



**TRANSCRIPT
OF PROCEEDINGS**

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PRODUCTIVITY COMMISSION

**INQUIRY INTO IMPACTS OF NATIVE VEGETATION AND
BIODIVERSITY REGULATIONS**

DR N. BYRON, Presiding Commissioner
DR B. FISHER, Associate Commissioner
PROF W. MUSGRAVE, Associate Commissioner

TRANSCRIPT OF PROCEEDINGS

AT SYDNEY ON TUESDAY, 19 AUGUST 2003, AT 9.35 AM

Continued from 18/8/03 in Hobart

DR BYRON: Good morning, ladies and gentlemen. Welcome to the public hearings for the Productivity Commission's national inquiry into the impacts of native vegetation and biodiversity regulations. My name is Neil Byron and I'm the presiding commissioner for this inquiry. My colleague Prof Warren Musgrave is on my right. My fellow commissioner Brian Fisher is held up, but should be here within an hour or so. It's okay for us to start without him.

I'm sure you're aware of the background to this inquiry, and you've no doubt seen the terms of reference for it. Over the last few months since we issued the issues paper at the end of April we've travelled very extensively, from Darwin to Hobart and from Cairns to Perth and Albany. We've met with probably hundreds of people; land-holders, land-holder organisations, environmentalists and environmental organisations, state and Commonwealth agencies, lots of municipalities-local government people and basically anyone else who wanted to talk to us about anything that was relevant to the terms of reference. We've now received over 160 submissions, also from that wide range of interests, and they're still coming in.

The purpose of these hearings is to provide an opportunity for interested parties to discuss their submissions, elaborate on them and put their views on the public record. Yesterday we were having hearings in Hobart. Tomorrow we'll be in Moree. That will finish this first round of public hearings. We're working towards completing a draft report for public comment, which will be published early in December, and we expect that after people have had a couple of months to analyse, critique and digest that we'll probably have another round of submissions and public hearings before the final report is presented to the Commonwealth government on 14 April next year.

We always like to conduct these public hearings in a reasonably informal manner. We do take a full transcript and, for that reason, we can't really accommodate comments from the floor. At the end of each day's proceedings we make a habit of always asking anybody in the audience who wants to come forward and put their views on the record or someone who's already made a presentation, but has thought of something they forgot to mention, or someone who wants to comment on what someone else has said during the day's proceedings - there will be opportunities to come forward and put those views on the formal record.

Participants are no longer formally required to take an oath, but under the Productivity Commission Act they are required to "be truthful in their remarks". As I say, participants are quite welcome to comment on either the written or oral submissions of others.. The transcript will be made available to people who have made presentations, for editing or correction of any mistranscriptions, then copies will be available on our web site within a few days - a week at the most - and hard copies will also be available on request.

I'd now like to welcome our first evidence for today, Mr Jim Hoggett from the Institute of Public Affairs. If you'd just like to introduce yourself for the transcript, summarise - maybe in 10 minutes or so - the main points of your submission, which Warren and I have both read, and then we can have a question and answer elaboration on the issues you've raised. Thank you very much for coming.

MR HOGGETT: Thank you for the opportunity. My name is Jim Hoggett. I'm a senior fellow at the Institute of Public Affairs. Today I guess I'm speaking on behalf of two strains of thought. One is the IPA - the Institute of Public Affairs - which is the public policy angle of this and, on the other, I'm speaking somewhat on my own behalf as the operator of a small to medium agribusiness; in other words, from the point of view of practical land management. I should say that, in formulating my submission, I was ably assisted by my son, Alard, who is a qualified forester and had some substantial input into what I wrote.

The regulations that we're talking about cover the conservation and native vegetation and the preservation of biodiversity which are, in themselves, fairly loose terms, but do give impetus to all of these regulations. My submission covers the main lines of our thinking. Much more could be said. In addition to the policy paper, I've tried to put a down-to-earth picture from the point of view of our own small enterprise, as people who are actually operating within the terms of the regulations.

I don't really want to just summarise the submission. I'd like to make a few comments that address the wood rather than the trees, so to speak. I would say, by way of introduction, as a general comment that the body of regulation in this area is an appalling mess. The focus of the commission's inquiry is probably mainly on things like the New South Wales Threatened Species Conservation Act and the Native Vegetation Conservation Act, which are the main substance of the regulations, but we have a long long list of acts - Protection of the Environment Operations Act, Protection of the Environment Administration Act, Waste Avoidance and Resource Recovery Act, Environmental Planning and Assessment Act, National Parks and Wildlife Act, Plantations and Reafforestation Act - it just goes on and on - Rural Fires Act, Catchment Management Act, Wilderness Act, Water Management Act, Ozone Protection Act, Fish Resources Management Act, Rivers and Foreshores Improvement Act and things like the Murray-Darling Basin Act.

It's a huge and rather boring list, but it's the boring and lengthy nature of it that is the problem. The mess is true for landowners who have to deal with it and regulators who have to administer it. I just say, as a general comment, that the regulations are incomprehensible, duplicative, ambiguous, inequitable, unadministrable, unstable and tyrannical. You have to work really hard to do

something with which there is so little hope of complying.

Besides the acts just mentioned - and these are mainly New South Wales acts - there are regulations, regional management plans, catchment management plans, property management plans, conservation agreements, threat abatement plans, recovery plans, local environment plans, preservation orders, consent procedures, licence conditions, protected lists, threatened lists and endangered lists - in short, a complete obsession with process - with the usual nasty side effects of encouraging people to litigate, to intervene in activities, to inform on their neighbours and generally to be hostile to any form of human activity. We've tried to outline in our submission the sheer volume and intensity of regulation, to demonstrate the impossibility of compliance. I don't think we've more than scratched the surface.

What's it all for? Well, there's no agreement on that question of what it's all for. There's no clear idea of what we're trying to do with all this regulation and no underlying philosophy. One is tempted to say it's just a continuing dismal trail of reactions to this or that political pressure, underneath which there's a steady accumulation and building of a vast edifice of black-letter law. Nothing is repealed except to be replaced by something longer and more restrictive.

At the heart of it is a profound disagreement over the role of the environment, and here we're generally talking about the rural rather than the city environment. On one side, there's a large group that wants to conserve, preserve and to go back to some Arcadian ideal. This is, essentially, an unreachable goal and so it generates insatiable demands. The other side generally wants to conserve, which is not well recognised, but to go forward and allow for a populated landscape. These are two different visions of our landscape: firstly, a steady state historically based vision of the landscape on which humans are something of a blight and, secondly, a sustainable state based on use and the land for human occupation. Both are viable, in the sense that the earth would keep turning if we were to go to the extreme of either, but I think only one is truly sustainable.

The failure of the regulations is, in this sense, a failure of vision. It's a tendency towards the first option always that leads to preservation and ossification - ultimately, a centrally planned ecology, which is no more viable than a centrally planned economy. There are two flaws in it. One is that it's administratively and politically impossible. It's as unsustainable as the Soviet state, which generated, of course, its own ecological disasters. Secondly, we don't know what the goals of this philosophy - this plan - should be. We can't know what the goals should be, because there is no steady state environment. Even without humans, it has changed and will change directly.

Perhaps the most fatuous environmental provision in the whole lexicon that I

read was section 140 of the New South Wales Threatened Species Conservation Act, which enjoins a biological diversity strategy, ensuring the survival and evolutionary development in nature of all species, populations and communities. Apart from the internal inconsistency of the survival of all species and evolutionary development, which is saying, "Get back in your box, Charles Darwin," first, we don't have any idea of what this ideal future would be and, second, it's unlikely that a New South Wales act of parliament will bring it about. Incidentally, you can bet that the preservation of species, populations and communities did not include human species, population and communities.

I think a fundamental weakness in the regulations is their inability to envisage alternative sustainable environments. There is no single optimal preferable environment. There are many possible environments, any number of which could be sustainable and environmentally sound. A tendency of the regulations is towards one, generally the one we have or had. We need, I think, a new perspective on the debate, a perspective which will give us better outcomes than where we're going at present.

Just to digress for a moment, in the last bushfire season 300 million hectares were destroyed, a great deal of which was native vegetation. Under the definition of "clearing" in the various legislation that we have, what that means is we cleared 40 per cent of Victorian forests last year, 60 per cent of ACT forests and 20 per cent of New South Wales forests. Admittedly, the definition of "clearing" is a slightly absurd definition, but that's really where it leads you. My son, who grew up in Canberra, went out to the Brindabellas to see the aftermath of the fires and he was struck by the absolute silence over hundreds of square kilometres. Millions of animals had died and millions of plants had been destroyed. He compares that 300 million hectares with the 10,000 hectares logged annually in Australia, which represent less than one-third of 1 per cent of the total burnt.

That's not to say that's a completely gloomy picture. Those forests will come back. They always do. They will come back dramatically different, but they will come back. Our obsession with the fragility of our landscape, I think, will be - I guess it's a comment on that obsession that these forests will recover. What I'm saying is the future potential environments are multiple and they're likely to be modified far more dramatically by natural than by human events and any number of them will be acceptable. I mean "will be acceptable", because they will happen whether we want it or not.

The integration of the two views - the two philosophies - isn't always assisted by the powerful parties involved. I've often commented on scientists looking at the landscape through a microscope. I'm not intending to be dismissive of the contribution of scientists, but they're not qualified to manage land. Politicians

sniffing the political breeze and officials who are well-meaning have the difficult task of trying to administer these acts, but without any risk on their part of paying for the mistakes that are made by them or their masters.

What is clear is who the regulations are for. They're overwhelmingly for private land-holders, the people who actually manage the land, the people who modify it every day who supply most of our basic commodities. They are incapable of handling this juggernaut of regulation. They deal with it quite often simply by ignoring it because they're not aware of it, or because they can't cope with it. Unlike government and non-government organisations, it's not their business to fill forms, attend committees or provide free advice. In short, they cannot engage in much process, and these regulations are all about process.

For the lucky farmers who have cleared their land, the regulations are at worst a nuisance. For the majority, they're a many-headed hydra. There's a clear inequity here. If you're cleared, you're home free. This has a reflection in the sometimes frantic clearing activity that precedes new regulations. Because our environmental law is so unstable, nobody out there on the land trusts the government to fulfil any of its promises, and I've given the instance of the regional forest agreements which were ratted on within five years - 20-year agreements which were broken within five. So the reaction out on the land tends to be, "Well, we can't trust anything that the politicians tell us."

Also the regulations contain very few incentives to conservation; lots of proscriptions, no incentives. The effect, generally speaking, is to take productive land out of economic use, and I'm not talking about the appropriation for national parks here, which are aboveboard and are there to be seen. I don't necessarily agree with them all, but they're of a different kind.

Taking land out of productive use has two effects. Firstly, it expropriates property, and secondly, it ensures that the land ceases to be responsibly managed. The expropriation of property is an important point that's been made by a lot of people, and I'm sure will be made by the national and local farmers federations. This is not just a plea from farmers to retain rights that they don't deserve. We're not just talking about water here; we're talking about woodland and forest and land generally. Property rights are the basis of the functioning of our society; they're one of the two or three things that make it function well, as opposed to the majority of economies and societies in the world, which function very badly. So I think they are very important. I won't enlarge on it, because I think others will do that.

The second thing, ensuring that the land ceases to be responsibly managed: if you take out of the land the interest that a person has in it, and you impose on that person substantial costs to manage it, then they won't manage it. Nobody will

manage it - the government won't manage it, and they won't manage it. It's like somebody coming into your back garden and saying, "Gee, you've got a lot of non-native trees here. I'd like you to take them all out, remove your dog from the back garden - it's a feral animal - and just nurture the native plants. By the way, if branches drop, leave them there; if undergrowth grows, leave it there, and when the fire comes through we'll deal with it at that time." It's inconceivable in anybody's back garden, but it's happening in back gardens all around the state, and the nation.

So as it stands the regulations, I think, are poorly based. They're impossible to administer or comply with in a practical sense, and they are likely to have perverse effects, partly because of the previous two points, and partly because they alienate the people who must make them work.

I did try in my submission to give an impression of what it meant for a small rural operator like me, and I won't go into that. I mean, it does increase uncertainty; it locks off land, it involves large compliance costs, it will involve inspectors and auditors, for whom we will ultimately be asked to pay, as we are under various other acts of parliament. There's a potential exposure to penalties; there's the risk of finding protected species on your land, with all that follows that, and it makes the private native forestry option prohibitively expensive for all except very large property owners. You only have to go through the acts and check what the processes are to engage in private forestry - sustainable private native forestry - to see that it's pretty much an impossibility for anybody who's trying to make a living in other ways, and this is disappointing because I think it affects the health of those forests.

So for us, even on a small property - we have about 115 hectares of cleared land and 115 hectares of forest, which I might say have been stable that way for probably 150 years, and that 115 hectares of native forest could be safely, sustainably and well-managed generate something up to \$20,000 a year for us, which for a small operator is quite important.

We have suggested some improvements to the commission, ways in which the whole thing might be made more sensible. It would involve, I think, a review of some of the principles that keep getting trotted out - the precautionary principle, the intergenerational equity principle. We need to look at those principles in the light of the human dimension to the environment, and in the light of - well, in their own light, just to look at them more closely and see what they actually mean. We need to recognise use of the environment.

We need to simplify the regulations. This, I think, is our major plea. We need to focus on outcomes and not processes. We need to give private landowners an incentive to conserve sensibly, instead of waving a big stick over them all the time. There's no reason at all why there shouldn't be a market in environmental goods, and

this would give government - and I might say the non-government organisations - an opportunity to put their money where their mouth is and actually buy good environmental areas and practices.

We need to go for the regions with the serious problems, instead of blanket regulations over the whole of Australia. The Manning region, I think I put in my submission, is 25 per cent locked up in reserved public land, and I think it's something almost like 60 per cent forested, and has been for almost ever. There's very little major clearing going on - in fact, no major clearing going on. We don't need to hound people in those areas, and we need to allow, I think, to think about mixed use of national parks, instead of just locking them away into some form of wilderness over which people walk.

My brother lives in England, in the Lake District, where the national park does have multiple use. It has to be carefully controlled. There are problems with that. Incidentally, the problems are just about equally those of the people who use it for rural industry, and those tourists who use it, because being a country of nearly 60 million people, with rather limited national parks, they tend to wear out in a way that ours don't. Mr Chairman, thank you for your forbearance. These solutions are boring, they're hard, they're difficult, but government created this mess and only government can clear it up, and it will require a lot of resolve and a lot of sensible approaches. Thank you.

DR BYRON: Thank you very much, Mr Hoggett. That has covered the full sweep of issues in the terms of reference. I was going to ask you if you could elaborate a little more on the way forward, as you've called it, in the Institute of Public Affairs submission. If we, as a thought experiment - hypothetically - were to accept your diagnosis of a mountain of contradictory legislation that's unenforceable, unimplementable and all those other things that you said, how do we actually go forward from there?

You mentioned simplification, that the law has to be understandable to those who are going to have to abide by it. It has to be implementable, enforceable by those who have to enforce it, et cetera. Can you elaborate on how we might go about such a simplification and clarification of outcomes. I guess that relates also to your point about a lack of vision about where all this is headed.

MR HOGGETT: Yes. What we're in at the moment is a moveable feast. We have a situation where there are sort of a series of guerilla attacks going on all the time, on legislators and on property, which are designed mainly to enlarge the area under public land, but also to restrict the activities on private land. So there's not, to my mind, any attempt to put those things in context, to look at the broad picture in Australia, to see whether any individual action on the part of government makes a

significant difference.

So I think it requires a resolve on the part of government to stand up and abstract somewhat from that emotional side of things - I'm not against emotion, by any means; I feel pretty emotional myself about some of what's happening - but to abstract from that and to try to draw together all of the multifarious acts which I've mentioned, and to take out of those acts of parliament and regulations and the various other things that depend off them, and try to focus them on what they see as the environment.

Now, I think this has to be done more on a state level than on a Commonwealth or a local level, because realistically that's where the powers lie, and realistically that to me is a manageable body of legislation and body of people, and land, for the purposes of simplification of acts. I've been engaged a long time in deregulatory activities and I know how hard it is, but if you could focus down the relevant provisions of all of these acts that relate, for example, just to your area of purview - which is native vegetation and biodiversity, which is not water and all those other things - if you could simply focus those into one piece of legislation and one set of regulations, and no more than one or two departments, then you might begin to get some regularity, I suppose, both in the thinking and in the formulation of legislation.

Now, I know people say, "Well, we don't want an all-powerful environment department," so you do probably have to have two bodies here involved in this, and the state government has tried to do this from time to time by drawing more departments in to balance out other departments, until we've got six or seven departments. So you get committees with 20 people on them, which is impossible to agree on anything. I think you do need to focus it down administratively, legislatively and in the regulations, on one or two pieces of legislation and one or two departments. I know that's a very difficult thing to do - it would be a very bold thing to do, because the current spread advantages certain kinds of lobbying and disadvantages others.

DR BYRON: From one of the other comments you made before, talking about the extraordinary diversity and variety of Australian landscapes - even within a state, like New South Wales - would suggest to me that maybe many of the issues might be best resolved at local level. You're probably aware that at the moment I think Commonwealth and state governments are moving towards regional natural resource management bodies which somehow will be both representative and skill based and they will diagnose everything that needs to be done at a regional scale, however that's defined, in terms of vegetation, water, soils, biodiversity, et cetera, and they will come up with regional NRM investment strategies specially tailored to that region or catchment or basin, and somehow this will fix it all and will integrate it, and will enable locally-designed tailor-made solutions to all these natural resource

management problems. You don't seem to have much faith in that sort of approach.

MR HOGGETT: Matters will be resolved in my backyard and the backyard of every farmer. That's where things will actually happen. So your point about being resolved at local level is valid in the sense that they will be resolved at local level, because it's at local level the environments will exist; where the environmental policy will be managed from is a different matter. I'm not unhappy with the idea with devolving of state powers to the local level to manage, because that's what local governments now do in terms of development consent. If I want to put a shed up, I go to the local council, and they are practical, sensible people and they will give me advice; we'll resolve it, and it will be done - and, by the way, they look after the environment, too. When I put a shed up, I have to make sure it's on a proper base; that it's not discharging its water into a street; that any activity there is contained; and all that sort of thing.

So at that level, I think that's where it will happen and should happen. I think we're talking about perhaps two different things. The determination of the philosophy, even at the regional level, has to engage the state government. In New South Wales, we have been going through a process of trying to agree regional environmental management plans, or regional vegetation management plans, and there are 22 of these proposed; only two have been agreed. Even when you get to the regional level, you've got one hell of a ding-dong battle between people who want to do one thing and people who want to do another.

I'm not quite sure how to resolve this because, if you look at the substance of the disagreements in those regional discussions, you'll find some philosophy coming down from the centre through poor old Bob Smith, who had to try to manage this process and make sense of it, coming up against the hard realities of people who are actually managing land that contained extensive native vegetation and saying, "You cannot do things that way. If you tell me, with a thousand acres of forest, that I can only take 30 trees a year, then you've made a park." So at the very local level, it's difficult. I think it does have to be managed at the local level. You do have to devolve powers to the local level, but I guess what I'm saying is that the guidelines that those people have are vital to the success of it.

DR BYRON: I guess I'm sort of trying to pick up your point that if laws are going to be workable, people at the local level have to both understand them and, to a certain extent, agree to obey.

MR HOGGETT: That's absolutely right.

DR BYRON: So if the people in a particular catchment somewhere in north-western or southern New South Wales devise a set of rules that they themselves think

are reasonable, that they will comply with even though it may impose some costs and some benefits on them, then those sorts of rules are more likely to be adhered to and enforceable than something that is externally imposed which they don't understand the logic of or which they're convinced are unworkable or unhelpful, or will actually make the environment worse. That sort of legislation that is not understood and accepted is always going to be a problem to enforce and may actually be dysfunctional in the sense of pragmatically building up a long-term, sensible land management practice.

MR HOGGETT: It's true that centrally imposed laws go up against the Russian dilemma, where the Russian worker says, "The government pretends to pay me and I pretend to work," and that's what happens out on the land: the government pretends to the world that it's environmentally secure and I just get on with life as best I can. Essentially, the outcomes that they're promising don't happen, because they don't engage me or anybody on the land. I'm not so foolish as to think that there will not be state level environmental laws that impose some sorts of standards. I guess what I'm saying is that those sorts of environmental standards should be directed at serious environmental problems, and the rest should be devolved to the local level under an umbrella of environmental responsibility.

I can't go up to the top of my block and clear forest on a 45 per cent slope. Farmers are a lot more intelligent than people give them credit for. You won't find a lot of farmers going up onto a 45-degree slope and clear felling, because the next thing is they get a great land wash down onto their pastures, and the land up there then becomes virtually useless for the next 40 years, or something like that. Sensible directions from the centre and leave a lot of the detail to the level, so that if somebody is clearing 2000 acres all of a sudden, the helicopter goes over and it will see 2000 acres being cleared, and then you're subject to severe penalties, and you know that; you know that if you do something dramatic.

But if I take 20, 30 trees per hectare out of my forested area, which I could comfortably do without harming the environment, subject to certain broad forestry rules, which you can get advice on - leave that to the local level. I think that is an approach. Now, that is the supreme difficulty you face, because the people who want to tighten the environmental rules and to lock up more land operate, generally speaking, at the state and Commonwealth level, and they like the legislation there because it is sweeping; it does prohibit activities over wide areas. It's very hard for a non-government organisation - and we are one - to get down to the local level, other than to save a patch of forest and say to somebody up the Bowman River Valley, where I live, which is 15 acres of valley, mainly forest - if you saw the aerial photographs you'd see a little strip of pasture land down the centre and the rest is forest. Over the hills it's forest.

It's very hard for a non-government organisation to come down and talk to us and say, "Hey, what you doing down here? Can you improve the way you're doing things?" So I'd like to engage them in purchasing environmental values as a way of doing things at a national level. I just think that realistically there will be legislation at the centre, but maybe it's regulation at the local level.

PROF MUSGRAVE: Thank you, Mr Hoggett. I found your submission very interesting, useful and quite stimulating. I'd like to just continue along the line that you've been pursuing with Neil and pick up the point that I heard you making, but possibly wasn't what you meant, which seemed to reflect a certain pessimism about the ability of local communities to be active and effective managers of natural resources. You may not have meant that, but let me just go on a little bit before you respond. A lot of people we've talked to have expressed a desire to have a more outcomes oriented approach to resource management - that is, that the regulators, instead of talking in terms of what you can't do, stipulate outcomes that are sought for locations.

Also, there are those who believe that it is possible in such an outcomes oriented situation for regions which are suitably empowered and resourced to actually produce responses from within their region which meet those outcomes. Then there's a third suggestion that some sort of community response which transcends backyards is necessary, because solutions to significant problems of environmental management and biodiversity relate to the region as a whole not individual backyards. Do I make the point clear there?

MR HOGGETT: Yes.

PROF MUSGRAVE: Therefore, some sort of management of the region, either from above or from the community itself, is necessary. Now, given that preamble of mine, am I correct in saying you're pessimistic and, if you are pessimistic, have you got a further response?

MR HOGGETT: I suppose I'm historically pessimistic but, future looking, I am a bit more optimistic. We live in the Manning catchment, which is a region. It's also been designated as an administrative region for the purposes of the environment, which is not so comfortable. We live in the Bowman River Valley, which is a river that runs into, ultimately, the Manning, through the Gloucester River, and we sit on a patch of ground in that valley. My pessimism, I guess, arises mainly from trying to envisage how we, all our neighbours and our neighbours in the region could interact with the central policy authorities in a way that would allow us to responsibly manage our land, and just for one property, you could envisage several environmental futures. I've said it would be nice to take some timber out of our property. We could equally easily enter a conservation agreement with National

Parks and Wildlife, close off that area and use it for public purposes of various kinds and scientific purposes and things. There are many alternative futures for one single property.

