To be read in conjunction with
the tabled evidence/statement

BOARD OF INQUIRY
Proposed National Policy Statement for Freshwater Management

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

THURSDAY 13 AUGUST 2009

HELD AT THE HERITAGE HOTEL, 35 HOBSON STREET, AUCKLAND

HEARING OPENED [9.33 am]

APPEARANCES

Mr P Neilson and Ms H Stonyer, NZ Business Council for Sustainable Development

Mr J Burns, Ms Gouvan (ph), Mr G Taylor and Mr Salmon, Environmental Defense Society (EDS) and Ecologic Foundation

Ms M Drury, Mr B Sinclair, Mr I Boothroyd and Mr A Monigattir, Solid Energy Colas of NZ

Ms K Newland, New Zealand Wine

Audio file: dpm 0128

CHAIR: Mr Neilson, good morning and welcome to you, it's a pleasure to welcome you to this inquiry and we'd like you to understand that we treat this as a relatively informal opportunity to understand more about your submission. So we're not imposing any particular requirements we'd like you to present just as you would like to.

MR NEILSON: Thank you for that. Thank you for the opportunity to meet with you and also the available the (inaudible) time. Obviously with your programme that's quite difficult to offer to anybody. But we just thought we'd have a sort of in one way a strange request, we are sort of asking you to slow down so we can speed up later, which is almost an internal contradiction. But that's roughly where we are, not because we're hostile (inaudible) most of the aspirations that are in the National Policy Statement, but obviously there are parallel processes going on and this is probably the first time in 20 years we may have an alignment of the planets and something might happen significant. And we didn't want your work to be in vain on the basis that it didn't coordinate with events that occurred outside, that are obviously outside your control and that obviously the level of (inaudible) what finally happens. So in order to help that conversation Heather Stonyer our Project Manager of the water project is here with me and she will talk a little bit about obviously the best use solution approach and we have also provided additional copies if anybody (inaudible). Heather will be talking about that and then I'll talk about the key (inaudible) what we're requesting and why.

CHAIR: Very well, good morning, it's nice to meet you and thank you.

MS STONYER: Thank you I'm going to refer you to page 26 of this book which accompanied our submission. Page 26 gives you an overview, a summary of best use solution and the key features of it and I just want to run through what the best use solution is about. Beginning on the left, the

policy and planning aspects of this. One of the most important parts of what the best use solution is about is trying to identify the key things that we need to have happen and where they need to occur. So, we have proposed integrated catchment management plans. We're looking for a whole of catchment point of view on this, we're not looking for portions of a catchment to have certain plans and we're not looking for regional generalisations. So the whole attachment is very important in this piece of work, we're looking for that to be integrated and the integration would occur along issues around quality and quantity, surface and ground water and it will address the multiple values across a catchment.

What happens in the integrated catchment management plan is that we set the environmental base lines. We then allocate the entire - the rest of the water to four pools. So one is the aquatic ecosystem sustainability, minor in-stream uses, public use in-stream and consented use pool. In doing that, what it does is it takes out - currently your environmental flows tend to accommodate all of the flows, they tend to include the recreational and the in-stream flows and so you get this lumped effect and it actually makes managing and the discernment for a community planning process of exactly what is important to that catchment and to the community that responds to that catchment. And actually makes some of those issues very difficult to discern, so we have worked to unbundle some of those things, so that we can actually make clear decisions. What that gives us, is an ability to actually begin to define some of the things like cultural values and what they may actually mean for a catchment.

The other thing that we've got in doing this, because we have assigned the entire water that flow or the ground water source, because we've fully allocated that it sets an upper limit for the consented use pool. So there now is no encroachment. The consented use pool is defined and it's stable - well, it's stable within the natural variability. But it cannot therefore

encroach on your environmental base lines, because the entire water is allocated, so it's allocated and it's apportioned.

The next thing that we're looking at in that consented use sub pool is that that is where you can reserve sub pools for municipal or generation. So there's an ability for the community to decide that some of the priorities for a catchment would be around generation, or that you've got domestic that obviously you've got municipal needs, but it also could be around growth. So you can actually plan for the needs of communities in terms of municipal supply.

The other thing that we have looked for in that whole of catchment view is that we're looking for what is the assimilative capacity of the catchment as a whole? Because we know that we can only abstract a certain volume of water before we begin to affect the quality and the ability of the catchment to absorb or to actually deal with the loads, the contaminant loads we're putting back in. So we need to know what the assimilative capacity is and that's defined across the catchment.

[9.40 am]

We set limits for the contaminants in that planning phase. We also define a series of rules around the catchment management plan and they're around sheer transfer, they're around how water and it's only the consented pool, and we'll come to what that means, but this is where the community would define in the planning stage, it would define what that transferability would look like. Whether it can go upstream, downstream, whether in fact it occurs. Whether it's held within zones, but it's at that place is where that happens. We also have requested that we have an allocation decision for any water that is unallocated at that point so that there are - we're looking for the methods in which those allocations will be made and this allows us to shift from the first in first served to a more

value-based allocation framework. And so that's very much that integrated catchment management.

If we shift over and we look at the next part of it we're looking at how we're going to manage the quality and quantity aspects, so we have defined water that's available for consented use and now we're going to figure out how can we actually manage some of the effects of use of that? So what we have done is we have separated the take and use consents and we have created a water access entitlement. So, taking use consents will continue. They simply will not define the actually volume of water that is being taken, they will say the rate of which the water can be applied, they'll say the rate of which the take can occur, but the actual amount of the water is held in the water access entitlement. That access entitlement is a proportion of the consented use pool, so this is how we manage variability around what the consented use pool could look like. The water access entitlement is the entity which allows transferability and that's why I mentioned that there will be rules around how those shares or how the proportion of water and the consented use pool will move and that is through this - through the water access entitlement. It is the entity which is available to be transferred. We are looking for it to be a secure property right and it is available for transfer.

The quality is managed through a contaminant discharge entitlement; it's a (inaudible) trade of nutrient discharge, it is very similar to what is happening around - or could be similar to some of what's happening around Taupo at this point. We will put - again, it's a proportional share which allows dischargers to transfer any portion that they do not use.

The other part of the contaminant discharge, by putting a cap, it allows us to manage and to help get water ways which we know we have quality issues in, we can have a reducing cap on those, so it actually gives us a mechanism through which we can manage our current problems. In the

same way that the water access entitlement allows surplus water that we know is not being used, it is allocated but it is unused, and in catchments it can be up to 80% of allocated water is not being used. Not necessarily true of all catchments in Canterbury, but when we did our work what our consultants came back with was that anywhere between 20% to 80% of water is not - that is allocated is not actually being used. So we need a mechanism that allows the water that is already assigned for use to move, in the same way we've got a contaminant discharge entitlement that where you've got efficiency gains, where we don't actually need - where a farmer or where a user can actually get an efficiency gain and actually reduce the amount of discharge where they can actually find help to resource that through that efficiency gains. But we also can manage - the important thing about most of this work, is that we can actually manage the current state that we're in and shift towards a better state as well through this sinking lid.

We have obviously, because we're introducing some new entities, we need to establish a registry which will facilitate the water accounting and quality management. And it will allow and it will enable the voluntary transfer of water and contaminant entitlements. We have no mandatory transfer, it's all voluntary; that what we're trying to do is there is transferability available in some catchments at this point, but what we have is that time and cost delays are enormous. The transactional costs mean that the opportunity for transfer is often lost. And so we're looking for a much cleaner and a much more transparent way of helping to shift these entitlements. The entitlements, once again, are only related to the consented use pool, so it's a pool that is capped way back in planning and the only water that moves is in that pool.

We have asked for improved metering and monitoring. We know that councils need to improve that and we know that there is work done in the NES for standard metering that would support that.

I think one of the key things about our best use solution is that we have actually said that setting up these catchment management plans and setting up this framework is a matter of national significance and it needs to happen within a set time for critical catchments.

We have an ability within that best use solution to prioritise the development of catchment management plans to for fully or over-allocated catchments, that will help us to manage them back to sustainable limits.

We also believe that for catchments that are undergoing the gold rush now, that by introducing this style of solution you're actually going to manage it before they actually enter the critical space. We know that the cost of the best use solution, we know that it's costly, but we weigh that against some of the costs at present. There is a loss of investment because of uncertainty, (inaudible) know the risk; we have planning and consenting delays at present; we have huge litigation costs in our current systems and we have an inability to actually unlock the value of the water that we know exists and has been already determined as being available for commercial use.

MR NEILSON: Thank you for listening to the major features of the (inaudible) proposal in terms of the best use solution -

CHAIR: It was a great to be able to remind us of your scope and main issues, thank you.

MR NEILSON: But obviously it's a fair question at this point to say, well that's very nice but what's it got to do with the job – for the inquiry, which is to do with the National Policy Statement in terms of the – and probably I'll try and put that into some context.

Again, the fact that one group, even if it had through widespread (inaudible) in producing those recommendations, we went out of our way to try and clear the significant water (inaudible) the country to make sure that we came up with a solution that not only would work, but also have a tolerable level of agreement across most of the (inaudible). But probably more importantly, the new Government, in terms of its Cabinet paper which was issued, I think it was in May, I'm not sure of the date, but effectively has put forward as a policy of the Government on water that remarkably reflects what's actually contained in the paper we prepared. So we have in parallel effectively a document that you've received, (inaudible), we have a policy statement from the new Government and we have a distinct interest in getting some action in this space, because clearly we believe that within three years in most economically important catchments there's actually going to be a log jam because water will have been allocated to an activity and it's quite hard to make transfers to suddenly use, once you're in that position. So we are effectively – the gold rush is underway, we're getting towards a limit which we didn't previously have and therefore, we have to make some good decisions about how we're going to plan this for the future and obviously you have one of those instruments in front of you and obviously although you're only invited to effectively review that, it goes with that process, there are other things going on and probably our sort of argumentation or probably proposition would be, in order to get the best value out of the work that you are doing, there will be value in for example awaiting what comes out of the Land and Water Forum which is basically taking quite a few of these proposals and seeing whether there can be a broad commitment as opposed to a understanding of the sort of mechanism.

[9.50 am]

That has been endorsed by Government as their preferred pathway for development of a policy. And the opportunity that when that Body has made its recommendations and Government has considered them, that they could be invited to make a further submission on the NPS as proposed, on the basis of effectively its compatibility and desirability given what its policy position is. We don't know whether that's feasible, possible, we just think it might have some common sense attached to it, but it's not necessarily the same thing as what you're allowed to do, but we thought that there would be value in taking that step, a bit more positive, that probably would of course require another round of submissions on whatever the Government might say at that point and also the viewpoint that the Inquiry may have got to by that stage. But we think that that may provide us with a more useful outcome and make sure that the work that the Inquiry does, actually doesn't result in a document which may not be compatible with where the Government is likely to go. Now, you know, we can't speak on behalf of the Government. All we know is things are happening in parallel which could be significant and we wouldn't want to have an inquiry process on a National Policy Statement that resulted in something that was not going to be helpful at the end point and we started again in another year's time.

So that was basically the position that we wanted to put forward to this Inquiry. As I said, we don't know whether it's feasible but we think it's desirable and we believe that there's likely – whatever is done, it's likely to have a considerable number of features that are actually in that model, not because we're geniuses (inaudible) brilliant ability, but if you get 25 people who know something about an area in a room, with good will, the number of options that develop are small about how you deal with these things and once that has been determined we think that getting to action is probably the desirable thing after that.

So our recommendation is that if it's possible, if you were able to, before you (inaudible) a final decision, that hopefully when the water forum has completed its work, and that the Government might be invited to provide a whole of Government submission on the basis of its views in response to its own policy position, but also in terms of what comes out of the land and water forum. Just to ensure that what comes out of this process is compatible with what goes before. So in one sense we are putting in a submission because we're wanting to make sure that whatever emerged from your process did not cut across the possibilities of a package of measures which we think would be desirable and appears to have a degree of community and also Government buy-in.

CHAIR: Now at what stage in your presentation would you like us to have some exchange with you. We would –

MR NEILSON: We've covered in short form, basically what we think we need to say. Obviously we wanted enough time for you to have a discussion in case there were things – if you had for example, you have the benefit or probably the burden of hearing most of the other submissions. We obviously put a submission response to the original draft. You would have had an opportunity to consider some of these papers and it may be that your point of view is that there's nothing in our document (inaudible) compatible with where you might end up going. I don't know that. I can't pre-judge that, but I – we do see the desirability given the time pressures on the issue, that we don't end up with an NPS that effectively becomes part of the problem, rather than part of the solution. You know, we looked at the document and said, there's a whole lot of very desirable statements in this draft, but it does remind me if something's drafted by my fellow politicians in a former life, that there's a line there for everybody, but it doesn't give a clear steer on prioritisation and certainly doesn't provide the instruments by which you could get to a conclusion. And when I see that,

that sounds to me like a lot of work for the planners, a lot of frustration for communities and full employment for (inaudible), which isn't necessarily a problem in a time of high employment, but again, does it serve the wider public purpose to have that? Vagueness is not necessarily helpful and certainly a lack of prioritisation and a lack of clarity about how you resolve these issues, there's a remarkable (inaudible). And the Crown telling you the community, we'd like you to consider these things and not giving you any mechanism to actually resolve the prioritisation and make decisions or resolve those issues seems to me inviting more problems than we have at the moment and we have enough (inaudible) at the moment.

CHAIR: Well when we started I did invite you to present as you would choose and that's what we've been listening to with a lot of interest, thank you.

And if you're ready we'll now come to the point where we might have some exchange with you, because it will be helpful to us as well. Thank you.

Might I just start with that important topic that you've just been talking about, the place of this in relation to other activities that have been going on. Because when we come to the best use plan or model there will be questions from all of the members of the Board I'm sure, but just looking first at that question, there are two or three angles to it that I'd just like touch on with you. One I might call the constitutional aspect of it. And I touch on this because I suppose that's the Chairman's particular responsibility.

As I see it, the Board is set up, sure by the Government, but it's in terms of the RMA and these Boards, as I see it, are intended to be independent of the Government and independent of the people who drafted the policy statement that's being considered. And that's to give the people who

come along and talk about it some perhaps confidence that it won't be a matter of looking defensively at their suggestions, but on the contrary, be are quite detached from those who wrote it and those who approved it at Cabinet, so that they can really have a full hearing. So that's what we're trying to do and so in a sense we're excluding from our consideration anything that the Cabinet does or that the Government does and changes of Government and all of that sort of thing, we're just getting on with the task of looking at the content of this document and seeing whether it can be improved and indeed many people have talked about the same sorts of things as you have. So I've got a bit of a resistance to putting it off or waiting or taking too much notice of what this Land and Water Forum might be doing, from that point of view.

Then there's the practical point of view that we're an ad hoc Board. We've been brought together from other lives to do this task and we'll be expected to complete the task and go back to our lives.

Then there's the question of what is the practical value of an NPS at a time when there's more broad review of our arrangements concerning managing water? And you may know more than I do, because I don't know much about what the Land and Water Forum is doing, but the impression I have is that it's at a rather higher level of generality, that's not a criticism, it's important that it's done again, than what we're doing and albeit that you may feel the land and water forum will have completed its task within a year and good luck, but sometimes experience tells you that these targets are not always achieved on time, but even then, if what they're going to produce is as helpful as we're all hoping, it's going to require changes to legislation and so you can add a couple of years, can't you?

[10 am]

So finally, what does the Government want anyway? And we have been given the understanding that when the Government, the Cabinet, did decide to go ahead with the Land and Water Forum idea, they expressly gave some consideration to the process that we're involved with and this is only over the last few weeks, and expressly noted that this was going on and didn't express any suggestion that it shouldn't continue.

So, all of those things seems to be pointing in a different direction than what you were asking of us and I'm saying that right here and now and out front so that you can bring to our attention whatever you want to in relation to that, before we come to the very important and relevant topics that we want to discuss with you.

MR NEILSON: Well I probably would suspect what we suggested was the best answer, but I think that we would more than happy if what you decide in the end (inaudible) not been compatible with what we have recommended. All we're saying is our work - the work that we put together is probably not going to be the final total answer in terms of all of the points that will come out of the – and it's really matter of making sure we don't do things which I think would preclude what we may think is broadly understood, as the (inaudible).

CHAIR: Well that's very good and we can certainly be comfortable with that, because at the moment we're working in the framework of the RMA. If the RMA is changed, and that must be part of the outcome of the forum's considerations, then there may need to be some changes to the National Policy Statement as well. So it may be that you can see some improvements by way of national policies as interim measures. Does that seem sensible?

MR NEILSON: Yes. Very. As I said, we basically prepared this – events occurred after and we're saying while we'd like you to show some interest in what we're doing to make sure it's not compatible, we're also aware that there are other things occurring, and of course it's over to the Crown to made the submission (inaudible). Unfortunately the Crown, other than through the Ministry, or the Department of Conversation has shown a remarkable reluctance to get (inaudible).

CHAIR: Well, we could have a very interesting conversation about that.

MR NEILSON: But it probably won't help you with progress on the current (inaudible).

CHAIR: Yes, so what I'd like to do is recognising the relevance of your best use to our undoubted topic and duty, we'd like to have some exchange on that, and I'm going to invite one or more of my colleagues to ask questions first, so that we can focus on that. Mrs Vernon would you like to ask first?

