutely right and that's why we say we can't address that and effectively we recognise that it happens, but it's something that we need - the only area that we can effectively attack nitrogen on is how it is coming off the land.

**MR PRIME:** Where you had the algae warning sign, it didn't have a safe (inaudible) scale, is it never safe then?

**MR GREEN:** No, no, there's a significant part of the year that it's safe.

**MR ATKINSON:** There's a low risk, medium risk and unsafe.

**MR PRIME:** Yeah, so there's - is there never a time when it's safe, like you've got nowhere to put your - if it isn't safe -

[2.30 pm]

**MR ATKINSON:** It's a good question because algae, the only way I can look at that question is that algae can occur in any spot of the lake. Obviously if it's right throughout the lake it is easy to put a signal everywhere, but in some times you get concentrations like they used to have algae in Okawa Bay but nowhere else in the rest of the lake, but one of the main - the principle issues for Lake Rotoiti has always been that Rotorua has very nutrient enriched waters and then when it got into the deep waters of Lake Rotoiti it would incubate and then that's when the algae really formed, so it was being - 250 tonnes of nitrogen each year came into Lake Rotoiti from Lake Rotorua. 250 tonnes, so it's a huge amount. That now has been stopped, but -

**MR GREEN:** It has been diverted.

**MR ATKINSON:** It's been diverted, but it's still going down the Kaituna River and into the Makatu estuary, yes.

**MR GREEN:** But Mr Prime I think it's a prime, it's a great example of bureaucrats, about covering their butt, because they are basically that you can't say that water is 100% safe, but it's got to be about risk and from a community point of view we would only be concerned about it if it was in that (inaudible).

**MR PRIME:** So swimmable in the medium term?

**MR GREEN:** Yes.

**CHAIR:** Mrs Vernon? Thank you.

**MS VERNON:** Thank you very much and thank you for going to the trouble of rewriting the NPS. It is helpful from where we sit to actually have in black and white what you're thinking, rather than saying to us, well we'd like you to do that, to go away and think about, or do it, but sorry I'm going to actually refer my questions to your rewrite and just ask, is it - it looks to me very similar to what Ecologic put forward as a rewrite as well. Have you seen that one?

**MR ATKINSON:** No we haven't seen it, but we did have Guy Salmon came to our symposium and he did - he did give a speech and we did talk to him about what we - you'll see in that symposium there that there were a lot of questions were asked of the Minister and you could see obviously Ecologic and Defence Society have really picked up on the National Policy Statement, which had only come out a month before we had the

symposium so it was a very real issue. So Guy Salmon - we talked a lot with Guy Salmon and then we asked him to peer review, or to review the - what had been written. Yeah.

**MS VERNON:** That's fine. So going along the strength of your - and your passion and your concern that you have presented today, then when I look at some of your words, I would ask you or perhaps challenge you, are they really bold enough to get what you would like or see the NPS trying to deliver when you use words like "ensure" and "where ever attainable", you know because doesn't that let people slide under the radar screen because they'll just put up their hands and say well it's not attainable?

**MR ATKINSON:** Well I think, I guess we have taken the view that we can get people over the line by bringing in the scientific experiences so that they are able to have a little bit of flexibility to be able to work through. I mean, we've tended not to take the view that thou shall stop dairy farming, we would sooner take the view, well we understand the loads that we have got to take off the land, but come on farmers, you're the most capable people of running the farms, you find the ways of doing it and so we haven't been as prescriptive as we could be and I think your comments are very fair. But if we could get a policy statement with the words that we've got, I think we can then toughen it up as we go forward.

**MR GREEN:** But it would be fair to say though that that is why we are advocating for a National Policy Statement. Clearly we can't have all the areas pristine, clear and no dairy farming and that's why we're going back to this nutrient sensitive zone, it's certainly something that's been very well adopted in Britain and effectively driven their cleanup of their pristine areas.

**MS VERNON:** Equally in your Objective 1 you talk about ensuring integrated management, but when I read your words, to me it looks - and your presentation today, it's more about catchment management isn't it, individual catchment management, would that be a fair -

**MR ATKINSON:** We've picked on Rotorua, particularly because it is arguably - Bill Bayfield (ph) even said it's, I mean it's the monster, it's got huge implications, not only economically but for that whole region and it does require the whole community to get engaged, because we're talking about a serious amount of money to be able to get it fixed. So we had picked on that as a - by way of our best example, but I'm sure that there are lots of examples in the lakes where we don't need quite that heavy approach, so it is a case of - with the lakes it is definitely a case of looking at each catchment separately because the other catchments don't interfere with them unless that lake flows in. What they have found in Lake Rotorua is that there are eight - there is an eight, eight system which where (inaudible) and Okari are going into Rotomahana and the Blue and Green lakes and then that goes into Lake Tarawera, and then Okatana also goes in there, but when you look at them, you say well how the hell do they all link into each other, but they've worked out, tracing the water systems, that they are a one lake system. So I think the process that is gone through and Rotorua's been fantastic because we've had GNS come in and they've actually studied which way the waters go and they've worked and understood how these, the catchments occur and then they're putting plans together which are - that lake system affected, so yes it's a case where - doing the research, the water runs in very weird and amazing ways.