My difficulty is getting that management at the local level without the Wentworth Group property management plan idea, which seems to me tending towards a Soviet-style rigid application of local solutions. It's very hard for officials to go for flexible solutions. The reason for that is that officials are not business people. They are not paid to take risks; they are paid to be risk averse, so that the solutions that they tend to develop at local levels tend to be risk averse solutions. So therein lies some of my pessimism. When the Wentworth Group says, "Let's have property management plans for every property in Australia almost," I see that as impossible. If you do want to run it at the local level, which I think is the right level, you are going to have to allow some flexibility at that level for the local authorities, or whoever is managing it - and, remember, this is very resource intensive in terms of bureaucracy - you need to allow them some flexibility to cover some of the risks that they are going to have to take to make those agreements between the landowners and themselves possible.

They won't be agreements where the local authority ticks off on clearing the back of my lot, and I know that. I can't do that now, and I wouldn't expect to do it in the future, but they might allow me to do some things which the legislation currently prohibits me from doing. In fact, the legislation almost currently prohibits me from walking up on the back of my block because I'm bound to tread on some species or another that is rare, endangered, or something of that kind, and if I tread on it I damage it and, if I damage native vegetation, I am clearing. So I think the challenge is, yes, to find that solution at the local level but some degree of flexibility. I didn't think that far ahead, Prof Musgrave.

PROF MUSGRAVE: Please, don't feel modest. I think - and others tend to agree - that it's at the local level that the challenge lies and that our understanding of how things should be done at that level, if indeed we knew what should be done is not at all clear.

MR HOGGETT: Yes.

PROF MUSGRAVE: Can we just wander away a little now. You talk about the conservation agreements, or similar such arrangements. Other people talk about market based instruments, various incentive payment type arrangements, which would be positive and where land-holders are responding to an incentive and, therefore, would be inclined to want to deliver rather than feeling they have to line up and touch their foreheads and say, "Yes, sir; no, sir." A difficulty that occurs to me in relation to that is that the ambitions of legislation are very substantial in

relation to the funds that are available to pursue them. As evidence of that I cite the apparent inability of governments to manage the national parks they have to an extent that observers deem to be satisfactory, and also the fact that regulations that are being put in place impose the costs on land-holders. There's no denying that land-holders do carry the costs of much of the private land regulation.

To the extent that that limits an unwillingness of the body politic to fund programs that are adequate to meet the objectives of the legislation and, therefore, calling on the private sector to cough up the funds, either voluntarily or otherwise, do we have scope for such incentive type arrangements as I've just described and you referred to? They're very good in principle for those who would like to see individual sovereignty in relation to the management of resources that are owned by individuals but will we be able to afford it?

DR BYRON: Is it feasible?

MR HOGGETT: In a way this is, I suppose, part of the reality check that was implicit in what I wrote and is implicit in what a lot of people who are critical of the way we're going write. They're saying, "Why don't we have a market in environmental goods and why doesn't the government devote resources to conservation in the sense of extending maybe out beyond national parks?" You are absolutely right; we manage our current national parks very badly. That's a sweeping statement but one that I strongly believe to be true, and I've visited a lot of them. A huge number of them aren't visited, frankly; they just sit there and there may be scientific reasons for them.

They can't, I think, expropriate much more than they're doing already without the costs becoming beyond reasonable, so looking then beyond the parks to private areas of environmental value, the area I live in - our property actually now butts onto a national park. It didn't previously; it now does, since the latest round of declarations, and there are pieces of our property that could easily fit into the park but beyond that there are huge areas in New South Wales - and you've only go to get out and look, and most people don't - that have outstanding environmental values and outstanding natural beauty. Just come and drive up our valley. To extend into those areas, conservation beyond what the people are doing - and most of them are doing quite well, I have to say - requires some resources to be devoted to it.

What we're saying is if the public through the legislature wants more conserved, then let's open up some opportunities for that to happen; firstly, maybe through the budget by conservation agreements, which are less expensive than national parks and engage the private land-holders. As I put it in the submission, they engage you in actual conservation activity. It costs something but it doesn't cost as much as a park ranger. If people are really serious about some areas, maybe they

can buy them, and they can do that through non-government organisations, through various sources, and possibly by way of subscription. Some of the major non-government organisations could say, "We have an area in the Hunter catchment," or somewhere like that, "that is of outstanding beauty. We're negotiating with the landowner, not to buy it but to have it properly looked after in the way that we want it looked after, rather than he or she wants it looked after."

In that sense you start to develop a market in environmental good. I know it's not as simple as the markets in water. Water is a finite, clearly available, measurable substance. Environmental good is hard to measure. In a way it was a challenge, in the submission, to people who want more, to say, "Well, are you prepared to pay for more and what are you prepared to pay?" I think there are means of doing it - difficult but possible. They certainly won't lock up large areas.

DR BYRON: Just a last question then, and that relates to your use of the phrase "careful use of the environment". It's not clear to me what you actually mean by that. There's the implication of some sort of prescription but perhaps I could ask you how that relates to the concept of duty of care, because you might have some comments on the idea of duty of care as well.

MR HOGGETT: I was really trying to bring together the two sides of this debate - the side that uses the environment and the side that wants to conserve values in the environment - and to try to reach some synthesis where you did conserve the important values in the environment. For goodness sake, the Europeans have been doing it for 2000 years and some of the environments in Europe are extensively modified but very beautiful and very sustainable. So I was trying to bring together conservation of the values of the environment but with use of them, which would mean not the extensive prohibitions that exist at the moment - "Do not do anything with this plant, animal, whatever" - but to take a broader view - "Yes, you can use that area. If you're using your forest area, if you're taking timber out of it, do be careful about what you do to do that and what species you take out." Don't just blanket it out is what I would say.

A forest is an easy way to do it but it also applies to land. There's an awful lot of prescriptions relating to riparian zones which you'll come across as time goes on, and some of them are prohibitive. I have a neighbour across the river from me, we border on the river, and he comes down every now and again. He looks after his property, fences it carefully, grazes it carefully, but he likes to burn a bit of timber off the property but he can't go into the riparian zone, which is full of logs and Christ knows what that come down in every flood, because we have a flood just about every year. He can't take timber out of there, which seems a bit silly. These are small logs.

So it was really that sort of thing. I have an irrigation licence and it says, "The

licensee shall not allow any tailwater drainage to discharge into or onto any native vegetation as described under the Native Vegetation Conservation Act." Now, my irrigation licence allows me to take 40 megalitres out of the river, which is a quite small amount in terms of the river flow, but God forbid that I should water any native vegetation with that irrigation water. That's just silly. I mean, I probably won't have much tailwater but if there's a bit it will go onto the casuarinas probably. I don't know whether or not I'm breaching my licence with that. What I'm saying is that the rules have become so pervasive that they do actually forbid sensible use of the property.

DR BYRON: What you've said suggests to me that a premium should be given for negotiated outcomes.

MR HOGGETT: Yes, at the local level.

DR BYRON: Yes, at the local level. I might say that this is not an uncommon wish that we've heard throughout our hearings. What you've reminded me of is that old saying in Switzerland where everything that's not illegal is compulsory, and vice versa.

MR HOGGETT: Yes.

DR BYRON: The list of prescriptions and prohibitions does seem quite long. To completely turn that on its head would almost get us back to the common law situation, as I understand it, where on freehold land you can basically do pretty much as you wish, provided you do not cause harm or nuisance to your neighbours. There are questions about how broadly we define harm and nuisance and how broadly we define neighbours. It's not just the people over the boundary but it may be people further down in the catchment that you're in. If you're in Tamworth your neighbour could, in that sense, be people in Mildura who get salty water.

Rather than trying to make a list of everything that any landowner could possibly do that might cause some adverse impact in terms of soil, water, vegetation, biodiversity, flora, fauna, whatever, and have this huge long list which people are supposed to keep in their head when they go to work each morning - to completely reverse that and say, "Unless we have evidence that what you're doing is going to cause serious harm, then carry on. If you want to grow corn instead of tomatoes, go ahead. You don't need a permit from us. If you want to grow sheep instead of cattle or alpacas, go ahead. You don't need a permit."

MR HOGGETT: But if you want to put up a giant piggery your neighbours are going to have something to say about it.

DR BYRON: That comes under causing harm and nuisance to your neighbours. I think even the most conventional interpretation of common law would put some controls on that, for the same reason that you can't play your stereo in an apartment down here at 3 o'clock in the morning very loud, or have an incinerator burning in the backyard.

MR HOGGETT: It's an almost John Stuart Mill approach to the environment, though, if you do. You're responsible for yourself.

DR BYRON: The purpose of the legislation is to protect the rights of others, so it both circumscribes your rights and protects them as well because just as you're not allowed to harm your neighbour, he's not allowed to harm you either.

MR HOGGETT: It's funny that it sounds so radical but it's so old. Of course, it's not going to satisfy people if you have a koala on your property and they live in Warrawee and want to preserve that koala.

DR BYRON: The question is how broad is the definition of who is the neighbour or the affected party and how broad is the definition of what constitutes harm or nuisance?

MR HOGGETT: That is a very extensive debate and it's called the stakeholder debate, and we have it in corporate matters and many other matters as well. Who is really a stakeholder? Just anybody that puts up their hand because they feel aggrieved if a tree falls in the forest, or the neighbours or the person who owns the land? Big debate, that one. I wouldn't like to write that one up.

DR BYRON: Well, thank you very much for coming.

MR HOGGETT: Thank you.

DR BYRON: Would you like to make any final comments in closing?

MR HOGGETT: No. I guess one thing I'd like to say is that in a sense you are correct that I feel somewhat pessimistic, because I have been through this cycle in other areas several times, but I think the resolution of the difficulties that you're asked to examine is just so important. It's just so important to the future of our farming community and our landscape, and I think it can be resolved sensibly. Thank you.

DR BYRON: Thank you very much.

DR WOODSIDE: I'll just introduce myself. My name is Dedee Woodside. I'm working with the ricegrowers of Australia and a number of other irrigation groups as a sustainability adviser. My background is biodiversity, both nationally and internationally, and so it was an interesting marriage to be working in a sector which had otherwise been maligned in terms of their management of the area. So it's a great opportunity actually to be with you here today, because I think that what is happening in parts of the irrigation sector, and in particular the ricegrowers, is a wave of change and possibly a model for how to work with the farming sector in a way that would deliver on different kinds of outcomes more rapidly, particularly for biodiversity.

So you have a submission from the ricegrowers which goes over a few things. I made a PowerPoint summary which I can give you. Now, what I thought I'd just do is go over a couple of issues concerning the ricegrowers, not just from their perspective but from mine, with one foot outside; some of the issues for the drivers of change that are going on in the rural sector in biodiversity and environmental management; some suggestions as to how things might work differently, given the example that rice is doing; and then there is actually the case study from rice.

The rice industry has over 2000 farmers, predominantly a family-run business. In my review of the value systems that underpin the rice industry - which I did when I first got to know them, I went out and tried to figure out what drives them. Their primary goal for change is leaving a legacy for their kids, because it's a family business and the desire to leave choices. Their secondary goal was to maintain lifestyle, and their third goal through their value system was profitability, which was an interesting sequence and quite surprising to many people involved in that.

The industry grows annually in general over 150,000 hectares of rice in the southern Riverina and a little bit into Victoria. There is no longer rice grown, except the odd little experiment, in Queensland or even in the ORD at the moment. About 90 per cent of the ricegrowers belong to the ricegrowing association, so it's a representative body. The industry is vertically integrated, so that the ricegrowers own everything from their paddy to the plate internationally. It's completely integrated. It's run as a cooperative at the moment, with vesting powers for all the crop in Sunrice. This is important in terms of rapid change for environmental management. In a good year - at the moment, we're down about 10 per cent in production - they will export 85 per cent of their rice and have an impact on the GDP of around \$800 million. So reasonably significant land-holdings are upwards towards \$3 billion worth of investment in lands for ricegrowing.

Another aspect to profile from my point of view is to clarify from biodiversity and environmental management that Australian rice is different from temperate rice grown anywhere else in the world in that it is grown in a complex system of rotation.

It's not grown as a monoculture. It's compulsorily grown on rotation. It also means that every crop is followed by a second crop to use the water that's in the profile, so that rice alone is not grown; it's a sequence of crops that follows rice to make sure that every drop of water is generating output. It has nearly two times the production per hectare that other temperate ricegrowing have because of the efficiencies of the solar radiation here and the way in which water application has occurred, and it is known internationally as the lowest per grain of rice water user and the lowest pesticide user.

From my point of view, working with the industry presented me with an opportunity to use all those positive aspects to see if we couldn't go further and start farming biodiversity in that context. So I think that background is important. I was surprised at the willingness of people to put forward the fact that leaving a legacy was their primary goal for change, which gives a handle for driving a change process. As far as the drivers go, there are both the internal and external drivers for considering all the biodiversity issues and other environmental issues. Internally, people wanted to change the approach that was happening, because there was tremendous fear across the industry - loss of control, never knowing what else was going to hit them next - and they were in reform fatigue. People just couldn't take any more.

There was water reform and there was all kinds of competition reform and so on, so they wanted to look at this differently. They didn't understand the language of the legislation or those who came out to talk to them about it, because the language just didn't mean anything. There were competing demands, or so it appeared, at first glance - that if I, as a farmer, was to do something about biodiversity, then I'm not going to be able to grow my crop, or at least that's the way the authorities were presenting it; it was an either/or. There didn't appear to be any resources to help out with this change, and they couldn't figure out, "Why do I have to change my private land when we're not handling other parts of the public lands well enough anyway?" So that kind of argument was going on.

There didn't seem to be any practicality coming down, just new rules, so people were also saying, "Look, I've been trying for a long time and nobody seems to acknowledge the work that I do. I've got 400 hectares of my property under native bush, and I'm told I can never touch it any more because there are some new rules, and yet, if I don't manage it, it will fall apart for the animals that live there as well." So there were all these kinds of conflicting messages going on. From the external point of view, the agencies in the region, who became part of the conversation, were saying, "Look, we've got to do things differently because, after all, in excess of 70 per cent of this land is in private hands. If we don't start forming a dialogue, we're not going to make the change. Yes, we are asking for a reform at once; maybe there's another way to have this conversation about reform." We need to acknowledge that the community is demanding participation and not just being at the

other end of the whip all the time. They are demanding to participate, which means we're going to have to find a language to talk to them in.

In general, there is an acceptance that there is poor coordination at different levels of government and across agencies. I can attest to that, having spent 16 years as a senior public servant in this area. There is also an acknowledgment that much of the demand for change was quantum - go from nothing to something tremendous all at once, especially in regard to biodiversity - without looking at the incremental or adaptive change process. Of course, there is also recognition that the results on the ground are generally pretty poor at the moment. There are some good ideas, but delivery is really wanting. There is also recognition that the key agencies have a terrible reputation in the bush for their own management of their own lands.

So with all of that, there began a discussion about how to undertake this differently, and the different players - government, ricegrowers and others - decided that, "Look, we should really make an effort to undertake an experiment where we see if we can't do this whole process differently." The rice industry responded to the pressures and the opportunities by developing a sound environment policy, which it put out for public debate for one year, which was heading out to openness. The first step was opening up the doors for dialogue. They put in place an action plan that had input from various sectors - NGOs included - where five parts were to be delivered: restoring the balance for biodiversity; greenhouse abatement; industry innovation and best practice; a larger program on healthy rivers and landscape; and the Environmental Champions Program, which is the platform for delivery of change in the farming sector. It's actually a change management process.

They went to work to build their organisational capacity and their farmer capacity to participate in this change process and established this five-tier collaborative program for change, which is called the Environmental Champions. The federal government has supported that program to the tune of around a million dollars under the AFFA program for pilot EMS on the basis that it will deliver on these outputs and be an example of a change process. There's an additional \$1.3 million worth of commitment in kind or in staff from all the cooperating agencies on the ground to drive this experiment.

Behind this program, there is about \$600,000 worth of investment through grants and industry in undertaking a baseline survey on rice farms and in the region to see what is there in terms of biodiversity in the agro-ecosystems, to see if they function as ecosystems and to see where to go from there. There has to date been very little appreciation across Australia of the altered systems and the values that they contribute as they are, so that we build from there instead of just replace them. From my point of view, I believe that's one of the major outcomes that is not mentioned in your summary paper but needs to be taken on deck - that in the altered

systems it's similar to the need to maintain lantana in many of our urban bushlands. Without lantana, at the moment we have no cover for much of the animals on the ground.

We need to go slowly to replace the altered environments to make more native environments possible. To that extent, we need to think carefully about the fact that biodiversity really has composition structure and function, and perhaps in a reverse order is how we have to go about working with the farming sector to recover first function, even with our altered environments and move into structure, which may also contain non-native aspects into composition, which is more native biodiversity. We need to take a tiered approach to that recovery. I have been working on such an approach in this program with the ricegrowers.

The suggested changes that the rice growers would put to people about changes in policy and strategy include development of a sense of partnership. After all, this is going to require change on that 70 per cent of the landscape which is privately owned, and it will require partnerships based on the strengths and weaknesses understood between the two; the rights of the individuals and the government and the opportunities that come from a less litigious approach. The industry would say that it is really important that future legislation be undertaken as it is done with other countries with an impact study of the legislation in advance of its delivery.

It happens all the time in Canada where you develop a piece of legislation. You go out and do an impact study; work with people; see how you might get some feedback into that before it is rolled out to policy. There is a big need from the industry's point of view for there to be recognition for both a value based change and facultative change - that is, we're not going to get biodiversity up here if we don't recognise that on the one hand people will make those changes simply because they want a nice world, but there also needs to be a more facultative recognition as well, and that is the goods and services provided by those environments - how they benefit and more incentive-driven relationships with those changes, and sometimes it's just acknowledgment, but a rather more user-friendly side as well as a value based change.

At the moment we tend to drive it all as if people should drive it from a value based process alone. There needs to be greater dialogue along the way about reasons for change, the changed goals, and the establishment of a language which is useful on the ground that actually becomes meaningful to those who have to effect the change. There is a need to do research on target groups, recognising that in the policy sense, and certainly from the strategies of delivery, one size does not fit all. There is a need, as I mentioned before, to take a tiered approach to change, to roll out perhaps policy to acquire an ultimate change, but not to try to get there in just quantum leaps. It's too scary. People don't do it and they can't comprehend how to

get there without the tools being delivered at the same time.

I mentioned earlier about the need for there to be an adaptive and coordinated approach amongst the agencies - not yet evidenced - and there is a need to recognise participation as the absolute key to success. Having a few people doing well is not as good as having everybody on the road to succeeding. The industry has taken that approach and intends to get 90 per cent of its farmers up to level 3 of its program, which is a biodiversity level. That's three out of five in the next five years, because participation then enables a language to be spoken across the industry which does not get spoken now.

There is a need for acknowledgment of achievements in those areas that have already been taken care of in the past, so not just looking at the gaps but looking at what the matrix of good stuff is out there - need for tax incentives and market based instruments to work with people in terms of their facultative relationships with biodiversity, and there's a need for focus on outcomes. The rest of what you have there I'm not going to go through.

You can scan those details, but it's just an outline of how the rice industry has structured its program, with key issues being talking to farmers about the farming of habitat, and the farming of habitat because it delivers on wildlife and other biodiversity values, but also because it delivers services back to you on the farm at a regional level and at a catchment level. The program was worked to deliver this sort of language of change and tools for making it meaningful at each of these levels.

PROF MUSGRAVE: Thank you, Dedee. I'd like to ask you some questions about the land and water management plans, the irrigation districts, and how they relate to the programs you describe here. The reason why I want to do that is some people describe those land and water management plans as pointing the way for the future organisation of partnerships between governments and community landowner groups, such arrangements which go beyond what has been possible so far with schemes such as Landcare and Bushcare and so on.

What you describe is very interesting, and knowing the rice industry as I do, represents a substantial achievement by the industry and a remarkable achievement in marshalling different groups, and shall I say sources of funds to contribute to their planned activity, but as I understand the land and water management plans, they represent a significant legal undertaking on the part of the irrigation districts to commit, in the case of the Murray districts and concomitantly in the other districts, hundreds of millions of dollars of their money to the achievement of the outcomes of the plans. I guess my question is: what's the relationship of all this to the land and water management plans? You don't spell it out, and it would seem to me that the relationship calls for some spelling out.

DR WOODSIDE: The rice industry covers four major irrigation areas, three run under private company structures and one under the government areas. The interesting thing about you asking that question is that I also happen to be on the board of the Murrumbidgee Irrigation as their environment appointment to that board, and in that role I am responsible for the land and water management plan of the Murrumbidgee area. In that case, the land and water management plan on paper is currently committed to about \$300 million worth of change. That is trebled by the expected investment being two-thirds of that investment on farm.

The \$300 million is largely off-farm activities, so there's an additional \$600 million that will have to be invested by farmers over time on their own farms for that change. The way in which that works in that area is around \$250 million of that is raised through a levy charged to the farmers. That levy - there is about \$80 million spread over 30 years that comes in from the government. So it's a small contribution of government to what has to be put in by the farmers and the urban communities to the change in the region. That plan, like all of the other plans, was written through cooperation ground up of the communities, and every single one of the plans is out of date..

The Murrumbidgee plan is the only plan that incorporated biodiversity as part of it. Every other plan has had to tack it on because biodiversity wasn't considered part of the negotiations or issues raised early enough. I don't believe that the land and water management plans are capable of delivering in their current form on biodiversity issues as we need to deliver on them. The coordination between this, the rice-growing issues and the plan, is absolute. Every irrigation body has a licence. Every farmer has to have a licence to irrigate. They must follow the rules of that irrigation body.

As a result, this program is built with full membership of all of the irrigation bodies as part of its cooperating base. Effectively, the rice program becomes for the rice farmer a one-stop shop for meeting the requirements of its irrigation body, national parks, land and water management planning, federal government expectations and state expectations in terms of water reform. So it becomes simply the interface for capacity building and not a new set of rules. This program is fully tailored and delivered by the irrigation bodies in cooperation with the Department of Agriculture and the rice growers in each of those areas using absolutely the requirements of those irrigation bodies as the foundation in that area. Does that make sense?

PROF MUSGRAVE: That makes a lot of sense. That was very clear. Thank you.

DR WOODSIDE: And that's part of why everybody was willing to get together.

No-one has signed off on anything here. There is a three to four-year experiment in place and every agency - everybody has signed on to the experiment rather than signing off on the results saying, "Hey, look, if we can drive change more rapidly, try to have one area where we're all developing our materials and our training programs and so on and working together with some efficiencies, then we can possibly roll this out to the other agricultural activities in the region." So the irrigation bodies own it a hundred per cent from that regard, and as time goes on, they'll roll it out to horticulture, and already cotton is taking on this kind of concept in its roll-out as well.

PROF MUSGRAVE: I guess just the one thing you did really make clear is the nature of the relationship of these initiatives to the land and water management plans. Are they somehow rolled in together?

DR WOODSIDE: Because the land and water management plans other than the one in the Murrumbidgee area do not in themselves contain a lot of biodiversity elements, this is - add value to those plans.

PROF MUSGRAVE: Indeed.

DR WOODSIDE: In the Murray area, biodiversity is kind of a tack-on, but there has been no system for delivery. The Rice Champions Program is being used as a trial system for delivery of change of biodiversity on farm. I don't know if this helps to explain, but primarily the land and water management plans are about salinity, water tables and a couple of other aspects of the sort of blue and brown components of environmental management.

All the green things and the things that interact with the water tables has been poorly integrated into those plans. There is a serious need for the upgrading but the way in which each of the areas are facing this is saying, "Well, let's work on this rice program. If that represents a good way to upgrade our land and water management plan and integrate it through that way, then that's a good experiment for us. We'll now roll it out across our region using these concepts."

PROF MUSGRAVE: Yes, but why I'm pushing you on this is - I agree with what you say. The Murray plan started actually as a drainage program and evolved as that. I would suggest that the non-rice grower plans such as Gemalong and Lower Murray which will develop later do have a more explicit inclusion of biodiversity considerations like Murrumbidgee. But I wasn't thinking so much about the outcomes that are being sought. They're laudable. What I saw as being a very powerful component of the land and water management plans is their provision for a discipline of management and implementation, monitoring, auditing, reporting and adaptation. It seemed to me that these programs that you describe here do face the

potential danger of having lots of stakeholders whom - well, and with these dangers that can flow from this sort of involvement, and that the discipline the land and water management plans have in terms of the monitoring, auditing, review, adaptation, would provide a useful framework for the total overall activity.. I was curious as to whether you've taken advantage of that.