MRS VERNON: First of all, I've read your submission with interest, and just wondered with – and you talk about integrated management and Objective 2 is about integrated management, and I've been asking people well, if we put the word "catchment" in the middle there, would that be so difficult, or unacceptable, and most – most people have agreed that that would be probably quite logical actually, where – where a lot of regions are actually heading with this. And I um – I wondered, and I read your best use solution, and your proposal, and because we are kind of caught in the middle, but just wondered if there was in your opinion some model or some catchment planning that is heading in that direction, you mentioned Lake Taupo, but that's quite a specific and unique – and you couldn't compare the rest of New Zealand to being like that. So I just wondered are there some catchments that have got some of that

modelling, or ideas that you've put forward, that are halfway down the track?

MS STONYER: Variation six, for the Waikato is heading towards some of this. Motueka has an integrated catchment management plan, and there are others – there are two others in Nelson/Marlborough Region that are looking at – some of those that – that aren't there, they have different uses of the water, some have generation, some don't – so it's about – so yes.

MRS VERNON: Right, so thank you for that. It's handy to know, and I was interested to hear that you've been around a lot of the catchments to base some of this work on, so it's just not a theory. That even a complicated river, say in the Canterbury or say the Waikato River, which has actually got two rivers, and two catchments you see it being possible to eventually work through.

A question, even in your original submission is how do we get everybody started to think like this, or do this, and is that going to be – and I have no idea, everyone talks about Phase 2 of changing the RMA, is that we're it's envisaged that the get start go, sort of, sign is going to come, or, I mean, I don't know?

MR NEILSON: We've discussed two possible approaches. One was that some amendments be made to the RMA, in the near future. That would allow effectively consenting (inaudible) in regions where there's some (inaudible) catchments to be able to see, but would recognise that issues in Canterbury and Waikato are so entrenched that to just (inaudible) on a current track, that it's going to be quite hard to put a circuit-breaker in relationship with those. But to allow effectively, some learning by doing, in places where this is likely to be less controversial to allow people to get on with it, and enable, you know, effectively remove anything that's an

impediment to this happening. Most – and we did – we got some legal advice when we first (inaudible), and I think there were about four things that needed to be amended in the RMA to allow what we were proposing to happen, and one of them was clarity about taking use and what a comma meant to the people who didn't want to something (inaudible) for argument, the comma did not mean two distinctive things (inaudible), as you'd be aware any proposition is contestable and at $400 an hour, we suddenly (inaudible).

MRS VERNON: Thank you. I don't have any other question, because your submission was clear, and I have read that through, but it was nice for you to explain it through, so I don't have any further questions. Thanks.

CHAIR: Mr Prime?

MR PRIME: I'm interested in your comment in 8.1.2 - 8.12 of your submission and 8.12.1. I wondered what was meant by (inaudible) Government a newly developed agreement on (inaudible). Can you explain that (inaudible)?

MR NEILSON: Well in some ways similar to the agreement with Tainui, with the possibility that if there is believed and accepted that there is actually a co-management responsibility, that that would be best handled by Crown to Iwi negotiation, and that that would drop almost automatically into the catchment management plan (inaudible). We effectively, we couldn't – the group could not resolve that issue of - on their own (inaudible) negotiation with the Crown and Iwi, but we felt that that was the place where it needed to be. Effectively it's part of the foundation of agreeing the plan about how a catchment would actively integrate - management on an integrated basis but that would be on a pre-condition effectively that that had been resolved, because you couldn't even go forward if you were allocating

rights that didn't actually recognise, or respect (inaudible) then it was likely to end up with problems later.

[10.10 am]

So effectively it was going to be a requirement within the regional planning process for how it ought to have been managed and we felt at the time when this was done, the negotiations in relationship to Waikato were occurring and we thought that that was a useful model by which we (inaudible) dealt with.

MR PRIME: And you'd envisage quite a number then of –

MR NEILSON: Quite a number, because what we were saying is the Crown needed to make clear which were the priority catchments in terms of pressure, and that that would indicate a priority ordering in terms of resolving the issues about what were Iwi interests, what were traditional rights, what were expectations of reasonable, and what did co-management mean in a particular location. But starting off with those places where the problems were greatest and gradually moving across the whole of the country possibly over 20 or 30 years.

MR PRIME: Thank you. Thank you sir.

CHAIR: Dr Harding?

DR HARDING: Thank you very much for your submission and your explanation of this best use solution, which is an intriguing idea. I guess one of the things that I worry about a little bit it as a scientist, is the issue of uncertainty, and that we don't know what we don't know, to a certain extent. And some submitters have talked about introduction and ideas of

precautionary principles. How would you see – or would you see that something like that could fit into your model?

MR NEILSON: One of the things that we were very clear, and one of the things being said to the Ministers as we went through this is that, "why we don't appear to have a shortage of lawyers, we do seem to have a shortage of science knowledge in order to be able to make the decisions." We also – so first off, the concerns of those (inaudible) catchments we felt that the best investment in the current period of time was to make sure what was the background level, for example of contaminants, or was (inaudible) capacity, because you can have quite a different debate with how much arsenic was naturally in the river and you know, what's changed.

Secondly, we were concerned that unless there was a reasonably accepted science base, you effectively would never get (inaudible) the limit – you could go on forever. Certainly what we try to do in our work is allow for the fact that there's uncertainty by making (inaudible). And we recognised explicitly that if there was new knowledge, that that could mean the baselines would have to be reviewed because of the – you don't know in advance. And over time we will identify more things that we have to be concerned about are in the water, and they will be added into the mix – so you might get, you know, you've got a right, but it's got also the possibility of having it reduced in the future according to similar capacity of the stream, but also the discovery of new contaminants, or new issues that threaten (inaudible). So we tried to cover off on that basis, the uncertainty; in part make one's proportional, so if your new knowledge means you can no longer allocate on the same basis, your entitlement is a lower proportion of risk than previously. But make sure that people knew that that was the rules of the game when they started, and they couldn't claim new knowledge meant that we had to be compensated. New knowledge meant the world had changed. Our view of the world had

changed, and you had to live with that uncertainty. So we're effectively trying to move the risk in this from the community guaranteeing something, to the user accepting that there is uncertainty and having to factor that into their considerations. So we weren't saying "you get an absolute guarantee of how much water, how much quality" that must be something that was going to be out there adjusted at the time.

MS STONYER: Proportionality is – because when you first define your consented use pool, one share could be one cumec – like the consented use pool, because your environmental baseline won't change, or if there is a need for that to extend higher, your consented use pool could actually diminish also with natural variability and other things that happen. So at any point – so you may not have a share that is one cumec, your share value may actually be point 8. So that means that the value of that – that's how you account for that variability and that's the risk that is being transferred to the user, as opposed to the current situation where the contest is about we'll shift the baseline so that I still get my one cumec.

CHAIR: I'm a bit uneasy, perhaps just through misunderstanding, at the talk about the assimilative capacity for contaminant loads. I've been thinking that a sustainable water policy for the nation would be moving away from treating water bodies as the objects for disposing of waste of any kind, and that we should be thinking that that can't be sustainable. Perhaps I've misunderstood.

MR NEILSON: I think what we're saying is that there are probably constraints. And but that can be addressed in terms of assimilative limits and that they could move over time to reduce if that's necessary. There are obviously contaminants you wouldn't want in any stream at any time. We're not saying that everything is (inaudible) anything, what we're saying is where we know that there is a limit in relationship to ability to assimilate that that

clearly should be something that was explicit upfront and said "we have (inaudible)." One of the things that we came to very early in the conversation about what needed to be done was because assimilative capacity is very much related to actually volume of water, you couldn't actually create those things separately, so therefore they had to be part of a planning process, rather than a market process. And therefore we wanted to make sure that that was explicit in the beginning, but recognising that new knowledge will mean what you thought was right 20 years ago, won't necessarily be the right answer (inaudible). But what –

CHAIR: Well I understand what you say about the knowledge and that's the science of it, but physically and chemically the water may be capable of that assimilation, but as a matter of national policy, could we say we're not going to use water for that kind of purpose?

MR NEILSON: That's perfectly available, that's a prerogative of the community to make the decision that there isn't going to be. But what we were – what – effectively this work started off mainly in stress catchments, where actually we're already over-allocated assimilative capacity, which could not being maintained, and we were trying to work out how do you actually move back to something that could be lived with, and do that on a relatively fair and acceptable basis? We weren't assuming, or promoting the idea that we should be trying to push to the limit everywhere, but basically it was mainly a problem of how do we have to get back to a position whereby having over-allocated rights how do we pull them back to something that's actually compatible long term? And how do you do that in a way that's broadly accepted?

CHAIR: Well thank you, and I'm glad you've referred to the topic of over-allocation, because there have been grants that are now quite generally seen as unwise, but we're told that the principle of non-derogation applies,

in that at least for the remainder of the term, which might be decades, the rights continue. Is there some way in which that bind can be addressed in a National Policy Statement?

MR NEILSON: Well probably not in a National Policy Statement, I agree with you, because that is a major change of rights and entitlements, that should be in the proposed legislation. One of the things we proposed, although we didn't shout it to the mountain tops, is that this regime can only be put in place at a time when you finally agree to suspend the first in, first served – at least in those highly stressed catchments. Now if you give forewarning that of course, (inaudible) you'd need an awful lot of pro forma applications which then have to go (inaudible).

CHAIR: Water banking.

MR NEILSON: That's right. So what we have suggested is that - one of the reasons why we've said to the Crown "you need to work out what are the priorities for each catchment – stressed catchments, and effectively allow the provision of a movement away from first in, first served to a value based allocation system."

CHAIR: Well you know, I'm sure, that there are some right-holders, who say they have invested enormous amounts in plant, of one sort, or another, in confidence on the non-derogation principle, and so there's – it's not going to be easy to prise them away from that.

MR NEILSON: There will be compensation issues inevitably for people that have a reasonable assumption of those entitlements.

[10.20 am]

What we're trying to do is make sure the regime makes that less of a problem in the future, because we're actually saying to the property right holder, you're going to take a much harder course than of (inaudible) previously. At the moment everybody gets guaranteed reliability, guaranteed volume, when in fact it's a natural resource which must (inaudible) by the very nature of it is variable and it's just not a realistic representation when we have much more water than we have ever (inaudible) demand, that was quite a sensible process. Once you get anywhere close to the limits it's totally irrational. It's the transition that's actually a more difficult than I think the regime once you get there. That's why we don't shout it out. Because it's all predicated on a belief that you can transfer some new rights for some old ones, which will have different features. My experience around the world with doing these sorts of exercises is you need to persuade people that the current rights are untenable, then allow them one dimension in the new right that's more attractive than the old, and effectively do the switch. But in some cultures that requires a large amount of compensation. In Australia they would say, "I know I've been robbing you for 30 years, but you can pay me not to rob you for the next 30 years." (Inaudible) in New Zealand and we say "sorry, game's up – no compensation."

CHAIR: Well even in the Australian experience, we come to the question of the transfers, which you've included in your model and I think that's plainly desirable, but you're not suggesting, are you, a free market?

MR NEILSON: Well what we're saying is the community decides what the limits are, and for the commercial - in respect of a section of a catchment, you would be able to transfer more freely than you would at the moment.

CHAIR: More freely?

MR NEILSON: Yes.

CHAIR: But it does have to be a regulated market, doesn't it?

MR NEILSON: Oh no, it's pretty much a regulated market.

CHAIR: I just didn't - I thought I might have misunderstood that.

MR NEILSON: The community is setting the limits, in terms of volume, requiring proportionality risk, and also having contaminant limits in terms of those entitlements. And also, you can obviously only transfer in relation to that segment of the catchment. You can't take the water into somewhere else.

CHAIR: Well, I think that's perhaps an important part of it as well, isn't it?

MS STONYER: The Waikato variation has allocation sites, and transfer occurs within allocation sites.

MR NEILSON: And those rules we're suggesting are part of the local policy, and will be part of the regional plan, within the constraints of whatever the Crown is prepared to allow to happen.

CHAIR: Forgive me for monopolising this, but I've just got one further important issue I think, that I don't quite understand how it's dealt with in your best solution and that's dealing with cumulative effects, identifying them, and managing them properly. Can you just explain to me how your model deals with that?

MR NEILSON: There are two things, one obviously – there are two issues. One of them obviously limitations in respect of one particular attribute. You can obviously make the decision that nothing of this type is illegal. With water

in other places you can say – "there are limitations in place of significant contaminant that can be on the basis of what could be absorbed, and tolerated." And effectively you're saying "what is that limit?" Then effectively you're saying "who currently has entitlement to it?" Making – scaling back the entitlement in respect of what could be managed in this sort of capacity, and then allowing those rights to be tradable. Now obviously as we've discussed before, the volume and the assimilative capacity are very much related, so you'd have to make – there's the capacity right also – proportional partly to water that is actually available. Because obviously if the volume goes down, you can't have the same amount of contaminants, because it cannot be managed by that reduced volume. So that's how we'd manage the individual characteristics. There still remains an issue about how you accumulate those across different contaminants, because you wouldn't necessarily automatically assume that two contaminants don't have any combined effect, which you may not be able to measure (inaudible) and that's why we think this is always going to be a planning process, because a community's going to have to (inaudible) advice and decide what contaminants it is able to tolerate within its regime – or desires to have tolerance for and effectively do they have a combined impact? Which is why effectively those limits will have to be set separately, when in fact we start the allocation process. So we've – our model basically says, you go back to basics, work out what volumes and the assimilative capacity are, in a constrained catchment; that's what you're destination is, and then you work out how you're actually going to get there over a period of time.

The issue of multiple effects of different contaminants is still rather hard to deal with, and that's why we've recommended a planning process be the basis of this, and not only purely a market basis.

CHAIR: But I'm thinking of quite a big set of rules seems to be what you're contemplating, or what might be the result of what you're contemplating.

MR NEILSON: And we also think, obviously one of the things we've generally been enthusiastic about (inaudible) for example for a price on carbon, and for a waste levy in order to manage more of those things, because we think that having been one of the guilty parties responsible for the RMA in its early stages, having embraced this regime on the assumption that economic Instruments were going to be developed, and therefore we speak about management of effects, not about allocation, but of course the inactivity of the allocation issues means that they get such into the RMA process, (inaudible) it was not originally designed to deal with that. That's unfortunately your burden, not mine, but we do have arguments in other places about what could be done about that.

CHAIR: Well I think that covers the points that I was wanting to ask about. Is there anything further you wanted to say by way of wrapping it up?

MR NEILSON: We will continue to encourage Government to make a whole lot of Government submissions and hope that helps.

CHAIR: Well it's like so many things, there's tension both ways, and sometimes a whole of Government submission is pertinent and helpful. Sometimes it seems that if different departments came along, with different points of view, that exposes issues rather more clearly.

MR NEILSON: Well, we're not suggesting that say the Department of Conversation should not be able to have its (inaudible) powers, we're obviously saying is basically "is there a Crown policy position on these issues, that would provide a clarity, and help with progress?".

CHAIR: Well, we're very grateful to you. Thank you very much for coming and presenting so clearly for us.

MR NEILSON: Thank you for your time.

CHAIR: Thank you.

CHAIR: Now gentlemen, you're going to come forward please, and receive my very warm welcome. And the Board understands that there's going to be a joint presentation on behalf of EDS and Ecologic, and that's very satisfying and pleasing to us. Yes, please be seated. And we would like to say to you right at the start that some submitters have been constructive in their submissions, and that's very helpful for us, and I won't comment about other submitters.

You'll understand too, that we've been having submissions from a variety of interests, and of course we're finding those who don't have a specific interest, but an informed and insightful point of view are the most helpful to us.

So a very warm welcome to you. I understand that Mr Burns is going to speak first. There's no formalities expected, you can just present as you would like to. We would perhaps hope that there will be time towards the end when we might have some exchange of questions, and responses such as you've seen with the last submitters. But please just present as you would like, and Mr Burns, you don't need to be upstanding, you can speak from the chair, if you're comfortable with that, or you can stand if you'd prefer.

[10.30 am]

MR BURNS: Thank you for that welcome Your Honour, and other Members of the Board. I am comfortable sitting in an area of informality thank you – having recovered from being hit on the head with the clock, which (inaudible) traumatic!

CHAIR: Well that teaches you to sit in the front row, instead of the back!

MR BURNS: Yes, I think I'm safe here really. I'd personally like to introduce Miss Gouvan (ph) who the Board may not be familiar with. (Inaudible) Mr Taylor (inaudible).

And yes, as Your Honour said, what we had in mind was I'll produce some (inaudible) representations, which are in writing, which should keep you informed, which are mainly of a legal nature, and then Mr Taylor, and Mr Salmon will greet you - address the Board as well, and then we'd be happy to engage and drive on (inaudible).

So to begin with my formal presentation.

I'm making these representations on behalf of EDS and Ecologic. EDS and Ecologic have lodged very similar submissions on the proposed National Policy Statement on Freshwater Management which describe various concerns with the NPS. We've also attached to those submissions a re-worded of the NPS which (inaudible) more specifically.