**MS VERNON:** Equally in your redraft you talk about Objective 5, encourage stakeholder negotiated drafting of the plan objectives, we interestingly today had a submitter who suggested that in fact the NPS should put in a

standard and let the community decide one way or the other rather than - as a means of getting started and they either stick with it or they move away from it, rather than going the way - or as an alternative to Objective 5 where you start off with community consultation, because if something's already there that actually focuses the mind.

**MR GREEN:** Yes it's an interesting issue isn't it because on the one hand you could just create the general framework and then get each regional council to determine what's important for their area or you could have a process much more - iterative type process. I think in our example, I think we've been hurt a bit when we say that if we'd had a regional policy statement that had been tough we then know that we - which was almost explicit, then we know that we would then be able to put a lot more pressure as a pressure group on Rotorua District Council to bring about land use change. So I think in the case where we're dealing with, we have stakeholders who are actually very, very strong. Federated Farmers, Lake Water Quality, Fish & Game they are very, very articulate and understanding of the issues. To embrace that in a policy setting approach is actually a wonderful thing for council but the only thing is unfortunately council didn't do it when it came to the Rotorua Lakes plan. Their processes were wrong, so I'm not quite sure which is the best way to go because we ended up complaining that we would like to see the lake plan redone and hopefully they will take our advice and have another go at redoing it, so rather than taking 240 years, we might be able to get it done in 80 years time. But I also sit on boards where we own 30 farms and I know if you were asking the farmers - oh no, we don't want a National Policy Statement thank you very much. I mean - what John said to you before is relevant, I mean our society really does understand the issues because it's been living them for 20, 30 years and it's worked with the scientists, we've have eight - six symposiums bringing scientists from around the world, we're up-to-date, right up with it, so we actually most

likely can put in the far more effective stakeholder input to a plan than the majority of the people who come from around the country. But I think you know when you see the Auckland residents walking on the beaches and finding their dogs dying and whatever and then people suggest that it might be coming from this source or that source, I think we're going to see a lot more of that. So I believe that, well in my personal view, I think the National Policy Statement needs now to be a little bit tougher and more prescriptive.

**MS VERNON:** Is it prescriptive or directive?

**MR GREEN:** Directive, perhaps. Directive. And I think one that avoids high level of political interference.

[2.40 pm]

**MS VERNON:** Right. Just, in one your slides you talked about wanting iconic status in the National Policy Statement, and I just wrote down that I wonder who will decide that iconic status, but perhaps you might help us with what sort of criteria are you thinking that sits behind what iconic status may be, because I think it is - and if I just explain a little bit further -

**MR GREEN:** We didn't quite spell it right did we.

**MS VERNON:** That's all right.

**CHAIR:** We'll forgive the spelling.

**MS VERNON:** That's all right, we knew exactly what you meant. But why I ask that question is because - and what sort of criteria you have perhaps got at the back of your minds about iconic status, because yesterday we had

a submitter who actually gave us the proposition that something outstanding can be degraded at the same time and the example given was the Whangamarino wetland. So I just wonder what sort of criteria you had at the back of your minds that the NPS might put in or to help identify what an iconic -

**MR GREEN:** Yeah, I can see why that submitter would do that because as you know a lot of the wetlands in this country have been converted into pasture and they are no longer doing the thing that wetlands do, which is actually to strip nutrients out of the waterways, so wetlands are a very valuable tool for nutrient stripping, so - sorry you wanted to say -

**MR ATKINSON:** Well I think though for an iconic status we're not really looking at a waterway in its narrowest definition, we're talking about really the catchment of that waterway and we would see those catchments effectively in the Rotorua situation incorporating, for iconic status, all the catchments within the Rotorua district and recognising that they are important nationally from basically our clean green image which we market nationally, from tourism, that is by the far the biggest industry around in particular Lake Rotorua, that is a very large industry so it's very important to New Zealand and for the general public of New Zealand, most people in actual fact by survey have an association with the Rotorua lakes and where those - so that type of national importance I think gives iconic status. But it needs to be important nationally.

**MS VERNON:** Thank you. Thank you.

**CHAIR:** Dr Harding?

**DR HARDING:** Thank you. So the North Island - I just need to catch up a little bit here, this diversion of the wall, can you just tell me a little bit more

about this, how long has that been in and what is this wall exactly or this structure?

