



COMMONWEALTH OF AUSTRALIA

SENATE

Official Committee Hansard

ENVIRONMENT, RECREATION, COMMUNICATIONS AND THE
ARTS REFERENCES COMMITTEE

Reference: Hinchinbrook Channel

MONDAY, 24 AUGUST 1998

CANBERRA

BY AUTHORITY OF THE SENATE
CANBERRA 1997

INTERNET

The Proof and Official Hansard transcripts of Senate committee hearings, some House of Representatives committee hearings and some joint committee hearings are available on the Internet. Some House of Representatives committees and some joint committees make available only Official Hansard transcripts.

The Internet address is: **<http://www.aph.gov.au/hansard>**

SENATE

**ENVIRONMENT, RECREATION, COMMUNICATIONS AND THE ARTS REFERENCES
COMMITTEE**

Monday, 24 August 1998

Members: Senator Allison (*Chair*), Senator Tierney (*Deputy Chair*), Senators Hogg, Lundy, O’Chee, Payne, Reynolds and Schacht

Participating members: Senators Abetz, Bartlett, Bolkus, Boswell, Brown, Calvert, George Campbell, Chapman, Colston, Coonan, Cooney, Eggleston, Evans, Faulkner, Ferguson, Ian Macdonald, Margetts, McKiernan, Neal, Patterson and Woodley

Senators in attendance: Senators Allison, Hogg, Payne, Tierney and Woodley

Terms of reference for the inquiry:

1. The relationships between Federal, state and local governments and developers in the Hinchinbrook Channel.
2. The effect of developments on the environment of the Hinchinbrook Channel and surrounding environs.
3. Whether governments have met their obligations under the various acts and agreements that deal with the Hinchinbrook area.
4. Alternatives to the existing regime.
5. What lessons have been learned and what can be done to prevent problems like this occurring in the future.

WITNESSES

**WILLIAMS, Mr Keith, Principal Executive, Cardwell Properties Pty Ltd, PO Box
444, Main Beach, Gold Coast, Queensland 4217 323**

**MAROHASY, Ms Jennifer Joyce, Environment Manager, Canegrowers, GPO Box
1032, Brisbane, Queensland 4001 348**

**SHEEDY, Mr Peter Edward, Manager, Canegrowers Herbert River District, PO
Box 410, Ingham, Queensland 4850 348**

**BEALE, Mr Roger David, Secretary, Environment Australia, Canberra, Australian
Capital Territory 370**

**KING, Mr Daryl Harvey, Director, World Heritage Unit, Environment Australia,
PO Box 1567, Canberra, Australian Capital Territory 370**

MORVELL, Mr Gerry, Assistant Secretary, Environment Assessment Branch, Environment Australia, GPO Box 787, Canberra, Australian Capital Territory .	370
REYE, Dr Susan, General Counsel, Department of the Environment, Canberra, Australian Capital Territory	370
COOK, Mr Clive Robert David, Manager, Environmental Impact Management, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville, Queens- land 4810	370
McPHAIL, Dr Ian Roderick, Chairman, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville, Queensland 4810	370

ENVIRONMENT, RECREATION, COMMUNICATIONS AND THE ARTS REFERENCES
COMMITTEE

Hinchinbrook Channel

CANBERRA

Committee met at 9.07 a.m.

WILLIAMS, Mr Keith, Principal Executive, Cardwell Properties Pty Ltd, PO Box 444, Main Beach, Gold Coast, Queensland 4217

CHAIR—Welcome. I declare open this fourth public hearing of the inquiry of the Senate Environment, Recreation Communication and the Arts Reference Committee into the Hinchinbrook Channel. The committee prefers that evidence be given in public, but should you at any stage wish to give your evidence, part of your evidence, or answers to specific questions in camera, you may ask to do so and the committee will consider your request. However, I point out that evidence taken in camera may subsequently be made public by order of the Senate. The committee has before it a supplementary submission from you, submission No. 83. Do you wish this supplementary submission to be confidential?

Mr Williams—Yes. I think that would be best as the main thrust of my submission was confidential.

CHAIR—Do you wish to make a brief opening statement?

Mr Williams—Yes. I would like to address some of the items in that additional submission. I have also given this matter a lot of thought and I am rather perplexed about the purpose of the entire committee hearing. To me, it seems to have political overtones and to not be held out of any concern for the environment.

When I was told about this committee, I took the matter seriously and made enquiries about how Senate committees of inquiry are conducted. I was advised that it was a serious offence to lie or to attempt to deceive a Senate committee. But, apart from a few meaningful questions posed by members of this committee, there have been very few attempts made to uncover the truth. The truth will never be uncovered at any Senate committee hearing until the accused has the right to cross-examine his accusers. I do not see how it is possible for you, the committee members, to know what questions to ask of these people who supposedly provide evidence.

Two weeks ago today I sat here and listened to five hours of deliberately deceiving accusations and, apart from Dr Bowman of the CSIRO, the speakers had one thing in common: either they had not visited the site or they had not done any testing at the site. Their comments were based on supposition only.

Jes Sammut, with no credentials, by his own admission, told blatant lies—and I put that very bluntly—when he said that he went to the office and obtained permission to inspect the site. It is a bit like a second-hand car salesman saying, ‘Yes, it’s a beauty mate,’ but he has not looked under the bonnet and he has not looked inside the doors. He did not get permission to inspect the site other than, perhaps, the residential lots along the waterfront. By his own admission, he certainly did not carry out any testing, and he did not inspect any of the site south of the main canal that you inspected.

If you are serious about uncovering the truth, I must inquire of your committee as to why you paid to get Hamish Malcolm here when he contributed absolutely nothing, other than to

state his disagreement with one of the ground rules laid down by a group of his superiors. Collusion with the NQCC is Hamish Malcolm's forte. I will supply to you now if you wish an affidavit by Margaret Moorhouse of the North Queensland Conservation Council which shows conclusively that he colluded with the North Queensland Conservation Council. He came to our site every day as the environmental site supervisor and reported that night to Margaret Moorhouse what had been happening.

One of the lies that he told in an affidavit, which I will send you later if you wish—

CHAIR—Mr Williams, can I interrupt you for a moment? You do of course have privilege in appearing before this committee, but I do warn you that some of the remarks you are making about people are likely to put at risk their integrity and standing, and I urge you not to continue in that vein.

Mr Williams—Senator, thank you for that advice. But everything I am saying is absolutely true and supportable, and I have evidence to prove it.

CHAIR—Then if you can just concentrate on the evidence and not make those sorts of remarks, I think that would be best.