I'm aware Your Honour that the Board has read the submissions and the proposed re-wording of the NPS, so I don't intend to repeat the submissions, or traverse EDS and Ecologic's proposed re-write of the NPS, although Mr Taylor and Mr Salmon will to some extent address the re-write.

Rather, these representations briefly address the main points of concern to EDS and Ecologic and also some of the legal issues which the submissions raise. And as I say, Mr Taylor and Mr Salmon are present, and they will give brief presentations of their own following my presentation, but their primary (inaudible) proposals all arising from the submissions.

The issues of concern, in EDS and Ecologic's submission, are following the primary matters which the Board needs to address in order to ensure that the NPS is workable and is successful.

Firstly, a robust set of goals encapsulated in the objectives and in the policies in (inaudible) these goals. Secondly a (inaudible). And thirdly, we advocate utilisation of section 55(2)(a)(b) of the Act. Fourthly, we seek recognition to the objectives and policies that non-point source discharges remain as a contributor for poor water quality and that this issue needs to be addressed with urgency and particularly land use development and discharge of contaminants. I have addressed each of these issues below.

Objectives and policies. We submit the NPS lacks robust objectives and policies. EDS and Ecologic proposed amendments to the objectives clearly set out a structured approach for addressing the freshwater amenity. They set clear goals for achieving enhanced freshwater quality and quantity.

Proposed amendments to the objectives are closely aligned with section 5 of the Act. EDS and Ecologic rewritten preamble details this approach. Put simply, the redrafted NPS seeks to reinforce the Court's interpretation of section 5, that sustainable management is the heart of the RMA and is a sole guiding principle for the management of all natural and physical

resources, but that the sustainable management is qualified by the three bottom lines, as set out in sections 5(a), (b) and (c).

EDS and Ecologic's proposed objectives also set out a clear path to address non-attainability of water quality standards. EDS and Ecologic do not believe that water quality standards should be allowed to be reduced because the standards are too difficult to attain. However, they do understand and acknowledge that in some situations it will be very difficult and expensive for farmers to modify practices to comply with water quality goals set in the NPS. Therefore, EDS and Ecologic have proposed three alternative ways forward for land owners who cannot attain water quality standards. These are detailed in Objective 5.

EDS and Ecologic submit that managing non-attainability is crucial to the success of the NPS. Without a process for managing non-attainability the NPS fails to guide farmers as to how reach or encourage farmers to reach the NPS goals and does not therefore follow through on its targets.

EDS and Ecologic's proposed Objective 7 introduces a precautionary approach into the NPS which at present does not exist. Due to the poor state of water quality and over-allocation of flows in many catchments in New Zealand at present, EDS and Ecologic submit that any approach to freshwater management should be conducted on a precautionary basis.

The NPS does not include a target date for any of its objective. EDS submits this will result in inaction and delays in improving the freshwater standards. NPS's objectives have set a date of 2015 for the recovery of freshwater to a level that's safe for swimming and other recreation in and on the water, and for the protection and propagation and the safe harvesting of fish, shell fish, wild life and mahinga kai.

Ecologic has set a less ambitious date of December 2028 for the recovery of freshwater. A 13 year gap, with dates – of course it's a matter of how long is a piece of string. But Mr Taylor and Mr Salmon will explain the reasons for this limit. We discuss this difference in their individual representations.

And in addition to the target for improving water quality, EDS and Ecologic's objective set a deadline for establishing standards for the life supporting capacity of all surface freshwater and dates for achieving these standards.

Turning now to section 55(a)(b), that's the one that states, "National Policy Statement may direct that specific provision be included in the document without notification or hearing under the Clause 16, Schedule 1". In our submission, this section provides the unique opportunity to insert provisions from the NPS straight into district and regional plans without having to go through the Schedule 1 process. It enables specific provisions of the NPS to have immediate and direct effect throughout the country and is, in EDS and Ecologic's submission, the best tool available for managing freshwater in the interim period while regional policy statements and plans are promulgated.

EDS and Ecologic submit the NPS should direct the provisions set out in Policy 5 be inserted into all district and regional plans throughout New Zealand without notification or hearing in accordance with Clause 16 of Schedule 1. Direction of these provisions be inserted in the plans will, in EDS and Ecologic's submission (inaudible) the NPS will be in accordance with Part 2 of the Act for sustainable management. It will ensure there are provisions that will take (inaudible) effect.

Turning to non-point source discharging. As highlighted in EDS and Ecologic's submission, the management of point source discharges is significantly improved over the last few years. However, non-point source discharging remains subject to few, if any, controls. Unlike land use activities which can be undertaken as a right, there is no presumption of a right to discharge when it comes to water. Section 15 of the Act prevents any person from discharging contaminants into the environment unless allowed to do so by rule on a plan or a resource consent. EDS and Ecologic consider section 15 has not been effectively utilised to control non-point source discharges in agriculture. The current health of many of New Zealand's waterways is reflected in this failing. EDS and Ecologic submit that the deposition of dung and urine from farm animals, especially when farming practices involve intensive use of land such as for dairying, is contrary to section 15 of the RMA unless permitted by a rule in a regional plan and therefore, requires having discharge consent.

Now Your Honour, the submission – this representation then goes through the case law on that topic. I may be preaching to the converted, but I'm not sure whether the Board wants me to go through the analysis of the case law or - I don't know to what extent you –

CHAIR: I think that to the extent that what you're doing is providing legal argument, I am confident that your analysis of it is something that I will be able to follow and I suspect that my colleagues will leave that to me and so what I'm going to suggest is that you take that part of your presentation as read and come on to some of the broader matters that I'm sure we're all interested in. Is that satisfactory?

MR BURNS: I thought that might be the case. Your Honour will be, I'm sure, so familiar with that case law and that analysis.

CHAIR: Some of it looks rather familiar.

[10.40 am]

MR BURNS: Indeed. I will draw attention I think to the summary. I'll move through to the summary I think in paragraph 38 where I know that the above analysis (inaudible) proposed indicates that dung and urine discharges are caught by section 15(1)(b) and therefore contrary to the RMA. EDS and Ecologic submit that if non-point source discharges are not adequately dealt with by the NPS, the health of New Zealand's freshwater will never fully recover.

EDS and Ecologic propose Objective 3(d) attempts to manage the effects of non-point source discharges so that the objectives of the NPS are achieved.

EDS and Ecologic submit that the NPS should recognise the importance of non-point source discharges in the recovery of New Zealand's freshwater resources and provide a clear direction in how to manage it.

In relation to land use development and discharge of contaminants, the NPS defines land use development as "includes land use intensification, land use change and subdivision of land". This definition does not capture existing land uses such as farming. However, the term is coupled in the objectives of the NPS within the phrase, "and discharge contaminants". In our submission, and for the reasons which I've set out in the law which Your Honour's familiar, the phrase, "discharges of contaminants" captures point source discharges and following the interpretation of section 15(d) above, also captures non-point source discharges". So EDS and Ecologic support this approach in managing discharges. They do not want to see any weakening of the NPS, so it only applies to discharges associated

with land use development. Such an approach would be akin to grand parenting existing discharges and would not be conducive to achieving full recovery of New Zealand's freshwater quality or with the intend of section 15 of the Act as a restrictive, rather than a permissive provision.

So in conclusion, EDS and Ecologic submit that the Board should adopt provisions in line with their reworded version of the NPS. EDS and Ecologic's version of the NPS will result in effective and efficient management of New Zealand's freshwater resources and will ensure that freshwater resources are sustainably managed for future generations.

So that concluded my opening Your Honour and I'll now pass over to Mr Taylor and Mr Salmon.

CHAIR: Mr Taylor, we're planning to have a break at about 11 o'clock and just thought to let you know that so that you can plan how you present and relate it to what Mr Salmon's going to say as well.

MR TAYLOR: Thank you Your Honour. Well the way we're going to handle this is that I'm going to deal with a particular discrete issue that I think is probably no more than five minutes and Mr Salmon will go through the areas of the submission that we want to highlight to the Board. So you're going to interrupt him I think, rather than me.

CHAIR: Yes. All right. That's fine. Yes. Thank you.

MR TAYLOR: Your Honour, I think that – I mean one of the – we understand of course the nature of the brief and the Terms of Reference that the Board has, but there is one matter that isn't directly relevant to the brief, or the Terms of Reference, that might assist the Board with some relevant context, if I can put it that way. And that's the role and function of the

Land and Water Forum. And I thought it just might be helpful to describe very briefly the genesis of that, the role, and how it might sit in a complementary way alongside what the Board is doing here.

CHAIR: Perhaps you weren't here when we had some exchange with Mr Neilson about that, this morning?

MR TAYLOR: No.

CHAIR: No, must have been before you came in. I'm sorry about that, but he was in effect I think hoping to persuade us to put off completing our task until the forum had completed its task and I was bringing to his attention some considerations that seem to be resistant to that notion. It doesn't mean to say that we're not interested, of course, in what the content of the forum's task is and of course we'll listen with interest.

MR TAYLOR: We're not contending that –

CHAIR: No, all right.

MR TAYLOR: Your Honour, the Land and Water Forum arose out of the - I think it was an initiative that arose out of the Environmental Defense Society's 2008 Conference where we had heard presentations in fact from Mr Salmon on collaborative governance models in Scandinavian countries as a way of setting policy and strategies by Government facilitating a process where all key stakeholders are in quite a lengthy process of talking through the issues, understanding the technical background and seeing where there's common ground around what policy – broader policy setting should be. It was originally called the Sustainable Land Use Forum and then people didn't like the acronym, so we morphed into the Land and Water Forum which is perhaps somewhat more presentable.

The initiative has since been backed by Government and is now funded by Government and has I guess some 60 or so participants in its plenary form and a smaller group of some 15 or so that are managing more detailed iterations around the policy issues, and the expectation is – and there are some Iwi involved in the process as well, although I did think – I think there (inaudible) and I confirm that that's – their involvement is in no way running interference, as it were, in their direct relationship with the Crown and negotiations with them over Treaty matters and that's been made fairly clear.

There are three possible outcomes from the exercise which in substantive terms is really just getting underway this weekend with meetings in Taupo with Tuwharetoa and will take 12 months.

The three possible outcomes are one, that it could fall over and one would have to say that it is certainly a challenging exercise to bring all of the stakeholders together and try and get agreement on the preferred way forward which is a National Policy on Water and related land use matters. And it has never been done before in this country.

The second is that if it succeeds, by the time we finish obviously you will have finished and will have reported to the Minister and your process could very well lead - well the expectation is that it will lead to an NPS being promulgated and it may be that the work of the Land and Water Forum leads to an agreement that there should be some further modifications of the NPS through a subsequent process. That's the second possibility.

The third outcome, as we see it, is that you do such a good job and deal so comprehensively with the issues that you inform, as it were, the Land

and Water Forum process and we clip any complimentary non-RMA measures around the NPS that you recommend.

So I guess what I'm saying is that you know we are looking to address the same issue, you through this Board of Inquiry and a National Policy Statement. And the Land and Water Forum through a broader exercise that might involve looking - or that will involve looking at non-statutory, complimentary policies and strategies as well.

So I just thought it might be helpful to give you that little bit of background.

CHAIRMAN: Thank you. I was wondering in my conversation with Mr Neilson whether it's right to look at the forum's scope as being at a higher level of generality than the Board's task. And one that is really likely to require some amendments to the RMA whereas this Board - the Board has to work within the framework that the RMA provides. And that's our limits really. So is it fair to think that the forum will be looking at things more generally? And perhaps more radically even than, than the Board can do?

[10.50 am]

MR TAYLOR: Yes sir I think that's a fair summary, I would agree with that. I think the only thing that I would add would be that whilst your Terms of Reference are quite clearly constrained within the present legal framework, if there are some matters that fall a little bit outside of that framework that the Board nonetheless considers are relevant and would be helpful, we would certainly encourage you to note them in your report as perhaps an addendum, something analogous somewhat perhaps to an advice note on a resource consent. Which is Mr Burns' helpful way of (inaudible).

MR BURNS: As Your Honour knows with consent authorities when they're getting outside their jurisdiction they tend to go down the advice note which can be very helpful.

CHAIRMAN: Can be. Sometimes it's a matter of giving advice that nobody wants.

MR BURNS: I don't think that would be the case here. We would appreciate (inaudible).

CHAIRMAN: Yes well perhaps even just a covering letter.

MR TAYLOR: Indeed, yes, yes.

CHAIRMAN: Well we're very grateful for, for that understanding about the Land and Water Forum. And particularly we note that it's about to start it's work and I think that we gathered that's it's planned to take a year or so and to the extent that we can be permitted to say so, we wish you well. We hope it'll achieve all of the goals that everyone has for it.

MR TAYLOR: I think many of us are tired of fighting battles in the Environment Court ad nauseam (inaudible). It would be nice if we could settle on some agreed national framework. And that's really the motivation.

CHAIRMAN: So the framework that we're concerned with here is important too. And it may, as your middle option suggests, require some further modification in due course when the forum process has been completed. But we might at least get on with it.

MR TAYLOR: Yes indeed. And we're certainly encouraging to do so and, and now I'd like to hand over to Mr Salmon to – unless you wanted to take the adjournment.

CHAIRMAN: No I think what we'd like to do is to ask Mr Salmon to make a start. And to forgive my interruption in five or 10 minutes and perhaps even to help me with a suitable moment instead of interrupting your plan. And may we ask you to proceed when you're ready.

MR SALMON: Thank you very much. We've approached this task by, as you will have seen, redrafting the National Policy Statement from scratch rather than suggesting fine tunings of it. And in many ways the best way for us to deal with this would be for us to just respond to questions from you. But I thought perhaps if I could just spend 15 minutes or so just touching on the key concepts that lie behind the redrafting at least as far as the objectives (inaudible) is concerned. And I thought perhaps I should start with Objective 1. The objectives we've tried to structure around section 5 of the Act. Which broadly speaking facilitates people getting on with their lives or their economic and social objectives subject to those three constraints (inaudible) with the word "while". And what we're trying to do here is to flesh out what we mean by those three constraints, section 5 (2) (a),(b) and (c).

So the first objective is intended to amplify what we mean by sustaining the reasonably foreseeable needs of future generation (inaudible) water. The second objective deals with life supporting capacity. And the third deals with adverse effects on the environment.

The first one – I just thought it would be worth spending a moment or two touching on key elements of it. A), deals with stopping further degradation of ground waters or super (inaudible) by recognising and

wherever obtainable, reversing any significant sustained upward trend in the concentration in pollutant. That work “wherever attainable” is something which widely used internationally. And it’s intended to cover off two types of obtainability problems. Both of which are addressed later on in the document. One is where there’s a natural source of contamination which can’t clearly be managed. And the second is where there is some economic reason why it can’t be obtained. And in subsequent parts of this document we try and amplify on each of those.

B), deals with essentially swimmability and fishability. And the main difference between this document and the draft that was published by the Government simply is that The government envisages a long process of councils writing their own standards as to whether they want their waters to fishable or swimmable and we’re proposing that that should be a decision taken at the national level.

There’s a difference about dates between the EDS submission and the Ecologic one. And, of course, in a novel context of things when somebody is polluting and you expect them to clean up their point source discharge, they have to do it in a pretty short amount of time and they pay the cost of that. And that of course NPS drives its (inaudible) from, simply with that - what you’d normally expect (inaudible) given a resource consent and required to clean up.

The Ecologic view is really one which was written with the Land and Water Forum partly in mind. We were trying to suggest a date which might be acceptable to the farming community. So that’s the difference and the Board may find it wise to locate somewhere between those two extremities and that’s a matter for your judgement. But that’s the reason for the difference in the two dates.

I'd also make a comment about the underlying issue here, which is land values. Contamination of water, if you're going to repair it, has an effect on the assets which is discharging into the water. And normally somebody who's discharging like for instance, Hamilton City will have to spend quite a lot of money in quite short order to clean up and that will reduce the value of their assets or any other (inaudible) assets. In the farming community it has - it translates into the matter of land. So if you have a very early date for cleaning up discharges, land values will tend to drop. If you can take up a longer into the future date, land values in the natural course of things are gradually rising and perhaps they'll rise a bit more slowly than they otherwise would have done, but it makes it much less difficult and onerous for the land user to accept and change provided they're given time.

The last part of this objective deals with the need to ensure that fresh water flowing into the coastal marine area is of a quality suitable to meet any objectives or policies that have been established in that area. And we do have quite a serious problem in New Zealand with estuaries and off shore rocky reefs and the associated fisheries being degraded by sediment laden water coming down from erosion on the land. And we need to have something that increases that directive.

Let me just take perhaps one more objective, because it's quite short, before we take the adjournment.

The second objective deals with life supporting capacity as referred to in section 5. And this is essentially of course about biodiversity. And there's an internationally recognised methodology which is normally used to address this kind of question which freshwater biologists identify reference sites in the region and try and assess what species would normally be present in the water and then taking account of environmental

variables, they extrapolate that across the rest of the region to establish what a reasonable standard (inaudible). That conceptual approach or that methodology is widely used in Europe, North America and parts of Australia and it's being championed by some freshwater biologists in New Zealand. So, we've essentially elected to support that approach and this objective is drafted on that basis.

That's all I wanted to say about Objective 2. Is this a good moment for us to take a break?