**MR ATKINSON:** It's a structure that was - Lake Rotorua empties through the (inaudible) channel and we have slide showing the outlet effectively of the Ohau - Lake Rotorua. It comes through a channel which is wide and then empties into Lake Rotoiti and then effectively Lake Rotoiti discharges into the Kaituna River system. This wall effectively is 1.2 kilometres long and was installed at the cost of I think approximately 10 million dollars and it's a sheet piled wall supported with Irish (inaudible) so it's a heavy steel structure. It's designed life of 50 years and it effectively captures the water coming out of Lake Rotorua -

**MR GREEN:** I'll show you here, it comes out there and goes down the Ohau channel and in winter when its colder it goes down the main body of the lake because colder water sinks to the bottom so it goes - Rotoiti's average depth is just over 14 metres whereas Rotorua's 11 metres, so - and then in summer it goes down the Ohau channel - the Okere arm and then down the Kaituna River. So the whole idea of the wall was to put it across there and then stop it and contain it behind the wall, so it carries on down the channel - up the Kaituna and it stops it going into the main body of the lake there.

**MR ATKINSON:** So it's an engineering solution to isolate Lake Rotoiti from the degraded waters of Rotorua.

**DR HARDING:** Thank you. I also want to follow on a little bit from what Mrs Vernon was asking you about before, and in the context that you alluded to the fact that you have had discussions with stakeholders in some of these catchments and that they had been very difficult discussions to reach agreements about water quality and that sort of thing

and as she said, you know we've had submitters who have suggested that you know you could form a catchment user groups and there might be some overall standards, but then it would be up to catchment user groups to sit down and discuss the particular standards within their particular catchment.

**MR GREEN:** I think we see both things happening on Lake Rotoiti, sorry in the Rotorua district. Around some of our more iconic lakes, not more sorry, our less polluted lakes, those solutions I think on a community base are going to work because the lake's not - it's not too difficult to get there, you know you've got to lift your game plan by 10% and you can get there and people can see that they are achievable objectives when they really sit down. It might cost them a little bit of money, but it's more effort than anything and therefore whether the opportunity where it's a relatively simple fix, communities, I believe will be able to solve that and that's the case for all of the lakes, I think here except for Lake Rotorua. But we have been involved with this large community group that was put together and run through EBOP and it did a very good job of bringing a plan together, trying to get people together. We've been involved effectively with the LUK Board which is - or it's pre - not the LUK Board but it's pre-runners, where effectively we as Lake Water Quality Society sat with Federated Farmers and tried to work out how science might take this through and we did ecological type things and at the end of the day those problems around the lake, in my opinion, are so significant that it has meaningful impact on their balance sheets and when that becomes a problem effectively we get stonewalling and just self protection and there are some hard decisions that have to be taken.

Now the RMA in respect to other industries have taken those hard decisions and there's plenty of examples, the fishing industry, what's happened in forestry and industry in general. There's been a lot of hard

decisions made to clean up their act in the environment, in the air and all of those types of things, but the land issues, on a community type consultation basis where the decisions are hard, we just haven't been able to get there and we've tried really hard.

**MR ATKINSON:** Up to 2000 the farming schools were still encouraging loading nitrogen onto the land and they did not acknowledge diffuse pollution which was the animal pollution walking around on the land. They all acknowledged as they were doing their RMA at least for effluent around the cow shed and whatever and they would feed it out onto the farms in spring and the grass will stop taking the nitrogen, but there's a couple of points I'd like to make. 50% of the leaching off farmland comes in winter because the grass is not up taking the nitrogen. That's 50% in any catchment and so that is - that's huge. All we ask is district plan please stop the lifestyle blocks from bringing in cows. All the lifestyle blocks around Rotorua which you know only 10, 15, 20 acres, they all bring the cows in, in winter and they wonder why it's leeching into the lakes. The science tells us it will leech, it will just go straight through and into the waterways and done. Now we could simply have a rule, lifestyle blocks - you want to become a lifestyle block, you're only going to be there if you have a covenant on your title and you cannot have cows or you can't have a certain loading, so the systems now, one of the biggest issues we've had with the Federated Farmers is they don't believe the overseer, Stuart Hedguards (ph) work that he's done on overseer, but they are now beginning to believe it and the best thing that ever happened in Rotorua, the Ngati Whakaue, tribal lands, their farm just over the road from the airport, they got in the octopus system and it was Ag Research and Stuart Hedguard (ph) helped and they had a whole team and they worked out that they - by using land use on different parts of the farm which is - they've got about two and half thousand acres here, that they could produce an economic outcome by taking the dairying out. So they took

out 330 cows. I mean Maori have done by far the best thing in the Rotorua catchment of all, of all of the farms and we just hope that from that they were saying to council, we need to get a bit of subdivision so we can get some capital back and we can reinvest it in something else. So we're beginning to see some very - certainly Ngati Whakaue have done a fantastic job from a lake point of view, but it's not easy to get it from a farmer who's up in the Mamaku's and he wants 700 cows and he wants to load it with all the fertiliser and whatever - he's just not going to listen to us.