DR WOODSIDE: I see where you're coming from, and the land and water management plans - and as a person who chairs it for the community - are still only as good as people are willing to participate in it. There are some elements that are delivered by the irrigation company as part of their legal agreements and there's works programs and there's other things.

PROF MUSGRAVE: Indeed, yes.

DR WOODSIDE: And some things get built into the licences. That will not drive change as quickly as if you can go to the commodity bodies and say, "If we work together on this and our incentives are rolled into your program, can you bring all of your farmers up to speed a whole lot faster?" The rice program is simply a mechanism for change; it does not set any of the rules. All of the rules are set by the agencies who participate. It really is - perhaps if I just step back a bit.

When you're out there, the farmers get hit by everybody, including the land and water management plan, including their water licensing conditions, National Parks - in the old days in New South Wales it was DLWC, DSNR - no, Department of Infrastructure, Planning and whatever - the whole thing, and each of those things was coming in individually. The land and water management plans do not of their own coordinate those impacts on the farmers; they only do to a small extent.

This program was intended to say, "Hey, look, we've got land and water responsibilities, we've got all these other responsibilities. How can we ensure that we get the farmers to meet all of those responsibilities, and here it is." It's like a program that hopefully any irrigation company would now be able to pull off the shelf, having participated in it, and say, "This is a method for bringing our farmers up to speed." So if we look at the plans as being the set of goals and outcomes, this program becomes the method for delivery.

PROF MUSGRAVE: In closing, I'll comment that I find that quite alarming, because the contract that's been signed off by Murray Irrigation as the implementing agent, with the state government, is the result of a commitment by the community to deliver the goods, and what you're saying is that you have doubts as to whether this delivery arrangement will work.

DR WOODSIDE: Just can't do it all fast enough - it just can't. It can't get enough

courses out, you can't get enough incentives out on the ground, to make the change fast enough. You need the cooperation of the farmers in their structures, to achieve that.

PROF MUSGRAVE: Has Murray Irrigation informed the state government that it can't deliver on time?

DR WOODSIDE: I don't think that's the case. I think the task is just so huge. I don't think it's a case of on-time type things. If you can go beyond compliance and achieve something much greater as a result of cooperation with your farmers, then you're better to use every tool you can. I see it as - and this is me as a very strong environmentalist - this is just another tool in the kit to roll things out. It is better that the farmers are assisting to achieve that, than waiting to be told what to do.

PROF MUSGRAVE: I have a feeling - and I hope this is so - that we're actually talking about different things. We'd better close on that note - or I close on that note.

DR FISHER: Thanks very much. I just had one question. I think, if I'm not mistaken, you're the first person who has provided evidence to suggest that an exotic pest like lantana should be maintained, in a dynamic sense I guess, contrary to legislative requirements here in New South Wales, so that you provide cover for native animals. Can you outline to us your views about the extent to which conflict between certain bits of legislation that farmers are faced with is contrary perhaps to long-term good environmental outcomes?

DR WOODSIDE: I suppose it depends on what you're saying is a good environmental outcome. In my own practices - and I also have a property - if I thought that removing all the blackberry all in one sweep was going to lead to a lack of refuge for the very animals I was trying to protect, then I would take a staged approach. It's used everywhere; every kind of bush regeneration program is a staged approach, and that's the kind of thing I'm referring to.

You know, if structure is a thing that keeps your target species alive, then you maintain the structure while you replace it. You simply work through in some - so the difference is the rate at which you meet those outcomes and the methods that you use, not that you're not trying to meet those outcomes. There's just the practicality.

Let me give you an example. In the rice-growing area around Coleambally the drains are the only sole habitat now for the endangered southern bell frog. Do we remove some of those drains that need to be dealt with, or do we manage them in a way to work to some kind of substitute habitat situation? Where some of the corridors for fly-ways are made up of exotic species, you have to be very careful to make sure that your replacement species get up to the right height and meet the right

kind of structural requirements before necessarily you remove those corridors for canopy.

Likewise with the long-necked tortoise, there's a couple of species of tortoises that only exist in certain parts of the country because of certain drainage and canal systems, and that's simply - you've got to take it into account; you don't just cut one thing off and hope for another. You work with them as the refuge, until you've created the alternative.

DR FISHER: Well, that makes good sense to me. But as a farmer, do you feel that there are conflicts in these bits of legislation that you face, that make it more difficult for you to pursue this approach that you're discussing?

DR WOODSIDE: Yes - well, there's a fear element that comes, that I work with all the time in the farmers, and that is, somebody will come in and criticise me for this or fine me for this, but I can't do it any faster - you know, I can't make a change faster. So I think part of the translation of legislation and into policy on the ground has been this idea that the world can change in quantum leaps, and the truth is it needs to be adaptive, slow change, and be taken into account even in terms of the penalty systems that occur on people's properties.

For example, if someone is growing a plant that is providing some refuge, there's not much point in telling them to go in, to poison it and remove it. If that is the only refuge, work with them to achieve the alternative, and then remove it. Don't just fine them, because they won't. So it does work on the ground as a direct conflict from time to time.

DR FISHER: Right. This all sounds very practical to me, but in other evidence we've heard, we've heard the other side basically saying that you have a set of regulators who have legislation that they're faced with, and they are required under that legislation to pursue the aims of that legislation, and in some cases that would lead to prosecutions, despite the consequences, both for the farmer, I presume, and whoever is living under this piece of lantana - or blackberry, or whatever it is, that is to be removed.

DR WOODSIDE: Yes, it can be serious. I can give you an example. The other day somebody got fined for a drainage basin that he'd put on his property. The reason he put the drainage on his property was because the road was flooding and the best way to take the water off the road, he thought, was to simply divert it and hold it in a pit that he had on his place. He's in court at the moment over this - because he thought he was saving the road and contributing to his neighbourly duties, he had this basin, and the person who came out to inspect it had no choice, because the rule was the rule.

On the other hand - it was the inspector who was telling me his dilemma, and yet at the same time this person had created a new habitat, it had grown really well because he had lined it with reeds and stuff, and was working it, but it was technically the wrong thing to do and so he had to be fined. That sort of thing creates huge ripple effects across a whole bunch of the farming community, who say, "There's no point in helping out. We can't help. What are we supposed to do?" So we have to find a way to dialogue through these problems, I think. It doesn't make it right, but we just have to find a way to work through with practicality.

DR FISHER: It's probably a difficult question, but do you have any thoughts about how you would practically make some of those changes and translate regulations, I presume formulated here in Phillips Street or in Orange or somewhere, and get them on the ground in Leeton in a sensible fashion?

DR WOODSIDE: I guess I would take a lot of stress off the people on the ground. I'd use techniques that are used widely elsewhere, and it's used by the EPA. If somebody has something that is offensive, they work with them to put in place a plan to undo that, and if you don't comply with that plan - restitution of that issue - then you hit your fining stage. But the idea is to have that cooperation in the first instance, and it then engages the resources of the authority to help to find the appropriate solution. I think that kind of thing would deliver a lot of more practical outcome on the ground.

I find that in many many cases the EPA are much more capable of dealing with that; they deal with it all the time. It's about the plan of mitigation or whatever, and still if you don't deliver, you deserve to be fined. But it's stepwise to that. I don't know if that helps.

DR FISHER: Thank you.

DR BYRON: Yes, well, it just seems that what you're saying is that a certain amount of discretion on the ground may be necessary, given the extraordinary heterogeneity of the landscape; that black-letter law frequently throws up anomalies which, although being environmentally and economically and socially worthwhile, happen to be illegal.

DR WOODSIDE: Yes.

DR BYRON: That suggests that maybe we should be a little bit more cautious in casting laws that are likely to throw up those anomalies. The only question I wanted to ask you was about the sort of - if you could give us some examples of the problems that rice growers were having with what you described in the submission as

top-down regulation. I guess you've given one or two examples of that, but are there any more that you could offer?

DR WOODSIDE: I can tell you some outcomes of that. In fact one of these examples is in the Murray area - as a result of this program that's happening, there's a formation of farmers in clusters to work together to undergo change as teams, with their irrigation bodies and so on. Everybody tries to work up to standard. One particular area I can think of has - this is close to an area you may well know, the Barmah-Millewa forest - high-value biodiversity, and people have been terrified to let anybody know that they have been working with that forest to maintain forest plots on their own grounds and extend the habitat, as a team of farmers.

There's an area of about 170,000 acres of land - whatever that translates to - there are 20 farming families working together, and they're restoring bush next to this and creating corridors. They have been terrified to talk to the authorities, because if they do so they will come in and they will never be allowed to use those areas again. So they've built them as multiple-use areas, occasionally getting a fence post out or whatever.

When National Parks went through there, they happened to find that it was a good extension of some endangered species' habitat and immediately an HCV was slapped on them - high conservation value. People are feeling that, "Hold on, I'm doing everything I can to do the right thing and, as soon as I share that knowledge with somebody, I get loaded with some restrictions." Maybe the restrictions don't practically affect them, but they do emotionally, and so they don't want to have that dialogue. Immediately, that achievement becomes a disincentive and we need to find a way that we can remove those kinds of practical disincentives and still achieve the outcomes that we want, while people still work within the rules. Does that give an example?

DR BYRON: Yes, that's a good one, thank you. I think that we're going to have to move on. We're a little over time already. Is there anything else you want to say in closing?

DR WOODSIDE: No.

DR BYRON: Finer points?

DR WOODSIDE: I hope we can resolve whatever the differences - - -

PROF MUSGRAVE: I'm sure we can.

DR BYRON: We're probably in vigorous agreement, I think.

PROF MUSGRAVE: Yes, I think I know what the problem is.

DR WOODSIDE: All right.

DR BYRON: Thank you very much for coming.

DR WOODSIDE: You're very welcome.

DR BYRON: I propose now that we break for about 15 minutes and we'll resume with WWF Australia at 11.30. That will go through then till 12.30. Thank you.

DR BYRON: Just make yourselves comfortable. If you each can introduce yourself and then speak to the main points in your submission, which we've all read carefully, then we can discuss it. Thank you very much.

MR MOSS: For the record, my name is Warwick Moss. My official position is natural resource economist in our resource conservation program.

MR GLANZNIG: If you can just give me one more minute, I'll finish your form.

DR BYRON: I suggest you leave the form and we'll do it later.

MR GLANZNIG: That's fine. I'm Andreas Glanznig, the biodiversity policy manager for WWF Australia. Firstly, we'd like to say thanks for the opportunity to present to this important inquiry. We think that it's come at a very important juncture in looking at how we can put in place more effective measures to conserve biodiversity and also facilitate the transition to an environment which is sustainable.

As a way of opening our discussion, what I found interesting - looking at some of the submissions yesterday - was a sense of déjà vu. A lot of the themes that were coming out in the submissions sort of echoed the policy debate in the early 90s, in that there was a dichotomy put in place between so-called command and control legislation, on the one hand, and voluntary or land care type instruments on the other. I think that where WWF sort of differs from that position is that we firmly believe that, in fact, a far more sophisticated approach is required, one that really looks at a policy tool kit - a suite of policy incentive instruments - that can really optimise the strengths of each of the voluntary market and regulatory incentives.

To that end, to provide a context for how we see the role of regulation-playing in conserving biodiversity, our view is that it can provide the safe minimum standard to ensure that those who are recalcitrant to other incentive types can be persuaded to ensure that there's no irreversible loss of biodiversity. On top of that, you can build a whole range of other incentives - instruments that are market based, voluntary or motivational - and I think that conceptual framework is summarised quite well in what we consider a landmark report put out by Environment Australia in the mid-90s called Reimbursing the Future.

In taking that forward, WWF does work in a range of areas that look at a variety of incentive instruments. On the voluntary side of things, we have projects in place in Western Australia which work with land-holders to encourage the voluntary conservation of remnant vegetation and one of our most successful projects is called Woodland Watch. On the market side of things, we are heavily involved in testing some of the market instruments; for example, an option based system in Liverpool plain. From the regulatory incentives point of view, obviously we're strong

supporters of the EPBC Act and we are very keen to see it implemented in an effective and efficient manner.

Taking that forward, we also acknowledge the shared responsibility and the shared need for an enterprise of effort that takes us towards a sustainable Australia. I think that our view is that we definitely need to develop a compact between government and the community to take us forward. I think where this inquiry has an opportunity to foster that cooperative and partnership approach is really looking at opportunities for players in the community, like ourselves and others, to engage this enterprise. I'd also like to just put on the record that, in relation to voluntary and other incentives, we do believe that a far greater investment is needed to take Australia forward and, to that end, we recommend the establishment of an environment levy to enlarge the pie for investment in voluntary, market and other incentive types.

They're the general introductory remarks. Now that takes us into our submission, before I hand over to Warwick for his comment. Our submission basically makes two general recommendations. It says that there's a real opportunity for this inquiry to look at costs in a broader context. We'd be encouraging the inquiry to look at net costs; so not only direct costs imposed on land-holders by regulation, but also looking at the costs to downstream users and the environment from clearing and other activities; secondly, the opportunities to factor in avoided costs that basically accrue to the land-holder by retaining native vegetation. We think that they're both important aspects that should be included in the calculus of how cost is interpreted and analysed.

The second major point that we make in our submission relates to socioeconomic assessments and, in that regard, we flag that there have been several attempts to quantify the economic costs. In one of our critiques of one study, in particular, it highlighted that, if you questioned and looked at some of the assumptions, they were found wanting, which would lead to a totally different conclusion if you ran a sensitivity analysis. They're the two general points that came out of our submission. In relation to the socioeconomic side of things, we do recommend for the development of standard guidelines just to standardise the way that socioeconomic analyses are undertaken. I'd like to hand to Warwick to make some introductory remarks.

MR MOSS: I don't have much more to add to that as an introduction. I think your questions might get to more of what I wanted to say. I guess the main point I'd like to emphasise is that I think at the heart of this debate, obviously, is the role of government. As we look through different submissions, there are obviously different interpretations of what the role of government actually is. From our point of view, we see within the broader context of this inquiry, obviously, that the government

does have a stewardship role for the resources of the country and a role to correct market failures where individual action is not producing the optimal social outcome.

At the moment there seems to be a lot of pressure on this type of regulation as the government being capricious and putting disproportionate costs onto land-holders and, in general, sort of creating an us and them situation between government and land-holder.. While we totally accept that there is an issue that regulation must be done in a fair way and certainly is going to be ineffective if it puts an unfair cost burden onto particular individuals, the essential element of the story still is, from our point of view, that the government must have a strong role in this area.

We'll be approaching our comments from the point of view that we consider that attempts to sort of reduce that government role and to give almost unfettered property rights and unfettered individual action in these areas is likely to be generating market failure and would be undermining the role of government in successfully doing its job. That's all I wanted to say at this time.

DR BYRON: Thank you very much. Beautifully brief! Your submission has given us a great deal to chew on. I'll take the liberty of going first. It's been put to us in lots of the other hearings and our visits that much of the native vegetation that exists today on private land exists there only because the landowner wanted it there or was quite happy to leave it there or actually deliberately put it there. The argument that you make about market failures is sort of consistent with the view that land-holders are either actual or potential ecological vandals who just can't wait to bulldoze the last tree sort of thing, unless they're forcibly restrained by strong legislation.

The evidence that land-holders actually do look after, retain and actively manage native vegetation seems fairly strong. The evidence that land-holders have caused lots of damage in the past is also strong. We've seen conditional freehold that required the land-holder to get all those damn trees off the place in order to have unconditional freehold. We've seen grazing leases that required the lessee to clear so many hectares of timber - say, 100 hectares - and to ringbark so many thousands of others. Up until the mid-80s we had tax deductions for tree clearing. In that sense, the case has been put to us that, where farmers in the past did actually do excessive damage to native vegetation, this is not necessarily proof that farmers today likewise are going to. The incentives may have actually reversed.

The issue that has been raised in many hearings - and early this morning - was that, if you ask yourself who has the incentive to get land management right at a local level and who has the expertise to get land management right at a local level, one answer might be the people who own the place. Those who put that point of view to us would also say that they have greater knowledge of what will deliver

environmental outcomes on the ground than people sitting in an office in Canberra, Sydney, Melbourne, Brisbane or whatever. Your argument for a strong government role hinges on market failure. The counter-argument being put to us is that it's being displaced by regulatory failure, which may be even worse. Reactions? Comments?

MR GLANZNIG: I've got so many, I'm not quite sure where to start now. I suppose I'll just start at the beginning. We obviously think that farmers have a very important stewardship role, and so would reject perhaps the rhetorical flourish that sort of suggests that they're environmental vandals. I think farmers are a very important part of the solution.

DR BYRON: They certainly tell us they see themselves that way.

MR GLANZNIG: I take the point that a fundamental issue here was government policy, so it was farmers acting within the legislative frameworks and knowledge that existed at that time and there was a strong incentive. As you flagged, by being written into tenure arrangements and so on, you had to clear. I mean, there were also tax incentives for the Mallee in Victoria. Again, we don't want to get into the blame game, but I think it's a question of flipping that around and saying, "Well, where do we want to go now?" and to take issue with the point that farmers only know best. I think the key point is actually looking at a property within a bio-regional or landscape or catchment context.

I think the false assumption to that argument is that farmers can most effectively understand potential downstream impacts. I think that's where the role of a partnership approach comes in. If you're going to act rationally within a market based system, you've got to have a good information base. To that end, that's the essence of the Wentworth group catchment care approach, which is basically - you have standards, you have a catchment plan, you provide good information that sets out the various values of the native vegetation that are retained on an individual property

You then go through a process where you work out how to share the costs of retaining that vegetation, and that's in a sense the catchment care principle. Then once you've worked that out, you can then accredit a property management plan and then enable farmers to get on with the job.

DR BYRON: I guess my point in the history was to say that one interpretation is that landowners responded very well and very predictably to the incentives they were given by the government. I think what probably annoys or irritates them now is to have that flung back in their face as proof that they can't be trusted to look after the country properly and, therefore, will have to be strictly regulated. The counter-argument was if you give them a different set of incentives, they will

probably respond quite rationally to them, too. So I think we're not in disagreement, we're just trying to work out how much stick and carrot is appropriate.

MR MOSS: My response would be that it comes back to Andreas's introductory remarks about the suite of mechanisms that would be needed, say, under the reimbursing the future type role. My comment was saying that I think we still need to see this as a suite; it's not an either/or, which is probably self-evident. But we definitely need to ensure that the situation doesn't get worse, which is really where regulation can certainly give you that sort of certainty and confidence that it won't get worse. I do then totally support that, if incentives have changed for individuals, if farmers and graziers are recognising these and putting in place the right behaviours and if the public can support those through payments for public good contribution and the structural assistance, then I think we have a good suite. The regulation, though, is still the cornerstone in that it must give the broader community the confidence that the situation won't get worse.

Now, I know it's obviously different in vegetation and biodiversity, but the model I like to think of is the load based licensing scheme in New South Wales in terms of pollution, where you have the legislation setting an absolute limit but you're using a market based instrument to try to provide the right incentive to - - -

DR BYRON: The least-cost way to achieve it.

MR MOSS: Yes, the least-cost way to get that outcome and to actually provide an incentive to not get near that absolute limit but to come much lower down in your emissions. I honestly don't have an answer, but I think that the challenge for the Commission and for everybody involved in, say, market based instruments is to be able to tailor market based instruments to the particular difficulties of native vegetation and biodiversity, which is I why I assert that there's still a strong prima facie case that there is market failure, despite what you say about people's recognition of the need to preserve their resources, mainly being that they're still incomplete markets.

So while people are recognising the need to look after their land, that's not necessarily saying that they're looking after the catchment. There may still be more in addition to what they think they need to do on their property, and that is needed for the broader community; secondly, the informational question that Andreas referred to before about current and future needs is not going to be present in today's system. So while I fully applaud the efforts of farmers to manage their resources, I still think while we don't have this good government/land-holder/community partnership we're not going to be focusing necessarily on the ultimate social outcome.

In that context, the challenge for market based instruments is to say, "These have worked extremely well. We've had a homogenous product. We've known exactly who's contributing and we've known exactly the result of, say, a policy change," but in these cases, where we've got heterogenous variables, we've got multiple and varied benefits from different actions and we don't necessarily know who all the players are who are contributing to what might be a problem, we've got very little evidence, even around the world, that I know of that shows we manage those situations very well. I think that's where we're a bit reluctant to see the new range of incentives as providing the right answer when those sorts of difficult questions are very untested in market based instruments.

DR BYRON: But what complicates it even further is that I'm not certain that people sitting in government offices in Canberra, Sydney or Melbourne know what the answer is either. So I guess I don't share your faith on the capability of governments to direct land-holders, any more than they were right when they brought in mandatory tree clearing or tax concessions for tree clearing 20 or 30 years ago. I'm not sure that they're going to get it any more right tomorrow.

MR MOSS: I would say that would be true again if we think about the "us and them" kind of approach. This is something where we can certainly say we have common ground with farmers - that absolutely we have that same distrust. There is absolutely no doubt about that. Obviously, if government is sitting in an ivory tower again making decisions on the basis of secret information, they're not properly consulting. "Consulting" is not even the right word; it's still a partnership. We totally agree with you, and we think the problem, of course, with the current planning processes has been that people have been consulted to death. They don't see any positive outcomes of their consultation and, in fact, they see government often ignoring them and coming up with new policies to undermine a lot of that.

We're definitely not saying that, in government having an ultimate role in this, we leave government to do it without actually proper involvement of people. But the question is: how do you get scientists, farmers, the broader community and government actually working together properly?

DR BYRON: Carl Binning told us in Canberra in hearings a couple of weeks ago - and I may not paraphrase him correctly - about a landowner. He said, "Yes, all you people from the city want to tell me how to run my farm, but when you come out here and we stand on the farm you can't actually tell me how I should run my farm, or you give me advice on what I should do that either doesn't work, or it won't achieve the environmental outcomes, or I'll go broke if I try to do that." So from the landowners' point of view, they see everybody else trying to direct, guide, give information, or whatever, and they feel frustrated by that.

MR MOSS: Can I give you an example of our approach, which is where I'd say that we differ with that. Again, Andreas mentioned the conservation auction we're trialing in the Liverpool Plains area of New South Wales. I think that we've approached that in exactly the way I'm talking about, about partnership and, I guess, totally opposite to telling people what to do. Basically, WWF is an environment group that is obviously looking for people that we could work together with to make some change towards sustainable land use management. At the same time, that local community realised they had some issues. They really recognised that they have had significant biodiversity loss, and salinity is an increasing problem there, and they needed to make land use changes.

Now, they have done a whole lot of planning themselves to come up with the things that they thought they needed to do. We formed a partnership to say, "Look, we don't really know what you need to do. We agree with you that there is a problem. Biodiversity is being lost in this area. Salinity is a problem. We also recognise that some of the changes that you're making are actually going to provide public good and public benefit. So we are willing to bring money ourselves and try to leverage government money to pay for that public contribution." But we did not at any stage tell them what they needed to do. We just said as long as you give us public benefit, and as long as we can see that that public benefit is actually being generated, that's the kind of model we support, because it meant it was from the ground up.

DR BYRON: It was their innovations and - - -

MR MOSS: Their innovations. Again, as an economist working for the WWF I can actually say to you it's true. Your firm would take me out onto the farm and I wouldn't know what's going on. However, that's not true of the rest of the organisation, but it's certainly true of me. But I say to them, "That's okay. I still know that I want public good, and I know that I'm still willing to pay for it. We need to work together."

MR GLANZNIG: Just to add to that, Warwick made the important point about property management having to be nested within a catchment plan or a catchment sort of approach that maintains the landscape and ecological processes within that catchment. That's the challenge of providing a nested approach, where you actually develop state and regional standards, and they're then integrated into a catchment plan that then provides a planning framework in which you can nest the property management plan. Again, it's just a question of looking at how you maintain those broader regional values but also enable the farmer to get on with their job.

DR FISHER: Is your Liverpool Plains example pretty much a perfect example of private conservation, in the sense that you've brought some money together with a

conservation point of view? You've gathered a bunch of people from the community and you've made, effectively, some private decisions about conservation values. Is that what you've done?