CHAIRMAN: I think it probably is. And we hope you'll have a cup of tea and we'll come back in a few minutes and listen with interest to what you have to say then.

ADJOURNED [10.59 am]

Audio file: dpm 0129

RESUMED [11.34 am]

CHAIR: Now I think you were completing addressing Objective 2 Mr Salmon, is that right?

MR SALMON: Yes. I'm just going to highlight a few points, so I go back to Objective (inaudible). This objective is really dealing with non-obtainability, which is attributable to economic cost of compliance, so there's under I think Policy 1 of this draft, regional councils are asked to identify areas that are not obtainable for natural reasons and put them to one side. And then they are to identify areas which are not obtainable because of the economic cost of compliance. So this objective is dealing with that. And it is in two parts. The first part really requires avoiding further degradation of a water body that's in that category.

And then secondly, it calls for a procedure to be established between public authorities and land owners or others who are discharging, to work out a basis for sharing the costs of restoring that water body over time. Now, this is not quite the same as the grand parenting which is often talked about by the people in the private sector. Grand parenting involves giving farmers the right to continue discharging at their existing level of discharge. What we are suggesting here doesn't create a right, but it simply says that there is an acknowledgement that there may be a high cost of making this transition, and that there ought to be a procedure for addressing that. I guess it is important to come back to the point that if you are a point source discharger and a consent authority requires you to clean up, you bear the cost of that yourself. So, any step to share that cost is something which has to be taken fairly cautious. It shouldn't be something as of right farmers can expect somebody else to pay to clean

up in a way which any other discharger would have to meet from his or her own pocket.

When I circulated this draft to a number of people for peer review by scientists and lawyers, I did get a comment back from a lawyer to the effect that the suggestion might be ultra vires the Act. And if it is, then this would be one of the things that as Gary Taylor suggested you might address by way of note suggested that something could be done about it by perhaps (inaudible).

Moving on to Objective 6, there is a problem in practice that regional councils have been very slow to set environmental flows on water bodies, and to establish appropriate limits on takes for ground water. That is partly due to the fact that there's quite a lot of technical knowledge required to do that. The result anyway of these delays, has been that in a number of places water has become over-allocated, and then it becomes quite expensive to reverse or to re-establish a sensible flow because people make investments, and then it becomes quite difficult to get back to a sensible flow.

It seemed important to us to set in some default mechanism, and we propose one here which simply says that this will define what the minimum environmental flow is until such times that the council gets around to defining it more precisely.

Turning to Objective 7, this is all about cumulative effects and precaution. This is an area where our peer reviewers were nervous about creating a lot of legal uncertainty, because when you invoke precautionary principle in some overseas jurisdictions this has given rise to an awful lot of litigation to what it really means. So we tried to approach it in a cautious way and establish some legal tests, which would have to be met. So it is

not as ambitious as some of the precautionary principles used in overseas legislation, but it's designed to create some reasonable level of certainty while still addressing the issues that underlie the need for a precautionary approach.

And the key to it really is to get councils, wherever practicable, to set quantitative limits on the impacts that are allowed in water bodies. So that's either a quantitative limit on the amount of ground water that can be taken out, or a quantitative limit on the amount of nutrients or other contaminant which can enter a body of water. In setting that limit, councils need to deal with uncertainty in a precautionary way, where two tests are right. One is where there could be significant adverse effects, and secondly, where those effects would be difficult or costly to reverse. And in those cases, then the council would be empowered or required to set a precautionary limit.

So we just put that forward for your consideration as a way of addressing these rather difficult issues. I should just briefly touch on two other objectives, 9 and 10. 9 is intended to try and pick up in New Zealand practice, the learnings that we have from a number of overseas jurisdictions about the value of collaborative practice. I spent five years studying this in the Nordic countries and just to briefly encapsulate the way it is done there, if I can draw a contrast between a consultation and collaborative governments. In New Zealand we do consultation and a council will publish a proposal, there will be a hearings process, and it will often be quite an adversarial process. The council will go away and hand down a decision, which doesn't necessarily have the buy-in of the various warring parties. In the Nordic countries the normal practice is to invite the parties themselves to write the policy. And they will spend a year, or up to three years in some cases, getting fully conversed with all the technical underpinnings and with each other's points of view. And they know that if

they can reach agreement on a policy and it's reasonably precise, then that will be adopted. On the other hand, if they can't do that, if they can't reach a consensus, then the decision making authority will impose one.

And there is quite a strong track record of success in using that approach in the Nordic countries. That is not to say that in the New Zealand context where we have different habits of resolving our differences, that it would work here. But what we are trying to do is get councils to try it, and over time we believe that if it starts working it will become more institutionalised and will be more successful.

So there's a number of points in this document where we try and enjoin councils to use a more collaborative approach. I am happy to provide some further evidence about (inaudible), if that would help.

Objective 10, we have a situation at the moment where the only monitoring of the performance of regional councils which is done by Central Government, as to how fast they process resource consent applications. And our feeling is that they should be monitored in a number of respects, not least of them being how effective they are in achieving the purposes of the Act. So, we would like to see this as part of your recommendations, something which requires some monitoring and reporting on performance of Regional and Local Government in the matters and the objectives in this Policy Statement.

Now I just want to turn to Policy 1 and in particular, the part of it on page 6. The term naturally degraded water under this policy would have to be identified, and also any water body having protracted pollutant status. We have defined both of those terms on page 10, in definitions. I think the key point about these definitions is that – and this is where they contrast with the definitions in the – exist in the Government's proposal.

The Government's proposal has essentially a politicised definition of degraded water resources. We tried to create a definition which is just (inaudible), something you can take to the Environment Court and test. And so although it is expressed in a narrative form, our intention is that it should provide greater certainty and objectivity than the one which the Government provided. So that is the reason for offering those definitions in the way and the form that we have. And the procedure in Policy 1 would be that the councils would first of all identify (inaudible) degraded water bodies. And that's defined and those would be set to one side. it would then identify those which are to be given a protective status where it is going to take quite a long time to fix the water body. And then for those that fall in between, they can get on with their regional plan, and take action to achieve the objectives of the National Policy Statement.

I think it's probably appropriate that I just leave it there and from this point on I can respond to your questions.

MR TAYLOR: Perhaps we can take the Board through Policy 5?

CHAIR: Yes please.

MR SALMON: Yes. Well obliviously there's an interim issue here. It is going to take time for authorities to implement Policies 1 to 4 in their regional plans, and so we wanted to use here section 55 (2)(a) of the RMA to drop some provisions directly into those documents as interim measures. And the effect would be essentially to bring these matters under interim control, while the plans are being (inaudible).

CHAIR: Interim and immediate?

MR SALMON: Yes.

CHAIR: Now I wonder whether Mr Prime would like to ask any questions at this stage?

MR PRIME: I have no questions.

CHAIR: Mrs Vernon?

MRS VERNON: Thank you. Can I just concur with the Chairman about how helpful it is if somebody wants some changes that they actually clearly put them in the submission. And I do appreciate, as I am sure the rest of the Board do, the time that it has taken you to rewrite a whole National Policy Statement, because you don't do it without some thought.

So, first of all if I start, there's a theme I notice in your submission, and I will talk about your redrafted the National Policy Statement. You have concentrated quite heavily on, and if I go to say Objective 3, you talk about livestock. But we have had - and it relates to quite a few things in your redraft, we have had a lot of submissions from concerned urban submitters about things like storm water are just pushing down creeks and streams within the urban sector and there is concern that in actual fact there is a huge amount of contaminants and that it needs dealing with, some way in this National Policy Statement. And then of course we've had others who are saying well that urban streams don't count, and fine, leave them out. And I just say, look at your Objective 3, and you've specifically mentioned just livestock and I wonder whether in actual fact it needs more broadening than that, that in actual fact we really are talking about urban and rural non-point source discharges, because they are all affecting water quality, especially what's (inaudible) out to sea.

MR SALMON: Well yes, I can't disagree with you at all. The only reason that in 3(b), we say "to use discharges and contaminants including those from livestock" and the reason for mentioning livestock was for the avoidance of uncertainty. Because some people believe that livestock are not regulated, and we've gone to some trouble to set out why we believe it is and that is the only reason. I would be perfectly happy to say, including those from urban storm water, as well. The only slight qualification (inaudible) if you look at the total area, or the total length of streams that are contaminated, there are those that are contaminated by urban storm water, would be perhaps 1% of the total, and the other 99% are contaminated by livestock or to some extent by crop and agriculture.

MRS VERNON: But the difficulty we have is that we've got - and you are absolutely right, but we have got urban submitters who feel that that has been a very convenient excuse for nothing to happen. And that they are looking at this NPS because that's their environment, not the rural. And we have even been told that it is much easier and cost-effective if we only deal with rural water quality, and don't worry about urban. And that would be very convenient for some organisations, and there are people who live in the urban community, that's their environment, they've got a steam in their backyard and they would quite like to see it looking to the best of its ability just like rural people.

MR SALMON: That is certainly our view and the thrust of this would of course force Local Authorities to clean up, and it is unfortunate as you are probably aware that some Local Authorities have water companies that they take dividends from and use for a non-water purposes. And there is a need, clearly, to put a regulatory framework in place, which means that they can't just forever postpone cleaning up their -

MRS VERNON: So your whole redrafted of the NPS does kind of scooter the rural sector, and that is fine, but you wouldn't mind if there was a bit of balance in perhaps the urban sector has the odd mention.

MR SALMON: I must say I thought the thing was going to have very big consequences for urban water authorities, and it wasn't our intention to skew it toward picking on the rural sector at all. We are treating both sectors (inaudible).

MRS VERNON: It's just that sometimes people need their names, you know, the word "urban" in there for them to actually realise it.

MR SALMON: I think we would be very happy to have urban referred to specifically, and that in fact might make some rural people feel more comfortable with the Policy Statement when it emerges.

MR TAYLOR: I think that, I mean your point resonates with our experience in setting the Terms of Reference for the Land and Water Forum, because the question of an equitable approach between rural and urban water issues was very much in the minds of many of the rural dwellers. You are quite right.

MRS VERNON: Thank you.

MR TAYLOR: Presentation is often important in these things, but we certainly intend it from a technical and legal point of view to be comprehensive.

MRS VERNON: The other thing is you have used some new terms in your new NPS. For example, "wherever attainable" and - that's one that comes to mind anyway. And you've changed – I know, in your definition you have used the word "protracted polluted status." While they are international

terms, I just wonder if - we have had quite a few submitters saying, "Please if we can, stay with words that people are familiar with", because, it will again avoid litigation or confusion, or whatever, and particularly your "protracted polluted status." I mean I know what you are trying to say, but I am not quite sure about it again, for the reasons that some of the submitters are making that it will cause more confusion, it gives more reasons for nothing to happen while somebody litigates the definition of the NPS. So I just wondered if you'd care to comment about how an NPS can get around that? I mean the new NPS has things like "notable values" which has had lots of submitters say, no, stick to whatever. And the definition isn't directive enough or clear enough. So I wonder if you could help me a little on this, "protracted polluted" and "wherever attainable."

MR SALMON: I can make two comments about that. The first is that I'm not too worried about introducing a new term occasionally, because it only takes one or two cases for the Environment Court to clarify if there's an argument about what it means. And so the real question is, is it a useful addition? And in the case of water management, the fact that some water bodies can only be cleaned up over a very long period of time, often gets used as an excuse for doing nothing with all the others. And if you think of Lake Taupo, Environment Waikato has set in place the variation that will bring it back to its present water quality and I think in 18 years' time. So that is an example of this kind of problem. Lake Rotorua is another one. That isn't going to be fixed in 20 years' time. So what we're trying to do by generating this new category, is to say that there is only a small number of unusual circumstances where we should be tolerating waters still being polluted, more than 20 years from now.

In all other cases, if you haven't specified in your plan that it is has got that status, your duty is to clean it up before then. So what we are trying to do here is to remove to one side those very difficult cases, and keep councils

focussed on getting on with the rest of them. So I think it is quite a useful device to identify those. We've set those three tests out in the definition section, I think reasonably tight and reasonably clear. So I would hope that it would create a lower litigation. In fact, if you look at the second paragraph of the definition, we have taken that directly from section 85 of the Act, which I think is quite well understood, the meaning of those words. I don't think we are going to get a feast litigation out of this.

MRS VERNON: So then that brings me nicely back to, you are not averse to using new terms and then in your Objective 3, you "avoid, remedy or mitigate" and in actual fact, you know some would see well that is just is actually promoting status quo, people are used to that system and it is not raising the bar. I wonder if you would care to comment on that?

MR SALMON: I think you have to see Objective 3 in the context of the term of "receiving objectives". And in a way, that little Preamble is just leading into paragraphs a, b and c. A), requires resource consents to be consistent with the new objectives, so it is raising the bar. B), is addressing the need for integrated management of land and water, and C), is addressing the need for integrated management of quality and quantity. So I think that those statements do add something to the existing Act.

MRS VERNON: Thank you. In your 3(b) - I have been asking most submitters this question. The term "land use development", and you do raise in the beginning a concern about trying to capture existing use as well as future development. And quite a few other submitters have expressed that concern as well because the current NPS as drafted looks as if it is only talking about the future, when in fact it's the past that we are trying to really grapple with. So, I just wonder if there's any - you do use the word "existing land uses" but I just wonder if it may not be more just talk about

existing “land uses and development”, rather than “land use development”, in your (b), whether it is clearer that way?

MR SALMON: I’m sorry, I didn’t understand, we use both “land use” and “land use development” in (b)

MRS VERNON: Yes you do. But your “land use development”, is it future or is it the existing land uses and of land use development? I am not - I just wonder.

MR SALMON: Our intention is to -

MRS VERNON: Capture both?

MR SALMON: Is to capture both. Yes.

MRS VERNON: Right.

MR TAYLOR: In might better read “the effects of existing and future”?

MRS VERNON: That’s right. As long as that is your intention, that you are trying to capture both.

MR BURNS: “Existing and future land uses and development”. (Inaudible).

MRS VERNON: Again, Objective 5, “non-attainability”, do you think it requires the definition of what you mean by “non-attainability”?

MR SALMON: Well I think it does in the sense that it says where a particular water body cannot attain Objectives 1 or 2 by reason of the high cost of restoring water quality, so that’s the particular definition of

"non-attainability".

MRS VERNON: So that is your definition?

MR TAYLOR: But we could add a completeness to the definition.

MR SALMON: Well there's two reasons for non-attainability. One of them is that water is naturally degraded.

MRS VERNON: Yes.

MR SALMON: And the other is that it can't be improved because of the high cost. And this objective is dealing with the second kind of non-attainability.

MRS VERNON: Thank you. And you're comfortable with putting the word "reason of high cost" because we have had a lot of submissions saying that the cost is just totally prohibitive of many things, now, even forget about the future. So I am interested that you have put that term in. Does it not let people off the hook, to use that excuse? Or is it is just about being realistic that there are high costs?

MR SALMON: It is about being realistic, and what we are saying is that in a great majority of cases water quality can meet these objectives simply by putting in an effects and a bit of vegetation on the stream side of the fence and that will solve the problem over a huge amount in New Zealand. But there are some places where the level of stocking, given the nature of the soils and the connection to the water body, and the sensitivity of the downstream water body, where all those factors come together, that the only way of meeting water quality objectives may be to lower the stocking rates. Lake Taupo, of course, is an example. And so I think we do need

to recognise that that is a reality. And there's a procedure - what we are trying to do with this is to set up a procedure for isolating those cases, and dealing with them. Firstly by saying, you can't degrade the water further and then by saying that as far as improving the discharge is concerned, we will talk with you about how to do that. And it might involve public funds contribution as in Lake Taupo, or it might involve relaxing the rules of subdivisions so that the landowner can perhaps subdivide for a lifestyle block, or something which would offset the diminution of land value, which would otherwise occur. So I think we cannot avoid the fact there are some high cost circumstances. But in my experience, they are not nearly as widespread as some people would like to persuade you. So setting in some tight definitions is quite helpful.

MRS VERNON: I don't disagree. Again, I look at though for people who want some of their urban storm water creeks day lighted, or whatever, or even maintained during previous standards because they are open now, anyway, how helpful that will be for them? I know where you have come from but again, I do think you know we have got the urban situation as well, and you do talk about water going out to sea and being an important component, a lot does come from urban areas, whether that is going to be again, another convenient - because that's the argument they use now anyway.

MR SALMON: That is true, that retrofitting some of our urban sewerage and storm water systems, especially where they are interconnected, is a costly number and would fall under this provision. But I feel that is just an inevitable feature of improving water quality. What I'm keen to do is to put aside these extremely costly cases and get on with all the other ones, where people are sort of reluctant to set any rules because they think they are going to imposing undue costs. Theses cases where there is a lot of

cost are not that many, and let's segregate them out, and get on with the others.

MRS VERNON: Thank you. With your Objective 6, I know where you are coming from, but I wonder if it would be more helpful, since we are trying to be specific, if you put "default environmental flows and levels for surface and groundwater" in the title?

MR SALMON: Yes, that would be an improvement.

MRS VERNON: Because just reading it, it struck me that that's what you're – it is a little confusing.