[2.50 pm]

So what EBOP did and we will also - EBOP did a wonderful thing in the Rotorua catchment and in fact the five lakes catchment is it picked on the five most degraded lakes and they put in a rule 11 and that restricted the nutrient loads for the average of the 2001, 2004 period that they were putting on. Brilliant and it stopped it. Now we were hoping that they are now going to go a step further. We're haven't quite got them on that step further, but time has moved on.

But just to put it in context, Lake Taupo are taking 150 tonne of nitrogen I think. We have to, for Rotorua to get to steady state, we've got to take 311 tonnes of nitrogen, so double what Lake Taupo's got and we haven't got our - we need help to do that. But it is 311 tonne, and so - and just to help you, over a thousand tonnes of nitrogen goes into Lake Rotorua each year, just from the catchment, a thousand tonnes. So it's a lot and it has its own problems, so yes it's - some lakes and some waterways require far greater commitment and challenge than others.

**DR HARDING:** Okay, well thanks for that. I've got one or two some what more specific questions going back to your actual submission on the wording

changes and that sort of thing. So Objective 2, it seems like you focused on surface waters and taken groundwater out of the equation here as far as improving surface water quality. Now I recognise that your interest perhaps is in the lake, but obviously you've got major groundwater and you've got issues here. Is there a reason why groundwater's been taken out of -

**MR ATKINSON:** Well surface water, you can manage but groundwater, once it's in there, it's very hard to manage unless you put down huge bores and you work out what the chemical configuration are and the technology is beginning to happen overseas on groundwater, but groundwater, once the water gets through into the groundwater, it's very, very hard to manage and so our attitude is turn the tap off. You can't turn the sky off, but we can certainly reduce the tap by having lesser animal loads on the land and so on and so forth.

**MR GREEN:** I don't know Don, does that answer your - look I haven't been involved in the granting of that, so I can't really help you too much in the detail, but you are correct in saying the groundwater - there is a lot of nutrients within the groundwater. Our average age in groundwater there I think is about 80 years, so you know having to address that groundwater effectively (inaudible)

**DR HARDING:** Okay. Well I guess my final questions relate to this document and okay so I'm not quite sure how familiar you are with the original submission, but there are components in here such as ideas that naturally degraded and you use the term contracted, polluted status, which you don't offer any sort of definitions of, they are terms that have been proposed by Ecologic and EDS and they offered some form of definition of those terms.

**MR ATKINSON:** We were very much supportive of the position that they took.

**DR HARDING:** We are going to hear their submission again, as well.

**MR ATKINSON:** Yes.

**DR HARDING:** That's fine, thank you.

**MR ATKINSON:** I mean I think in a way I mean we came out of the symposium and with Ecologic, with Guy, I mean we find that National Policy Statement, we find it a little bit hard to sort of get our heads around because we're trying to tie it into the plans of what we deal with, specifically with our lakes whereas the National Policy Statement is trying to cover the whole ambit of water - freshwater across the country. We're very much more let's keep it focused on the lakes and that's how our mindset is, so we were persuaded that there are some concepts that we do need to open our minds on.

**DR HARDING:** Absolutely, not. Entirely accept that, but you realise from our point of view we need to think about the big picture and cover the basis.

**MR ATKINSON:** Yes, absolutely.

**DR HARDING:** Thank you very much.

**MR ATKINSON:** Yes, because in our sense we are more desperate than most areas of New Zealand and we're most likely to ask you to write the toughest plan that you could because it will fix Rotorua. It will drive action to fix Rotorua, but that's why we introduced the concept of nutrient sensitive zones, or existing degraded areas, because there are other

To be read in conjunction with  
the tabled evidence/statement

areas which can be quite adequately managed and it shouldn't be a problem. So it's not an easy task that you have before you.

**DR HARDING:** Yes, thank you.

**CHAIR:** Well thank you very much to the Society and for you two in particular for coming and giving us this understanding of what you've been about and what you've achieved and what you haven't been able to achieve and we especially thank you for the trouble you've taken in preparing the slides and thinking of what you'd want to emphasise to us in this face to face presentation today. So we're very grateful to you. Thank you very much. And I think that concludes the submitters that we are to hear at Tauranga, but we're returning to the Bay of Plenty in two or three weeks, so we're looking forward to perhaps seeing some of you again then.

**MR ATKINSON:** Thank you very much for listening to us. We appreciate the work you are doing.

**ADJOURNED** [2.56 pm]