MR MOSS: I certainly wouldn't stand here on the public record and say it's perfect, but I do think that the concept behind that - and there are other trials of those sorts of thing - is a pretty good concept. One of the things I should probably say about that is that it's very similar to the Conservation Reserve Program in the United States. It's also very similar to the Bush Tender Scheme in Victoria. Where we think we've added value to those schemes has been that those are the top-down approaches. An auction isn't going to work in every circumstance and it's not going to work for every community, but what we were mostly concerned about was actually bringing something from the bottom up, and that's where we think we've added something positive to the debate.

DR FISHER: The thing that strikes me, listening to you and reading your submission, is that in the submission you talk about the fact that you need a portfolio of instruments to deal with this problem, and that sounds eminently sensible. We know that one instrument will not fix a whole range of environmental issues, so we could agree with that. You talk about cooperation and partnership, and the Liverpool Plains example sounds like a good example of that. But on the other hand, to quote you, you say that, "Regulation ensures or gives certainty and confidence about outcomes."

I'm a bit empirical, and that's probably one of my failings. The evidence we're receiving in large measure right across Australia suggests that actually a lot of the regulation does not give certainty; in fact, a lot of the regulation seems to lead to perverse outcomes. For example, in Western Australia, we heard evidence about if a rare plant is discovered, then the relevant government agency comes out and puts a couple of yellow stakes next to it, and this apparently often attracts grader drivers, in a rather adverse way, to the point where lots of people are saying to us that, "We just don't tell the authorities any more, because there are serious perverse outcomes." In Victoria, the other day we were told about the case of the red-tailed black cockatoo, I think, and the notion that a bunch of farmers now do not bother to report where nesting sites are because they're concerned about adverse consequences from doing so.

Now, this does not sound to me like we have a system in place that's generating certainty of outcomes. I guess the thing that I'm interested in is how you see moving forward from the position we're currently in, where the people who are in charge of a large proportion of Australia - private land-holders, basically - can be, in a sense, encouraged back into the fold, so to speak. That seems to me to be the serious challenge, and I just wonder whether your Liverpool Plains example is a better

approach than the sort of heavy-handed regulation approach.

MR GLANZNIG: I suppose I'd just make some general comments. You're focusing more on the threatened species legislation as opposed to the native vegetation. When I look at that, I think back to how the US has taken forward their Endangered Species Act, because they had the same issue with perverse outcomes. The solution there was to really provide strong economic incentives that sort of sit on top of that legislation, so in fact if you do identify a rare plant or whatever, you then pull in a suite of financial incentives to assist you conserve and actively manage that land, and also compensate you for any loss of production. I think that's a fair and reasonable sort of approach to take this forward. It deals with the equity issues that the farmers have and also gets you your biodiversity outcome.

Rather than again trying to reduce the debate to an either/or debate of regulation or no regulation, it's sort of saying that again we need this suite of instruments. I think what perhaps you're highlighting is that on top of those precautionary standards ingrained in legislation is that there is a need for additional financial incentives, and also assistance with ongoing management of critical habitat for threatened species. I think that's the way the US addressed this problem.

MR MOSS: I think you're also raising is obviously the level of distrust that exists between government and community members at the moment. Like we've all said, there have been some significant government failures and market failures in the past. Like you say, how do you bring people back to the fold? I would say still, from my point of view, that the legislation has to set some kind of standard - like we said, the safe minimum standard - that says, "Okay, the information that you might have is insufficient to lead to the social outcome that we want." The legislation at least has to provide some confidence, even if there are obviously perverse outcomes, that the ultimate social goals will be protected.

Again I really want to say there's only one possible mechanism and there's research already in your own department, obviously looking at other types of schemes like this, not just options. Where it's kind of added some value, as far as we see it, is it's been totally supplementary to that legislation where it's said, "Okay, we're not going to go below this level. How do we improve from this situation by providing public contribution as well as private contribution to improve on the current level?" We've put that model forward ahead of some of the offset schemes which have been discussed, because the offset schemes are focused largely on no net loss. In some situations you can't afford to trade off one part of the biodiversity or the native veg for another.

We've said in this case, especially in an area which has already had massive biodiversity clearance, we would be willing to accept that there might be a perverse

outcome at this stage because what's there is so valuable now in social terms, because there's so little of it. Let's put in a scheme which actually encourages increase and, like Andreas says, let's obviously put in assistance to help those people who might be adversely affected. But mostly importantly, let's try and build some trust and communication so that these perverse outcomes don't happen. It may be that if people trusted the government more, if the information was more shared, they'd say, "The government has put stakes there because that thing is really important and they're going to help us to manage it, or we've got skills to manage it. Let's work with them to manage it."

That would be the difference. I wouldn't say take the legislation away to stop that species being protected. It's getting people to agree that it's actually important and we need to work together to protect it.

MR GLANZNIG: I think, just to take that forward and to put it into an institutional context, it also identifies the role of government supporting non-government organisations who arguably have greater trust for land-holders, and a good example is the Trust for Nature in Victoria, where there was a conscious decision made to establish a government-funded non-government organisation to work with land-holders. That model has seemed quite successful.

Similarly, the case study I flagged in Western Australia is that initially with our Woodland Watch program it was challenged by certain government agencies saying, "How is this going to value-add to what we're doing?" The differentiating factor was that we had far greater trust in the community than a central government agency, and consequently we were able to be far more effective in working with land-holders to set aside voluntary areas for conservation. I think it's a question of, at an institutional level, which organisations you invest resources into to work in partnership with land-holders and others.

Another example for WWF is where we've been working with land-holders in the Monaro grasslands. We've had a facilitated working-in with land-holders, supported by a community grant scheme, the Grass Ecosystem Grant Scheme. Again it's providing somebody that land-holders can work with that they trust; they can build good rapport, there's dialogue, and that's seeded with additional small grants just to encourage more active management, fencing off remnants and so on.

We've got another example in the Brigalow area, again where one of our field officers is working with land-holders to conserve threatened reptiles. Again there's been quite a lot of interest in that, and it's a partnership bottom-up approach. But I think underlying your comment about the perverse outcome is trying to enthuse and tap into the natural history aspect to a lot of land-holders. If you get into a good conversation with them they'll tell you all this array of native species live in this back

paddock or down by the river and so on. There are quite a few examples where you've got very dedicated amateur naturalists that have documented a whole array of species.

DR BYRON: That's another example of the information asymmetries, because land-holders actually know a great deal about what's on their property already and frequently, because of this distrust or perverse incentives, they've never told anybody because, as you say, under the existing or the old regime there's only downside. What's intriguing me about what you're saying is that you balance the legislation with some sweeteners so that when you actually find a rare and endangered plant or animal on your property, it's almost like winning a small lottery, rather than stepping in dog-do.

MR MOSS: That's right.

MR GLANZNIG: And I think that takes me back to my opening remarks that the way you do that is by enlarging the pie to which you can invest in these issues. That's why we strongly advocate an environment levy. Australia does need a pool of funds so it can actually provide these sweeteners. That's the only way you're ultimately going to generate a cultural shift. At the end of the day that's what we're talking about.

DR FISHER: On the other side of that, there would be some people who would be suspicious that what you will generate as a balance of regulators will continue to potentially make it worse. I just had one last question for you and that was I guess you probably like regulation more than I, but at some point we have to accept that there will be some role for government. Now, having said that and agreed that there will be some role, one of the things it seems to me that's happening is that a lot of the mistrust in the community is coming from what you just have to call stupidity in the current - not necessarily in New South Wales, but Australia-wide.

A lot of the legislation is just pretty silly, frankly, you have to say now. For example, if you're in Victoria and a prickly acacia grows in your front garden path and makes it rather unpleasant for you to walk to the front door, it's actually illegal to dig it out. Of course, it will be dug out because it is, in that instance, a pest and will be removed contrary to the legislation. Farmers see this and think that's pretty stupid. Regulators potentially - if they catch the person digging it out - feel obliged to go and prosecute them in some instances, which is also pretty stupid in my view. How would you see us getting around those problems which are really causing, it seems to me, those sorts of little issues turning to big issues for land-holders. They're causing 90 per cent of the angst. How do we write decent legislation, given that you guys believe in legislation? How do we get around that particular problem, do you think?

MR GLANZNIG: I suppose just a general comment is I think it's important to always contextualise these exceptions, these pitfalls of legislation. They need to be put against the backdrop of the overarching benefit of legislation. I think you're always going to have examples where there are individuals with examples of hardship, or you're going to have these anomalies where non-logical actions are captured by the legislation. But against that there is the overarching benefit of legislation. I think ultimately it comes down to how you write it, and that's the challenge for those within the respective departments at Commonwealth and state levels.

MR MOSS: I'd certainly like to make the comment in support of what Ricegrowers said before us today, in that I think one of the difficulties - and, like you say, it comes back to trust again - is that people aren't involved in the legislation, especially as governments are seen to keep involved with land-holders over massive tracts of the country. Obviously it's too expensive, so we're going much more to self-regulation. We don't have extension officers the way we did before. People aren't having the contact and discussion, so what they're seeing now is someone coming in and slapping a notice on them without any context.

I support Andreas saying that while the legislation looks silly when these exceptions are brought to light, the ultimate goal obviously might be to protect that particular species and so, yes, if people are engaged with that by saying, "Look, I'm protecting that species elsewhere on my property and, yes, it makes sense to move it here," the legislation should be responsive enough to that. But you wouldn't remove the legislation on the basis of some exceptions unless again you had very good evidence that it was only ever applying in the way you described.

DR FISHER: I'm not talking about removing the legislation necessarily though. I guess I'm really asking a more general question. Obviously you see part of your role as becoming involved with land-holders and doing cooperative things on the ground, and that sounds excellent to me, but do you also see part of your role as becoming involved with legal draftspersons to try and make sure the regulations are more sensible, so when they're applied they don't cause so much community angst?

MR MOSS: That's certainly a resourcing issue for us and this wouldn't just be WWF; this would be all environment groups. We have obviously participated in lots of legislation over the year and we'd see that role. I guess I come back to the comment that yes, I think if the approach to regulation was seen as being - like Ricegrowers said this morning - people actually can discuss and debate what's actually happening with that regulation, then it can possibly be made more workable.

Now, to the extent that we could actually influence that and others could

influence that in the drafting of the legislation, that would be good, but it's also obviously things come up that weren't anticipated at the time. I guess you'd want to be able to be a bit more flexible in the implementation.

MR GLANZNIG: In a previous life, having had to administer a piece of Commonwealth legislation, I think one of our guiding principles was at least to supply the commonsense test, just trying to administer the given legislation so that it made sense and so that you weren't putting yourself in the situation that you've flagged. Again it's just the way that you structure legislation to provide a bit of flexibility at the administrative level so that you can apply the commonsense test.

DR FISHER: I guess we should hope that commonsense becomes more common.

MR MOSS: I'd certainly say that was the motivation behind the Wentworth Group report of the model for landscape conservation. It was in fact to simplify the legislation and to make it more flexible. We haven't seen the Sinclair report response to that yet but presumably there has been a lot of discussion about whether that model will be effective or not.

PROF MUSGRAVE: First, let me make an observation to which you may or may not want to react. There are two main thrusts to farmer concerns that are expressed to us in the submissions made. One is that it's costing them dough, and in some cases catastrophically so. There's a suggestion that this is actually in each jurisdiction, not such a huge number of farmers, but that's just a suggestion. We don't really know.

The other is unhappiness with process, and the discussion so far with you has really focused on this, and the focus of the discussion has also been on legislation, and I wonder if that is the correct focus. People who we've asked the question have tended to say that they thought that the objectives of legislation as enunciated were satisfactory from their point of view. That has mainly been people from conversation groups, I might say, that that question has been put to, but I think that farming groups have tended to say they have no concern with the legislation as such. It's the implementation that they have concern with.

The stories of seeming stupidity or silliness to seeming stubbornness, pig-headedness, to almost corrupt behaviour by regulators on the ground are myriad. That's not to criticise necessarily all of the regulators on the ground. It's to say they've got smoke. What's the fire? The first seems to me to be the process, and the fault with the process seems to me to be the way in which those very broad abstract generalised objectives in legislation are translated down to the coalface. We're getting pretty strong evidence that that is not being done well.

The thing that struck me in our discussion with a number of conservation groups is their obsession with Commonwealth legislation. They want it to be made stronger, more powerful: Commonwealth legislation. They want Commonwealth legislation to be such that the Commonwealth has the power to drag the states into order. The states are the vandals. So are the farmers, by implication, but the states are seen as the vandals. I wonder if there might be some benefit in our management of our native vegetation biodiversity if groups such as WWF would focus their attention on the way in which those legislative objectives are translated into operational objectives on the ground so as to ease that farmer unhappiness. Do you think there's a task there for WWF, say?

MR GLANZNIG: There's some colourful rhetoric being flung around today in terms of vandals and so on. Obviously, if you apply sound policy design principles you want to harmonise.

PROF MUSGRAVE: But can you be concrete, Andreas?

MR GLANZNIG: I was getting there, but it's always good to work from the general down to the specific.

PROF MUSGRAVE: Okay, sorry.

MR GLANZNIG: Call me an analytical thinker, but that's generally how I work. I agree with you, but also think the flip side to the point that you raised, Warren, was that you've also got a case where regulators have permitted 577,000 hectares of native vegetation to be cleared annually between 1999 and 2000 in Queensland, and I think there's a big question mark of whether that was sustainable clearing, and our point of view would be obviously not, the question about effective administration of law cuts both ways.

PROF MUSGRAVE: Indeed, and perhaps I could have couched my example in those terms. I couched it in the farmers' terms. It seems we have an unsatisfactory translation of objectives down to the operational level and I just wonder if WWF is concerned about that.

MR GLANZNIG: Obviously we're concerned from a policy design point of view. You want to ensure the outcome is delivered in the most efficient way, and that does require harmonisation between respective pieces of legislation but we also need to be put on the record that we do agree that the EPBC Act does need to be strengthened. We would like to see the vulnerable threatened ecological community - a matter for national environmental significance to be added as a trigger under the EPBC Act. We think that that would be an additional required precautionary measure to make sure that we don't unduly degrade vulnerable communities.

I think that there is an obvious role for government and a range of other agencies to make sure that you put in place the most efficient framework that delivers the outcome. We've highlighted that we're operating at different levels. We've highlighted local, regional and we also operate at the state level and obviously our involvement with the Commonwealth with the EPBC Act and the implementation of various incentives such as our threatened species network, community grant scheme, the Grass Ecosystems Grants Scheme and so on. I think that we try and engage the process from a number of levels.

MR MOSS: If I can comment, I can hear what you're saying and I certainly think that there is - - -

PROF MUSGRAVE: A little more rhetoric.

MR MOSS: I do support what Andreas says that it really is on both sides. My understanding of the difficulty for some of these state based regulators is that that has really been a big change in their role. They didn't ever really see themselves as regulators for a long period of their history. Their initial role was to try and have this country expand generally on the basis of agriculture and so they were trying to facilitate the use of resources. They were getting people to use these resources, and then suddenly they've had to become regulators, and in many cases a lot of people are very uncomfortable with that. So that's why there's still a lot of approvals of the use of resources which can actually seem very unfair to other parts of the community who are saying, "We're not allowed to do that but Joe knows Jim and they've managed to still come up with an agreement."

I guess one of the points I heard you say was what's the relationship that we see between the Commonwealth and the states and trying to get better outcomes on the ground. There's absolutely no doubt that we share frustration with probably most people in the community at the way that these regulations are being implemented in pretty much all states. On water, veg, biodiversity we're very frustrated, just like most people. That's why we really have seen the need for the Commonwealth to take a tougher role, because they've got particular legislation which is meant to try and help where there have been problems across state boundaries, in particular, say it's things like the Murray-Darling Basin Commission work. EPBC is relevant.

The NAP NHT funding type issues are all where the Commonwealth is playing a role and we're very frustrated that the states in many ways are actually sort of stymieing those processes. Instead of letting money go to the regional committees, the states are trying to get the money to go to them so they can have more control over it. All these things are extremely frustrating to us.

DR BYRON: But having the Commonwealth come over the top doesn't necessarily straighten out the tangled mess, to quote the Western Australian Minister for Agriculture, that the state legislation is in. It may actually add to the mess rather than resolve it.

MR MOSS: Yes, but again, if that's really where the funding has to come from, there has to be some level of partnership between the Commonwealth, the state and the regional bodies, and also there has got to be - the EPB is role for them to play.

PROF MUSGRAVE: I wonder if I could just be a little more specific and less purple. The ACF told us about their thoughts, and I'm sure you've heard them, of a nested approach to the development of natural resource management policy that borrows from what we've seen in the national competition policy. That seems to have been not a bad sort of idea, where you've got a formalised structure with incentives provided by the Commonwealth to the states to meet objectives defined by the Commonwealth, springing from their legislation, which in turn should drive the states to define their objectives better so that they can then induce regions and farmers to conform to these clearly stated objectives; that people on the ground would have to meet if the states are going to meet their objectives so that they can satisfy the Commonwealth as in the national competition policy, as we've seen with water. There's a specific example. What do you feel about the ACF proposal?

MR GLANZNIG: In general terms, I think it's a very sound proposal, and I think what's interesting there is that there is cross-compliance. You need to implement a given suite of actions to pull down the Commonwealth doors, whereas under the NHT that hasn't been the case. There have been agreements but they're not being fully honoured, implemented by the states. Whereas under the competition policy, unless you produce the results that you said you're going to produce, you don't get the Commonwealth dollars.

We think that's why the competition policy works and that's why there has been a bit more colour in the way that the states have implemented the NHT and now the NAP but, on the other hand, you get into this situation: if the Commonwealth withdraws dollars, is that going to be a perverse incentive or do you then engage in an ongoing dialogue with the states? I think the general point about tying dollars to specific actions is a good one, because then you're providing a big sweetener but you're expecting a certain action to be implemented.

PROF MUSGRAVE: Suggesting an outcomes oriented approach wouldn't tie dollars to specific actions but to outcomes - to the deliverer of the outcomes to decide the actions.

MR GLANZNIG: Sure.

PROF MUSGRAVE: But relating to this, I can see great virtue in the ACF proposal but what bothers me is what do we do below the level of the state government, and this brings me to the Wentworth Group's catchment care idea. I guess I'm asking you to be the Sinclair Committee now, but who will develop the catchment care principles? Who will be responsible for implementing them? How? Have you got any thoughts?

MR MOSS: I think there are some thoughts within the Wentworth Group model, which is empowering the local communities obviously through the - - -

PROF MUSGRAVE: That's just an abstract concept, Warwick. Can you take us beyond that?

MR MOSS: I guess no, I can't, because I can't create the Sinclair report.

PROF MUSGRAVE: That's a nasty question. Sorry.

MR MOSS: I do think that we've kind of covered some of those principles. You need to have the empowered catchment management bodies which obviously have the local community involved in them. That's really where they're having this devolution as much as possible to the local people; capture the local knowledge and agree on the outcomes.

PROF MUSGRAVE: Do you think we've done that very well today?

MR MOSS: I don't think we've done that very well today, and most people would probably say we haven't, but that doesn't mean to say again that the model can't work, but I think you're quite right, I think there's a massive frustration that people have been asked to come off it, plan after plan after plan.

PROF MUSGRAVE: Yes.

MR MOSS: Then again, someone might just come in straight over the top of that plan and say, "No, we're doing something else," or still I haven't seen many plans signed off in the whole country. How many plans have actually got to a point of even being finalised so that they can be implemented.

PROF MUSGRAVE: Yes. Give us some grounds for hope, Andreas.

MR GLANZNIG: I suppose just looking at what I see as one of the virtues of the Wentworth Group model is what it does do, though, is set the need for targets, and then basically you've got that infrastructure in place, you have standards, targets and

then they're translated down to the property level. I think one of the interesting things with the New South Wales legislation is it focused more on process. It put in place a process to set up regional plans and so on. It didn't actually define the standards that you're attempting to do and I think that's going back to this idea of the nested approach and then the virtue also of national approaches is that you can actually articulate the clear outcomes that you would like to achieve at the national level. Then you gradually take them down to the regional level as standards, and then you leave the mechanics up to the region to put in place a whole range of instruments to achieve those given objectives and standards. I think that's a sound approach.

PROF MUSGRAVE: We haven't got our structures worked out for the regions. It seems a challenge.

DR BYRON: I'm sorry, gentlemen, I think we could probably continue to discuss your submission for at least a whole day or two but, in the interests of moving on, any final concluding comments that you'd like to make?

MR MOSS: Again, I'd love to spend all day, but if I could make a very quick comment in relation to what Warren said, particularly about the costing dough comment, if I could, and I also want to make one comment in response to the submission you received by Prof Jack Sinden, and if I could just do those very quickly.

DR BYRON: Okay.

MR MOSS: We have seen, obviously, a lot of comments about how much dough this is costing individual farmers, and we do think that there's obviously a major issue there. One thing I'd like to come back to on the Liverpool Plains example is again that there's examples showing how much farmers in the Liverpool Plains have suffered from restrictions on clearing on their land. At the same time, we've had to generate this mechanism in the Liverpool Plains to try, if you like, to purchase environmental services from farmers to try to rehabilitate those areas which have suffered from previous clearance.

So I think it comes right back to the net costs idea Andreas was mentioning that, while you're not looking at benefits in this inquiry, you have to consider some of the benefits as costs, given that the costs that are being incurred from either past practice or current practice need to be brought in in relation to any costs that people are suffering at the moment. Yes, it might be true that that farmer is now suffering, but the reason they're suffering is because there's been a lot of development to that point which is now having to be corrected by other mechanisms. So we need to look at the net effect of that, and then we need to ask the question: is that share

appropriate? This farmer is having to bear this cost, but so is the community bearing this cost, and maybe those costs are actually relatively proportionate. If, of course, we then see that somebody is bearing way too much of the cost, obviously that's inequitable and we need to shift it. But it's not just purely that one sector of the community is bearing the cost. All sectors of the community are bearing the cost, and all sectors probably have to share in making the changes with cost.

The second point I'd like to make, if I can, is that I noticed in Prof Sinden's submission to you - and it's a minor point - at the end he produced a report showing the costs to land-holders of native vegetation in the Moree Plains area. We critiqued that report, and just in a footnote at the back of that submission he comments that we agree with his data methodology and conclusions. We're saying that is actually incorrect, and in our submission we gave you a copy of our critique of his report, where it says we actually disagree with those conclusions and his methodology. So I just refer you to that, that if you are looking at that point, please just refer to our exec summary where it says what we - - -

PROF MUSGRAVE: Just a quick question. In particular you had a concern about his sampling.

MR MOSS: Sampling was one of them. He made extrapolations on the basis of survey samples. Now, that is obviously what happens in a lot of techniques, but in our report - that it seemed to be very unrepresentative of the catchment to be able to make such extrapolations. To be honest, I did that report a year ago and I can't remember all the criticisms we had but, in particular, we showed that if you just vary some of his assumptions, you change the estimated cost from about \$120 million down to as low as, potentially, 17, purely just by tweaking some assumptions in his method. We're just saying that it doesn't seem like a fair basis to estimate these costs, but we are saying in our submission to you that, if you can provide guidance to people on how to do these assessments correctly, we may be able to get some sort of better handle on what these costs really are.

DR BYRON: In Jack Sinden's defence, I probably should add that his textbook, with Al Worrall from Yale, was probably THE textbook in resource and environmental economics in at least five countries that I've taught in for about 20 years, and he's a very highly respected international authority. He's also clearly, in this case, of no apparent affiliation.

MR MOSS: Yes, my comment has absolutely no criticism of Prof Sinden. Although I recognise he's very well respected and his work is good, I would just still assert there were major flaws in that work from our perspective, and that's why we've produced a report. So presumably you can weigh up his report and our critique and see what you think.

DR BYRON: Thank you very much. The final, final last word.

MR GLANZNIG: This is my concluding comment to pick up a comment that Brian made about looking at the perverse outcomes of, say, threatened species legislation. Again, it's just a comment of necessarily throwing the baby out with the bath water. This legislation has a very important role to play in maintaining the safe minimum standard, but the opportunity arises in what you can overlay on that legislation to actually provide the appropriate financial incentives to really provide the sweeteners to get land-holders to declare those threatened species and their habitats and basically then, ideally, attract the appropriate funding to enable ongoing management of those habitats.