MR SALMON: You have to read the whole thing before you –

MRS VERNON: You do and I just wondered that – I wanted to make sure that I'd assumed that's really what you're trying to capture both, thank you.

CHAIR: Dr Harding?

DR HARDING: Well thank you very much for your submission. And it's extremely helpful that you've re-written a version of it. There's so many issues here I'm not quite sure that if I'm going to capture them all, but I'll do my best.

One of the first things I was wondering about, and this is on – actually it really started on page 3, Objective 1 is the definition of fresh water. So in your definition you haven't really changed that much from the proposed NPS that there is at the moment. Some of our submitters have suggested that the current definition really focuses on the water, rather than the ecosystem - the riparian zone, the biota, and that sort of thing. Do you

have any view on whether it might be useful to think of these as ecosystems rather than water per se?

MR SALMON: Well I guess we have to think of them as ecosystems, but it's just a question of whether we do that by defining water as an ecosystem, or whether we just go with the existing definition of water, but get "ecosystem" recognised in the objectives and policies. So we've taken that latter course, but you could actually go in the other direction, and define water in a broader way. I haven't thought through exactly how that would work, but it is certainly something that you could do as an alternative approach.

MR TAYLOR: The approach that we're advocating is an holistic way that would embrace that concept.

DR HARDING: Because a lot of the intent in the wording if you like, it's subtly different in that some might interpret a lot of these things about quality, and quantity, and we've had other submitters say "well, what about the habitat", you know, that could easily fall through the gaps there, if you like.

MR SALMON: What we would assume that, you know, in section 5(2)(b) is it that refers to life support capacity is all about habitat, about biodiversity, and we tried to amplify the meaning of that in our Objective 2. So we absolutely agree that habitat shouldn't fall through the cracks and I guess the issue here is, would it be useful to add something to the definition that reinforced that (inaudible). I'd have to consult colleagues at to what are the legal implications that would have, but intuitively yes – what we want to achieve – we want to have people looking at water as a whole ecosystem, and when they think about impact on water they're not just talking about you know, it doesn't have a trace of chemical or change colour, but what happens to the organisms that are living in it? And we

think that's what section 5 is all about with reference to life support capacity.

DR HARDING: Okay thank you. So you've already explained a little bit about the timeframes issue that your two organisations have got slightly different timeframes, or in some cases markedly different timeframes, and I think, but correct me if I'm wrong, EDS has taken the view that the timeframes you're suggesting are based on when you might reasonably expect a polluter, or whatever to remediate their pollution. I wonder about the other longer timeframe whether that's – is there much – is there any particular sort of science behind that, or –

MR SALMON: Well the most important thing that it can be done to alleviate water quality seems to us to lead to get the streams fenced off and get some riparian vegetation established. And Environment Waikato have spent a large amount of money on a ten year programme to progress the percentage of the Waikato that was being fenced off. It just takes a long time to do it. And I think that most regions are finding that problem. So we need to give a bit of time for that, and then a second issue which involves time I guess, is around nitrate leakage off dairy farms in particular, and the Waikato River, the concentration of nitrogen in the river, or nitrates in the river is going up between four and five percent a year – if you're going to turn that around – it's quite hard to stop this thing leaking off the farms, so we are talking about adjusting stocking rates, and that probably is where quite a bit of time is going to be needed.

I looked at the Danish experience, and they've just completed a 20 year action programme that was started in 1985 to improve the water quality in Denmark, through reducing nitrogen and phosphorus leakage, and they've achieved their objectives in terms of the leakage off the property, there's still a lag effect in terms of the ecosystem recovery, but they needed the

whole 20 years to get their intensive dairying back down to a manageable thing in terms of water quality – they needed that 20 years. And perhaps they've intensified more than we have, because of the subsidies available under the use of the common agricultural policy, but when I look at the actual stocking levels in the Waikato, it's not that different from Denmark – what Denmark was like in the mid 1980s and they found that the only way to get water quality improved has been to lower stocking rates. Well that's been part of what's happened – the adjustment that's happened on these farms. And so, that's something that needs a bit of time.

MR TAYLOR: I think we – I mean our quandary here if I can – is the costs of taking too much time need to be considered as well. And I'm referring in particular to the damage to our international reputation, and the one hundred percent pure New Zealand brand, which you know, we put great store on, in the way that we present ourselves internationally, not just as a tourist destination, but also for our primary produce. And we're aware through research that EDS has done, that consumer buying preferences internationally are becoming much more aware about ethical and environmental sustainability issues. Stuff is being taken off shelves in the Northern Hemisphere, like Hoki taken off the shelves of the Waitrose (ph) supermarket chain, even though it's got marine stewardship council certification as being sustainable, because the John Lewis Group thinks that bottom-trawling is damaging to the environment and it's analogous in respect of dairying. I mean I think that the dairy sector is potentially at risk, if the lack of integrity underpinning that brand becomes widely known internationally. And you know, the reports that you have seen from Environment Waikato, and the Ministry for the Environment about the direction that water quality is going in some of these intensively farmed areas, is cause for concern. And so we think that – you know, we may not have the luxury of taking 20 years, because markets may demand that they set standards themselves that require much quicker action than that.

DR HARDING: Interestingly we've had a submitter recently who suggested an alternative way of dealing with that problem and that's that you don't call systems degraded. You come up with another name for them. Thank you for that.

In Objective 2, I was interested to see the reference to Regional Reference Sites and I think it might be fair to say that a number of regional councils around the country have struggled with reference sites, in that some areas may not have un-modified reference or baselines, and that becomes potentially a problem when trying to model these sort of – and I mean there has been some suggestion about using National Reference Sites, or something like that, but I mean, do you – are you aware of that sort of debate, and the problems with it?

MR SALMON: Yes, this document was reviewed by Professor David Hamilton who's alluded to some of these issues, but his view was that it was worth pursuing this approach anyway. In fact, the overseas jurisdictions have had the same problem. In Western Victoria for example, they couldn't find any reference site that would give them the remotest of idea as to what, you know, species should be expected in their rivers, because they were just so modified and the view that they took was well New Zealand's got less problems than that and we probably could make some assumptions, and arrive at a reasonable set of parameters. But you're more expert in this than I am. It's obviously a matter for judgment – any methodology has its problems. And one is quite struck with – most regions in New Zealand, there are – certainly compared to Victoria, there are some reasonably un-modified waterways you could extrapolate from.

DR HARDING: So I might just pursue that a little bit more, and link that with the idea of naturally degraded. There was a number of submitters, again, that

have brought up this issue of naturally degraded which, when I first heard it, it actually surprised me somewhat, that a system that's in its natural state could be considered to be degraded, but if you were using a reference site-type approach, then would there not be the potential to say "this is a reference site in its natural condition, and it happens to have these sort of water quality, and biota" and that sort of thing. So, by definition, if you were using a reference site approach, you could completely get rid of the idea of naturally degraded. Do you find it – sorry did I explain that –

MR SALMON: Yes – no I think that's right. I think that in – that's in respect of Objective 2. But if you go to Objective 1, which is the main area where we're thinking that we'd need to have this concept of naturally degraded, that's where we're saying "the water should be fishable, and swimmable"; it's all about meeting human needs. And in that area, the water might contain some – the ground water for instance, we're saying we shouldn't have a sustained upward rise in some contaminant. Well, a lot of ground water does have that from a natural source, and it can't be avoided. So we were wanting to use that concept of natural degradation really to set aside some water bodies from the tests that would otherwise flow from Objective 1.

DR HARDING: Okay, fair enough, I'll have to think about that. So over on Objective 5, you've introduced these criteria for determining non-attainability, and I guess partly of that is the procedure established for consideration of public authorities to come up with these criteria. Do you think it would be useful to give some indication of timeframe in that?

MR SALMON: Yes. Probably that should be done in the policy, rather than the objective. I think Policy 1 does have something relative – I'll just check what we wrote there. No perhaps – perhaps this is an oversight on our

part - that we've set out in Policy 1 the procedure that has to followed, but it looks as though we've failed to put in a timeline for it. So that could be – that would an improvement on our draft.

DR HARDING: Objective 6, the default environmental flows –

MR TAYLOR: For surface water and ground water.

DR HARDING: For surface water and ground water. So at the moment it refers to the "mean annual flow rate" and I think later on somewhere, which I may not - oh it's away over on Page 9, in Policy 5, you talk about "mean annual low flow", which is referred to as MALF, and in this case the "low" is missing. Now, I'm wondering whether you're intending that to be "MALF" meaning the low flow, or whether you're thinking about mean annual flow, which would be potentially significantly higher than the mean annual low flow.

MR SALMON: Gosh, I'll have to give you a note about this – ask Jim how we got to what appears to be a difference in two parts, it may have to do with the context, but I'll get back to you.

CHAIR: Yes as a minimum a mean seems unusual; whereas a mean low flow might be –

MR SALMON: I think that's probably just an error that shouldn't actually go in there.

CHAIR: And unattainable.

MR TAYLOR: I think those should be in Objective 6.

MR SALMON: I think that's probably the answer but let me check it.

DR HARDING: I guess logistically it could be very challenging to work that out for ground water.

MR SALMON: Yes, well I'm not really qualified to comment on that. This proposal came from somebody though who was expert in this, and they suggested (inaudible) so – this is a matter for you to judge I think.

DR HARDING: Thank you.

In Objective 10 you've introduced the idea of the Ministry for the Environment logging some reports on this performance of regional councils. Do you envisage that this reporting might be made public, or -

MR SALMON: Yes, of course.

DR HARDING: I'm glad you said "of course" because –

MR SALMON: In Sweden they have sort of an agency which is responsible for monitoring the performance of all public authorities against 16 National Environmental goals, and 71 Environmental milestones, and that reports to parliament every four years and each authority is given a rating as to how well it's performing at those tasks, and there's a narrative paragraph, which identifies any areas of weakness and this is done regularly. I think it would be a huge improvement to the efficacy of the New Zealand situation to have something similar.

MR TAYLOR: It may be that the institutional changes that are flagged by government - couldn't be established under an EPA – that that reference to the Ministry for the Environment –

CHAIR: I'm just a bit unsure whether an NPS is the place where you'd expect to find duties devolved upon any particular agency of government – you know, I certainly understand the objective, but it may be something else for the covering letter, rather than, contents of the NPS.

MR SALMON: There is some duties in the Act relating to monitoring, so I suppose to some extent you could (inaudible) that, but -

CHAIR: But most of those are duties imposed on regional councils in the respect of water, and I know Mr Burns is about to turn up Section 35 is it for monitoring?

MR BURNS: I don't think it does impose any monitoring duties on the Ministry, or the Minister.

CHAIR: Oh so I'm not sure whether, to be consistent, and compatible with the Act we could quite do that, but –

MR SALMON: Yes – I shall (inaudible) possible to pick that up.

MR BURNS: Section 35 is confined to local authorities.

MR SALMON: But what about the powers and the duties of the Minister, is there something there?

CHAIR: They might be in the Environment Act. A bit of homework for Mr Burns, I think.

MR BURNS: Yes, I don't think it's actually section 35 pertaining to the Minister, but I'll check it out.

MR SALMON: I think there is something somewhere that sets out the Minister's – what the Minister's duties -

MR BURNS: The Ministry does publish its monitoring of council's performance in relation to their consent functions and timing and I think has a system – there was some recent publicity wasn't there, where some councils were black-listed for non-performance, so there must be a - there's a naming and shaming in the system in respect of resource consents certainly – but whether it's – whether it results through a statutory –

CHAIR: Have you found it?

MR BURNS: Oh yes we've – "the Minister has a function under section 24(f), which Miss Gouvan (ph) has discovered "to monitor the effect of the implementation of this Act, including any regulations enforced under the National Policy Statements and Board of Consultation Orders." -

CHAIR: Well thank you. Well that's rather stronger than the one that held up the clock – or failed to hold up the clock! Sorry, doctor, have you got some more questions?

DR HARDING: I have got a few more. Still on page 5, Policy 1, Part B – you've suggested some dates 2000 to 2004 as baseline years for measuring degradation. I'm just wondering if you again have any particular reason why those dates were selected?

MR SALMON: A couple of thoughts there one was to get a single year baseline period, rather than just one year, for obvious reasons. And secondly, to get the most recent available at the time you were drafting this. But I mean it could well be that we could improve on that at this point and by

the time this comes into force and so it could say 2002 to 2007 or something like that.

DR HARDING: Are you aware whether all regional councils in the country actually have stating environment, I assume baseline data for those years.

MR SALMON: Well even the most impecunious ones do seem to have some material, and then there's of course the NIWA data as well. So just how comprehensive it is, is the only question.

DR HARDING: Okay. Now under the – sorry I'm moving – actually moving through the document, but some of the questions are jumping around a little bit, so I'm actually over on page 6 and you've added "ephemeral, or intermittent flow conditions" to "the naturally degraded". And at the present moment ephemeral streams and artificial water sources are excluded from the definition of fresh water.

MR SALMON: So we've got a duplication of that.

DR HARDING: Well, I'm not sure if you have, or not. But I wonder whether – in this case you've deliberately – you support the idea of excluding ephemeral and artificial water sources from this definition of fresh water, or whether you have a view on that at all?

MR SALMON: Well it is quite a difficult one. The stream fencing business rather – a lot of the contaminants that are getting into waterways seem to come from ephemeral flow channels and so in an ideal world you'd try and get them protected as well. But maybe this is a sort of one step at a time process that we talked about. This particular approach that we've used here of including ephemeral streams in our definition of what naturally degraded and so therefore immunising them from all these controls is

partly due to a sort of degree of sensitivity to the rural sector's views on things. We were going into the Land and Water Forum wanting to be kind of positioned as taking the – having regard to their concerns and for their point of view, it's an impractical business to fence off all things, you know. But we may not be able – in the long run, this may be something that needs to be addressed more on a case-by-case basis. If we can get the other things fenced first that would be huge step in the right direction.

DR HARDING: Fair enough. Ephemeral streams are one issue, mean what about – maybe this complicates it more, but artificial water courses? I mean we've had situations obviously where we've got urban systems where there are – where some submitters would suggest that these are artificial, they're not natural – some of these are not natural streams, and therefore they don't get to worry too much -

MR SALMON: I think it was covered by that famous case in the Environment Court involving a Cuss (ph) drain, where it was declared that it was a water course up for control under the RMA. That's not a case I'm hugely familiar with, but that was my sort of brief understanding of what it meant.

DR HARDING: Okay. A relatively minor point on Page 7, Policy 3 (b) you use the word "sensitivity" there, "the sensitivity of each fresh water body to adverse effects". I'm wondering whether you had anything in particular in mind, when you used that word "sensitivity."

MR SALMON: Well, with some water bodies you could discharge some nutrient into them and nothing would happen. Now others you're going to get an algal bloom. So water body sensitivity does seem to be a thing that needs to be considered when you're making decisions, I would have thought.

DR HARDING: Thank you. Those are my main points. Thank you very much.

CHAIR: Do you think that a National Policy Statement with ten objectives, and five pages of policies really could do with a kind of an overarching goal? And I don't mean something anodyne that just repeats parts of Section 5, or something like that, but something that says what we're really trying to achieve that's going to make a difference. Would that be permissible?

MR TAYLOR: I think that would probably be a good idea, particularly in order to convey to lay people what the technical objectives and policies are trying to achieve. Swimmable and fishable comes to mind.

MR SALMON: That term is used at the United States Clear Water Act (inaudible).

CHAIR: Yes. And on the other main topic that goes to the total thing, cutting out over-allocation. I mean that's not the words you'd use, but that's the concept?

MR SALMON: A slight reservation I'd have about just using fishable and swimmable, is that that just addresses, you know, human demand to coin a phrase.

CHAIR: Yes, yes, it's a bit (inaudible) isn't it?

MR SALMON: The European Unions Water Framework Directive talks about (inaudible) water status and it's basically – this is translating from the German, but the basic concept is that the water body is in good ecological health.

CHAIR: Ah, that's better – yes, all right, thank you. But do you feel that it wouldn't be doing too much damage to the idea of the National Policy Statement if you started off with an overarching goal of those kinds?

MR SALMON: I think that would be very helpful and getting people to understand the purpose of these things is a huge step towards winning cooperation and implementation. So if everyone accepted that the National Policy was to restore fishable, swimmable and good ecological health to our water bodies or water ways then that is the kind of common sense touch stuff.

CHAIRMAN: And it's a bit different from instruments of - we won't make any examples, but just seem to have something for everybody and nothing in particular that makes a difference.

MR SALMON: It's analogous to a Preamble to an Act (inaudible) .

CHAIRMAN: Perhaps so. Some preambles to Acts are -

MR SALMON: Some are helpful and some aren't.

CHAIRMAN: How nicely you put it.

MR BURNS: The concept at least is – one can see before getting into detail where it's going to go, which seems to me to be a good thing.

CHAIRMAN: And while you, Mr Burns, are as it were responding, may I just ask a question which may be a bit finicky really. But if we look at Objectives 1, 2 and 3 and we know what they're about. When I was reading them first I thought well they are confused, not in what they're trying to do, but they're confusing objectives and policies and putting them all in together.

I sort of started off from the basis that if it says "to" do something or other, that's an objective and if it says "by" that's a policy.