Mr Williams—I will submit to you the copy of the affidavit which was presented in court, so it is public knowledge, and which referred to what Hamish Malcolm told Margaret Moorhouse. That has to be collusion. He had an absolute disregard for his professional ethics in regard to maintaining confidence about the work that he was doing for the Queensland government.

By contrast with some of those who have given evidence, I suggest that this committee should check the characters of these people who have given evidence. Some have been recently charged with criminal offences. I also suggest that the pursuit of the truth would have been better served by summoning to appear before your committee the independent monitor, Professor Peter Saenger, who, apart from being the independent monitor appointed at the direction of the Prime Minister and the Premier of Queensland, is a man I had never met or have had no further dealings with, you should note that he was so independent that he was commissioned by both Senator Faulkner and Senator Hill in regard to providing scientific reports on my application for consent. So both sides chose to invite Professor Saenger to report for them.

Professor Saenger has the true facts at his fingertips. He has the results of all the surveys—the seagrass surveys, the beach surveys, the mangrove surveys—and he has available the compilation of the extensive monitoring programs that have been carried out on dredging, turbidity, the dreadful acid sulfate—the mythical acid sulfate, I must say, in this case. Professor Saenger was present during your inspection of the site, but he was not invited to address this committee. He was told that he would be sent a list of questions, but as recently as yesterday—and I took the liberty of checking—he had received no word from your committee and no list of questions.

I ask you again: what is the point of listening to the insupportable and emotional diatribe being dished up by self-confessed green fanatics when you choose to ignore the most highly

qualified professor of coastal management in this country who has all of the unchallengeable scientific evidence with him?

CHAIR—Mr Williams, can I interrupt you for a moment? Because Professor Saenger has not yet received questions does not mean that he is not going to. There is still plenty of time for the committee to put those questions to him. So please do not assume that that is not the case.

Mr Williams—I do think that if this committee does not get the advice of Professor Saenger they will be neglecting their responsibilities.

Senator TIERNEY—Chair, are you indicating that there is a plan to call Professor Saenger?

CHAIR—No, that is not my understanding, but that we would put some questions in writing at the end of the hearing should they be considered to be necessary.

Senator TIERNEY—Is there any reason why we have not called him?

CHAIR—I do not believe so. Professor Saenger did not make a submission or invite the committee to ask him—

Mr Williams—Senator Tierney, I asked that question, and I was told that he could not be fitted into the program last Monday week. Yet, after I had been told that he could not be fitted in, miraculously Hamish Malcolm was fitted in. So I wonder who is more important to this committee—the environmental site supervisor, who was there for only a very short period of time and disgraced himself while he was there, or Professor Saenger, appointed by the governments, who has, at his fingertips, all the answers to all the accusations that were made. All of those answers show conclusively that there has been no harm—none at all—caused to the environment.

Senator TIERNEY—Perhaps, Chair, we could take this matter up in a private meeting.

Mr Williams—As an alternative, I also respectfully suggest that you should summons before you Mr David Kay who was the head of the World Heritage unit at the time when the proclamations were made. Perhaps you could ask him why proclamations were made when not one solitary soul—not one—from the office of Senator Faulkner ever inspected the site before those proclamations were made.

You should also ask him why Senator Faulkner took no notice of the Pitman report because, when Senator Faulkner realised he was on thin ice because it was very obvious that the site could hardly be damaged by what we were going to do due to the existing turbidity that exists there naturally, they realised they were in trouble and, in fact, stated that to me while they were there. His staff member said, ‘This is not what we expected. It is pretty hard to say why we should be considering damage.’

They had been told twice in the two days before the proclamation—once by the Great Barrier Reef Marine Park Authority and once by Ed Casey, the former Minister for Primary

Industries in Queensland—that they had both had their experts visit the site. They said that they could see no harm being caused by the dredging, the building of the breakwaters or the clearing of the mangroves.

At my last appearance I told you that that same letter from the Great Barrier Reef Marine Park Authority cautioned the minister against taking notice of Dr Peter Valentine or Mr David Haigh. So you should summons David Kay and ask him why, when the Pitman report came out—a report by 14 scientific experts; Senator Faulkner called them ‘the committee of scientific experts’—it was said they could see no damage.

Why then did Senator Faulkner not pick up his marbles and walk away and say, ‘This is a matter for the state government’? That has always been a source of concern to me. Why did he not walk away then, when his own appointed 14 scientific experts, as he called them, said there was no sign of damage? There are quite a lot of other questions you might ask of David Kay, by the way, such as: did you approve of the world heritage legislation being used in the case of Port Hinchinbrook? I think you will find his answer is: no, he did not approve of it. You could ask Ros Kelly, the previous minister, if she approved of it. She has publicly told conferences, with 400 and 500 people there, that she did not approve of it and it should never have been used. This is the reason why I believe this whole issue has political overtones.

If you are really seeking the truth, I can give you enough scandalous information to keep this inquiry going well into the next century, but I really do not think the truth is what you want. Perhaps a royal commission would be the best way to go about it, but the potential result might scare off many people. I personally would welcome a royal commission, and I stand by that which I have stated so many times. I have never breached the deed, and I have acted totally responsibly in regard to protecting the environment.

I will submit that affidavit as part of my submission. I am also going to refer to a comment by Professor Talbot. He said that the plan has changed from the original Tekin plan. I submit here the original Tekin plan. If you can find a boulevard along the esplanade, I would love to know about it. If you can find that there are not houses along the esplanade, I would love to know about that too. It says here that along the esplanade there is a beach bar and grill and there are beachfront cottages along the beach.

He also said that the population had gone up. If you multiply out the various things on the Tekin plan, it comes to about 2,600 people, whereas I am limited to 1,500. I wonder why governments want to limit the population of my development when they are screaming for jobs. The bigger the development, the more jobs it is going to create. I also wonder why they want to limit the size of the development when it is a part of the urban area of the township of Cardwell, yet there is no attempt being made to limit the population of Cardwell or to limit anything else. Why do I deserve this great attention and get limited? It is only through large resorts such as Port Hinchinbrook that the township is assisted. It is only through large integrated resorts like Port Hinchinbrook that there is some contribution made towards headwork for sewerage and water supply to the town. We do not want their water and we do not want their sewerage, but we have agreed to work with the council so that they can sewer the whole of the town of Cardwell and they can provide better reticulation for the town of Cardwell.

See if the marina is increased in size, as Professor Talbot said. You will find that the number of boats at the marina is less under our plan—234, I think. This says there will be a 210-berth marina, but you have to add on to that the individual jetty sites around here, which is about 66. I am pointing out these things that Professor Talbot said were lies. He knew them to be lies, because he has had access to this plan for the last five years. I would like to submit that as part of my evidence as well. That is the master plan of Port Hinchinbrook.