DR BYRON: Thank you very much. That's a good point to wrap up on. Next we have Mr Hespe.

MR HESPE: My name is Stuart Hesse. I'm a consulting forensic engineer. I live at Rockley in the central tablelands, where I have been woolgrowing for perhaps 20 years, and I'm formerly a director of the Australian Woolgrowers Association and a past member of the New South Wales Farmers Association. Do you want me to go ahead with my submission?

DR BYRON: Yes.

MR HESPE: Well, as I said, I believe that all these types of legislation, with which I understand this inquiry is dealing, need to be looked at firstly on the basis of the background against which the legislation was enacted. It is my belief - and I've examined the thing fairly closely - that a great deal of this legislation has been enacted on the basis of emotive rather than strictly practical scientific or historical evidence.

There is no doubt whatsoever that the fundamental issue of the question of biodiversity and native vegetation is a question of what you decide at the particular time is native. That's the first point. The second point is that there is very dubious evidence that the clearing has extended to the extent that it has been claimed. There was a great deal of evidence on the other hand, which is not very often exhibited in the public arena, that these claims are grossly exaggerated. So we have the question of quantum - in other words, how much clearing has been done - secondly, the relevance of biodiversity and the relevance of the word "native" in terms of vegetation - in other words, is any particular form of vegetation preferable to another - and I'll come back to that later.

Then we have the whole question - which I think is probably the overriding one - and this is this question of global warming. There is very little evidence, in fact I could say there is no believable evidence that global warming has occurred to any greater extent than the normal natural process over even historical times, much less geological times. As I said in the report, there is plenty of evidence that over the past 10,000 years temperatures have increased enormously more than they have over the past century or 130 years, and subsequently have gone down again.

Any objective scientific evidence - and by "objective" I mean those who have got no axe to grind or don't want to rely on government grants for further research and so on - has clearly said that the evidence of global warming is at the very best questionable. As I mentioned here in my report, Fred Hoyle was very emphatic about the whole question of the amount of carbon dioxide in the atmosphere and its effect on the reflectivity of those particular wavelengths which it does trap, and pointed out that you had to have an order of perhaps five times the amount before it had any real effect, and yet we are being told consistently by the media, and consistently by the people who are behind the - how can I put it - explaining to the

government why these sorts of legislation should be enacted - that the amount of carbon dioxide in the atmosphere is already at a dangerous level.

Now, there is some evidence of course that the atmosphere is increasing in temperature. But look at it. The Intergovernmental Panel on Climate Change, which is probably recognised as being the official spokes-organisation for this sort of thing, says it has raised .05 degrees plus or minus .1. Now, this is just arrant nonsense. The order of accuracy is twice the claimed change, and you will probably remember that the major increase in atmospheric temperatures occurred up until about the mid to late 50s, and during the 60s in fact there was a very marked decline, and there was a lot of conjecture in the media that we were entering into another ice age.

So we've got to look at these things very carefully and objectively, and not let our emotions run away with any preconceived idea. Because, if that does happen, then you run into even greater dangers, and I think that's the real thrust of what I want to say, and the danger that we've run into already is that a very important sector of the economy is being grossly disadvantaged by this type of legislation.

Now, the question of global warming comes into the question of native vegetation, because global warming has been promoted by those with that point of view as being the result of the burning of fossil fuels and also by the fact that the carbon dioxide produced is not trapped by growing vegetation. So that the claim is that native vegetation, or any vegetation I suppose for that matter, should not be destroyed, partly because of its effect on the atmospheric content of carbon dioxide. There are other, of course, very important factors, and I'll come back to those in a moment, but that is one of the overriding ones.

So we have the situation where, because of largely emotive and certainly not scientifically based claims, very important and very long-term effective legislation has been put in place and, as I said, the major impact of this has fallen on one sector of the community, and that sector of the community that is already under stress. I'd say that 75 per cent of farm owners and operators have to rely on external income to maintain their viability as a productive unit, and this of course is a very serious matter.

Also, we have a very important factor in that over a long period of time the productivity of native soils has reduced. This of course was inevitable because of the pre-existing nature of the soils themselves. You know that Australia is the second harshest continent in the world after Antarctica, and it has the most degraded soils and geomorphological structure, so that the soils are very fragile and were initially very infertile, except in small pockets.

This has been overcome to a large extent by a number of different innovations

in agricultural science but in the longer term even these palliative effects have been reduced, so that the per-acreage productivity is gradually declining, and needs to be addressed as well as other questions. It's not going to be helped - I mean, that aspect of it is not going to be helped one jot nor tittle by any of these pieces of legislation. There's nothing that these pieces of legislation would bring into effect to increase or improve the productivity of the already in-production areas of agricultural land.

Just as a by-product or a by-way, the amount of land held in freehold in Australia is very small and, if you take out the parts of it in built-up areas, the cities and towns, you're getting to around about 10 per cent or less. So if all that was cleared, and of course it wouldn't be, it would make no difference at all to the overall effect on the question of native vegetation itself, on the question of global warming itself; it is such a small proportion of the likely outcomes.

Now, to move to the question of native vegetation, as I said, you first have to define what you mean by "native vegetation". There's no holy significance about any particular species or genotype, and we know that the Australian flora has been completely changed over the last 40,000 years, basically because of Aboriginal hunting methods, which have been used - the traditional firestick hunting method, so that in particular the eucalypts are a direct result of that change in the flora.

So what do we take as being "native vegetation"? Is it the vegetation at a particular point in time? Is it the vegetation 40,000 years ago, or what? And why are we so concerned about "native" vegetation? It's vegetation as such that has an effect on the geosphere, so I just find it very difficult to accommodate the almost holy significance that has been applied to native vegetation without even attempting to define what is "native".

There are other aspects of the question of retaining existing vegetation - let me put it that way. In a lot of areas native vegetation by its nature means that the undergrowth or the understorey, and particular grasses, are very sparse. In other words, the tree population takes first grab, if you like, at the nutrients, so that the sward or the ground cover is very sparse, and this in itself creates an environment for erosion. I can show you plenty of areas that have never been touched by human intervention - in other words, an axe has never been put to the trees and a plough has never been put to the ground - where erosion is very very bad indeed. In point of fact, the best protection against erosion is a good heavy sward, and you won't get that with native vegetation.

So the arguments that, "Oh, removal of native vegetation will give rise to very bad erosion," is totally false. I can give you examples of where sward has actually been used as the basis for drainage channels, so that the proof of the efficiency and effectiveness of a good sward is very available to be seen. So that, if you like, I feel

that demolishes any question of the necessity to maintain native vegetation for the reasons of erosion. Maintain vegetation, certainly, because you have to bind the soil surface to prevent erosion, and very often trees, effectively used, are advantageous; I'm not questioning that.

You've got to only look back to the old regulations requiring no clearing within, I think, 30 metres of a watercourse, and that legislation was in place and has been in place - well, at least 50 years, and that in itself is a far better approach to conservation - which I like as a term better than any of the others in use because conservation is really what we're talking about. We have to conserve the Australian infrastructure and the Australian landscape, if you like, but more importantly the structure of the Australian soils. It doesn't follow from that that the way you do it is to stop judicious clearing, and I want to use the word "judicious" with emphasis, because nothing that I am saying here I want you to interpret as meaning we'll just get rid of the lot; far from it. I believe that judicious clearing and careful reworking of the areas that are cleared is the best way to maintain the existing landscape and still allow productivity to increase. I'm jumping from place to place here, I'm afraid, but the only alternative is simply to regurgitate my report.

DR BYRON: We have read it.

MR HESPE: You've got the report, so you don't need me to do that.

DR BYRON: Not a good use of your time.

MR HESPE: No, certainly not. Also, on that point of existing legislation or existing information, the New South Wales Department of Agriculture for years has produced a series of documents classifying land into various categories, starting from totally arable going right through to marginal and specifically proscribing, not in legislative terms but in advice terms, clearing of certain types of land. Now, this is the approach that should be adopted, not a blanket refusal to permit any clearing. What should be done is a very clear expose of the benefits and disbenefits of clearing certain types of land and also, if you like, the prohibition of specific things, such as within a certain distance of watercourses, as was already the case. As I say, that legislation, if my memory serves me correctly, has been in place for at least 50 years.

DR BYRON: What you're suggesting there is that a lot of progress could be made simply by provision of information to land-holders, rather than prohibitions and taboos.

MR HESPE: That's absolutely fundamental. I don't think there is enough - and nor has there ever been enough - promulgation of specific information to land-holders. There's a lot of broad pictorial sort of stuff which doesn't get right down to the crux

of the issue. But I think that if land-holders, particularly these days when land-holders are much more aware of what the results of poor practice can be - would be of far greater benefit than draconian prohibitions because, apart from anything else, that just simply gets their backs up. They don't want to cooperate about anything in that case, and that's just not the way to deal with people. After all, you're relying on the land that they're sitting on for a living. I don't think that aspect of things has ever come to the mind of the legislators.

DR BYRON: The point that you've made in the submission is that the land-holder is actually the person who is best placed, who has both the local detailed knowledge and the incentives, to want to look after the property well for handing on to future generations and so on, or even just for maintaining the value of their capital asset.

MR HESPE: Exactly and, bear in mind, most of them, that's their only asset - and very often a depreciating asset and very often offset against considerable debt. So they've got all sorts of incentives to maintain that asset, but this legislation creates another aspect of it: it brings back the old attitude that used to be in place of extracting as much as possible out of the existing land without bearing in mind that that in itself degrades it by way of its fertility and so on. In other words, there was an attitude which has long since disappeared but it was there, that the land was there; let's get a good crop every year and really without taking any consideration of what might come in five years' time. A lot of that was ignorance.

You've got to bear in mind that a lot of the things that are being complained of occurred when there was ignorance in the farming community and in the community at large as to the effect of farming practices and other practices, but that's largely disappeared. Every farmer that I know - and I know very many - fully understands that you've got to look after the land, or else in a few years' time your crops are going to halve, or more than halve. The same thing applies to livestock: if you don't maintain and manage your land properly, the number of dry sheep equivalents that you're going to run in five years' time is going to be a lot less than you can now. So continued - I was going to use the word "education", but I think that's being a bit naive - promulgation of hard information, and by "hard information" I mean something that the farmer will understand and can actually put to use will do far more for maintaining the land than any of the sort of legislation that we're talking about here.

I mentioned earlier that I perceive a danger of going back to the old bad ways of getting as much as you can out of the land without too much concern for the future. This sort of legislation creates a risk of that happening again because, on the one hand, farmers with definitely viable but tempered country cannot clear it but, on the other hand, the cost of buying land is going up because of, if you like, a static base of land availability which is being encroached upon by people from the cities

buying up small parcels at a time and going up and living the country lifestyle, which effectively takes that land out of production. Many farmers have had to sell off portions of their land in order to buy groceries. So that reduces the available base of viable land and it also increases the cost. Now, I can give you an example of that.

In the Central Tablelands, improved land, bare - some of it being arable but not necessarily all - is \$1500 an acre. That's the going price at the moment: \$1500 bare. That's no structural improvements, improved land - not necessarily all arable, but some arable, so that if you're running livestock you can grow feed crops and so on. That is, of course, an increase in price over the last 10 years of about 30 per cent. Now, in the same time, uncleared land has reduced in price, so that means that a farmer who has uncleared land but which would otherwise be clearable and become definitely viable, has been deprived of an asset. You're talking about \$1500 in value for improved land against 5 or 6 hundred to improve it. So you're talking about 900 to 1000 dollars an acre that has been taken away from the capital assets of that farmer.

These things are very serious as far as the farming community is concerned. Those who are fortunate enough to have all their land cleared are sitting pretty; those who are not and who have either consciously, purposely or because of other circumstances kept land which otherwise they would have cleared, uncleared, have been deprived of that asset. I could use the word "robbed", if you like, and that is a very serious matter. It's certainly not the case that all good land has already been cleared. That's completely wrong. The issues paper asks a number of questions about why hasn't land been cleared and is the land that's uncleared as good as or worse, or whatever, than land that has already been cleared. The answer to that is that it depends on the individual case.

I think it goes without saying that there is no land-holder who would clear land unless he was sure that it was going to be as good as the land that he's already had cleared, because otherwise he's just spending money unnecessarily and creating problems for himself. We get back again to the question as to who is the person best qualified to make that decision. I reiterate again that the man best qualified to make that decision, properly advised and with proper information, is the land-holder himself. He's the only one that knows whether clearing a certain area is going to produce land as good as the land he already has in use. This is a thing that cannot be achieved by a blanket prohibition such as the legislation that we're looking at.

To get back to what I said earlier, that I don't at all mean by anything I say here that there should be complete open slather, if I can use that word, it depends very much on proper education and pointing out to farmers the limits of the effectiveness of clearing; most of them already know that. No-one clears steep, stony ground and nobody clears up against an existing watercourse. I would say these days most

farmers clear on an appropriate contour basis, leaving tree belts on the contours to provide, in the first place, a run-off trap and to provide also a mixture of wood lot, space for bird life, that sort of thing, and also for shelter for livestock. So properly organised and scientifically based clearing is a benefit to the landscape not a detriment to it, and to say that this isn't likely to happen I suggest is completely false.

We then come to the question of biodiversity. Now, there is a fiction in the general community that somehow or another different species interact together to maintain a stable environment. Any ecologist - and I've quoted Birch in this regard - points out that this just isn't so in nature, that nature is a constant battle between species and gender types, and there's not one jot nor tittle of evidence that the disappearance of any particular species has any effect whatsoever on the longevity or the effectiveness of what is remaining. The history of the world is the disappearance of different species and the re-emergence of others. Again, I've got to emphasise I'm not advocating, "Well, to hell with it; let them eat cake."

I believe that we've got to look after what is there, but to say that the world's future depends on the maintenance of the two-toed sloth, or whatever, is just farcical. We do the best we can to maintain what is there but at the end of the day it's the future of, if you like, the human race that has to come first in any decision-making process. In that respect, a blanket prohibition on clearing, the sort of - I'm not really familiar with the wildlife legislation, but I suspect that that might have similar consequences, and I don't want to enter into that because I don't know enough about it, and I might make the wrong sorts of assumptions - but I suspect that that has the same sort of problem about it as the native vegetation clearing legislation.

So all in all the thrust of what I'm saying is this: in the first instance nothing should be enacted that is not properly scientifically and historically based. It is completely wrong to have this sort of legislation based on emotive issues, that are promoted by people who don't really understand the fundamentals.

Now, *nil nisi bonum*, but I had as a client many years ago, when he was still earning an honest living as an architect, Milo Dunphy, who was the leader of the Total Conservation Centre, but in those days he was in what was called the Colong committee, and in fact I appeared for the Colong committee once in the Mining Warden's Court, in regard to the Marulan Quarry of Blue Circle Cement.

The reason I mention this is that Milo Dunphy was one of the leading figures in conservation and other circles of that nature, and I know from a long period of contact with him - as I say, he was a client of mine - that the fundamental basis of everything that Milo stood for was very emotional, and was based a great deal on the effect it might have on the activities of his group as bushwalkers. In other words, he wanted to maintain everything as it was; didn't want any tree cut down, he didn't

want a blade of grass disturbed, and it was purely on an emotive basis. There was no fundamental or scientific basis of what his views were.

In point of fact, the objection they had to the Marulan Quarry was that during the overburden removal process, boulders were rolling down the hillside, still on the property of Blue Circle Cement, but running across tracks that the bushwalkers were walking on - actually trespassing, as it turns out, but no-one objected to that - but they were more concerned about that than anything. In fact, that was the whole basis of the claim in the Mining Warden's Court.

So what I'm saying is that no matter how genuine these people are - and Milo was completely genuine, but the basis of what he was aiming to do had no relation to any scientific or fundamental thing of importance. So my plea is that, firstly, no further legislation of this sort should be enacted without a thorough investigation on a scientific and historical basis. Secondly, that the existing legislation should be amended on this basis. Thirdly, that any legislation of this type should have proper public scrutiny.

Now, on this particular point I want to draw attention to the legislation about - I can't remember its title, but it was related to watercourses - and there was a public hearing held in Bathurst on this particular legislation, which only pertained to the Macquarie Basin. In other words, I understand that each river basin was put forward to public scrutiny in the area of that basin, and the particular inquiry at Bathurst was in regard to the Macquarie Basin, and I went to it, along with a number of people in the district.

I was horrified to find that after a preliminary harangue from - well, from the departmental officers - the people were split up into groups of half a dozen or so and asked to produce a commentary on the legislation. But it was only after a short time I realised that each one of those groups was seeded by a member of the department, and I know for a fact that what our group said was reported completely wrongly by the departmental officer. Now, in my way of thinking, that is not transparent public scrutiny; that's sort of, if you like, an attempt to - well, to brainwash those that were there and to produce an outcome that had already been decided, but providing the apparent course of public scrutiny.

Now, these sorts of things need to be addressed. I've seen a number of that type of public examination of this type of legislation, where the outcome has already been decided, and no matter what the participants might say, they are reported as having said something quite different. That is from my own personal experience, that particular one, and I deprecate that very much indeed. I suspect - although I've got no proof whatsoever - that a great deal of this type of legislation, where it is open to public scrutiny, is dealt with in the same way.

As someone here before said, I could go on all day. I don't propose to do so, but I think there are some things I said in my report that I haven't touched on again. There is one thing I want to touch on - or one thing I want to go over again, and that is what I call the retrospective - well, I'll use the word "theft" of land-holders' capital by the blanket refusal to allow clearing. I produce some figures, and those figures, I mentioned earlier, are very definitely based on fact. If anyone likes to go about and inquire, they'll find that they're correct.

Secondly, I just wonder how this stands in regard to legality. A number of QCs that I have dealings with in my forensic engineering role hold the view that in terms of the constitution, that this type of legislation is very dubious indeed. But of course, who is to challenge it? There's no farmer that can possibly do it. The New South Wales Farmers Association won't because - well, with respect, they're far too concerned with making sure that they don't upset anybody. So I raise that point. It's impossible to prove, but that's just my view.

DR BYRON: Yes. Well, that point has been raised by a few other people too, and I think you're right in saying at the very least it's a very contentious legal point, that's probably going to go all the way to the High Court one day.

MR HESPE: Yes, well, it would be good if it did, but as I say, who will do it. You know, it costs money. On that particular point, there's not only the constitutional side of it, but there's common law rights involved. Now, there is a test case currently - and of course I can't talk about that, because it's in the court at first instance that there's been a decision, but it's now into appeal, so I can't mention that. So that is another aspect of the whole question.

DR BYRON: Yes. Well, I think we've heard and we've got the main points loud and clear. You've raised a number of really good points, particularly the one about the legislation being on a sound scientific base and - many other people have said to us in hearings that sometimes the basic data on which regulations are based is seriously flawed. We've been given examples of where maps are wrong and all these sorts of things. So it's most unlikely that we're going to get sensible policy decisions if they're based on flawed data or flawed scientific analysis. I think we're going to have to call it to a halt there. Thank you very much for taking the effort of putting in a written submission and for coming today.

MR HESPE: Yes. Before we go, could you enlighten me as to who WWF is?

DR BYRON: The Worldwide Fund for Nature, who were here just before.

MR HESPE: There's one thing before we go I want to draw to your attention to,

that in the list of participants here, I am the only individual - and this is the sort of thing that I also raised in my submission - that, if you like, the transparency of even this inquiry I take leave to object to.

DR BYRON: That's why we're having hearings in Moree tomorrow.

MR HESPE: Yes, but I point out, Moree and Cairns are the only two places outside the capital cities that you are having hearings.

DR BYRON: But we have made extensive visits, we've had town hall meetings, we've had - sitting around the kitchen table on farms all over New South Wales and Queensland.

MR HESPE: Well, I haven't heard about it. I'm not saying that that proves anything, but I'm simply saying that the advertising, or whatever you like, about those things hasn't reached me. Could I suggest that the people that are most concerned with these types of legislation are rural land-holders.

DR BYRON: We're very well aware of that.

MR HESPE: There are very very few of them left. It would cost very little - and their presence is readily available from Departments of Agriculture and elsewhere - it would cost very little to advise them by direct mail, in future inquiries of this nature, because there's very little chance of them noticing the advertisements otherwise. That's a very important point.

DR BYRON: Which is why we've also had radio and television and the local newspapers like the Cowra Guardian and the Caloundra Star - - -

MR HESPE: Well, you didn't have it in the Western Advocate in Bathurst. Anyway, I have another question. While I read the briefing paper, is the reason for this inquiry to determine the effect on the Australian economy, or what? I mean, the Productivity Commission seems to be a rather unusual body to be conducting an inquiry into the effects of native vegetation legislation, unless it is looking into the effects on the actual Australian economy. Is that the reason? The terms of reference to me didn't seem to be sufficiently clear to answer that question.

DR BYRON: Well, maybe it's most efficient if I explain that to you later. I'm quite happy to do that.

MR HESPE: Yes.

DR BYRON: But I think out of courtesy to those assembled, we probably should

suspend and - - -

MR HESPE: All right. Well, just one last thing on that question of the economy, I think that that is a very important factor. I've already drawn attention to the fact of land being taken out of production by hobby farmers. Australia is producing, in a good year, enough food for 100 million people. The need for that is not going to diminish. Agricultural produce is about 25 per cent of our export earnings. I've already mentioned that the actual productivity of existing land is gradually being depleted and will have to be improved by extra capital input into that land by way of improvement - fertiliser and so on - which isn't being done because of falling farm incomes.

By taking additional land effectively out of future production by this sort of legislation, it's having a very real effect - and will have an even greater effect on the Australian economy than it's having at present. I think that is a factor that I've mentioned in the report but I want to emphasise again here - that in terms of the Australian economy and the efficiency of its operation, this can have a very deleterious effect.

DR BYRON: Thank you very much. We'll adjourn now and resume at 2 o'clock with the New South Wales Farmers Association.

(Luncheon adjournment)

DR BYRON: Thank you very much, ladies and gentlemen. We'll resume with the New South Wales Farmers Association. Gentlemen, If you could each introduce yourselves for the transcript and then summarise your main points and we can discuss, thank you.

MR STREAT: My name is Jonathan Streat, policy manager with conservation and natural resources with New South Wales Farmers Association.

MR KEOGH: I'm Mick Keogh, general manager of policy.

MR RENTON: Stephen Renton, senior analyst.

MR KEOGH: Thanks very much for the opportunity to address you this afternoon. The association has provided some information already and been involved in some visits that you've made, and we thank you for making those visits to some rural areas. We also have another 19 or 20-odd submissions from individual members who have asked that they be forwarded on to you, so we will table those and provide them for your reading. I guess we've been actively involved in and canvassing these sorts of issues for quite some time now, and I think we don't necessarily want to go over a lot of old ground but, in summary, the members' issues that we run into on both threatened species and native vegetation legislation and its impact revolve around three reasonably familiar themes.

The first and probably the most frequently mentioned one is equity, where individuals believe that what they're being required to do, how they're being restricted, really basically generates what is essentially a public good at an individual cost and, therefore, the whole approach is inequitable. I guess the second point they raise continually with us is questioning of the effectiveness of the regulations, particularly things like the native vegetation legislation and threatened species legislation in New South Wales which puts very blanket restrictions on a whole range of activities and generates with it a range of perversities and a whole range of issues that individuals end up responding to, often knowing full well that in terms of effectiveness they're not really achieving what the presumed objectives of the legislation or the regulations are.

I think the third one that arises is related to that, and that's the issue of economics; both the economics of regional communities and individuals but also the economics of how governments go about attempting to achieve conservation outcomes. The blanket regulatory approach, the command and control approach, certainly doesn't seem to be sensible economically if the desire was to get those results in a least-cost way to the community.

We have a number of activities under way that we hope will provide

information that might assist you, including a random survey of farmers right across the state to get some quantitative information about the impacts and the number of farmers that the regulations have had a direct impact on. We will provide that in the near future. We have been, as I said, active on this issue in New South Wales for quite some time, since 11 August 1995 to be exact. There is some reform under way at the present time in New South Wales.

The state government went to the last election with a commitment to revisit the whole issue, particularly in relation to protection of native vegetation. The group that was established to look at that has now submitted a report to the minister and the premier on that, and I think the premier has about 60 days to respond, so we're hoping to see some change in terms of the nature of the regulations and the way the regulations are administered throughout the state in the near future. We do need to acknowledge that.