MR SALMON: Well, another way of looking at an Objective 1 would be to say it's simply to ensure as in a), and then to establish b) and c), to ensure. So you could break it into three objectives and all of a sudden those things that you're suggesting at the moment are a bit like policies would then become objectives. And the only reason for using that word "by" was to provide that explicit linkage back to that part of the provision in section 1 of the Act which refers to the reasonably foreseeable needs of (inaudible).

CHAIRMAN: Of course. No, I understand that and I'm not at the moment talking about what you're intending to do. I'm just talking about the structure as a means of communication. And if you just stopped at generations and then you said "the policy to achieve Objectives' – or, "the policies to achieve objectives one are by" and then you had you're a), b), c)?

MR TAYLOR: I think from our point of view, I think that is a more elegant approach.

CHAIRMAN: Yes.

MR TAYLOR: And consistent with the distinction between objectives and policies.

CHAIRMAN: Well thank you. A little point really. I just wanted to ask a question about transfers, 'cos there's a lot of talk about transfers of the consents or rights to use water. And there's quite a lot of people who think well the free market will be fine. Economic instruments is a good

slogan. And then there is others who say no you can't leave it to the free market entirely; it is a market process, but you do need have some regulation of it otherwise you won't be achieving the purpose of the Act at all. How do you really deal with that in this model?

MR SALMON: Well, our view on that question really is that we need to change both the Act and the governance arrangements of the councils before you can introduce a tradability regime. And so we wouldn't be very keen on just sort of smuggling it in under the existing statutory and governance arrangements. And in particular -

CHAIRMAN: Leave that for your forum. Is that the idea?

MR SALMON: Well it is something the forum's going to have a crack at. But tradability. I mean trading is done by owners. We need to have some owners here. And Māori contest the Crown's claim to ownership. And one of the solutions that has emerged is that the Waikato Tainui settlement which establishes a co-management regime says we're going to replace many of the functions carried out by the Regional Council and invest them instead in a co-management authority which is quite a different governance entity.

And, I guess, taking a somewhat similar view here but this is – the whole concept of trading is raising such big questions that we shouldn't try and deal with it in the framework of this NPS. It's going to need a look at governance and it's going to need a look at empowering the collection of rent. Putting, put a price on water and if this is a resource which has an owner then the owner should be getting some rent for it. And it's also going to need addressing the property right around a water permit. Because at the moment a water permit isn't exactly the same as a property right and -

CHAIRMAN: It isn't, and that's why I think it's tradable.

MR SALMON: Well if you were going to make it - if you were going to make things tradable like that and make investments on them you really want to have some changes to the Statute which need to be widely agreed outside this fairly limited framework you've got here.

CHAIRMAN: So do you think that at the moment the provision for transfers of consents to take, say for irrigation, are providing a satisfactory regime for the meanwhile?

MR SALMON: Well it's quite difficult to judge that because it's not always transparent what's going on in water trading.

CHAIRMAN: No, it isn't.

MR SALMON: What is clear is that if we were wanting to do what the Business Council Sustainable Development would like to do, which is to introduce a transparent, widely accepted, and robust trading regime which has real integrity to it, then there would need to be, in our view, changes to both governance and statutory provisions. And therefore it's not something which could be introduced through a National Policy Statement.

CHAIRMAN: Well, what they would like, as you say, is for the future and it may or may not come. In the meantime, there is provision for transfers; should there be a National Policy over the way in which that is carried out absent Mr Neilson's ambitions?

MR SALMON: Well there's a statutory provision for transfers subject to a rule and a plan and very few plans make this provision, although Waikato and

Canterbury each have something in (inaudible). And yeah, I think the kind of trading that's empowered by those two regional plans at the moment is not very far reaching. And not an awful lot has happened. And so much of this depends on how urgent you think this matter is. Some people say getting trading up and running is an urgent matter. I think it's hooked up to so many things of great concern to Iwi and to other New Zealander's who are concerned about privatisation, that to go any further than what's in those existing regional plans is going to need a much more national debate than we've had.

CHAIRMAN: Yes. Well I wasn't wanting you to think that the Board was contemplating doing anything to encourage or to – but neither to discourage, but to see whether there's place for National Policy in terms of what is already empowered. But anyway your position is clear enough and thank you for that. And I'll go on to another topic.

It's perhaps a brutal way of putting it, but some regulatory authorities seem to be in denial. And they tend to say "well we just can't afford to do anything". And I think that they contemplate time limits as being a real challenge to their ability to carry on business as usual. And between the two organisations you've suggested some time limits, and thank you for those. Particularly if you're thinking of a far out time limit, say in the 2030s or something like that, is there room to have a requirement that somebody sets some steps for achieving the objective by the far out time limit in a way that's measurable and publishable? Does that sound an idea that might keep people working towards it rather than putting it off?

MR SALMON: Yes. Obviously we were all expecting that would come through in the regional policy statements and the plans, details as to what time limits applied to what catchments.

CHAIRMAN: Of course yes.

MR TAYLOR: But I think yes, the more explicit you can become in respect of the transition pathway to the target date, the better, because I mean the problem with far out targets is that the present generation of resource managers aren't going to be the ones that are going to be there when the far out target date is met or when it's reached.

CHAIRMAN: But there's also some, some expectations, at least in some of the community, that a far out date can't be used just as an excuse for doing nothing until it's closer. And some progress can be seen is a bit of a satisfaction.

MR SALMON: Yes (inaudible) in a way and we're trying to approach it the other way round. You hear regional councils saying that they can't meet a deadline because such and such (inaudible) going to take a huge amount of time to clean up. What we're saying is well why don't you identify the ones that you think can't be deadlined and call them - give them this protracted alluded status. And we actually think there aren't very many of those and so the excuse of not being able to afford to do things you've sidelined those big problem areas, or you've put them on a different track in which there's some discussion going on about sharing the cost as we proposed (inaudible). And that seems to me to remove the excuse which regionally elected regulated authorities have. They've got to get on with all the other ones; that they could be given as you suggest not only a target date but also a straight line or some other guidances to the interim.

CHAIRMAN: Or maybe they can even elect it for themselves, so long as it can be seen to achieve over a period.

MR TAYLOR: Milestones.

CHAIRMAN: Milestones is the metaphor and sometimes even metaphors can be used to put things off. But milestone certainly is good shorthand for it.

Well I think we've come to the point where the Board has asked what it wanted to initiate and I just thought that I should give you an opportunity to say anything - any of you wanted to say by way of wrap up before we take a lunch break.

MR TAYLOR: Thank you Your Honour, I've nothing further to add.

MR SALMON: (inaudible) touch on that question (inaudible)?

MR TAYLOR: Just - I mean what we're trying to achieve here is, to try and sum up is, is to get away from waffly language to get much more specific and direct. The government has made it quite clear that the things there's a lack of adequate national direction on freshwater. This is the key statutory instrument to provide that direction. And clearly this is against a background of in many of the most intensively farmed catchments, should I say in many of the most intensively settled urban areas, there's a trend of deteriorating water quality, which you will have evidence about.

CHAIRMAN: We certainly have.

MR TAYLOR: And so this – I mean I'm trying to rig you up here Your Honour, this is a very serious issue. I think it's a national disgrace and I think the initial draft was a totally inadequate response after four or five years of work by the Ministry. But you've got the ability with your Terms of Reference and your powers to come up with something that's really going to make a difference. And we would collectively urge you to do that.

CHAIRMAN: Well thank you. Thank you very much. And it's really been very satisfactory to have the two submissions presented together and if we are able to improve on the NPS it's because we get submissions like these presented as they have been today. So thank you very much indeed.

MR TAYLOR: Thank you very much Your Honour and thank you Members of the Board.

ADJOURNED [12.37 pm]

Audio file: dpm0130

RESUMED [2.45 pm]

CHAIR: Good afternoon, please be seated. And a welcome to you all. We're looking forward to hearing your presentation this afternoon in support of the Solid Energy submission and we have no formalities to expect of you. You may present it just as you would like.

MS DRURY: Thank you. First of all I'll introduce myself. My name is Maree Drury, I'm a Senior Resource Management Consultant for Gold & Associates. On my right is Dr Ian Boothroyd, the Principal Scientist for Gold & Associates and to my left is Brett Sinclair, Senior Hydro Geologist for Gold & Associates. Behind us is Alan Monigatti, the Senior Environmental Specialist for Solid Energy.

What we propose to do today by way of introduction is to quickly run through some of the Solid Energy New Zealand's operations, then to focus on some themes in our submission. We will not attempt to cover everything, but we have narrowed down our evidence to pull out some key issues which I will be illustrating by way of slides and graphics.

We will then look at the implications of the National Policy Statement on Solid Energy's operations and I'm going to focus on the practicality and the workability of the proposed NPS in relation to those operations and we will then cover the amendments sought and summarise what we've demonstrated graphically.

Okay, so just as an outline, Solid Energy may at times wish to completely or partially divert a stream, take surface or ground water for coal processing, take water that seeps into underground mine working,

discharge water from a mine and from a coal processing to a stream, or even to a stream in a different catchment, take and use water for fire fighting, undertake drainage work, may undertake land clearance which may effect catchment hydrology, create dams and weirs and divert water from wetlands or into wetlands. So that just about covers most of the things you can do with water.

The things that we are going to focus on, firstly in terms of Policy 1A through to C (1) (G), and Policy 2A through to B. The introduction of freshwater water quality standards, environmental levels and flows, the identification of notable values and the identification of outstanding and degraded freshwater resources. With respect to Policy 1D, potential restrictions at times of low flow on existing operations to sustain notable values and non-(inaudible) tangata whenua values and interests.

With respect to Policy 2C, the efficiency of (inaudible) freshwater in relation to uncontrolled ground water takes. By this we mean mined dewatering.

The return of freshwater to freshwater resources while meeting quality standards and environmental level and flows which may not always successful and discharge permits to include conditions of sustainable management of demands on freshwater and integrated management of the effects of land use development and discharge of contaminants.

Finally, we'll discuss briefly Policies 3 and 6, rules governing resource consents to have conditions for sustainable management of demand on freshwater, individually and cumulatively and integrated management of effects of land use development and discharge of contaminants and the monitoring and reporting requirements.

Okay, firstly what we're illustrating here is a existing catchment, for example, prior to a mining operation. Note there's areas of developed and presumably undeveloped land. So up here we might have a high country streams which are relatively in un-impacted by human use, a valley floor which may have some use for pastoral farming. Again a tributary coming in from an area of less impacted, in terms of human use, streams and indigenous vegetation and then an area of more intensive farming and settlement in the lower catchment. We will also outline different geology that comes into place, so for example I've just used as an example maybe some limestone coming in to the ground water area, or – sorry, the upper aquifer and the coal seen in the lower aquifer.

What we're illustrating here is that we're adding steps to the planning process through the introduction of standards and flows on a regional scale, for example there may be the requirements to express flow in the upper catchment and a water quality in the upper catchment, the water quality and a flow in the lower catchment and a level or flow in the subsurface ground water and the lower ground water. I've used X and Ys there to illustrate the fact that this is often not known. So the type of timeframe first of all in the RPS stage is likely to lead to a broad brush approach and the lack of adequate investigation, particularly for ground water. The establishment of freshwater quality standards and environmental levels and flows may overlook the values or nature of specific water bodies, as well as overlook the ability to protect the values of the water resources through a mixture of design, remediation and mitigation measures. I have given handouts of this, I hope you've got it, and also I've referred to the paragraphs in that –

CHAIR: Yes, thank you.

[2.55 pm]

MS DRURY: The time and cost to applications to disprove a conservative standard or flow and time spent by regional councils deferring – defending a conservative or blunt instrument, rather than focusing on assessment of the effect of a given discharge within a context of a specific environment is something that Solid Energy feels could be an outcome of such a process. The above statements apply both to surface and ground water, quality and flow and ground water quality and flow as there is little flow data available in many streams and nearly all of the ground systems where Solid Energy New Zealand operates, apart from what's often done in terms of the investigations that are done for the AE. A blunt policy instrument disregards the protection of natural preservation such as the limestone that I've illustrated there, affecting the ground water for quality potentially on PH and the difference between the upper and the lower aquifers.

So what we have suggested is the need to prioritise and schedule ground water and surface water evaluations to water quality and flow to address outstanding water bodies where there is a high demand and potentially a constant area of conflict. The imposition of a broad standard has the potential to result in restrictions on the use of water in situations where use may still be possible without compromising the protection of in-stream values. Dr Boothroyd has been involved in many examples of this and can answer questions of this matter a little later on.

Another suggestion we have is that the NPS establish a framework for assessing and developing water quality standards and flows that reflect river types, for example whether they are spring fed, wetland sourced rivers, rather than suggesting numeric standards be established by regional council as a whole.

With respects to Policies 1A through to D and 2A, again, in terms of establishment of standards and the notable values that are related to those.

Outstanding freshwater resources and I've illustrated – sorry, I might have just skipped ahead there. In terms of outstanding resources, under this example we are suggesting that in the upper catchment it may have been classified as outstanding freshwater resources and in the lower catchment it may be degraded if in fact the investigation allows for different standards within one catchment.

If a numeric water quality standard of flow rate is to be applied then this should be done within a scientifically robust framework, for example, the river environment classification for the freshwater environments of New Zealand. Frameworks of different types of ecosystems to be taken into account and different standards applied to all or group types, otherwise the standards will be very conservative and this might also apply in a degraded situation.

The establishment of a protectionist framework for outstanding water bodies on the basis of possibly one notable value, which in fact could be remediated, or it could be a notable value which is quite different from that which would be impacted by the activity. For example, the upper catchment might be for trout fishing and outstanding from that point of view, so the discharge may not impact on trout fishing.

In terms of the lower catchment and potentially the degraded freshwater resource, if a numerical water quality standard's to be applied, it may be of a lower threshold than of the outstanding. If a priority is to be given to enhance and restore, then we've suggested an expanded notable values framework would be well placed, similar to that which Auckland Regional

Council have developed. In that framework they describe a high value, or degraded with high potential for restoration or enhancement or a low potential for enhancement, all within a degraded framework. So what we've suggested is a directive in the National Policy Statement on the methods by which notable values framework can be established.

Staying with notable values, first of all I'll explain this illustration. Again, if we look at a catchment with respect to how it potentially could be categorised, the upper area may be outstanding surface waters, the lower area degraded due to current (inaudible) uses of that catchment and the lower catchment could potentially be outstanding, if there was a notable value attributed to it, which made it outstanding and I've got some people swimming in that river, for example, potentially that could be considered outstanding for contact recreation.

So the water quality in that lower catchment would be Y, plus potentially the contact recreation standard that would be required of it. Then we have to consider the effect on the current treatment and the view of the consent condition, whether that would be required because of the notable value that's put in place for the lower catchment.

So under Policy 1B, if I try and explain this a bit better, again the framework needs (inaudible) the framework for the definition of notable values. That framework needs to provide an intensity and a scaled notable value. As notable values can be established on the basis of ecological, recreation or cultural values, then the interplay between all of these values needs to be assessed in terms of the impact on potential uses. For example, as illustrated, if the upper catchment is outstanding for ecological reasons, the middle catchment is degraded due to surrounding land use and non-point source pollution and the lower catchment is down – outstanding for recreation or potentially cultural use,

or even a lake perhaps, how may these values affect a discharge or land use application in any one or any part of that catchment? If a notable value for swimming causes the freshwater resource to be classified as outstanding where there may be no high ecological value in that area, then this may still lead to a high ecological threshold being applied, with associated restrictions to the land use and discharges in the catchment, when in fact ecological values do not warrant it. As the lower catchment is used for swimming, then does Objective 3 require that the water quality meet a swimmable standard in this river, or does Objective 3 refer to a net gain in water quality nationally?

So there we are sort of seeking direction as to what was the intent of – sorry, what was the intention, whether in terms of swimmability, whether it applied to within any catchment or whether we were talking about a net overall national gain. We'll potentially have a scientifically robust and defensible standard framework for notable values associated with the scientific, ecological and biodiversity values because they have been in part established already, while this objective framework for cultural and recreational value assessment is utilised. This could result in an imbalance or an unfair classification of freshwater resources as outstanding or degraded on the basis of the different rigour that has been implied to be assessed.

So our suggestion therefore is that the definition of outstanding notable freshwater resources and degraded freshwater resources needs to accommodate a notable value decision making framework and provide an intensity and scale to the assessment of notable values that are to be protected for outstanding or enhanced and restored for degraded. So for example for intensity and scale, by intensity I might refer to the degree of use, the importance of that use when compared to other available areas nearby or where it may occur and maybe for scale we're talking about a

time of year, considering migratory times for fish, swimming time or a geographical scale, whether we're talking about a whole catchment or parts of a catchment.

Moving on to Policy 1G and that goes through to Policy 2C(i), restrict existing uses and the efficient consumptive use.

To explain this illustration, what we've got happening here is we might have water being taken from a deep aquifer in an underground mine and also water being taken passively from a lower aquifer due to hydrological gradient changing associated with the digging of a mine pit. Restricting the consumptive uses may not be possible, for example, mine (inaudible).