While I am wound up about things that should not be done, if we talk about responsible bodies such as the Australian Conservation Foundation, I suggest that you look to my original submission. You will find there, at annexure C1, a document put out by the Australian Conservation Foundation. That document contained nothing but lies. You will find my comments on each of their comments in order. How can the government possibly consider the Australian Conservation Foundation to be a reputable body when they put out deliberate lies with the intent of misleading all Australians? How can a government continue to fund these organisations that act irresponsibly and try to undo what the government is trying to do?

Going through the printed addendum to my previous submission, under 'stormwater', I think I congratulated one of your members on asking a sensible question and I hope that answer was satisfactory, Senator Hogg. You did not get it?

Senator HOGG—Yes, I got it, but I want to ask further questions.

Mr Williams—Okay. Do you want to ask a question on that now?

CHAIR—Have you completed your remarks?

Mr Williams—No. I will get this finished. The potential for acid sulfate soil in the channel: another one of your senators asked about that and I think that has been answered too. We go back to Professor Talbot and look at all the information that he had at his fingertips, but he deliberately deceived this committee. I was told that that was a serious offence. Is it or is it not a serious offence to deliberately go out to deceive your hearing? I would like to know if it is an offence or not.

CHAIR—Is that the end of your remarks?

Mr Williams—Is it in order to deceive your committee?

CHAIR—Of course it is not in order to—

Mr Williams—No, of course it is not. Well then I wonder why you did not take issue with Professor Talbot, because he knew the correct answers to every one of his deceptive comments. He spoke about cyclone surge. The figures are there, available to everybody, put out by the Beach Protection Authority. On a one in 900 year occurrence—one in 900 years—a cyclone surge may get to RL3.2. Our waterfrontage blocks are 4.2 and the lowest allowable ground floor slab is 3.5. One in 900 years.

Acid damage to building foundations: he knew all about the CSIRO report yet, funnily enough, he could not read that section of the CSIRO report which said that there was no problem with acid sulfate soils in the foreshore residential precinct. He said the plans have changed. I have already dealt with that. The plans have not changed and I have submitted the original Tekin plan.

He spoke about jetties protruding out into the Hinchinbrook Channel from 55 waterfrontage lots. That is being totally deceptive because nobody would be building a jetty out 400 to 500 metres into the Hinchinbrook Channel. How could they get permission to cut through the mangroves? Because, certainly, I have had enough problems with that.

He spoke about the erosion. You heard him questioned by one of your senators. He dredged up old information from four years back that has since been refuted by surveys and indisputable scientific evidence. He said the marina size has changed. We have already dealt with that. The marina size has not changed.

He said the development is not needed. That may well be for Professor Talbot sitting back in his home in Sydney. But his family group is not being destroyed in the town of Cardwell as it has been by government decisions for the last 20 years, starting with Senator Richardson stopping the forestry industry and promising the people of Cardwell tourism as an offset. When the first major tourism project came up in the area, the Senate and Senator Richardson were clearly against it. Talbot also spoke about 2,000 to 3,000 people using Hinchinbrook every week—a ridiculous statement when he is fully aware of the limitations and quota system put in place by the Queensland government.

With regard to acid sulfate soils, I want to make it clear that—without any malicious intent, I am sure—at a meeting with those who were formulating the deed, the Queensland government's senior representative handling this matter told me that there was no acid sulfate problem at Port Hinchinbrook. He later gave me a report by academics at the James Cook University to support that there was no acid sulfate problem at Port Hinchinbrook. So how can I be responsible for going ahead?

Senator HOGG—Can you furnish the committee with a copy of that report?

Mr Williams—Yes, I can furnish you with a copy. I can give you the name of the people present at the meeting and the lady who gave me the advice. I am sure they will admit that they gave me that advice.

I have already spoken for long enough about the scientists and pseudo scientists who spoke about acid sulfates for about five hours and told you absolutely nothing—because they had not done any investigations on site, except for Dr Bowman. If you recall, Dr Bowman's statement was that the impact at Port Hinchinbrook would be very minor if managed properly. He also said that he had probed the channel to the greatest depth that he could and found no PASS material there. I have since written a letter to the person inquiring, I think Senator Woodley—and I can put it on the official record, if you like—saying that we tested below that depth to the maximum depth to which we would be dredging, and there was no PASS material there.

Senator WOODLEY—Have you got that letter available?

Mr Williams—No, we only probed manually. We did not send raw samples down.

Senator WOODLEY—No, have you got the letter that you wrote me? I can table it but my fax machine did not quite properly—

Mr Williams—Yes, Senator, I think I do have a copy.

Senator WOODLEY—Otherwise I can table this, but it has a bit missing.

Mr Williams—It is in my briefcase. I will grab it before I leave. I could go on and further criticise lots of statements that were made in this room on Monday, 10 August, but I think I have covered those. It would be belittling to answer some of the ridiculous comments that were made by some of the people who were here that day, so I am not going to comment. I think it is suffice to say that they have never been to the site, they have not tested the site again—except for Dr Bowman—so anything that they said was mere supposition. I ask: why should you even listen to supposition when the real facts are readily at hand through the independent monitor who has been put in that position to give an unbiased opinion of the whole monitoring regime? Do you want to ask any questions?

CHAIR—I am sure we do, Mr Williams. You have been saying for some time—and I think it was a part of your written opening statement at the last hearing—something to the effect that not one drop of acid-contaminated water has entered the Hinchinbrook Passage as a result of your company's construction works. Isn't it the case that on 13 January this year monitoring showed that waters at the discharge point peaked at pH4.7?

Mr Williams—No, that is not so. Again, the records are there. You can get them from Peter Saenger. I do not know where you got that information from, but it is totally incorrect. I had never even heard of it until today. Where did that information come from?

CHAIR—It came from Mr Justin Parsonage, who was the environment supervisor at AESS at Port Hinchinbrook on 17 January.

Mr Williams—Are you saying that Mr Parsonage said that water passed into the Hinchinbrook Channel at pH4?

CHAIR—Yes, at the discharge point.

Mr Williams—At the discharge point. On what date?

CHAIR—That is on 13 January 1998.

Mr Williams—That could be possible at the discharge point. But that is not into the Hinchinbrook Channel. That is something like 800 metres upstream from the channel, and that is not my responsibility because, by the time that water has travelled five metres into our channel, it is not acid. Also, if read the deed, you will find that I am not responsible for rainwater. I am only responsible for water that flows off my site as a result of my

company's construction works. That is all I am responsible for. Water comes down the creeks into my property at as low as pH4. It flows out of nature into my property from the western side of the highway as low as pH4. I am not God.

CHAIR—You would have some records or you would have some monitoring which will show that at the point of discharge it was 4.7 but at the point of entry into the channel it was some other rating?