I think broadly, however, we'd still suggest that the command and control regulatory mindset is very pervasive and still alive and well in both Commonwealth and state bureaucracies, and we think a lot of the cause of the problems that members have experienced and farmers have experienced comes from that almost philosophical approach that command and control is the only way to get a behaviour change or a cultural change in communities and particularly regional areas where land management issues are at the fore.

We've cast around for quite some years now and looked at a number of alternative approaches to this issue. One that we've particularly I think perhaps brought to your attention but would do again is a variant, if you like, of the Conservation Reserve Program that operates in the US. It has a number of features that we think would do well to be adopted here in Australia and in New South Wales and that may well generate much better outcomes and much better results at considerably less cost.

If we just outline the key features of that, and I suspect you're familiar with it, basically it involves the development of an environmental benefits index or an environmental scoring system to put some quantitative assessment around the various aspects of environmental actions that might be taken to improve the environmental features of particular areas of land. Allied to that is a voluntary tendering process that allows land-holders to put together bids or proposals for actions they might take or series of action they might take to generate some environmental benefits. Part of that bid is their assessment of the likely cost that might be involved in those activities being carried out on their land, and emphasising that the process is of course voluntary.

The outcome of that bidding process is typically the negotiation of 10 to

15-year contracts with the relevant land-holders. In the US it typically involves the cost-sharing of capital investment - that is, fencing and those sorts of things - and then an ongoing rental payment for up to that 15-year period in return for the land-holder carrying out the range of activities identified. We recognise that the origins of that system in the US are from set aside and crop programs that aim to restrict production, but we still think that in terms of generating environmental benefits at least economic cost there's a lot of merit in them.

We would also see that such a program as that could be broadened and allow the progressive dismantling of a lot of the regulatory regime that exists at the moment so that, rather than just using that scheme for positive action by land-holders, it could also be incorporated as, in a sense, a qualitative assessment of a duty of care standard and would allow assessments of whether actions being proposed by land-holders were going to take them to a position where in fact they were judged to be causing harm to the environment, or whether in fact some flexibility might exist about how they could go about the management of their land.

We also suspect that it might be interesting to explore, from the point of view of providing a platform for what is at the moment the potential environmental accreditation schemes that certainly the EU talks about, and whether in fact they come to reality or not I guess is a moot question. That will depend on trade and other negotiations but certainly there is a lot of discussion about putting environmental issues into things like WTO agreements associated - and being discussed at the moment.

The other angle that we think is worth pursuing in relation to this whole thing is that most of the schemes that have been trialed at a pilot stage in Australia so far, such as the Bush Tender program in Victoria and the Environmental Services Scheme in New South Wales, tend to be very much pilot schemes, and I think one of the biggest limits to them is that they have got a limited and defined amount of funding available. If you consider that land-holders' investment time frames are typically 10 to 15 years in a farm operation, a short-term funding scheme that looks like it's only got finite funding available over a period of time is not going to be attractive. It's going to take a while for farmers to reorient their management system and the way they operate to accommodate participation in some of those programs.

We've been examining the potential for part, if not the majority, of funding for such a scheme to come from an arrangement whereby tax credits might be generated as a result of a tender, and that tax credit might end up being an annual tax credit rewardable over an extended period as part of a contract. We certainly haven't developed that to any degree but think there's some interesting potential there. We certainly are a little wary of short-term or defined funding arrangements for programs such as this, given the nature and the time frame that most farmers operate

in terms of making their investment decisions.

As I've said, in summary, we've made a number of submissions and have some more material that we're going to put forward but we thought we might take this opportunity, rather than going over old ground, to highlight what we see as perhaps a positive way to achieve some of the stated objectives of some of these regulations without perhaps a lot of the economic costs and a lot of the perversities that seem to exist with the command and control approach that exists at the moment. Thank you.

MR STREAT: I was just going to support what Mick said. One of the key things we've found in our tours and our exploration of this issue - mine has only been in the last six months or so - is there seems to have been a fundamental failure when moving towards applying science to the landscape to achieve an outcome, but there was no real recognition of the social impact that the application of that science would have. It seems an oddity that in trying to generate an environmental outcome based on a regulatory system, the goodwill and the warmth that was there - the natural inclination to have a sympathy with the environment or the bush - principally that's how it's seen. It's not really seen as environment. It's only seen as bush, as scrub.

That simply was eroded by the manner in which the regulatory approach was (a) undertaken and (b) the consequence. It had a massive social impact, reflected through things like land value. How do I pass a decreasing land value on to my children, what's the social implication of having smaller towns and those sorts of issues? The declining population is probably as much in agriculture a result of improved productivity as many other things, but the regulation itself didn't provide an opportunity to build on that natural inherent goodwill that's in most people about their surrounds. It went against that. I think that's one of the prime failings of the native vegetation legislation and, to a lesser extent, the threatened species legislation.

I think by turning that into a positive through some type of system such as Michael has outlined is really where conservation and biodiversity conservation - if you read the act you can only interpret that was the intention of the objectives of the act - is where our society or legislators need to head. It seems to me an oddity that you would want to stifle or force a regulation onto people that (a) they don't want, when you have the opportunity to just encourage people to move towards the type of system and approach you want. An example is if we move towards encouraging people to behave in a certain way, we start to - as a society - set our bureaucratic structures around patterns of behaviour.

It would be of great benefit to reward a pattern of behaviour, rather than having a legislative process that looks at individual systems and in a sense micro manages everything. We've got one species, whether that species is threatened; then we assess the next species, whether that species is threatened. In assessing a development

application it would be much better if we had a culture that was built around, "Well, I'm going to do some development but one of the first things I need to think about is how that's going to impact on the environment." That's not what this current legislative approach has generated.

It's generated a society that takes step after step after step to avoid individual steps within legislation. It's got to meet an eight-point test. So you take steps to avoid meeting the eight-point test, rather than having a recognition that society wanted to achieve a conservation goal, and that recognition was seen as a good thing - I'm getting a bit lost here - that was rewarded as a type of behaviour in society. For example, you get approval because your approach to development and to landscape management is seen as beneficial, rather than numerous approvals based on specific bits of legislation, specific species or specific incidents. It reduces the bureaucratic process and it generates a culture of undertaking actions that are deemed as socially good. That's where I think the legislation fundamentally failed, and that's where I think a conservation reserve type program and the American environmental benefit index type program would change that pressure away from meeting specific legislative targets to avoid costs to you towards meeting a general pattern of behaviour that would give a better environmental outcome. That's one of the key things we'd try to push for.

We did provide numerous examples of cost and control, command and control. We took people on tours - real examples of people where farm values were really perceived but in reality have dropped because they went out on the up-swing and went out with the permission and encouragement of society, and society changed its mind between the time they purchased the place and they had hoped to be fully developed. In changing its mind, it's caused significant hardship for people, and that wasn't recognised, which is, I guess, a common theme you would have got from a number of people. There was value in trying to achieve some of the objectives that, once again, you can only interpret into the legislation, but unfortunately it failed to do that and it's a bit disconcerting. Do you have any questions?

DR BYRON: We can ask the questions.

DR FISHER: I just want to clarify a couple of things, and then I had a couple of questions. First of all, are you or are you not advocating that we have environmental caveats written into the WTO agreement?

MR KEOGH: I'm not advocating that at all.

DR FISHER: Not, okay. I just wanted to clarify that.

MR KEOGH: We're, in fact, very opposed to it but aware that it's certainly been

mooted in some circles.

DR FISHER: Yes, good. I just wanted to make sure that I understood where you were coming from. Secondly, I presume, in advocating a conservation reserve style program, you're not advocating the other aspects of the US Farm Bill?

MR KEOGH: No, not at all.

DR FISHER: No, okay, good.

MR KEOGH: We need to be very clear that we've certainly not been proposing any sort of grand subsidy scheme called something else. We think something like this could be very clearly targeted. Dry land salinity is a classic case in point because of the temporal and spatial issues associated with it. Command and control is simply not going to work, and all the clearing regulations in the world that prevent clearing in perhaps 20-inch and under rainfall aren't going to have any impact on some of the areas where salinity is an issue - over in Bathurst, some of the tablelands areas and some of the slopes areas.

Now, the only way you're going to achieve positive change there, where it is appropriate, is land-holders looking at how they do it and finding their least cost ways to do it, or least economic cost ways to do it, and generating the benefits that way. You're not going to get there by regulation.

MR STREAT: It would be a highly targeted, voluntary system looking pretty much at natural resource management issues, and that was it, the four key areas of water quality, salinity, biodiversity and soil conservation. Outside of that, any other - associated with agricultural production systems, that's certainly not where we're going.

DR FISHER: Now, I wanted to ask a couple of specific questions; the first one is an equity question. You mentioned this issue about, I guess, both intertemporal and interpersonal equity considerations as a consequence of people being prevented from clearing. So we have some people who have cleared; other people who haven't cleared; and then people who haven't cleared are now caught in the regulatory net and feel that they have been set upon by society, effectively, and are providing a bunch of environmental services on behalf of society at their cost with no compensation. Now, how many people in New South Wales are actually talking about here - in rough numbers, thousands, hundreds, tens, fives?

MR KEOGH: That's the aim of the survey work that we've got going at the moment. We'd estimate, from our own figures, there's probably around 2 to 3 thousand - that's our guess - that would have some direct impact of those

regulations, particularly the native vegetation ones, less so the threatened species. The threatened species is more about preventing further development because of not being able to pass the relative test, whereas the native vegetation ones are direct impacts in terms of being stuck, particularly in the face of regrowth and issues like that, and not being able to do stuff. That's our guess, but certainly that's the aim of our survey work.

MR STREAT: Yes, that's what we're looking at. I guess, or "surmise" is probably a better word, that really you're looking at areas where the regulatory regime has, in fact, closed the frontier. So you're looking at those areas in your state where, for a range of reasons - an artefact of history perhaps, or technological innovation - where areas are now being able to be used for improved economic gains, particularly cropping, that never were able to be used. So, in effect, you get a large area of the landscape that has been heavily cleared and has sustained agricultural production for a long time. It has reached a stage of full development. As agriculture has moved west with increasing technologies, certainly up in the north-west sector, they have sort of continued on as the frontier, and that frontier has, effectively, been shut by the legislation. They have said, "Well, your opportunity to go and, through the sweat of your brow, turn a piece of scrub into a capital asset has been taken away."

Now, I won't make any judgment about that, but all I'm saying is that that is actually what has happened and that's why you get these areas in society, in our state, where it will have a greater impact than other areas, and that's why they feel aggrieved, because they've gone out under the spirit of what it was, which was to open the frontier and convert their labour into capital - part of the Australian dream - and that's been stopped; in many cases, they got halfway through, or a quarter of the way through. It's localised; it's not like every second farm is going to be affected, but there's areas where almost every farm will be affected. I think you could look at a map and just look at the frontiers of our society and say, "Well, they're the key areas that are hit."

DR FISHER: The reason I'm asking this question is it seems that the sorts of evidence we've received to date is that there are two classes of issue here, and I think you're outlining them also, if I understand what you're saying. The first class of issue is in, say, developed areas in the centre of the wheat-sheep belt, where most development has taken place, but there still will be farms with some areas that some farmers believe are able to be developed, and they're stopped. So there's an equity issue there, and those people who have had the development stopped feel that they are paying a price that they shouldn't have to. But then you seem to be implying there's another class of issue where changes in technology, which obviously doesn't stand still, mean that there's a whole suite of country that could be developed, and would have been developed had we had current date technology in 1960, that now no longer will be developed. So is the second set of issues the major one for New South

Wales farmers, or the first set of issues?

MR KEOGH: I would say the second set is probably the one that has the most impact on members. If you do a sweep from probably somewhere like Moree down through Nyngan down to Balranald, right along the Murray and the area called the South-West Mallee, in all those areas there's probably cropping technologies now that allow fairly quick access to land and big areas. Really, I guess it is the moving of what is the potential wheat belt further west in situations where it is able to occur, and a lot of that is certainly put on stall. You'll find an area like Walgett, where I think about 60 per cent of the shire is undeveloped. I think the vegetation plan out there proposed only about another 10 or 15 per cent of that shire be developed, because they had identified areas where they thought the soil types were right, but that hasn't been able to happen. So, certainly, that's the area where most heat, I suppose, arises.

Within the developed areas, there are individual cases, as you say, where, for whatever reason, someone has been restricted. But I think also within those developed areas there's more uncertainty and caution about doing things - like, "Well, if this threatened species does appear here, how is it going to affect me? So, therefore, I won't necessarily do anything that might generate a habitat that might encourage the threatened species." At places like Deniliquin, for example, you'll probably run into issues about parrots and all sorts of things like that. There's a sentiment there that says you no longer get an agency person onto your place; you keep what's behind your gate in your own mind and don't tell anyone else just because of the potential. Some of that is not reality in a sense, but a lot of people react in that way.

DR FISHER: Yes, we've certainly heard people providing evidence of that strong perception in other states and again here this morning.

MR STREAT: In terms of the first class you were talking about of concern, I guess it also prevents a change in practice that may have efficiency gains or environmental gains. So installing a pivot irrigation system, which may be recommended by, say, department of agriculture, one arm of society is held up because the other side of society is arguing about the one or two trees that might need to be knocked over. I think that's also a class of issue or development that is of concern. I guess that sits at that "fewer individuals" level rather than the broader - sort of out the Nyngan-Walgett way.

I certainly think that first class of issue probably in a way affects the greater number of members to a lesser degree, whereas the second class affects a lesser number of members but very, very significantly. It takes away their livelihoods, and that's the key issue.

MR RENTON: I'd go further than that and add a third class of issues, which is the management of what's already there - - -

MR STREAT: Yes, that's true, too.

MR RENTON: - - - along with the issues of development that have been curtailed, but the management of existing regrowth which is being stifled by the regulations, and that's an issue that affects all farmers irrespective of how much development they have actually been able to undertake. I think that's one of the major issues that our members confront us about is the ability to be able manage as they have been managing in the past - in the vast majority of cases, sustainably - which has now been stifled by the regulation imposed upon them which, in New South Wales, says that as of 1995 everything that's greater than 10 years of age is now automatically native vegetation and you need a development application to be able to clear it or to maintain it. Even going beyond the development issues, what affects the majority of farmers in New South Wales is the flexibility to manage what's there, and that's where a lot of the hardship is felt by farmers, and that's where a lot of the anger and the mistrust stems from - the day-to-day routine activities which are being impacted upon from imposition of regulation from above.

DR FISHER: Before I let one of my colleagues ask you a question about managing regrowth, can I just ask one last question, and that is, for these frontier farmers of yours in Walgett - let's take Walgett Shire as a case study - how do New South Wales Farmers propose to do a deal with society, because obviously there are people on the other side of this issue that think that every tree in Walgett should be preserved. How do you propose to do a deal to let some development go on?

MR KEOGH: I think we'd see the use of something such as environmental benefits as an opportunity to do that. We don't imagine that there will be dismantling of the regulatory framework immediately, but it would do two things: (1) it would require the regulators to more accurately define what it is they do want to achieve as a result of the regulations. In other words, they would have to assess the environmental features of an area like Walgett and say, "All right. Is it a threatened species? Is it biodiversity? Is it habitat protection? What is it and how can we put some sort of ranking on those various elements?"

I think it would then go a step further and allow even the individuals caught in those situations to be rewarded for the extent to which their management systems are maintaining those environmental features or at least allow society some comfort that, yes, there is some development going on here but overall the net benefit is either neutral for the environment or positive for the environment and therefore we can have some comfort that what's going on is not just a rape and pillage exercise fence

to fence, but in fact we are, for example, establishing that a duty of care might be a requirement to maintain the average of an area above a certain score in terms of its environmental benefits or something like that. There are those sort of elements.

At the moment all we ever get and all society ever gets is a litany of clearing figures and that creates shock-horror every quarter when those figures are announced, despite the fact that for example in the last lot of figures that were announced the bulk of them were forestry operations and clearing applications by things like catchment management boards who wanted to replant stuff but had to remove some trees. At the moment all that society gets about what's happening is negative in the sense of, "It's clearing; it's clearing; it's clearing," rather than, "Gosh, another thousand farmers signed up to provide environmental benefits with an average score of so many and it's doing this much for the habitat and this much for threatened species," et cetera, which is, if you look at the USDA in its reports of the Conservation Reserve Program, it allows that more positive assessment to be made available to the community about what is happening.

MR RENTON: I would also argue that the other sector of society needs to go back and actually have a look at the definition of sustainable development; its environmental, social and economic considerations, not in isolation but taken into account together. No one has primacy over the other, and it seems to be the ethos I've come across here in New South Wales is that its environment - economic and social is a distant second and third. That's not sustainable development.

We need to think about sustaining communities, regional communities, regional New South Wales from an economic, social and environmental viewpoint, and not just environmental. I would say the environmental issues, in the past perhaps, hadn't been to the forefront, but I think the pendulum swung almost 180 degrees in the opposite direction. Environment is way out in front and society and economics kind of gets left behind, and that's not sustainable development in anyone's language.

MR STREAT: I think also that there needs to be a recognition by the broader society that the convenience of closing the front - placing a moratorium on development in areas where you have very few people and there's no real visible impact. There's no tangible result of stopping that when at the same time they look and see continued growth, continued expansion and it's almost as if some people are saying they know better than others and that it's the sacrifice that has to be made by the others rather than these.

The people at this side of the mountain, for want of a better word, need to understand that it's seen as unbalanced that you can take away someone's livelihood in order for the common good to be benefited and at the same time, that would be

unconscionable in urban Parramatta or Blacktown or the central coast or Tweed Heads or something like that. That is a real issue of equity. It's quite easy to close down out there because it affects few people, but as I said, those people it affects, you're taking away their livelihoods and also, as Steve rightly says, sustainable development is about growing an economy as well. It has got to be achieved in a balance.

PROF MUSGRAVE: Just picking that point up, Jonathan. Some of the people who have spoken to us about that on that point that you wouldn't see that happening in an urban area, some of them have said, "Well, you do." You see zoning regulation decisions taken which can have devastating effects on individuals and those individuals don't have any come-back, the same as farmers in this situation. I don't know enough about planning and zoning.

MR STREAT: Typically, you may get businesses that are impacted by those sorts of things. You get a freeway move, for example, and there's a whole lot of shops along the freeway, and the freeway moves. My understanding is there's usually some mechanism for a structural adjustment of compensation. I think the idea of structural adjustment has been well tested in many areas. It's more an argument over the change in the way you're encouraged to go out. It was part of what society saw as the way forward.

For one reason or other, society has changed its mind, but it hasn't had the good grace to really take on board the impact of that. I would argue strongly that any planning regulation that sits - it's a bit different to someone saying, "Well, you can only have pink tiles on your house." It might be inconvenient or unfashionable, but it's not taking away your livelihood. We're talking about people who have suddenly lost the capital asset value of their house or their land, and that's very different from - if you lose the capital asset value of a business because of a governmental decision, it's certainly a legitimate claim for seeking some restitution.

PROF MUSGRAVE: We're interested in the law insofar as compensation for taking of rights is concerned, and from my reading so far I see that the situation in Australia was somewhat different to the situation in the United States where there does seem to be literature which is defining what the position is. If the taking is significant, then the question of compensation arises. Whereas, in Australia, if there is a taking, there is no obligation on the state to compensate. It may compensate but there is no obligation. We haven't had anyone describe or refer to literature or suggest to us that there's any generalisation available as to the circumstances under which the state might pay compensation such as - the taking is significant, therefore compensation should be paid. Have you got any view on this? You know more than I do.

MR KEOGH: We have had a bit of look at this. Certainly, section 51(31) of the constitution, the just terms provisions, has been interpreted by the High Court to refer to a beneficial acquisition. So it can amount to just a taking of rights that should be compensable, and I think if you look at the case that was involved with the mineral rights under Kakadu National Park - I think it was called the Newmont case or the Mount Newman case - there was compensation there because it was deemed the declaration of the World Heritage declaration on Kakadu meant that the mining company had lost access to the mineral rights that it had and the Commonwealth had beneficially acquired those rights. Normally, for example, the Tasmania Dams case, the other one where Tasmania tried that angle and all except Kirby J said, "No, unless there's a beneficial acquisition of title or of property or potentially of rights that amounts to a fairly substantial acquisition, then there's no compensation payable."

PROF MUSGRAVE: Yes.

MR KEOGH: At a state level, none of the state constitutions have any property rights protection clauses in them.

PROF MUSGRAVE: But the common law - - -

MR KEOGH: No, the common law doesn't trigger anything. There is within each of the states and the commonwealth a property acquisition, or just terms acquisition legislation that was introduced in New South Wales in 1991 but again it's pretty much a mirror of the just terms provisions of the constitution, and certainly all the advice we've had in a multitude of different situations has been, "No, there's no provision there." In fact we understand that the Sydney Harbour Bridge was built by compulsory acquisition of 50 homes in the Rocks, and there was certainly no compensation payable at that stage, and that's certainly the issue with a lot of this legislation, that where the legislation is state based legislation, even if there was some provision to access the constitution to try and get some redress because it's a state based legislation, there is no opportunity there. The constitution doesn't have that impact on the states.

PROF MUSGRAVE: Maybe those who are interested in seeing the harm done to individual land-holders minimised would be advised to express their arguments in terms of market based incentive schemes and structural adjustment.

MR KEOGH: We've certainly questioned the effectiveness of the regulations, whether they actually achieve what - particularly with threatened species. In New South Wales there's hundreds and hundreds of species listed and I think at the last count there were recovery plans for probably about 5 per cent of them. So it seems that the approach on governments is, "We'll list as many as we possibly can, but as

for doing something effective that might involve a dip into the state coffers to actually do something to bring this species into some sort of recovery, we're not going to do it." Of course, all that does is create a very large perversity in that the last thing a land-holder would want is a threatened species or potential habitat for threatened species on the land.

PROF MUSGRAVE: Because this is moving.

MR KEOGH: Yes. Certainly, the effectiveness of the regulations in this command and control regime and the economics of going about it this way in terms of the economic impact of these things on regional areas and that sort of thing is the other angle that we think is a worthwhile area to debate about.

MR STREAT: It's founded on the precautionary principle which has some real legitimacy, but when you apply that precautionary principle through a regulatory mechanism that gives no incentive to be precautionary. For example, through an EBI scheme you would have incentive to be precautionary. You would be encouraged to be precautionary. It really is a cheap way and a minimalist approach by government to achieving precautionary conservation outcomes, and in that sense because, as Mike pointed out, it generates adversity, it sort of negates the precautionary value that was generated because you soon start to lose your contact with the community that can provide you with information; can provide you with a sentiment of achieving your aim, which is to take care, given that maybe your science isn't always up to scratch.

And unfortunately the regulatory approach to introducing a precautionary principle to conservation, whilst very cheap and seemingly particularly efficient, has completely failed because it's broken down that community will to take caution. It's decided that it's better off not telling anyone about anything. Therefore, you lose that ability to implement that. It's a tenant tenet, you know.

PROF MUSGRAVE: What is the least that you would ask in the way of reform? For example, we've had described to us situations where it would seem that there's no clear rationale available for an application of a regulation, such as refusal of a permit to clear. No clear rationale has been provided; where there seems to be no line of appeal. It would seem to me that those are two things that should at least be available as part of the regulatory system. Is there anything else that would seem to be minimal reforms that might be required?

MR KEOGH: I don't know whether it's your branch offices or your subsidiary - otherwise known as the Office of Regulatory Reform - has some fairly well-defined processes that are understood as the appropriate way to bring about regulatory measures, regulatory reform - call it what you will. They involve looking at what

you want to achieve, setting a clear objective, finding the way in which you can do that at least cost and, as a last resort, regulatory measures. When you define that, then look at the economic and social costs and benefits of approaching that and basically do that as an integrative process where hopefully you come up with the approach to something that is least economic cost, achieves the objective at least cost, and all those sorts of things.