[3.05 pm]

Once water starts coming into a mine you are in no position to do anything except take it out of the mine and it may – and that's considered to be a consumptive use. This may hinder the maintenance of notable values, as aquifers may not be linked to the surface water. Under some circumstances, the reduction in a ground water take during a period of low surface water flow, so presuming this is low surface water flow and in relation to the policy, which talks about restricting existing consumptive uses during low flow, under some circumstances the reduction in a ground water take during the period of low surface water flow could actually reduce the availability of water downstream of the mine. For example, a mine may extract from a deep aquifer and the (inaudible) of this water to surface water body assists in maintaining ecological or other notable values during a time where the surface water is under low flow condition.

Again, the notable values in freshwater resources are not necessarily incompatible with consumptive use and consumption can potentially be

maintained during periods of low flow. Failure to maintain a ground water level does not necessarily relate to failure to maintain a surface water flow and hence, potential notable values. So there are many issues that come out of this in relationship to the level that is set for the ground water and the levels that are set for the surface water under the NPS framework. The ground water may come into the mine in a localised area, but due to the de-watering, it is then released back into the (inaudible). Now a suggestion is that the NPS needs to allow for site specification valuation, effective consumptive uses on identified notable values, particularly where that consumptive use relates to mine de-watering.

Considering the material in Policy 2C(ii), what we're illustrating here is that the – this stream may have been diverted away from the mine, so I should have pointed this out to you earlier. The grey shaded areas show the original flow path of the tributary to the stream to the left and the stream to the right. These areas have been diverted away from the mine and in this case, this one – this area which is coming from the valley floor, this stream was diverted away and meets up with another tributary that (inaudible) up country.

Under this scenario we have potentially degraded surface water in terms of the NPS classification and potentially an outstanding surface water body coming up from the hill country and bush catchment.

What we're illustrating here is that diverted water flows are not necessarily discharged back into the same catchment from which they were taken. The catchments may have very different geological, ecological and land use features which impact on water quality. This can occur for both surface water and for ground water when the ground water is utilised on a filtration based.

If the surface or ground water take is of a lower standard that there the receiving water body will treatment be required prior to discharge in order to meet the water quality standards in the outstanding surface water body?

The wording of Policy 2C(ii) appears to have required us, even though it may not – it may be unnecessary from an effect point of view and the notable value for which the receiving water body has been categorised outstanding, can be protected without the water quality standard being met.

So our suggestions here, the Policy 2C(ii) recognise the return of freshwater to freshwater resources while meeting water quality standards may not be feasible in situations where natural (inaudible) and contaminants from surrounding land use mean the receiving water quality is higher than the extractable quality. And again, not only is there a land use effect here, but as we've seen in other places, there's a geological effect of potentially limestone having affected the water quality in this water body and the sorts of standards associated with that not being related to the sorts of standards associated with the valley floor stream.

Now this is just a comment about the planning process and the introduction of standards here. What I've attempted to show here is the NPS sets the standard by way of the introduction of its regional plan and regional policy statement. Potentially use another standards framework within that. So what this is suggesting is that the planning process within the NPS framework establishes a process for councils to set standards. Those standards may become embedded in regional plans. In the case of the ANZECC guidelines, these are currently being reviewed. There's many aspects of ANZECC which have been misused in the past and there are cases where there flaws in this guideline. A review of the guideline

and amendments once embedded into regional plans may require both a statutory process to amend the rules in those plans as well as a consent review process.

And so to run through what we've covered and our suggestions. Under Policy 1A, in terms of prioritising the establishment of standards. We suggest that under the NPS, we prioritise water quality standards and environmental flows and water levels to outstanding and high use freshwater resources. It is not always necessary to establish environmental flows, but we can consider where it is necessary. Water resources should be classified according to both their physical characteristics and their relative significance and we can use the nationally significant waterways programme as a way of starting that discussion and amendments to Policy 1A are suggested in the outline and outlined in my submission. I won't run through those yet, but if you have any questions later, we can discuss those.

In terms of notable values, when identifying notable values resource users should be thoroughly consulted. A baseline assessment scientifically robust and should be available to the public. (inaudible) levels may need to be set. Cultural values need to be defined, which reflect cultural importance and recreation values should be considered relative to this (inaudible) use perhaps. And when identifying outstanding freshwater resources, may need to apply a baseline assessment in trigger values and allow for use of outstanding water resources where the effects are minor. We have suggested an amendment to Policy 1B in our submission.

In terms of notable value, the definition of outstanding freshwater resources must reflect quantifiable and a justifiable scientific process for all notable value. When identifying the degraded freshwater resources, allow for the use of a resource, maintaining its life supporting capacity.

The level of restoration and enhancement should be commensurate with the future likely values and as discussed previously, in the values framework you may be able to do that. And a definition of degraded freshwater resources should include a scale in relation to the level of degradation and a framework of potential objectives for enhancement. We've suggested amendments to the wording of Policy 1B in our submission.

In terms of standards again, ensure freshwater quality standards and environmental flows and water levels are set within the context of the stream types, stream classifications, natural variation and the surrounding land use. We've suggested further wording of Policy 1C in our submission.

In terms of Policies 1G and H and the restricted existing uses. Amend Policy 1G to direct regional councils and TLAs so that consumptive uses can be maintained during low flows under the circumstances that we have outlined.

Amend Policy 1H to ensure future rules governing water and land use effects on freshwater resources recognise that if values can be protected, then use of the freshwater resource should be allowed.

And the amendments to 1G and H are outlined in our submission.

In terms of Policy 2, Policy 2C, amendment to exclude requirement for a sufficient consumptive use of freshwater when water take is passive extraction of ground water. Solid Energy cannot control ground water coming into the mine pit, it is a reflection of changing of that hydrological gradient and for that to be considered a consumptive use will lead into a planning framework which potentially it would be non-sensical.

[3.15 pm]

Amendment to Policy 2C(i) is outlined in our submission.

2C(ii), recognise the return of freshwater resources may not be feasible or possible either from a land use or a geological impact area and Policy 2C(i)(a), amend, recognise commissions on consents should relate to those (inaudible) attempts.

In terms of rules and regional plans, and Policy 2C(i)(b), recognise that in relation to compliance with consent conditions, ECNZ is only able to implement sustainable management of its own demands and direct regional councils and TLAs that consent conditions only able to cover activities over which the holder has influence and may not be able to cover those whole as required issues as it seems to imply at the moment.

Policy 2C(ii), recognise in relation to consent conditions that although ECNZ can implement land use control, complete integrated management can then only be achieved on a catchment wide basis as well and hence, they are not always areas where the consent holder has influence.

Under 2C(iv), monitoring and reporting rules in regional plans should only require consent holders to monitor and report on their own operations, rather than what seems to be applied on the catchment wide basis.

In terms of Policy 3, again it's following through the same logic. Amend and direct how they - that consent conditions only able to cover activities which consent holder has influence. The consent holders cannot influence land use control to reduce the overland flow etc on a catchment wide basis.

In Policy 3B and 3C, amend to direct TLAs that consent conditions on monitoring and reporting should only require consent holders to monitor and report on their own operation.

In terms of Policy 6 and 7, amend to clarify that Policy 6 is applicable to current resource consents and designations confirmed after the date of the commencement of the NPS. Not quite sure there whether it's going to apply to current ones.

And under 6B, D and E, amend to read, "regional councils and TLAs that consent conditions and recommendations on designations only cover the activities over which the holder has influence and that consent holders monitor and report on their own operation".

And finally, Policy 7, amend to direct regional councils and TLAs to implement non-regulatory measures that address only specific effects on use of the freshwater resource by that consent holder.

So that ends the presentation part of our submission to the Board. We're now available –

CHAIR: Well we're very grateful to you for that summary, that's really been an excellent introduction for the exchange that we'd like to have with you and we can only congratulate you on being able to summarise it so efficiently for us.

Now, I'd like to ask my colleagues if they have any questions that they would like to direct to you concerning this submission or the presentation and if it's agreeable to you, whichever of you that feels it is within their knowledge could answer. We won't be specifically directing a question to

any particular one of you, but we have read your evidence and we have read the submission. So I'll ask Mr Prime if he has any questions first.

MR PRIME: Thank you sir. If I refer you to page 2 of your submission and the second bullet. When you talk about treating water, can you describe what you mean by treat water?

MS DRURY: Sorry are you talking about our submission or the evidence?

MR PRIME: No, the submission that was lodged.

MS DRURY: Page 2.

MR PRIME: Page 2 under the introduction.

MS DRURY: Yes.

MR PRIME: There's a number of bullet points and I'm talking about the second bullet point.

MS DRURY: Taking surface water.

MR PRIME: And talking about treating the water.

MS DRURY: My understanding of that is that often the water once it's taken for processing coal, is settled out and so that there is like a storm water pond situation.

MR PRIME: So it goes into a treatment pond?

MS DRURY: It goes into a treatment pond.

MR PRIME: And released into the streams?

MS DRURY: Yes. Brett might be better to explain all the types of treatment that are done.

MR SINCLAIR: I don't know about all the types, but for example Solid Energy has its operations at Rotowaro; operates one treatment plant which incorporates a (inaudible) basin and then a system which is designed to drop the - enough of not only sediment, but also (inaudible) aluminium in the water before it's discharged again to a (inaudible). So that is one type.

Elsewhere, also in Waikato methane is used to remove the suspended sediment, that is sediment from a discharge, before being allowed to – before the discharged water is released into the receiving (inaudible). So those are two types of (inaudible) one is a relatively natural wetland and the other one there would be an actively controlled system.

MR PRIME: And do you normally test the water that's being released to ensure that there's no further degradation?

MR SINCLAIR: Normally there are consent conditions applied which require ongoing monitoring of the discharged water, but on (inaudible) as well, and that depends of course on what the crucial parameters are to be in each case (inaudible) and in general, the consent conditions stipulate quite a range of parameters that are required. In some cases the range is small, but the range is normally quite large.

MS DRURY: It's much like those discharge consent conditions, there might be a limit to the (inaudible) so to speak and then a water quality standard (inaudible).

CHAIR: Now we're going to just take an afternoon break now and when we return we'd like to continue this exchange if you wouldn't mind please. Thank you.

ADJOURNED [3.20 pm]

Audio file: dpm0131

RESUMED [3.40 pm]

CHAIR: Thank you. We would like to continue if we may, please. And I'd like to ask Mrs Vernon if she has some questions to ask.

MRS VERNON: Thank you. Thank you for your presentation. I am going to kind of chop and change between all the different documents that we have, from the different people who have presented information. So perhaps the first one that I will start with is on today's presentation. I guess it all flows down to my ultimate question that is at the back of my mind, which came from Ms Drury's evidence on page 23 where, in actual fact you are seeking some exceptions to be written into the National Policy Statement. But it also links to your page 12 of today where, you know, why do you have to treat water to a discharge to meet the water standards if perhaps the water standards are lower than the water will be if it's treated go in there? Also you talk about on page 14, not always necessary to establish environmental flows. And page 16, it's a similar vein, likely - level of restoration and enhancement commensurate with future likely values. So it's sort of in that line, but on page 23 you are asking for an exception to be made of the mining industry, which is under policy - it's 5.10 and it's under policy 2C(i).

And I just wonder with all this emphasis about mining and dewatering, and that that's quite a unique situation. However, we have had submitters talk about urban storm water as being a unique situation. We've had municipal authorities who are looking at prioritisation, because they are in a unique situation and they want exceptions as well. And I just wonder if I go to, then to Mr Boothroyd's evidence, talking about that the NPS provides - he fails to see how any additional value is added to the

management of freshwaters under the proposed NPS. Now if we have - start opening the Pandora's box of exceptions, how then will the NPS achieve exactly what I think the NPS is trying to achieve? And you know, following along from Mr Boothroyd's comments that he doesn't see it as achieving anything at the moment anyway. So once we have opened Pandora 's Box -

MS DRURY: I think in terms of that section I talked about mining dewatering, I suppose it's anywhere where the person undertaking the loses losing control, and when you dig in a pit and you change the hydraulic groundwater gradient, you can't really control how much water you then have flowing into that pit. So if you've set up an environmental level for groundwater or - and in terms of the groundwater, and you are going to be altering that groundwater through the extraction - shall I call it passive extraction. So it doesn't have to be just, mine dewater and I think that the issue is that there are activities that are undertaken whereby it's not a simple calculation of what your take is going to be. So that's what we are referring to there and hence, how can you maintain or understand the level that you have to maintain?

DR HARDING: Can I interject? Surely, maybe I'm simplify things, but surely when a company constructs a new building and they have to dig down into foundations, they get reports done where they calculate the amount of water that's liable to flow into these systems. They do estimates of requirement for pumping and that sort of thing? Don't mining companies do the same thing?

MS DRURY: They do that, they do it really extensively. Brett, do you want to talk a bit more about the assessment of what happens when you go through that.

MR SINCLAIR: I could get - it's very similar to assessment of (inaudible) dewatering of a foundation while a building is under construction. It is just on a much larger scale. The point perhaps is that once it seems to be granted (inaudible) an underground open cast mine and construction has begun, and the mine has developed to the extent it is below the groundwater table, at that point you've made your reasonable predictions as to what your ground levels flows are going to be, but once you have reached the groundwater table and gone below the groundwater table, you are no longer in a position to shut that flow off, and same within construction. You must therefore at the time maintain the mine, the dewatered state in order to be able to continue operations, we're not in a position to control the rate of flow into the mine, unless you stop mining or change the rate in which you are advancing your mine - developing your mine. That's not something which is normally managed in accordance with (inaudible) flows. There are a lot of other water parameters for mine development. That means that once a mine has gone underway, that dewatering process has started and the mine continues to develop, you are not in a position to change that discharge very easily, you can't stop the water flowing into the mine. On that basis you have to continue the take, you also have to continue the discharges and there are limited opportunities to modify that discharge.

CHAIR: Do you have some more questions Mrs Vernon?

MRS VERNON: A follow up from that. So am I right in my assumption that a lot of the changes that you are seeking are actually more about the future than your current practice? I mean some of your mines have been there, and I know the Rotowaro (ph) one extremely well, and I know the Aurora Stream extremely well, in that environment. And that's been there for a very long time and I think of - and I know it is not your mine, but I think of the open cast mine at Waihi for example. I mean, there is a lot of

history, a lot of knowns and this - well I don't know, it appears to me that probably this isn't so much of an issue in those sort's of the environments. But it is, maybe in new mines when you are starting out, and you have done all your tests but it is still an unknown. Or even in old mines is it still an unknown?

MR SINCLAIR: Even in old mines you can get surprised. There are possibilities. It tends to be on the short term basis, but you can get surprised. But also on new mines where the assessment (inaudible) in short terms a conservative assessment done as to how much water will be taken. There are always some possibilities for (inaudible) surprising changes in ground condition and that is always the possibility. In the older mines the ground conditions had variability - the ground conditions tend to be much better known because you've had had some exposures to changes in ground conditions in the past. So the knowledge tends to be better in those situations. But yes, it does invite both to existing mines provided of course they are still being operating, they are still advancing and it applies to new mines.

MRS VERNON: With these exceptions are there any current regional plans that actually have got mining written in, acknowledging this is an issue for you? You mine throughout New Zealand. Is there a case where the NPS would be inconsistent with what is currently practised in regional plans?

[3.50 pm]

MS DRURY: The Waikato variation six, I understand it's still being worked through but Solid Energy did submit to have mine dewatering considered a non-consumptive use from its point of view, and you can see it is really about that wording "includes (inaudible) for the efficient consumptive use." Now I think what they are saying, it's hard for that sort of activity to talk

about being efficient. And here under variation six, they are moving towards having those sorts of activities considered a non-consumptive use. I did consider whether we were going to have an issue here, in that we might have a region that considers it non-consumptive and the NPS that considers it consumptive. As I understand at the moment, although I think variation six is not totally complete in terms of the decision here, but they are still considering a consumptive.

MRS VERNON: Thank you. On page 14, I'll go back to - oh sorry, I think it is actually page 16. With your fourth bullet point you want in there "a definition of outstanding freshwater resources must reflect quantifiable, and justifiable scientific process", and then your third bullet point goes "level of restoration and enhancement commensurate with future likely values." Well how do you do that when a), the science at that stage mightn't be known, plus also you might have a resource consent for 35 years, so therefore the likely values of the community could be very different from when mining first started. So I just wonder if you could explain how?

MS DRURY: I think what I was getting there and I'll refer to Dr Boothroyd for this, but it's more to do with having a look at what the current values are, and what you could expect the values to be. Do you want to answer that question?

DR BOOTHROYD: One of the things that we have given consideration to is this question of how do you get to setting these values? And as you say, in some cases information is available or not available. And there are ways of (inaudible) beyond that without having to conduct extensive surveys. We have some expert panels and so on, which are quite capable of doing that, amongst other methods. And a means of looking to what some future value might be (inaudible).

MRS VERNON: But you probably acknowledge that to define outstanding freshwater resources in an NPS that can reflect all of that, would be a little difficult in some circumstances? I mean - or not, I mean you are looking to put some bullet points under that definition of what likely values are going to be?