Mr Williams—At the point of entry into the channel, I have already stated that there has never been one drop of acid sulfate water.

CHAIR—And you stand by that?

Mr Williams—I think you should get this acid sulfate correct.

CHAIR—You stand by that?

Mr Williams—I do not have to stand by it, Senator. It is a matter of record. It is a matter of official record. I might add that Parsonage was only doing that to be mischievous because the technical advisory committee who were working in accordance with the deed determined that the point of entry into the channel was no longer appropriate.

You have got to consider that, when the deed was set up, the point of entry was the mouth of Stoney Creek. There no longer is a Stoney Creek. As I said, that is caused by rainwater, and I hope this committee does not expect me to be able to change the acts of God because, believe it or not, I am not capable of doing that.

CHAIR—Mr Williams, on 2 December 1996, I understand that your construction company pumped water of the pH of 4.1 into the tidal reaches of the Stoney Creek. Is that something you can confirm for us?

Mr Williams—Water from where?

CHAIR—Into the tidal reaches of Stoney Creek, pH level 4.1?

Mr Williams—Into the tidal reaches of Stoney Creek on what date?

CHAIR—Can you confirm that?

Mr Williams—What date was that?

CHAIR—That was on 2 December 1996.

Mr Williams—On 2 December 1996—now you are stretching my memory. I would not think so. I would like to have more evidence of what that is and who took it. Who supplied that evidence?

CHAIR—That was the subject of a report by Mr Gledhill to the regional director of the northern region around that date.

Mr Williams—But again, Senator, it is of no consequence. When you say it was pumped in—

CHAIR—I suggest, Mr Williams, that it is the consequence—

Mr Williams—It depends where it came from. It was a result of rainwater. It is not my responsibility.

CHAIR—I understand that it is not the result of rainwater but, nonetheless, what I am doing is challenging your statement that not one drop of acid has been released into the Hinchinbrook Channel as a result of your construction. I have given you two examples.

Mr Williams—I stand by my statement. If it was pumped into Stoney Creek there was no chance on earth, not one in a million, that it entered the Hinchinbrook Passage as anything below pH6—and we are allowed to discharge up to pH6. As I said, either you do not understand or you do not want to understand. When you put acid leachate into seawater, it is buffered and dissipated within a matter of a few metres—not 100 metres or 1,000 metres. I would wager that I can put a 50,000-litre tanker load of pure sulfuric acid into the western end of our canal and, by the time it reaches the Hinchinbrook Channel, it will be alkaline. I do not know what you are trying to get at because this is patently ridiculous, if you do not mind me saying so. We are talking about something that happened in 1966—

CHAIR—In 1996.

Mr Williams—What I want to see is where the damage is that has ever been caused by anything that I have done at Port Hinchinbrook, and the answer is simple: there is no bloody damage at all.

Senator TIERNEY—Can I clarify a point there? Are you saying that when acid sulfate, or the acid, actually gets into the water, when the water that has acid hits seawater, it is automatically neutralised because of the chemical composition of seawater?

Mr Williams—Yes. And I think that you should get more information from a responsible scientist such as Professor Saenger who will go through the whole thing in detail with you. But what I am saying is correct; it is immediately buffered. I have also said—and I am quoting the words of Professor Saenger—that there has never been an incidence of damage from acid sulfate leachate in an estuary mouth situation. Port Hinchinbrook is an estuary mouth.

I will give you a five-minute—or a five-second—enlightenment on the fact that acid sulfate is a natural phenomenon. It is basically caused by the drying out of material say in a melaleuca swamp which may be several miles inland. It cracks like the photographs you see of the bottom of Lake Eyre. Then there is a sudden flush of water. The water flushes the acid out of that swamp and carries it down a creek. If it is a low capacity creek and it is

fresh water, then certainly it is possible to do some damage in that creek, but by the time it enters the seawater there is no longer any potential for damage at all.

That is why I have said to you several times today—and I do not know whether you cannot understand or you do not want to understand—that we constantly measure the creeks flowing into my land. There are several creeks. They carry in fresh water at pH levels of between four and six—rarely are they over pH six. So the water flowing into my land is coming in at less than pH six. But, by the time it leaves my land, through no action of mine but through nature, it is back to being alkaline and not acid.

Senator TIERNEY—You have spoken about evidence given by scientists before this committee. I must admit that I was rather intrigued that when I asked most of them they did not have any baseline data in terms of comparing anything, which I thought was fairly unscientific. You seem to be indicating that their motives are not scientific. You even seem to be indicating that their motives are political. Would you like to expand on that?

Mr Williams—Their motives are political or, if not political, they are carrying out their own crusade of hatred against me and Port Hinchinbrook and their hatred of any form of development. They are certainly not genuine scientists. They are quite prepared to bastardise their credentials without even blushing.

Senator TIERNEY—The last time you were before us, you mentioned that because of the reputation of the Hinchinbrook development in terms of the fracas over the environment, \$2 billion worth of projects have been lost to Australia. Could you provide us with more details?

Mr Williams—Yes. It is all in writing. I have already provided it.

Senator TIERNEY—For the *Hansard* record, could you go through what the projects were and where they were.

Mr Williams—I will provide that information, however I can tell you that not only do I know of the projects but, in most cases, I spoke not only to the developers but also to the investors who were putting the money behind those developments. They confirmed that they had withdrawn from the projects basically as a result of what has happened at Port Hinchinbrook.

Senator TIERNEY—Could you list some of those projects now?

Mr Williams—They include the \$500 million Rainbow Harbour project in Cairns; the False Cape project, across Trinity Inlet from Cairns; and a major project at Mission Beach. The name of the man who was doing the Mission Beach project slips my memory at the moment, but I know him quite well personally. That man invited me to his home for dinner and asked me what had happened at Port Hinchinbrook. After I told him, he said, 'Here's the plans for my great, environmentally friendly resort which is going to run into several hundreds of millions of dollars. I am walking away from it at this minute.'

Senator TIERNEY—With your project, which you are pretty determined to proceed with, you mentioned that 1,500 people will be on the site. How many jobs would your project create directly if it went through to the full development that is allowed at this point?

Mr Williams—On site, approximately 1,000. Of course, I am not guessing; I can give you the information from cold, hard experience on Hamilton Island where I know how many staff are required to service a number of guests. The Cardwell Shire Council put their own plus figures onto that for other jobs created, and they work to a ratio of 2.7. So 1,000 jobs on site would relate to 2,700 jobs created. But you have to accept that those jobs then become pretty thinly smeared with distance from the resort centre.