Unfortunately, in both the Commonwealth EPBC Act and the state environmental regulations, none of those ever go anywhere near those sorts of processes, and we think that sort of more considered approach to implementing these sorts of regulations would spin off things like, "Okay, well, what is the objective?" If you look at the New South Wales Native Vegetation Act, it says the objective is to preserve native vegetation. It doesn't say why. There's an implied greater good there somewhere, but there's no clear objective spelt out in that legislation.

If it was because society says, "We want to maintain biodiversity," then the next line of thought ought to be, "Well, how do we best do that? How do we do that at least economic cost?"

PROF MUSGRAVE: How does that translate into a particular situation on the ground?

MR STREAT: It would certainly make it more easier for a particular officer on the ground to make an assessment, rather than the legislative objective being to preserve native vegetation. So he sees a piece of native vegetation and that meets the objective of the act. If it's actually to achieve conservation in biodiversity, he can look at a single tree that may be senescing and on its own in the middle of a paddock and really is the only tree that needs to be removed to put in a pivot irrigation system, and say, "Well, the total biodiversity loss of removing this one tree is minimal." So it gives them a context in which to operate and that's what - - -

PROF MUSGRAVE: Yes. On the other hand, if the officer in question was attacked by the farmer or several farmers around about and they say, "This is ridiculous. It's just one tree, and look at all of these other trees around here," if that officer was able to come back and say, "Well, we want to preserve a certain species - - -"

MR STREAT: Of tree.

PROF MUSGRAVE: "Unfortunately the population happens here, and the habitat is such that unfortunately this is a significant erosion of that habitat. The tree has to stay," you would have a clear explanation.

MR STREAT: Have a reason, yes, and a logical reason that that farmer can - it's tangible enough for him to - - -

PROF MUSGRAVE: Yes. I think that this does happen, but also we've had instances where there doesn't seem such explanations have been available.

MR KEOGH: I think we've shown you we've had members who have been restricted from developing land because of the visual amenity of cars on the nearby highway, and that sort of reasoning certainly doesn't go down well - - -

PROF MUSGRAVE: Doesn't persuade you.

MR KEOGH: - - - with an individual who has been told, "Well, I'm sorry, but converting this \$20 a hectare land into productive land that might be worth a couple of hundred dollars a hectare can't occur because cars going down the highway might be somehow offended by the visual amenity that's generated." So you can't be surprised that individuals get very antagonistic about those sorts of approaches.

PROF MUSGRAVE: Finally, could I just ask you a question in relation to this issue of duty of care. There has been some discussion in our hearings about duty of care and how it could be seen to constitute a threshold. Below that threshold farmers should bear the cost of whatever action is necessary to meet that duty of care. Above that level there are those who would argue that the beneficiaries - society - should pay, and that would be you lot, I should think. On the other hand, you have others who say, "No, the polluter pays," and they would be another group. Let's not focus too much on that. I just ask you to focus on the duty-of-care concept which some people are suggesting constitutes a sort of dividing line. You no doubt have exercised your minds over the concept and if it's a practical concept. Can you advance our thinking on this in any way?

MR KEOGH: Certainly we've discussed this at length within the organisation. In fact, association policy endorses that concept. I guess one of the challenges with it is how do you translate that into some sort of practical reality. I think that's where we come at something like an environmental benefits score, environmental benefits index, as helping you. The dilemma you have obviously is in an area like Wagga, for example; a fully cleared and cropped area, for example, in the Kiama Creek, might well be regarded as a recharge area and causing salinity problems further downstream.

That individual, in terms of a duty of care, may be all very well and good in terms of the obvious effects that they're having, but the issue of recharge becomes very complicated because of the temporal and spatial issues. The best we could see that you could do there is perhaps by having the environmental benefits concept. At

least that person would have some incentives in front of them that, "If I can get my environmental benefits score up to 30 or 40, for example, out of 100, that might generate me some benefits that encourage me to do that." We think over time you could then use that to generate the notion of, "Well, your duty of care is that you should be able to generate 20 or 30 or 40 points" - or whatever along this continuum. Rather than sort of being an esoteric thing about, "Well, you have a duty of care," and how reasonable is the issue of polluter or harm that you want to consider as part of that, to one that in fact goes straight to practical realities and starts to generate some understanding amongst individuals about where they sit.

PROF MUSGRAVE: Okay, thanks very much. I don't want to prattle on too much, Neil. So it's your turn perhaps.

DR BYRON: Okay, thanks. Can I start by trying to summarise what I think has been coming out of what you've said but also a little bit tempered by what other people have said earlier this morning: that in terms of the regulation, landowners would like to be reassured that the legislative measures being imposed first of all actually work and won't actually cause environmental harm; that they will be efficient in the sense of being least cost and that might mean that you allow some sort of trade-offs within the property; that it's okay to take a little bit from here on the property if we put back a lot more over there; and that having worked out what's the least cost way of achieving these environmental outcomes, that those costs are borne fairly, both between land-holders - the guy who has still lots of native veg and his neighbour who has none - and, more broadly, between land-holders and the community at large. I'll put all that together and call that a contents issue.

Then there's a process issue that a lot of the complaints are about a lack of due process and appeals mechanism. People are talking expropriation without their consent and due process. Many people talking about that would like recognition for the fact that on other parts of the property or in previous periods they've done environmental good works, but when it comes to this particular one tree in a paddock, suddenly they're the worst person in the world because they want to get rid of it, and the legislation is written in such a way that it says if something is thought to be a rare and endangered species it must be saved, full stop, irrespective of what the economic and social costs of doing that might be.

People would like to see some sort of mechanism where you could say, "Well, yes, it is a nice tree and we would like to save it, but saving that one tree in the paddock there is going to cost me \$20,000 a year and I really don't think it's worth that much." But there doesn't seem to be a mechanism for having, as somebody said this morning, commonsense.

Apart from all of that, there is the question of, "How do we go forward from

here?" in getting land-holders and governments and the wider community all on the same page of the hymn book. You have talked about the US Conservation Reserve Program. The WWF this morning talked about their pilot that they're doing at Liverpool Plains with option rich - they also said was based on the US Conservation Reserve Program, like the Victorian Bush Tender pilot is.

In Hobart yesterday, they were talking about a whole suite of those sorts of measures - not just having one package, but they've got the private conservation reserves which are very well funded for very strategically important native veg of very very high conservation value, perpetual attachment, and then there's another one called Protected Areas on Private Land which is less stringent, pays less money, but requires less quid pro quo. There is a smaller program which offers very little money but also makes very few demands on the land-holder, and that's operated by Greening Australia. It's not just one package. They've got a whole graduated range of different tools they can pull out of the tool-box, depending on whether it's of extraordinarily high conservation value that they're willing to pay a lot of money for, all the way down through to, "Well, we'll help you fence that off because it's worth having," et cetera.

That process seems to me to imply a prioritisation, strategic thinking that you can't save every species or every individual of every species everywhere across the state. There is, as I think somebody in one of the submissions today used, "triage" - trying to work out what is really important that we must save and are willing to spend a lot of money on all the way down to nice if you can get it or some stuff that we're willing to let go because the conservation values are really not that great and the economic and social benefits of letting it go seem to be high.

Now I should come to a question, shouldn't I? Is that the way we're heading with this? The question was, the WWF proposal - coming back to the conservation reserve idea - that you have legislation which in their terms is a safe minimum standard, a bottom line that we won't go below, so that if you're a land-holder and you find that you've got a rare species on your property, there's both bad news and good news. The bad news is that you're not to clear it; the good news is that you've won the lottery - "We give you this and that. We've got such-and-such. We can help you with this and we'll pay you that" - and overall the land-holder actually ends up better off after all the sweeteners have come into play. Do you think that would work?

MR KEOGH: I'll just cover a point you mentioned. You mentioned earlier on about the lack of due process and the appeals when a decision has been made. The biggest problem we see with that - and we've followed up on quite a large number of those, seeing whether there were legal issues involved. There has been one where we had some limited success but the biggest problem with that is there's no final

arbiter or final definition somewhere that you can appeal to, because it's set in such terms that you've got the Environmental Planning and Assessment Act with its eight-point test and it's all absolute. It's all red lights or green lights. It's not, "Well, we'll trade this off against that." When you look at how you would put in place, say, an appeal about a particular issue, if you go to the strict reading of the legislation it doesn't help you at all because, unfortunately, that's the lack of flexibility in that.

I suppose we're aware of the Liverpool Plains program and a range of other ones. The biggest fear we have about those is that they become almost an external management program, whereby if an individual puts their hand up, then this raft of experts descends on them and develops them a seven-layered plan that may be all very well and good but I think on a broader scale is probably not feasible and is questionable in terms of their ability to manage economically into the future. I think we'd see a necessary discipline as society needing to express some priority for the various aspects of the environment that want or need to be preserved and allowing farmers to, within that, maintain the flexibility to manage to their best outcome so that environmental services become another commodity, if you like, that's available as a productive outcome, in a sense, from an area of land.

You don't end up with caveats on land, or those sorts of things which - and this is certainly, the New South Wales experience - people don't get attracted to in any great volume. We'd prefer to see a long-term positive incentive program sitting there on the shelf that a farmer could access, the same as he might decide to access wool production or beef production, or whatever else. We believe it would need to be there and need to be fairly secure in terms of how it operates for that mind-set to start to develop that having some environmental feature on the land is actually a benefit not a blight and something I can pursue.

DR BYRON: You might want to check the transcript of what the WWF said this morning, but my understanding of what they said was that they weren't trying to be proscriptive or impose a master plan on the property but were rather saying to land-holders, "If you decide that you'd like to produce ecosystem services X, Y and Z, we'll buy them from you," and that sounds to me a bit like a marketplace solution. Again, I think Australian farmers are very innovative in finding new ways to produce new crops or new systems and, likewise, they can grow all sorts of flora and fauna, whether it's native or exotic, or whether it's for commercial purposes, or whether it's for ecosystem services payments. But the idea of not trying to be proscriptive in advance but sort of stand in the marketplace and offer to buy, some farmers might be interested if they thought it was going to be a thick and enduring market.

MR STREET: I think its enduring is probably a key element. If it appears to be a fad, I think that will be negative. You talked about priorities. Where there is an advantage to an EBI type process, it would rest in those areas of vegetated country

that are probably attached - so they back onto national park. It's the back block of your land; it backs onto a national park. You have an inherent advantage in preserving that land which is left, rather than pouring your resources into replanting land that is currently under significant production. I think that type of approach, through an index system or a WWF system, or whatever, really allows you to change that culture, that, "The back country I can use for purposes A and B, which might be giving me an environmental benefit; a bit of river country I can use for a bit of both, because I can get my cows to drink and I can use it as a riparian corridor." Once you've put that in a production system, then I think you shift people towards that, "I'll be careful. I'll take a precautionary approach about the way I manage my land because, in the future, there's other benefits and other options that are in my toolbox," rather than just the traditional options and benefits that are seen as an agricultural production system, so moving from cows to sheep, or whatever.

But it would have to be a voluntary scheme, and it would have to be based on a sustained investment by society, because society has decided that it's going to purchase another good, which is conservation benefit. It couldn't be a fad, it couldn't be a bunch of grants handed out every once in a while when the government decides it's valuable.

MR KEOGH: Next time there's a privatisation, you mean.

MR STREAT: Well, I wasn't suggesting that, of course. It would mean that society itself has decided that we now have a permanent good that's worth valuing, and I think that's where we keep talking about some tax credit, or some sustainable process that can be funded.

DR BYRON: There's one last hurdle to that. In the newspaper last week, the Western Australian Minister for Agriculture was quoted as saying that their land clearing controls weren't working very well, et cetera, but he then went on to ask: why should taxpayers pay farmers for not damaging the environment? Now, that, I think, is the question that not only he but probably many other ministers with many other portfolios in many other governments will also ask. I think that if you want to get up a solution like the Conservation Reserve Program, you'd have to find a way of explaining that it didn't look like taxpayers were going to have to throw large buckets of money at farmers to pay them for not damaging the environment.

MR KEOGH: And that's where that notion of the duty of care comes in, because it depends where you want to start but, over time, with a scheme like that you progressively, or potentially, end up with farmers looking at it and looking at it from the point of view of, "Well, the average EBI score around here should be 40 or 50, and I'm not there." There's a negative associated with not being there. Similarly, "My country is at 70 or 80 out of a conceptual 100. I've got a bit of room to move,

but I'm doing better than average and I'm getting some benefit from the community out of that." So I think you'd start to create a culture of having some benefits from environmental features. For example, in the Western Australian situation, where salinity is such an issue, irrespective of how more restrictive the Western Australian government makes their land clearing legislation, they're not generating a solution to the problem. They're perhaps at the bottom end of the triage in hopefully preventing it getting any worse. But if the minister there is very serious about fixing the problem, million-dollar fines and very strident definitions of what's native vegetation aren't going to make any difference in terms of fixing the problem.

DR BYRON: Laws that make certain behaviour illegal haven't worked very well with murder, bank robbery and rape, for example.

MR STREAT: I guess it comes to the point of sustainable development. If you decide just no more development, then there's a certain issue, but that doesn't appear to be really what's argued. It's where we will be going. We want progress, we want thriving regional centres. Society wants one thing but, at the same time, is asking another, so it needs to chip in. I think also there are elements within, say, an EBI that it would be quite straightforward to argue there is a significant private benefit - for example, soil. Controlling soil erosion and maintaining a good soil structure gives a real significant individual private benefit. It's quite reasonable to expect that, in your EBI score, you'd have some weighting that would say, "Well, that's a real private benefit, and so you should really be carrying most of the burden of achieving a good score of that yourself," whereas something like biodiversity, it's very much harder to argue that an individual gains a private benefit out of that because, (a) by its very notion agriculture is about monocultures, it's not about biodiversities - it's almost anathema to them; and (b) biodiversity is about a system having a built-in resilience to change to external factors.

I think the Productivity Commission might have even mentioned that sort of line. That's something that is really, by its very notion, a broader community value. An individual has no real gain from having that feature. He does have a gain as part of the broader society, and so there is a shared responsibility to look after that, and that in your EBI would be weighted differently. So I think there is a system within that to achieve that balance; to argue that, yes, there is a recognised cost, and it may come down to being based on the duty of care concept; but there's also within that some elements of the debate that really are fundamentally a common good. Salinity is probably a bit of a crossover because, as Mick pointed out, you have the top of the catchment affecting the bottom of the catchment. Water quality is again a little bit of a more difficult one, but then you might end up with an arbitrary line, a fifty-fifty sort of deal.

That sort of notion is I think how we're going to progress that type of

argument. To say why should society pay farmers to not clear their land is really the same reason as why did society pay farmers to go out there in the first place: it was because we were all growing to a common good. Now, the fact that the fashion has changed doesn't mean you suddenly absolve yourself of being part of society.

MR RENTON: As a Western Australian, I'd suggest Kim Chance go back 25, 30 years and have a look at the government's role in causing much of the environmental damage.

MR STREAT: Yes, exactly right.

DR FISHER: At the risk of being provocative, aren't you guys on a hiding to nothing, in the sense that, if you look at the forward estimates, the cupboard for almost every government is bare? So the fiscal approach is hard. The regulators have got the upper hand, it would seem, in an empirical sense, and those regulations cost them nothing, other than the deadweight losses which nobody sees. So there's all this deadweight sort of drag there, but it's not in anybody's budget. You're arguing that you are owed something; the other side is arguing that they've got you on the ropes, basically. How are you going to get off the ropes?

MR KEOGH: I think there's a number of facets to that argument. The first is that I agree with you that, from a fiscal perspective, the landscape doesn't look good. You might look at Telstra, or something like that, and think, "Well, maybe there's a chance," but I think that's in a sense robbing Peter to pay Paul. That's why we prefer the notion of, for example, a good examination of tax credits as a mechanism to do that, because there's a valid argument there that, because of these activities, there is a potentially reduced drag on fiscal budgets in the future for programs like salinity, for programs like the National Heritage Trust, et cetera. Therefore, there's nice symmetry associated with that. Rather than having land-holders continue on as they are, we're providing them with an incentive to bring themselves back to a state that's more sustainable.

At the same time we're potentially reducing the future budget drains of governments in the future, to try and bring about some recovery on these environmental issues, particularly salinity. So there's a nice symmetry there in terms of - and I think we'd argue that in fact having farmers do it, in the sense - using innovation and their own flexibility to achieve it, will in fact probably have it happen much more cheaply than it will happen in any sort of regulatory sense.

I mean, the classic case is, I think the average maintenance cost of National Parks in New South Wales is about \$46 per hectare per year, and I'll bet for \$46 per hectare per year you would get an enormous amount of environmental services, so called, out of land-holders. In fact, I'd be willing to bet they'd do it very much

cheaper than that, and at less cost to governments and the community.

So I think there's a very positive story there to sell, that by putting just sufficient - just marginal incentives in front of people so that it gets them to the point of saying, "Yes, this makes sense for me," you'll get a turnaround in some of these more intractable environmental problems, much more cheaply than you can ever do it by regulation or by 15 Living Murray initiatives, for example, that are going to entail enormous cost if you really look at it. So that would be the angle we'd argue from, that there's a better way of achieving it, and those issues like, "Well, aren't you just paying people to stop damaging the land?" I think over time they'll progressively disappear.

I think if you think of a tendering system where you're trying to beat your neighbour in terms of what benefits you might be able to provide to generate some credits, you're going to progressively scale yourself up in terms of the environmental benefits you're generating off your land, so you're creating this ratcheting effect, if you like - and you certainly see it in the CRP program, where it's massively oversubscribed every time, and that's obviously putting pressures on land-holders to do more and more for the same cost.

So society's getting a very good bargain out of it, and I think it's a very positive notion, hopefully, that we might be able to plant as part of the story. I understand your negatives and I understand your concerns, but we'd certainly hope that we could sell a story that's a lot more positive than that.

MR STREAT: I'd like to reinforce that, that really it's not about being owed anything; it's about generating a mechanism that can take us socially to the next stage, which is some method of expanding our ability to manage the land in an environmentally sensible way. It's not about being owed; it's about getting to that next stage that we want to get to as a society, at the least cost.

Now, the cheapest way, as Mick has pointed out, was through regulation, and that has patently failed. We're going to the next cheapest option, I guess. You know, if you try and do something as a society as cheaply as you can, and if it fails, well then, you go to the next step up. You know, you buy the cheap paint, it peels off your house every year, well, you go down to Taubmans and buy a more expensive type of paint, and hopefully that's a little bit - - -

MR KEOGH: Not that we endorse Taubmans or anything.

MR STREAT: Not that we endorse Taubmans, yes. That's really what the argument is about. It's not about being owed something. I mean, society feels that it needs to - and farming communities recognise across the country that sustainability

is crucial to them, and they're saying, "Well, if we want to expand this notion, then we need a mechanism that's going to allow us to do that, and do that in a fair manner, that's wrested in notions of equity and a fair go for all." I don't think that's an unsaleable - we're arguing against the need for most hospitals and all the rest of it as well, as is everyone else, but society is about balancing that, and I think it's a reasonable argument.

DR BYRON: Okay. Well, any final words to wrap up, or can we just thank you very much for your contribution?

MR STREAT: Thank you for having us here, and here's this.

DR BYRON: Yes. We'll add those to the collection we already have. Thank you very much, gentlemen.

DR BYRON: Thanks very much for coming, Noel. If you could introduce yourself. We have the submission and we've read it and we would like to discuss it with you. Do you just want to make a summary of the main points?

MR RYAN: Yes, I'll keep it brief. It's the end of the day and it's been a long day and lots of information. I'm Noel Ryan. My title is the client change researcher for the Wilderness Society. Of course, land clearing has been a big issue so I've been involved with that. I've described the Wilderness Society as a national community based environmental advocacy organisation whose mission is to protect, promote and secure the future wilderness and other high conservation areas. It has offices throughout Australia, so a grassroots organisation.

I think on this issue our main focus - and it was prefigured in that submission - is on land clearing. We're focusing on land clearing because it has been identified repeatedly as the biggest single activity that threatens Australia's biodiversity. It was mentioned in the land and water resource audit and the state of the environment report, so they are the most comprehensive and scientifically based assessments of threats to the Australian environment. We consider it to be the biggest, most important issue.

Just summarising - I don't know whether it is in the submission - about 12 per cent of Australia's current greenhouse gas emissions are the major single cause of biodiversity loss and it has been identified as the major cause of dry land salinity by AFFA, the Australian Forestry and Fisheries Association as well. It is a huge issue. The costs build up to - and it's basically why these costs build up is basically market failure. These things that I describe - there is no market for them so they're not included in the pricing mechanism and the way the economy works.

In the past clearing was done, as has been said repeatedly today, in line with the goals of the government and the community. However, people who clear land now are doing it in their own knowledge and in their knowledge of society that all these costs are being generated by that activity as well as their individual financial benefit. That's the big difference between past clearing and clearing now. If you left vegetation on your property you were probably doing it in contravention of society 20 years ago, but now when you are doing it, you are doing it in the knowledge that those costs are being accrued to the society. You are actually using up the global regional commons.

Those costs, people have estimated greenhouse costs - 50 million tonnes at the moment. The Queensland proposal is for reduction of 25 million tonnes and at whatever cost of carbon dioxide ever turns out to be, whether it's \$10 a tonne or \$100 a tonne, so that puts it somewhere between 500 million and several billion a year. When the Queensland government recently submitted a proposal to the federal

government which John Howard has apparently provisionally accepted, part of their submission talked about other costs like, "Well, if they were to replant 10 per cent of what they cleared" - because they changed their mind later, at about \$2000 a hectare, that is something like 50,000 hectares a year, so that's about 50 million a year - or I could be wrong, it could be 500 million - anyway, it's a lot of millions.

The benefits from clearing are probably only about - for Queensland where most of the clearing is going on - according to ABARE's study was \$181 million for pastoral country. If you chucked in the cropping, which is much less in Queensland, as a proportion in New South Wales, it's \$191 million. That's the total net present value, they think, of the land that's available for clearing in the future in Queensland. So the cost of - the opportunity cost is very small, compared to the cost of allowing this particular land management activity to go ahead. It is going ahead at approximately the same rate as it has gone since white settlement. That's about 500,000 hectares a year. If you do that over 200 years, it's probably even faster on the average for the last 200 years. It has not reduced. It has been impervious to the government spending, since it has come into power, a billion dollars on Natural Heritage Trust. The single biggest threat to Australia's environment was not attacked by this incentive scheme, the government throwing this money at the scheme.

We sort of characterise land clearing, broadscale land clearing as what the Wilderness Society and a number of other environment groups want to cease. We believe that that must cease; that it is - what's been discussed a lot today are other management activities which are more discretionary management activities that aren't involved in an increase in investment in the property, although we would include - we are wary of increasing intensity of agricultural product production. It's tree clearing and clearing of native vegetation which is the focus. But for other management activities we sort of go along with the view that has been examined in the reform process in New South Wales. As you've probably been aware, there has been a reorganisation of government departments and the Wentworth group is currently in discussions with the government and stakeholders about how vegetation is to be managed.

We don't believe that the current system is perfect. It's certainly not perfect for the environment and it certainly does - there are probably anomalies for farmers, et cetera, that need to be addressed. Although any other system - any incentive system is likely to come up with anomalies as well. It's like any incentive; it's going to - if you think hard enough about it, it would probably cause, in some cases - you know, tree planting incentives might cause people to rip up native ground vegetation and replace it with trees. There are a lot of things that can go out under this management issue which you have come up with, obviously against, over time. It is a very broad thing and so to create one rule, or even several rules within some sort of regional system, is very difficult.

We believe - certainly with management activities that a regional approach is essential because of the variety of Australian landscapes and also utilising the knowledge of land-holders and people who use the land. Obviously they do have a lot of knowledge and we believe that that should be acknowledged. As for land clearing, we agree - I think the Productivity Commission produced a report, *Sharing the Cost*, a couple of years ago and one of the things it said was the impacter pays principle is efficient. If you take money from the taxpayer that has losses as well; losses to the community and, what's more, it doesn't change the demand. The impacter pays actually sends the signals to the consumer to actually adjust their behaviour for the use of the global commons that are being used in the manufacture or production of the goods they're buying - definitely.

However, we do believe that with the change in not de facto property rights, but with the expectations that have been - under certain property rights expectations that are held by rural people and other people, that in cases of genuine hardship - with hardship issues we believe that adjustment packages are appropriate for those people affected. We're not against people being helped through the adjustment process, but we believe unlimited compensatable rights is a blank cheque on society for environmental progress in the future.