DR BOOTHROYD: One of the things that we are trying to convey is that is where this notion of the framework, the NPS gives some direction to the framework, it doesn't have to be specific necessarily but gives some thought to how that framework might be delivered in the regional plan. For example I've been working with Auckland Regional Council and I made reference to this on this matter, where for all the categories, and in fact, in that particular case we've added some categories beyond the two that I've mentioned, three that's mentioned in the NPS, where we have looked at existing databases. For example there is the significant water ways of New Zealand, there are wet land databases where this is noted (inaudible) databases and draw on a map, which have been put together based on information, surveys and expert thought. So there is initial thought, you've made the first cuts. They're not perfect, they're not actually complete, but they are a very good starting point, and there will be some gaps and there will be some put in there that shouldn't be (inaudible) exist and I found that process very rewarding. Well this doable. And that's the kind of framework comments see we inside the NPS, or some reference to a framework, so that we don't have a scatter gun approach going on around the country where one region might be looking at extensive surveys and costs, and another one might be doing it quite simply. In some way it is conveying that. And that's one way. There are others, and that's just one way.

MRS VERNON: So that is what you mean by framework, that it is a guidance so there are some national consistencies on some interpretations of this NPS. Is that what you're saying?

DR BOOTHROYD: That's correct, yes. So that there is some guidance, there is some consistency, there is some - it's sensible and not off beam and things like that, which could easily occur. And some council's have said they're driving ahead with that now, even prior to the NPS even been completed. I think that's been done quite sensibly and they're drawing in experts to help them with that process, but there are others who may not have that resource or desire in which case you'll something quite different. So yes, I am not suggesting that we are going to have all the details with it yet, it would be quite incorrect to do that. I think the regions and councils need more time to build themselves, and more guidance on that. And the same goes incidentally for this question of standards, trying to convey the same in a framework which provides all the same attributes, I've just mentioned, into an NPS and therefore into a regional planning process, so that we do have (inaudible) defined.

MRS VERNON: So that is in line with what you suggested on page 17 as giving us an idea of what you see would be in a framework for standards, is that?

DR BOOTHROYD: Page 17 of the presentation?

MRS VERNON: Yes.

DR BOOTHROYD: Yes, that is right, and that is just some very - just a taste, if you like, of some you can see. And it may be well a series of bullet points and that's all it requires. I think personally I would like to see more than that in the NPS. Nevertheless, that's the kind of directives I'd like to see. And I might add as I mentioned in my evidence as well, there are some in

the presentation that Maree Drury mentioned (inaudible) of ways of assessing (inaudible) type, and again that's another way of bringing (inaudible). And I just come back to your question about unique actually I thought that was quite a nice point (inaudible). I mean the natural environment, as I've said, we need to see various places as well. All that variation exists in the natural environment and the idea of having a framework of types is one means of characterising those various uniqueness in a receiving environment and then lay on the activities, unique activities you've know doubt been hearing about, and the standards that would apply from that activity in that particular type of water body. I hope that's clear, that is the kind of framework. So there are two or three framework types that I am talking about there, and I'm not clear how they all come together, I'll leave that to you to give some thought to that, or direction to that. But those are the ideas I would put forth.

MS VERNON: Thank you.

CHAIR: Dr Harding?

DR HARDING: Thank you Judge. I think doctor, we've heard your comment there about not clear how that all might come together, is exactly were I'm at, at the moment. In particular, you have referred to in your evidence about site-specific criteria and I don't necessarily see how that could fit in to this sort of framework. Would you like to elaborate on that?

DR BOOTHROYD: My reference to site-specific criteria was not a suggestion that the NPS itself should give direction for such as the criteria. It was, for example where a national (inaudible) and have single regional standards wouldn't necessarily be meaningful in these particular activities. What concerns me is a direction that, to me, the current NPS has been formulated that you would end up with standards that apply blanket across

the region, or perhaps even across a nation. In my experience, (inaudible) are examples of that, but you can go beyond that in certain water types, again coming back to that kind of framework, and certain values that are held in those water types, so hopefully a higher degree of water use which you might take or discharge and still meet the values that you want to achieve in that water body. So that by way of example, that standard, regional standard in my view is inappropriate (inaudible) framework (inaudible). Does that make sense?

DR HARDING: Okay, but the difficulty with that then is that if you use something like the stream classification you referred to (inaudible) etc, which are GIS based classifications, then you could potentially end up with thousands of standards across the whole country, and I imagine organisations like Solid Energy might then scream blue murder because they have got mining operations all over the country with different site specific criteria or standards being used.

[4 pm]

DR BOOTHROYD: Well first of all I think you will find that Solid Energy and others would argue that that currently exists anyway in the regions, one region has a different standard to another region, even neighbouring regions have different standards, narrative or numeric, and when they do have standards they are often implemented incorrectly or correctly depending on the region. So we kind of face that now actually. But I couldn't agree more.

DR HARDING: It could be worse though.

DR BOOTHROYD: It is not an anticipation, and again, a well worded NPS would give direction to this. That it is not about thousands of old - of what

different standards that exists, in is some sensible process that allows for it to be meaningful at the right scale. I just use an analogy of speeding tickets (inaudible), we have certain speeding limits under certain types of road conditions. I think there are a few of them at schools and certain speeding because it's a type of activity and road going around a school; as you go out to the suburbs, it goes up a bit to 60 miles an hour or something, because the risks of accidents are less and then you go out in the open. I'm suggesting much the same thing for our water but not the thousands, and the framework would have to give direction to that, but I think that is a risk. But I don't think that is insurmountable.

DR HARDING: On a somewhat different note, other submitters have suggested incorporation of a precautionary principle. What has been your view on that sort of idea, as a concept, generally?

DR BOOTHROYD: Generally, well I am not unsupportive of a precautionary approach. I have some difficulty with an overly conservative approach, once again coming back to my examples (inaudible) differences in application that can occur between regions. I think it needs to be a sensible approach, a cautionary, certainly, but not overly conservative or protectionist.

MS DRURY: I think I was going to add to that, it comes back to this suggestion that you focus on where you know you have got problems, so there is many areas where applying a precautionary principle would not be necessary because you are not having conflicting land uses or in fact, anything going on in a lot of places. But there are places in New Zealand where there is a lot of conflict in water use and maybe we should just focus down and work on those areas of conflict in those regional plans for those conflict are appearing and apply the precautionary principle there.

DR HARDING: I think probably many people would agree that we need to focus where we know we have problems but I guess, if nothing else past experience has shown us that often, we don't know what we don't know. So in other words, there's instances now where we may have said ten years ago, "We understand the system fully. We can allow these sort of activities". And now, with 10 years down the track with greater scientific certainty and that sort of thing, we realise, "Oh, actually maybe we shouldn't have allowed that at all." Cumulative effects are something that a number of submitters have thought maybe 10 or 15 years ago people weren't thinking about cumulative effects.

MS DRURY: I think we thought about cumulative effects when we wrote the first RPSs in regional plans. But we didn't know how to address that planning instrument at that time, was my recollection. We did think about, but we didn't think we could address them.

DR HARDING: Okay, thanks. You have also made reference in your evidence about industry good practice, best practice and that sort of thing. We've had a number of discussions with various submitters about that. And you have suggested that that needs to be more clearly defined. Can you offer the Board any suggestions on how we might more clearly define or understand that idea of industry good practice or best practice? So this is in your evidence on page 13, dot 26. "As a consequence of the above questions, it is my opinion that industry good practice and its associated application need to be more clearly defined as in the proposed NPS".

MS DRURY: I'm just trying to refresh myself, what I was talking about there was that there is industry best practice and there's industry best practice guidelines that have been written for various industries, but I didn't know what industry good practice meant. Was that best practice or something slightly less than best practice? Or could the industries get together again

and decide best practice is usually constrained by economic constraints and whether there's a level somewhere between or within good practice and best practice which is what you do within the constraints of any particular area, like you might do a cost-benefit analysis of whether you are just going to do - I'm not sure that good practice meant - practice whatever it was versus best practice, because there have been guidelines written for best practice. And usually if an industry doesn't do best practice, it's because it argues that in the circumstance it's not necessary or the technology wasn't available (inaudible).

DR HARDING: So I guess my follow on question from that would be does - well, in your case, the coal industry have a series of guidelines for best practice or good practice as far as the use of water and that sort of thing is concerned? Does such a document exist?

MS DRURY: I know that they have outlined what best practice would for certain mines, and when they put forward the work that mine, they have often said best practice under those circumstances, that we will do this, this and this. We will avoid water courses where do don't need to impact, we will focus on treating the water in the areas where we are going to have an impact (inaudible). Whether there is actually a guideline for all of mining, I know it has been put forward in sites in this situation.

MR SINCLAIR: I am not quite certain that there is a New Zealand-wide best practice covering mines in general. There are best practice guidelines which have been adopted overseas and utilised here in New Zealand by Solid Energy to cover certain aspects of mining as such. It is the same as in general mine design, mine pit wall design, waste drop disposal design and waste drop disposal areas. You have best practice guidelines for all of these aspects of mining. I am not certain that there is in New Zealand a single best practice guideline covering mining ad hoc or even coal mining

in general, because also there are two aspects to coal mining as well. One is the practice of open cast mining and the second is the underground mining. So as such, I don't believe - I am not certain but I don't think there is one particular guideline for all aspects of coal mining in New Zealand.

DR HARDING: Some of the other submitters here have suggested the idea that having integrated catchment management which is in the proposed NPS at the moment. And that if such things were to occur then there might be a possibility to have user groups within each catchment; those user groups then might have the opportunity to work together in a non-regulatory manner to work out the values and standards, and that sort of thing in those particular catchments. Do you have a view on that, that idea?

DR BOOTHROYD: Well, in the past experience working with regional council we have done some work (inaudible) come together by working with the people and the usual stakeholders in those catchments and post-plan or post-(inaudible) they work together in managing their resource use. For example, in Hawke's Bay where my experience with (inaudible) flows (inaudible) the flow then - or the option is required to stop taking and they would work together and could share that responsibility (inaudible) at given different times of the day and different types of work aspect. So that is already practicing, as practice. The integrated catchment management plans of which (inaudible). I mean (inaudible) actually developed the particularly (inaudible) storm water and infrastructure management anyway, it is quite a common procedure.

[4.10 pm]

I imagine the NPS you are proposing is thinking of something which will get the current (inaudible) parties (inaudible) which comes back partly to my comment to Mrs Vernon made about you know, a lot of what I see is in the proposed NPS is occurring and what we're looking for is some more framework again to take it further, rather than saying (inaudible). I hope that answered your question.

DR HARDING: Okay, thank you very much. Thank you very much Judge.

CHAIR: Could we look at page 13 of your presentation where the question of standards again, and there is a suggestion that embodying a reference to standards in a plan might require a statutory process to amend. I wonder if that is still the case? Decades ago it used to be thought that that was the right position. I rather had the impression that these days it is generally accepted that if there is reference to a standard of an official kind of body like the ANZSEC, then it is treated as being a reference to whatever the current version is. And if you say this current review, say, of the ANZEC standard, then when that is completed, a reference in a regional plan to that standard would be a reference to the reviewed version or a revised version. Is that right?

MS DRURY: I think that the issue is that we here have picked up a numeric value to that standard and applied it to a consent condition especially. What I was trying to portray there is that you may have picked up that the limit value that's been accepted in that standard at that time, that limit value is then amended. So there has been situations for example, where trigger values in the ANZEC standard have been used for limits on consents for effluent discharges. We have been involved in working towards Boron limits, for example, where the Boron limits that were then in the ANZEC were shown to be quite broad for the type of environment we we're working them in, so the issue I was making there, is where there is a

numeric limit that has been picked up and used and then that limit has been discredited or changed, then you are going to be in a situation of reviewing a consent condition.

CHAIR: Well, so it's a question of whether the consent refers to the standard, or refers to the particular value that might have been derived from the standard.

DR BOOTHROYD: Yes it is my understanding that that is in fact, even if it is the standard or the documentation on this (inaudible), it's nevertheless a specific dated standard, and therefore that's the one that applies specifically to that number (inaudible).

CHAIR: Well that was the old fashioned view, wasn't it?

MR BOOTHROYD: I suppose in my experience, I haven't seen that shift, but may well have done (inaudible).

CHAIR: I think in the last 10 years or so, there has been a bit of a change there. Well thank you for that.

The other thing that I was not quite clear but was following is on page 15. Where we are talking about identifying outstanding freshwater resources and you cross-reference to an amendment to Policy 1B, that you're suggesting in your original submission and I couldn't immediately follow that. Can you give me the cross reference please?

MS DRURY: Page 14 I think of my submission at the end of each section I've summarised what we're requiring on page 14. **"**When identifying outstanding freshwater resources", I've suggested a definition –

CHAIR: Ah yes, I see it now. Yes, it's in that first bullet point in item 2. Is that it? Splendid.

MS DRURY: On page 14 I have got in relation to Policy 1B, when identifying notable values, and then -

CHAIR: Further down you have got a passage underlined, and then further down again, in the first of those bullet points, is that the one?

MS DRURY: Yes.

CHAIR: "Are not adversely effected, or the effects are minor".

MS DRURY: Yes, and then amend the definition to reflect that the quantifiable (inaudible). So I haven't given you wording for what a definition would be, just the direction that we're seeking.

CHAIR: You're hoping we'll write one for you? Well thank you very much. This has been a very useful presentation because we needed to get the context to understand fully what you were on about in the submission, and that has been very helpful to us. We are grateful to you for you coming and for taking part in this exchange of questions and answers. Thank you indeed.

CHAIR: Good afternoon, are you Ms Newlands?

MS NEWLANDS: I am.

CHAIR: We have been looking forward to your coming and giving us a presentation on the submission for New Zealand Wine.

MS NEWLANDS: Thank you. I'm afraid it will be short and sharp but that might not be such a bad thing, considering you've at the end of the day, I am sure you have had a long day. Dr John Barker who is the author of the submission unfortunately couldn't be here today, so he has asked me to attend on his behalf. I am the trade and regulatory affairs advisor at New Zealand Wine Growers, so I have a little bit of knowledge about this area, but it's by no means comprehensive. So I will do my best.

I suppose our submission makes maybe two or three key points and one of the sort of difficult aspects of this area of policy for us is that there seems to be so much happening right now in terms of water allocation and management of freshwater resources that it's very difficult for us as an industry to keep up with where the policy is heading and developing, and inform our members accordingly. So, I suppose, one of the responses that we had to the proposed NPS was sort of a confusion about what the actual impact of this will be on the viticulture industry who are heavily reliant on the freshwater resource. So, I suppose, that we do definitely have a commitment to keeping involved in the process and making sure that we are aware of what is happening and what is being proposed, but we are unsure about how this work stream will fit in with the work that is also happening in terms of the Land and Water Forum. So yes, as I understand it, this will be the sort of means by which whatever policy gets devised there will be implemented, and I hope that we are able to, I guess, stay on top of everything as best we can in that respect.

CHAIR: Well thank you for that. So in particular, New Zealand Wine and Dr Barker's submission are asking for three or four specific changes to the proposed wording of the NPS.

[4.20 pm]

MS NEWLANDS: Yes, and those changes are I think aimed primarily at simplifying this in terms of aligning certain key terms with terms used in the existing legislation, being the Resource Management Act. So I suppose that's one specific concern and request. And more broadly I think there was a concern that the economic impact of the proposed NPS was not perhaps adequately analysed in the section 32 analysis. I suppose that might be something that industry would be able to give a better look at when this is firmed up.

CHAIR: Can you allow me to just make a suggestion on that topic? The understanding that I have is that the Board is to focus on the content of the NPS and after considering all of the submissions from a variety of sources, we've to make a report with recommendations for changes to the content, that we see as improvements, and then the Minister makes up his or her mind about what the contents should be and which of our recommendations, if any, should be adopted. And at that stage there needs to be another section 32 report prepared, but not by this Board; by somebody else, by the Minister or somebody on the Minister's behalf. So we thank you for your comment about the economic impact not having been sufficiently analysed, I think that might be outside our scope.

MS NEWLANDS: Okay.

CHAIR: If there was any specific economic impact on your industry that you wished to bring to our attention on the basis that it might help us to decide what the content of the NPS should be, of course you should feel free to mention that.

MS NEWLANDS: I think maybe perhaps more specifically I think there has been some discussion about any water allocation model or management proposal, looking at the most economically effective allocation of water and I think that as an industry we would support that type of approach because we see our usage of water as being very economically effective.

CHAIR: And are you familiar with the Resource Management Act that is the framework within which this document is to fit?

MS NEWLANDS: Yes, generally yes.

CHAIR: And would you see that as being solely aimed at economic benefits or would you see it having some other values as well?

MS NEWLANDS: I think that definitely there are also social benefits in terms of the nature of the industry. I think those are quite difficult to calculate perhaps and to express. But I think there has been some work done by our organisation this year about the economic and also the wider sort of community contribution made by the wine industry in New Zealand and I think in terms of tourism there are quite a few effects that are still quite difficult for us to calculate, but we are also doing some work in that area.

CHAIR: Thank you. Do you have any questions Mr Prime?

MR PRIME: No questions.

CHAIR: Mrs Vernon? Dr Harding?

Well thank you very much for coming and giving us this outline or summary of New Zealand Wine's position and we will consider that, along with the rest and we are grateful to you for taking part.

MS NEWLANDS: Thank you.

CHAIR: We will continue with the rest of the submissions tomorrow morning at half past 9.

ADJOURNED [4.24 pm]