Let us say that, with 1,000 jobs on site, there will then be X number of jobs created in Ingham, Innisfail and Tully, then further away in Townsville and Cairns and then further away again getting down to industrial centres—Brisbane, Sydney, Melbourne, et cetera. When you get furthest away, of course, it is getting to be pretty thinly smeared.

Senator TIERNEY—So that figure of 2.7 is total, right across, including all those—

Mr Williams—That is right. They are all jobs, and they mean as much to this nation as any job anywhere.

Senator TIERNEY—If any unexpected environmental problem arises in the future as a result of the development, does the deed of agreement allow the government to demand specific performance from you to rectify that?

Mr Williams—It does not allow them to demand any specific performance other than that which is already encapsulated in the deed.

Senator TIERNEY—Would you expand a little on what you mean by that?

Mr Williams—My obligations are clearly delineated in the deed. So if the governments want to put any further obligations upon me, that would be in breach of the deed and I would have a right to claim compensation.

Senator TIERNEY—Do you think the regional coastal management plan, if there had been such a thing 20-odd years ago, could have headed off a lot of what has happened? Do you think that plan is a useful instrument?

Mr Williams—It falls into exactly the same category as this much talked about EIS that we did not get. It is just a bloody good excuse for the greens to use in opposition to us. They know full well that no EIS would have provided the environmental safeguards that the deed has provided and, be there a regional management plan or not, they would still object. They will object to anything anywhere, and I think this has been proven by their objection to Korea Zinc in Townsville, their objection to Nelly Bay on Magnetic Island and their objection to Dungeness at Lucinda. They just object to everything as a matter of principle.

In this case, they made a special target out of me because I have been heralded as a tall poppy. They throw up my ‘disgusting development’ of Hamilton Island. However, it is a

strange thing that, throughout the entire development of Hamilton Island, I did not get one word of dissent—not one—from one green organisation in Australia. Whether you like high-rise or whether you do not like high-rise—that is a matter of your own personal opinion—the fact is the tourists like them because, before you can get a tourist to take any type of accommodation on Hamilton Island other than in the high-rise buildings, all the high-rise has to be booked out.

I am not saying that I would do the same again under the same circumstances. We all make mistakes; we all change our minds. Time changes our minds for us, and it is horses for courses. I would no more think about building a high-rise in Cardwell than think about flying to the moon, but on Hamilton Island it was appropriate because there was so very little land that we built on.

An integrated resort cannot survive on a handful of people. By its very definition, it requires a lot of people. It is only through a lot of people that you can build the facilities that demanding tourists want today. This is nothing new. I can show you correspondence going back 30 years, where I advised the Queensland government, ‘You are being foolish allowing the development of one small resort on one island but over many islands. You would be better advised to leave all the small islands alone and to build one or several major resorts on one island, where you can provide all the infrastructure. That means an airport, a marina and everything else that is needed. Put them all on one big island, and let all the small islands remain naturally.’ That was my advice 30 years ago, and it is as appropriate today as it was 30 years ago.

Senator TIERNEY—Back to the regional coastal management plan. I assume what you are saying is that the deed of agreement is robust enough to provide sufficient protection—it does not need a regional coastal management plan or any new device.

Mr Williams—Before Senator Faulkner made the proclamations, his office reported that the deed was a comprehensive document which, in many cases, had more obligations than would have been expected in an EIS. They were the words of Senator Faulkner’s department. In fact, I have missed one word there. They said it was comprehensive—I am missing one word—in other words, they were saying that it covered everything.

Senator TIERNEY—Thank you.

Mr Williams—The deed has taken the place of any EIS three times over. Let me also say that if, as a result of this committee hearing, or if, as a result of decisions in other political areas, the same obligations that have been applied to me are going to be applied to all other developers in similar circumstances, then you can kiss goodbye all development in Australia, because no-one will accept the obligations that have been unjustifiably placed upon me.

Senator HOGG—In response to a question I asked last time about stormwater, I did not get a full answer. I am not saying that was in any way deliberate, because maybe I did not ask the right question. I will do so now. What protections are being put in place against run-off that will undoubtedly happen from properties, such as toxins from pesticides, people fertilising their lawns, people weeding their lawns and so on? You have a development site

there. I presume all of that will feed through the one stormwater drain system and then out into the one channel. Whilst I commend what you have done with the litter, do you know anything about the impact of what might happen from those sites themselves?

Mr Williams—It would be so insignificant. On a scale of one to 100, it would be about 0.0001 when you compare it with what is happening to agricultural land. Are you going to apply the same standards to every residential development throughout Australia? Invariably you will find that it all flows into the stormwater system, and it all flows into some channel. If you take, for example, what is happening in the town of Cardwell itself right now, because of the abundance of septic systems, the septic water is flowing out onto the beach. That is a known factor. Because of Port Hinchinbrook, they will be able to sewer the town and that will cease. So there is a very big plus factor. Even the stormwater that comes off the properties from every residence in Cardwell—remember that there are hundreds of them and they are surely going to fertilise their gardens and lawns the same as we are—is all going to flow out through the stormwater systems onto the beach.

Senator HOGG—Accepting that, what monitoring is there in place currently to know what the impact from Cardwell is, as it exists either today or in most recent times, of those things?

Mr Williams—I do not know of any monitoring that has been done for Cardwell or for any other coastal town on the Queensland coast.

Senator HOGG—So is there anything that will enable people, as time goes on, to designate the impact of your development as opposed to what might have naturally occurred from the town of Cardwell itself?

Mr Williams—They could get a comparison at any time, Senator, because we are obligated to continue to check quality of water from Port Hinchinbrook. That is also covered in the requirements of the deed. Also, as far as the marina is concerned, we are required to conduct our marina in accordance with the code of conduct stipulated by the Great Barrier Reef Marine Park, and that is considerably more severe than the codes of conduct applied to marinas that are not within the Great Barrier Reef Marine Park area.

Senator HOGG—Are you monitoring any of the areas offshore from your development at this stage as to the impact of your development?

Mr Williams—No, the government is monitoring them.

Senator HOGG—How do they differentiate the impact of your development from the town of Cardwell?

Mr Williams—I do not think they have ever attempted to do that, and I can see no good reason for doing it. However, the furthest out nephelometer measuring water quality, being turbidity and Ph—and they can put other probes into these nephelometers for various readings; in fact, salinity probes are in there—is about 400 metres offshore, and that is on the boundary of the World Heritage area because the boundary of the World Heritage area

starts at low tide. There are check nephelometers to measure variations, and they are sited, I think, one kilometre north and one kilometre south of Stoney Creek.

But again, when the baselines were established for seagrass, for example, they measured three kilometres north and three kilometres south of Stoney Creek. If they want to measure the effects of the town of Cardwell versus Port Hinchinbrook, all they have to do at any time is go and measure the town of Cardwell because the information from Port Hinchinbrook will be there.