We don't think that with land clearing itself, it doesn't have - stopping broadscale land clearing doesn't generally have the - it doesn't really make enterprises unviable. The ABARE report on Queensland actually said that. They didn't think that their current phase-out approach over the next three years, to stop basically all clearing of remnant vegetation in Queensland by 2006, would actually make very many enterprises unviable - enterprises that were in certain conditions that maybe borrowed money on the basis that perhaps they would be able to develop this land in the future and then get a cash return, but in general that's the exception. So it doesn't really make enterprises unviable.

The effect is more like what was discussed by the New South Wales farmers association. Technological change - those people will not be able to expropriate the rents that they've gained from that technological change on that land. So that's more of the effect and, of course, this has expectations in people's minds which, of course, have social implications.

The Wilderness Society has been involved in being more an activist group and a political advocacy group. However, we have been - especially in Queensland - involved in regional negotiations with stakeholders. We were with ACF involved on CYPLUS - that is the Cape York land use agreement. We were very involved and still involved in that. South-east Queensland regional forest agreement - we were involved in negotiating that; the phase-out of logging in south-east Queensland's

native forests over an extended period and relocating the industry into plantations. That has been generally accepted by all stakeholders as being fairly successful, I think, in south-east Queensland. The rest of the forestry industry in Australia might not agree, however.

But with regional agreements we don't see - and we've seen this in reports - that local committees can be expected to place restrictions on their neighbours. This puts a lot of stress on people, to actually place restrictions on their neighbours. It's just not possible. The restrictions have to be broad and a state or national or perhaps regional level, but if they expect local committees to place local restrictions that affect financial implications on their neighbours, it's a bit too much to ask.

Many farmers - I don't know whether you've seen some of the submissions - agree with regulation. It's not totally opposed by all farmers because they do things like - if a farmer plants 20 hectares of trees at maybe a thousand or \$2000 a hectare and his neighbour across the fence clears 100, you know, that tends to create resentment. We know, under the Native Vegetation Act, a lot of the reports of clearing to the Department of Land and Water Conservation - most of them probably come from farmers because they're the only ones that would know that it was going on. That indicates that there is broad support for this sort of regulation and it's not monolithic.

Also voluntary approaches aren't costless, they're not costless - apart from the fact that there's an OECD report that came out about a month ago on voluntary approaches in pollution regulation, and basically it said most of the voluntary approaches don't seem to have achieved very much environmentally. It has probably got a lot to do with base line setting in the negotiations, but they have bargaining costs and other costs associated with them.

The issue of regrowth has been raised in New South Wales. There's a bit of confusion between regrowth and woody weeds, but the main issue in New South Wales from an environmental perspective is large amounts of clearing of good country for cropping. The woody weeds that they talk about - that was grazing country. They want to clear the woody weeds and make it cropping country generally. There's a change of land use involved. It's not, "Get rid of the woody weeds and maintain the land use." There is a bit of a development. A lot of it is cleared for opportunistic cropping.

DR BYRON: Just on that one, we visited a few places that had been cleared, cropped for a few years and then grazed for a few years, and then the native vegetation had regenerated progressively, and that cycle seems to have been repeated five, six times in some places over the last 150 years, but it would seem that at the moment it's going to be the last time because whereas previously with what you

could call a fallow period of native vegetation, this time the fallow is not going to be allowed to be cleared for a sixth or seventh round of crop for a few years, grazed for five or six years and let it come back again.

MR RYAN: Yes. Well, it's hard to know - I'm not an expert on the ecology of the area, I'd have to defer to other people who are - I mean obviously there are benefits in it growing back to native vegetation, and there are also losses to biodiversity. From my discussion, it isn't a huge loss to biodiversity. For production outcomes - I don't know whether it's that common. It was discussed before. The agricultural frontier seems to be spreading westward, so I think a lot of the clearing of woody weeds may be involved in some of that spread, but I couldn't comment exactly on that particular management.

DR BYRON: Okay, yes. Sorry to interrupt.

MR RYAN: I think that's basically the main points. I don't think I've forgotten anything. Yes, I'll leave it up to questions - leave it brief.

DR BYRON: If I can go first: You make a big deal about the broad scale clearing of mature remnant native vegetation and that this has to be controlled through legislation. I'd just like to explore your understanding of land clearing. For example, do you think that in the absence of any regulatory controls eventually every last hectare of native vegetation would be cleared or do you think that it would bottom out at some point, before zero, by itself, and all we're really doing through the legislation is putting a floor on it?

For example, in Western Australia we were told that in many parts land clearing actually stopped 25 years ago and there hasn't been an application since, and it sort of bottomed out at about 15 per cent and now it's back up to 20 per cent. The reason I'm asking this is that it makes a big difference whether you think that the land clearing process is in a way self-limiting or whether you think that it's just going to go all the way down to zero unless you stop it.

MR RYAN: Generally it's been our experience, especially in the local community - in southern New South Wales there doesn't seem to be as much opposition to this land clearing as in northern New South Wales, so the committees down there aren't wracked by this division so much, because the local vegetation is down to about 15, 10 per cent native vegetation, and so most people can see that it's valuable, and there's no many people who can make money out of it there, whereas in northern New South Wales, wherever there's native vegetation that people can see as providing an increase in income - and Queensland is the same - yes, you can't get reasonable committee agreements. There's always this push as long as they can do it.

DR BYRON: Is that consistent with what I think the Farmers Association was saying about it being sort of frontier areas, that Victoria and southern New South Wales was cleared to basically just about everything that was worth clearing a hundred years ago, but it's when you get into northern New South Wales and southern Queensland that are just going through that colonisation pioneering phase now, but eventually, even if there wasn't any control over it, it would stop at some point, and the question is whether we stop it at 50 per cent or 30 per cent or 15 per cent.

MR RYAN: That clearing in southern New South Wales and Victoria has had a huge effect on biodiversity. In a whole stack of woodland they have observed no birds. An ecologist in the Wilderness Society, Barry Traill, has observed it. It's like a gangrenous foot you know, all these birds are dying. He goes to a woodland one year, they're not there, and they're sort of retreating north. So from a biodiversity perspective - it's probably the case with other species too from a biodiversity perspective. And this takes us to the 50, 100 year delay, so clearing at the moment is going to have these long-term effects, the same as salinity.

Salinity hasn't really hit Queensland yet, but then millions of hectares have only been cleared in the last 20, 30, 40 years. The same with the biodiversity loss: there's probably a lot of species still clocking along in the remnants now on the Darling Downs and the southern brigalow belt that will probably be gone in 30, 40 years, and it has been the history of Australia that some technical innovation, whether it's a bulldozer or a blade plough or some new technical fix will come along and increase the frontier further north, and there's clearing going on in the Northern Territory at the moment in Daly River Basin that's very suspect ecologically. I don't know what it's going to do to Australia's greenhouse figures. I haven't looked at it closely.

DR BYRON: On the land clearing - you see, there are people in the southern brigalow belt or even in the Pilliga, who will say in some of the Queensland bioregions still 90, 95 per cent of the total area is covered with native vegetation, and their argument is to say, "If we take it down from 95 per cent to 93 per cent or even 92½ per cent, is the sky going to fall in?" They're not talking about taking it from 90 per cent down to 20 or 15, but they're talking about relatively small - although it's a large number in absolute terms of hectares, in terms of a percentage of what's still there, it's a fraction of 1 per cent, and their argument is that they can't see why that percentage-wise small removal is going to be catastrophic.

MR RYAN: It will cause an effect. I've got a graph here that I can show you from a textbook.. I can send you - I've got it in my pile of papers there somewhere - that shows that as soon as you start to clear, you start to lose species and you lose more in the middle and then finally, when there's nothing left - there might be something left

but, you know, it - - -

DR BYRON: What I was getting at is if you move - - -

MR RYAN: You will start to lose species. You will certainly - from a greenhouse perspective it doesn't matter whether it's the 1 per cent or the last per cent. If a farmer clears 100 hectares, if it's average Australian woodland, he's putting as much greenhouse gases as 600 other people would if they completely went solar. That's pretty expensive. For 100 hectares of Queensland, what would that grow? A few cows. It would give you hardly any extra income but it's putting a million dollar bill on a greenhouse, so from that perspective there's no excuse for it.

DR BYRON: Yes. The point I'm trying to get at is that you say land clearing is the biggest threat to Australia's biodiversity and the major cause of dryland salinity. Even if we say that is completely true, does it therefore follow that every single hectare of land clearing must be stopped or are there still some hectares somewhere where the economic and social benefits of clearing that one more hectare outweigh the environmental costs? You've moved from a general to a specific.

MR RYAN: Yes, for building sheds or infrastructure and stuff, but for most agricultural activities I can't see that land clearing is justified really. The official policy is no full-scale - most of the environment - there's no broad-scale land clearing, and it would have to be a very high value agricultural activity I think to justify itself economically. Certainly environmentally we think that just by clearing that little area you're putting a place for weeds. Northern Australia ponded pastures are sort of sources for - you know, these are little areas where they can get a bit of water in for long enough and grow some sort of pasture there, and they're source areas for weeds that then invade other wetlands and woodland, so they do have a big effect if you start intensively managing these small areas.

DR BYRON: Yes, but what you're saying then is that there's really no need to do any sort of benefit cost analysis because you're convinced that the benefits of clearing another hectare in this broad scale - the sort of thing we see in southern Queensland or north-west New South Wales - the benefits will be less than the costs, almost by definition at this point because of what's happened already in the past.

MR RYAN: Well, certainly in southern Queensland - in New South Wales, yes, the remnants are precious. We're losing species now and will continue to lose them because of the clearing that's been going on. Salinity takes years, generations, to appear, so I think every bit - certainly in the wheat belt it's precious. And in northern Australia it has an integrity in itself. You know, it's the only place in the world where really you have large areas with woodlands still uncleared, so it has sort of an aesthetic value that many people consider to be pretty priceless.

DR FISHER: A couple of questions: first of all, I make an observation - and I don't want to get into a debate on greenhouse today because it's not really in our terms of reference, but I don't think at this stage we have the definitive analysis that would allow us to say that the damages associated with clearing 100 hectares of woodland in Queensland equals a million bucks, but that's a debate for another day.

You said something to the effect that you believe that individuals that were negatively impacted upon by regulations had some right to some sort of adjustment assistance. I guess the question I really wanted to ask was: in the case of land clearing, we have say 10,000 farmers in the community effectively bearing the cost, to use your terms, for 20 million Australians' contributed to the global common, so there's an equity issue there and clearly, given the evidence we've received, there's a bunch of these individuals who feel seriously aggrieved. At least, that's the impression I'm getting from listening to them day after day. How would you propose that we actually address this issue?

MR RYAN: I think the Queensland proposal basically has - not wanting to get into details, because that will have to be after negotiation between the stakeholders and Queensland government, federal government, and probably environment groups specifically in Queensland. There's a proposal there for \$150 million compensation. It's already there on the decks.

DR FISHER: Yes, but that issue was specifically about greenhouse. I'm talking about land clearing more generally across all the states. Are you suggesting that that the Australian government should take responsibility for dealing with these issues of native vegetation across the states?

MR RYAN: I think certainly it has got the money. It has already spent over a billion, maybe a billion and a half bucks, on the Natural Heritage Trust and it hasn't addressed at all this activity that has been identified as the biggest threat to these things that it's supposed to be addressing. I think the Natural Heritage Trust, the National Action Plan, possibly Greenhouse Gas and Abatement Program - the ABARE study said by spending the GGAP money it had marginal abatement costs of less than a dollar a tonne, which is - that's very low. When people are talking about 30, 40 - talking about geological sequestration, I think \$50 a tonne to pump it underground. So you can see it is a huge - there's lots of money around that's being misdirected and not directed to the actual cause of the problem.

DR FISHER: Do you see states having any responsibility for this issue?

MR RYAN: They have the current land management. They've got the framework legislation. All this clearing that's going on now is legal. It's tacitly approved by the

state but they do have the legislation in practice and in other states they have been able to ban land clearing and basically reduce the amount of land cleared by significant amounts. In South Australia and Victoria people can argue all over, but they've more or less got down to almost negligible amounts of clearing. So the states have the current regulatory capacity. It's either the Commonwealth has got the money. It would have to usually cooperate with the states or maybe it could pass its own legislation, but generally the states seem to be - at this moment both New South Wales and Queensland seem to be wanting to do something. Yes, I'm sure federal money would help, and certainly in Queensland - the Queensland government said, "We'll do it dollar for dollar if you give us \$75 million."

DR FISHER: Yes. It's not quite obvious to me why the Australian government should pay for something that's a state government responsibility, but I guess that's another debate we need to have some other time. The other question I wanted to ask was a lot of this state legislation seems to be, at least on the evidence that we have, a bit ineffective. For example, somebody mentioned to us that there was a direct correlation between the unreasonableness of the relevant state officials and the number of lightning strikes in native bush, hence leading to some clearing happening by natural means.

How would you propose to deal with these sorts of unintended consequences of the sorts of regulatory arrangements we have in various states around Australia? Because clearly it's not - given your aims, those sorts of unintended consequences are not consistent with your aims.

MR RYAN: True. You can see clearing from space. This is how big it is: you can actually look at it from the satellite and you can see it. That's how it's measured. Sure, it might be possible you're able to clear with a fire, although native vegetation is usually pretty - you'll usually get some sort of other native vegetation wanting to replace it, and when it comes to trees, really the only way to do that - reliably do it - is with mechanical or chemical means on a large scale, really. It seems to me, and it's borne out sometimes. In New South Wales we did get a number - before they brought in the Native Vegetation Act - of prosecutions for illegal clearing, but I say most of the clearing that's going on is perfectly legal.

They talk about one tree. That's not the Native Vegetation Act. You're allowed to clear two hectares before the Native Vegetation Act even comes in. There must be some other legislation - endangered animal without one tree, but it would be a rare event, so this loophole is a mile wide in the Native Vegetation Act, and a general lack of wanting to use it to stop clearing. I know in some areas the officials do it, probably because I know some official told me that none of the clearing there would ever be economic. It just doesn't stack up on a cost - you just can't make money out of clearing bush for sheep on the southern tablelands.

I think it is relatively easy. Those other management options like grazing and how you manage your field rotations and fertilisers, they're much harder to enforce than something you can see from a satellite, and you can see the stumps and you can take the lawyers out there and take the photos and gather the evidence. It's not always easy, but that's just the case. Large penalties of course. Where it's hard to catch people, large penalties are often the answer. Drink-driving, that's a life and death issue, but they have brought in harsh penalties to try and stamp this thing out, and by and large they've been successful.

Maybe they shouldn't have gone in for penalties. Maybe they should have supplied all pubs with unlimited taxi vouchers or something. I don't know. They've gone in for the penalty approach and it seems to have cut down the road toll significantly. I'm not an expert on that but I think we all agree that that's generally what has been happening.

PROF MUSGRAVE: Whether it pays to clear or not is surely beside the point. The point is there are people who want to clear and their perception might be contrary to yours, and that is that it does pay to clear. So it seems to me the fact that you think it doesn't pay or it does pay is beside the point, isn't it?

MR RYAN: It is their perception but as a society if we're wanting the socially best outcome - in other forms of regulation people say visual amenity - you couldn't clear the area because of the visual amenity to the highway. If I owned a house I couldn't put up just anything on the block. I would have to do it - - -

PROF MUSGRAVE: No. I'm just asking you whether you're saying that you or your colleagues perceive that it doesn't pay to clear, therefore refusal of permission to clear is not a problem anyhow; that the farmers are making mistakes by wanting to clear. How do you know that?

MR RYAN: Because that's what the evidence says. We can only go on that by the scientists. We could go for the experts or we can go for the farmers but they may have a good idea of what's happening at the local scale, the farm management scale, to bring themselves income, but that's certainly not the evidence of what happens off downstream effects; national and global issues.

PROF MUSGRAVE: You mean taking external costs into account?

MR RYAN: Yes.

PROF MUSGRAVE: I see. I was puzzled.

MR RYAN: I was just told by this guy in the state agency that he gets applications to clear and he looks at them and he knows that they're not going to make any money. So he was making that decision.

PROF MUSGRAVE: Very technocratic, isn't it?

MR RYAN: He didn't get many complaints.

PROF MUSGRAVE: Why did they apply? Anyhow, I think that's a bit of a side alley. There are two things I wanted to discuss with you. The first has to do with what seems to be almost a dissonance. On the one hand we hear a fairly general level of agreement from all parties about objectives, about compensation and about the desirability of having, if we could, market based instruments and adjustment proposals.

We have some feeling that maybe there's not enough money in the system to pay for all that might be necessary to induce farmers not to clear, but you seem to be more optimistic on that than some, but one of the things that the farmers talk about a lot but that the people from groups such as yours don't address is this question of due process, of seeming administrative inefficiency, of lack of explanation, of absence of rights of appeal. Why is this so? This would seem to be something we could all agree we should tidy up, don't you think?

MR RYAN: We'd like to see an act. We advocate to the politicians and they work for the bureaucracy, and it would be good to reduce the amount of anomalies in the system. This is management stuff, mostly, and a lot of those problems is that people are just sick of bargaining - going on committees and having to justify to bureaucrats and giving their books to bureaucrats. It's not easy. Any regulation always has anomalies. People always say, "It was always safe for me to speed there," and that's the trouble. But like I said, incentives would have the same effect.

You would give incentives when they're not really necessary and this is the trouble with land clearing with incentives, with a direct payment, is you've got to be careful that the 50 million hectares in Queensland - as Neil said, it's not going to be cleared tomorrow, but if you did, say, you'd get a certain amount of money to save it, then they'd all be saying - it's natural, it's human - they would all be thinking, "Yes, I was thinking of clearing that." They'd be all putting their hands up to get the money. So that's the trouble with clearing, it's pretty hard to direct the money to the people who really were going to clear. That's where probably that guy's method of doing it; seeing whether it was going to be a financially viable proposition was probably not such a bad idea, I would have thought.

PROF MUSGRAVE: The New South Wales Farmers' people referred to the

statement of the objective in the legislation that there should be something like there should be no clearing of native vegetation and you've got a statement like that in your submission, that all clearing of native vegetation should cease. That's a very, very strong statement - blanket across the whole jurisdiction.

MR RYAN: Yes.

PROF MUSGRAVE: It implies that there should be no discretion; that such a statement seems to imply that there should be no discretion, yet some of the discussion is in terms of the fact that that's not an adequate statement; that there should be an ability to define outcomes that could be devolved down through the jurisdiction, down to regions to the point where it gets down to individual applicants for permits to clear. To the point that their refusal can be clearly rationalised in terms of the outcomes that are sought, be they in terms of biodiversity, salinity or whatever, and there's a significant level of complaint that this doesn't seem to be possible.

It has not happened in many situations where it has been sought. I've just suggested your assertion that this blanket ban at the very top of the legislation seems to be quite consistent with this inability to be able to rationalise decisions on the ground - do you feel that there is scope for making it possible to be able to define outcomes that give greater and greater degrees of disaggregation so that we can ultimately rationalise to the permit applicant on the ground the reason why he can't clear in relation to his particular situation or has it just got to, say, blanket?

MR RYAN: With clearing, there's an irreversibility problem. Once you clear an area of native bush really well, it's going to take a long time to replace that. It's not something that can be - - -

PROF MUSGRAVE: Yes.

MR RYAN: With an offset situation, it's hard to imagine - we've got wetland offsets in America and they haven't worked out particularly well. You know, some people say they're a success, but they haven't worked particularly fantastically. A wetland is probably - you can imagine the shorter time span type - organisms live in it. With land clearing, I'm generally talking about trees or plants. Those offset situations - we don't believe that they're possible.

PROF MUSGRAVE: I think you've missed my question.

MR RYAN: You think they should be allowed to clear a bit more?

PROF MUSGRAVE: No. We've been told of situations where people have been

refused permission to clear and they have not been given an explanation of what is the underlying rationale for the decision that they should not clear, apart from some adherence to a basic ban. It would seem unfortunate that they can't have the science presented to them and it does seem unfortunate that they don't have some greater right of appeal, if it's true that they don't have appropriate avenues.

MR RYAN: I think there's especially a problem - as there is in a lot of jurisdictions now - that one farmer can get refused and another farmer gets approved. That's obviously a problem.

PROF MUSGRAVE: Yes.

MR RYAN: With the blanket ban - I don't know whether you guys in your travels have experienced this, but it seems to me that where the jurisdictions are tighter - Victoria and South Australia - have you had more less complaints, is there more worry about it? It seems to me that, where there's a lot of bargaining and a lot of leeway for making decisions, that's where there seems to be the most controversy.

PROF MUSGRAVE: It's hard to generalise. I would not generalise on the basis of our samples.

MR RYAN: Yes, right.

PROF MUSGRAVE: Let's leave that, because time is a problem for us. Can I just switch rapidly to another area, the regional committee business? You talked about the unreasonableness of asking regional groups to make decisions which affect members of the group. That's under (1) on page 3 of your submission. Then under (2) you talk about, "A regional committee is the best place to assist," and you list a number of dot points; important issues.

MR RYAN: Yes.

PROF MUSGRAVE: I find this a little bit difficult. You do see a role for regional committees?

MR RYAN: Yes, but that separation between ongoing management and the end of broad scale land clearing. We don't think it's appropriate - the broad scale land clearing - because it has a lot of capital implications.. Ongoing management - we consider a much bigger role for incentive payments, et cetera.

PROF MUSGRAVE: I see.

MR RYAN: That would be a much more appropriate way to deal with it in the

planning process.

PROF MUSGRAVE: Some people are less pessimistic than you about this. Of course, traditional societies have shown a great ability to manage common property in ways where decisions are involved, where some people are advantaged and other people are disadvantaged, and to recognise it must happen for the common good. It might be that if certain circumstances are satisfied it could work, but I understand your concern. These regional committees you have in mind, how would they be created? I'll ask you this question, say, in the setting of New South Wales, where I don't think the regional committee approach has been a roaring success.

MR RYAN: Yes.

PROF MUSGRAVE: Have you got any suggestions how we might form them?

MR RYAN: We tend to go with the Wentworth Group process on that. I mean, between the stakeholders - - -

PROF MUSGRAVE: But it's a bit skeleton and no flesh, isn't it, at the moment?

MR RYAN: Yes. I haven't been involved in the actual nitty-gritty of the negotiations. I mean, that's really stakeholder type issues.

PROF MUSGRAVE: Do you think stakeholder representation is the way to go on regional committees?

MR RYAN: Yes. Stakeholders are good, and there's all sorts of literature on how committees work, et cetera, and how the regulation works for common property. They're not good at assessing off-site problems. I would think a regional committee is not good at assessing - you know, farmers in Queensland aren't particularly good at assessing the effect of salinity in Adelaide's water supply.

PROF MUSGRAVE: No, and they shouldn't be asked to, should they?

MR RYAN: No. That's where you've got to have some sort of overview.

PROF MUSGRAVE: Yes, of course.

DR BYRON: I think we've come to - - -

MR RYAN: Yes, thanks.

DR BYRON: Thank you very much for coming along and thank you very much for

your submission.

MR RYAN: Yes, great. Thanks for listening.

DR BYRON: Unless there's anybody else who would like to come forward and put something on the record, I suggest we close this public hearing and resume tomorrow in Moree. Thank you very much.

AT 4.21 PM THE INQUIRY WAS ADJOURNED UNTIL
WEDNESDAY, 20 AUGUST 2003

INDEX

	<u>Page</u>
INSTITUTE OF PUBLIC AFFAIRS JAMES ALFRED HOGGETT	813-827
RICEGROWERS ASSOCIATION OF AUSTRALIA DEDEE WOODSIDE	828-840
WORLD WILDLIFE FUND OF AUSTRALIA ANDREAS GLANZNIG WARWICK MOSS	841-860
FREDERICK STEWART HESPE	861-871
NEW SOUTH WALES FARMERS ASSOCIATION MICHAEL JOHN KEOGH STEPHEN RENTON JONATHAN RUSSELL STREAT	872-894
THE WILDERNESS SOCIETY NOEL RYAN	895-909