If we were talking about some effects, that would be fine, but all the scientific information that has come to hand has shown absolutely no effect. What is affecting the Hinchinbrook Channel—again, this is from known scientific data which has been collected—is the vast volumes of silt being carried down that channel originating in the Herbert and Seymour Rivers, in all the tributaries of those rivers, and all the creeks and streams that run into the Hinchinbrook Passage.

Dr Brunskill of AIMS I think stipulated that between 20 and 30 million tonnes of silt are exuded by those river systems every 12 months. That was one of the reasons why the Hinchinbrook Channel as such became virtually inoperative when taking the sugar out of the sugar terminals at Lucinda. It was for that reason that, 12 or 15 years ago, they built the three-mile long jetty protruding out to the east from Lucinda. Until then, all the sugar was taken out of Lucinda by vessels of up to about 3,000 tonnes which plied up and down the Hinchinbrook Channel.

That is why it is shown on the charts as the Port of Lucinda. North of Port Hinchinbrook, from Cape Point on Hinchinbrook Island, taking one of the parallels of latitude to the mainland—it hits the mainland about a kilometre north of the Cardwell jetty—is the northern boundary of the Port of Lucinda. It was set up as a port because of the sugar vessels running up and down that channel almost daily and several times a day.

Senator HOGG—Just turning to the issue of acid sulfate soil, which I seem to think is pretty close to your heart, how often do QASSIT visit the site?

Mr Williams—I have nothing to do with that, Senator. That is determined by the Queensland government.

Senator HOGG—Do you know how often they have visited the site?

Mr Williams—I would think at least three or four times in a 12-month period.

Senator HOGG—Do they provide you with copies of their reports?

Mr Williams—No. They are only there to monitor and only if there was something that they considered to be amiss would they do a report. There has been nothing amiss. That is the point everybody is missing. There has been nothing go wrong.

Senator HOGG—Have there been reports, though, that say that there is nothing amiss and that everything is all right? To whom do those reports go? Do they go to you or do they go to Professor Saenger?

Mr Williams—They go to the Department of State Development—I have to keep up with these changing names. It was originally the Coordinator General's Department, then it changed to the Department of Economic Development and Trade, and now it is the Department of State Development.

But, from there, the main thing is that all these reports go to a committee called the Technical Advisory Committee, which, again, was set up under the deed. The Technical Advisory Committee is made up of various persons from the Queensland department of the environment, the Department of State Development, the Commonwealth Department of the Environment through GBRMPA and me.

Senator HOGG—So you are on the Technical Advisory Committee?

Mr Williams—I have to be.

Senator HOGG—I understand. I just wanted to clarify that point.

Mr Williams—It would be rather silly of me not to be there because such various things to be discussed are the practical means of going about any remedial action if it occurs. By the way, Professor Saenger sits on the Technical Advisory Committee. He is not the chairman of it. The chairman is the Director of the northern region of the department of the environment.

If anything were to go wrong, there is another committee called the Immediate Response Group—the IRG. So, for anything unusual that occurred that needed a response, another group was put together. But, since it has never been used because there has never been a need, I do not even recall who is on that.

Senator HOGG—On the acid sulfate soil, though, you have had no reports to the Technical Advisory Committee from QASSIT during their period of monitoring on dangers—

Mr Williams—I cannot recall that, Senator. I do not have a bad memory.

Senator HOGG—No, I am not asking a life or death question.

Mr Williams—There must be one that I can recall. When looking at the pre-wet season, QASSIT made about 12 or 13 recommendations and I recall Professor Saenger reporting on one occasion that I had carried out and complied with all those recommendations with the exception of one, I think it was, which was a recommendation that, by the time it became viable, was inappropriate. In other words, the problem passed away—that occurs because it is all very well to set up for what might happen during a wet season.

In that regard, let me say that I have exceeded my responsibilities in all respects. If they come to me and say, 'We want to make preparations for the wet season', I should really turn around and say, 'Well, go and make your own arrangements because it's got nothing to do with me.' If you read the deed, that will become abundantly clear. I am not required to worry about rainwater. I am required to worry about water that flows from my site as a result of my company's construction works. That is all—finish.

When that was written into the deed, there was an intention: that was the wording given to dredge spoil. In other words, the only water that would come from my site as a result of my company's construction works would be dredge spoil water and/or dewatering of the marina at a time when that is necessary. We have just dewatered the entire marina and no acid water came out. In fact, it was up at around pH8 all the time, and there has been no excess turbidity.

Senator HOGG—On the issue that you are not required to have responsibility for rainwater coming off your site, let us assume that there is rainwater going over your site and that it does in some way leach the acid sulfate into the nearby surrounds. Who has the responsibility for that?

Mr Williams—God.

Senator HOGG—I understand that.

Mr Williams—Without being flippant, the rainwater is not going to leach any acid out of my property any more than it may leach acid out of any other property. That means any other property along the entire coast of Queensland. Somewhere, somebody has been feeding you a bit of bullshit, if you do not mind me saying so. That is not what happens. The problem is that the water is flowing onto my property in an acid state.

Senator HOGG—Is this water from the western side of the railway line and the highway?

Mr Williams—Yes.

Senator HOGG—So you are saying there are acid sulfate soils there?

Mr Williams—Of course there are. When they were doing the main roads work, I went up the road for a distance of about seven or eight kilometres south of Port Hinchinbrook. At every guttering along the side of the road we were taking readings of anything from two to four. It is everywhere, but it is not doing any harm. It is doing a lot of good for all the pseudo academics who are trying to get a free meal ticket out of carrying on about acid sulfate soil. It is a meal ticket for all these scientists who want to make money. Read their reports to this committee. Read their reports that went to Senator Faulkner in the early days. Read the CSIRO reports. It is an invitation to say, 'Please give us some work.'

CHAIR—Mr Williams, I again remind you about making those kinds of remarks before the committee.

Mr Williams—What is wrong with that comment compared with what some of my detractors said last week?

CHAIR—Those sorts of accusations have not been made about you, Mr Williams, and I suggest that you confine your remarks to what is evidence.

Mr Williams—I think I should highlight some of the phraseology which has been used by my opponents.

Senator TIERNEY—Chair, I wonder why you make that ruling, because Mr Williams did not mention any names in that last exchange; it was a general comment. He is entitled to his opinion.

CHAIR—I think the committee has before it most of the key players, Senator Tierney.

Mr Williams—I wish you had been as precise when asking questions of people who I am sure you knew were telling lies and misleading this committee. I tell the truth. In everything I say, you can be sure it is the truth, and I have evidence to back up everything that I say.

Senator HOGG—Chair, can I get on with my question?

Senator WOODLEY—I really have to make an objection. If there is any inference that I or the chair are refusing to ask people because we want to cover up any evidence they might have—

Senator HOGG—I am certainly not.

Mr Williams—I am not suggesting you are doing it. To be fair, I think I said earlier in this discussion that you cannot be expected to know what questions to ask. Isn't that correct? I said that right at the beginning.

Senator WOODLEY—We will check the *Hansard*, and we will then come back and perhaps have this conversation.

Mr Williams—Let me say that if it was not those exact words, Senator, it was intended to be.

Senator WOODLEY—I am talking about the inference you just made.

Mr Williams—I know. I am saying that that is why I said that these committees will never serve any purpose until they allow cross-examination. You cannot be expected to know, but surely you must get a bit of a hint when people ramble and rave on when they have no credentials and have never been to the site.

Senator HOGG—Mr Williams, this is not meant to be a court of law—

Mr Williams—I wish it were!

Senator HOGG—It is not, and the questions we ask are aimed at providing information to us upon which we can make a judgment. It is not a court of law which will bring down a guilty or not guilty verdict on any of the people who have appeared before us, including you.

To return to my questions, I am interested in the QASSIT process. You say that they appear on your site about three or four times per year and that there are no formal reports other than where they find that something has gone astray—and there are no instances of that.

Mr Williams—I did not say that there are no formal reports. I said that I am not aware of any. Please accept that I work about 18 hours a day every day, mostly answering a lot of garbage that I should not have to answer. This has been 4½ years of harassment as far as I am concerned. I cannot be expected to put everything into a little cell. I am dealing with documents hitting my table at the rate of about 20 or 30 a day. I know what the system is that is laid down. I know that everything is being handled in a proper manner because I do not have anything to do with that—that is handled by the proper authorities. But, as I said, I recall that there was one report because Professor Saenger commented on my reaction to that report.

Senator HOGG—I accept that. On the process when QASSIT does its independent testing of your site, can you give me some brief background as to how that happens? Do they inform you or your company that they are going to be on site and, if so, when?

Mr Williams—They would see my project manager. Thinking back, I do not think they have been on site since prior to the last wet season—not to my knowledge.

Senator HOGG—Would it be possible—

Mr Williams—You see, there is no need. How many stages of monitoring do you need? The environmental site supervisor is there at random and is on site at least two days a week. His office is only 300 metres up the road. He walks in and out as he pleases. Over and above that, Sinclair Knight Merz mans the nephelometers which are placed at sites 7 and 10, plus the check nephelometers out in the channel. If anything happens, if there is any untoward reading, they have it within minutes and are able to report it back to Professor Saenger, which they do.

In addition to that, hand-held nephelometers are being used at random to pick up different readings at different depths. A reading is also taken by my people every day—that is a double-check on the environmental site supervisor—and is faxed through to Professor Saenger once a week. He checks our company's readings against the environmental site supervisor's readings. Rarely is there any discrepancy, and if there is a discrepancy it is minor.

That does not happen with the other people who, in my opinion, are causing more concern—and I am not saying harm, because I do not think any of them are causing harm. Let us take all the aquaculture farms down the way that you saw, which are far more extensive than Port Hinchinbrook. They take their own readings and there are no other

readings. They give their readings to the department of the environment every week or whenever.

Senator HOGG—Is there an independent monitor for them?

Mr Williams—No. I have about three monitors that the others do not have. I would like to know why I am being victimised. It is very hard to say that I am not being victimised. Every public servant and every politician who gets involved with Port Hinchinbrook says, ‘Well, we think everything is covered, but just for good luck we will put a few more obligations on.’

Senator HOGG—The other issue that I wanted to canvass briefly with you is the issue of water to be used on the site. I understand from evidence that bores will be sunk, taken from the natural watertable that exists in the area, to provide some water to the site. Is that correct?

Mr Williams—Bores are being used there, but there has never been any suggestion that I am depleting the watertable. I do not think there would be even another spear, never mind a bore, within 500 metres. I am putting my bores in the beds of creeks that run into my property. What we are taking out of there is minimal and only at certain times of the year. That water is not used to supply potable water to the people. It is being used to supply irrigation water, the same as anybody else who puts down a spear in their backyard. Are you going to suggest that they all deplete the underground basin?

Senator HOGG—That is not the question. I am trying to find out what use is made of the underground water that might be available on or near the property. I am wondering what the relationship of that watertable to acid sulfate soils might be.

Mr Williams—I do not think there is any relationship to acid sulfate soils, to the best of my knowledge. Certainly we test that water, but there has never been any significant acid in there. It is quite likely that it could be around pH6 to pH7, but that is something that has never occurred. Besides, when I offered to supply my own water instead of using the council’s water supply, I had it in mind to build freshwater dams in lot 17—that is, the area to the south of the canal.

When you were there, you might recall that I said there was a very large pond which is now being used for what you might call a final settlement pond, but there is virtually nothing settling in it. It is the last stage before going back into the canal. That was a freshwater reservoir that I was holding, but, at one time, just because there occurred the possibility—it did not even happen—of slightly turbid water entering our own canal, not the Hinchinbrook Passage, we decided to divert the flow from the final settlement pond into that pond. So it has now become salt. But, quite likely, as soon as the dredging is finished, we will pump that out and convert it into a freshwater reservoir. We will quite likely build other freshwater reservoirs if that is not sufficient to keep pace with the development of the site.

Senator HOGG—The last question that I want to raise is not an issue related to yourself but related to developments of this type in general. What protection should governments take in cases like that of your predecessor on the site who went out of business? What sort of

protection should governments put in place to ensure that, where a developer goes broke and a site is in need of remedial treatment, that site can be remediated?

Mr Williams—I think that is a case of horses for courses, Senator, with due respect.

Senator HOGG—I am trying to get your expert advice here from your position as a developer; not to cast aspersions on those who previously tried to develop your site. One of the claims made is that the site was left in a fairly degraded state. It raises, quite validly, an issue that this committee could look at—that is, who has the responsibility to remediate that site if it is not developed. Is there some sort of onus that governments should be placing upon developers such that if, in unforeseen circumstances, the developer goes broke, then there are sufficient funds available to remediate the site? If so, on what sort of basis would one construct such a fund?

Mr Williams—It should be a state government matter—probably a combination between the state government and the local authority—because, if it is a canal development, then that is the responsibility of the local authority. I would suggest that they could do what they did to me. If you read the deed, you will find I cannot even mortgage my land without getting permission from the government to do so. There is a default clause in there that says that, if I leave the site in a decimated state, they can take up my land and sell that to defray the costs of taking remedial action for anything like that.

Senator HOGG—Can you try to distance yourself from it, because I am trying to put this in a general sense.

Mr Williams—I understand what you are trying to achieve.

Senator HOGG—I am trying to find out whether there should there be some sort of trust account that developers must pay into such that, should they suffer a financial crisis and go bankrupt, then it is not the public purse that is going to pay for the remediation of the site, that there is some other form of trust account, or whatever it might be.

Mr Williams—That is what I am saying. It is not a Commonwealth government matter. Had the Commonwealth stayed right out of Port Hinchinbrook from day one—even back to the days of Richardson making incorrect decisions, and they were proven incorrect by the court—Tekin probably would have gone ahead. It was the interference of the federal government that brought that company to its knees. Too many masters and you go nowhere, and that is the fate that I have been subjected to. So it should be a state government matter.

And they can, as they did in my case, apply bonds for certain works. I think my bonds totalled about \$1.2 million. But, on top of that, they can go to the trouble of doing a deed—as they did for me—that will give them the right to take back the land and sell off the land to cover the costs of any remedial work. The only problem is, if you do that, that you will not have any developers because the developers cannot afford it.

There are few enough people in this country at the present time who are prepared to put their money on the line and even invest in this type of development. Certainly I would never do it again—no way. As long as my backside points to the ground, I will never invest

another cent in any type of development such as this in this country. In fact, I doubt that I will ever get involved in any type of development where there will be any type of government intervention at all. I can tell you that it is easy to make all these restrictions, but you risk not having any developers.

When you look at what has happened over the years, where are all these developments that have caused the taxpayers' money to be used? I really do not know about them. It is all very well to say that Laguna Quays failed. Laguna Quays is a beautiful development. Certainly some Japanese interests lost about \$200 million, but the development is still there, and it has not cost the taxpayers a cent. The same applies to Sanctuary Cove. Somebody lost a lot of money, but the development is still there and it is wonderful for the community.

Senator HOGG—That is a different issue, though. I am talking about developments that have commenced, such as the site that you took over. At the stage that you took it over, reportedly a lot of acid sulfate soil had been exposed. If you had not taken that site over and proceeded with your project, then we could still today, foreseeably, have that mass leaching out into the Hinchinbrook Channel.

That is not the only development that I am thinking of, though. There are other developments, which are not necessarily recreational developments—they could have been for other uses as well—that have not proceeded where acid sulfate is purportedly leaching out into channels and causing massive damage. But no-one is picking up the tab; no-one is remediating the site because of the extreme expense. And it is not just acid sulfate soil; there would be other causes as well.

Mr Williams—Senator, I hear what you are saying, but I cannot go further than to say that, if you look at it on a horse-for-courses basis, where there is a site where there can be damage, that has got to be assessed in regard to the construction techniques to be used and the extent of those constructions, and then perhaps you would put a bond against it, as they did with me. As I said, I was up to \$1,200,000 in bonds. Then, as the last resort, you can take action to secure the land or to ensure that the government or the council has the right to secure that land. Of course, that happens almost automatically because, if a project falls into disrepair and the rates are not paid, the council has the right to take over that land anyhow.

I understand what you are saying, that there can still be cases where a bill is left behind to remedy what has been done. It really is a very difficult question and, as I said, you have to find a line of balance between the imposition you put on the developer and whether or not that will discourage development entirely.

CHAIR—Mr Williams, is that bond money still held in cash accounts?

Mr Williams—No. I think there is still at least \$300,000 there, but most of it has been paid back because it was allocated to various segments of development. As I complied with those segments, it was refunded.

CHAIR—Is the project still viable? You are not having difficulty with investors?

Mr Williams—What investors?

CHAIR—So the project is still viable? You are funding it yourself?

Mr Williams—When you are talking about investors, what are you speaking about?

CHAIR—I am just asking you the question.

Mr Williams—Are you speaking about people with some share in the business? I do not have any.

CHAIR—Nobody else is in the business?

Mr Williams—I have no money in the business other than my own.

CHAIR—I understand. And the project is viable? You keep indicating that you would walk away if there were some compensation, but the project still stands up?

Mr Williams—No. Let us get that right. I said: if it is of such environmental consequence to the government that they feel it should be retained for the people of Australia, then they are welcome to buy it back. They have that within their power. But as far as saying, 'I am going to walk away and let somebody else develop it', the answer is no. But if the government wants it for the people of Australia, then, firstly, I cannot stop them anyhow. But I think they have concluded that there is no environmental significance and that it is not going to be of any benefit to the people of Australia. It would be of greater benefit to the people of Australia if it is developed in accordance with the master plan that exists today.

We are already seeing benefits for the people of Australia because today, for the first time, locals from hundreds of miles around are able to launch their boats in safety, which they have not been able to do previously. The emergency services are able to launch their boats 24 hours a day, seven days a week, to attend to emergencies which, until now, they have not been able to do. The public are already benefiting from what I have developed.

CHAIR—Mr Williams, you said in your opening remarks last time that there had been no erosion, that in fact there had been an accretion to the beachfront. Would you look at this photograph that I took on the day that we came to the site and give us your response to it? Doesn't that indicate erosion?

Mr Williams—No. It is a normal settling situation where the deed requires me to build up the foreshore to certain levels. If we tried to put it all in one great heap, we would have everybody yelling at us. So we put some in, we let it find its natural angle of repose, and then we put some more there and let that find its natural angle of repose. This will continue for some time.

CHAIR—So why did you plant the palm trees at that point, Mr Williams? As you can see from that photograph, the palm tree roots have been exposed, and I imagine that tree has fallen over by now.

Mr Williams—Yes. If you go back today, you will see that it is not there.

CHAIR—It looks like almost a metre of sand has been removed. Is that not erosion?

Mr Williams—No. I have just tried to explain it to you.

CHAIR—Why were the palm trees planted before the settling process you described?

Mr Williams—Because we did not wish to try to put a huge amount of sand on the beach at the one time.

CHAIR—So why did you plant the palm trees?

Mr Williams—Heavens above! We planted about 250 palm trees and we did not want to leave that one out. I have told you what we are doing. There may be, and there may continue to be, some slight erosion at that point. But what happens is that there is a longitudinal movement of that sand north along the beach. Had we been permitted to build the project in accordance with the plans originally submitted, that would not have happened because there would have been breakwalls.

CHAIR—Mr Williams, can I bring you back to the remark that you made that there has been no erosion; in fact, there has been accretion—that is what you said.

Mr Williams—Senator, you are just looking to drive nails into me and I am getting pretty tired of it. I have told you what is happening. If you cannot understand what I am saying, then I suggest you go and get some other advice. I am saying that the sand, as it is placed, reaches a natural angle of repose. If we had heaped all the sand up there in one go to bring the foreshore back to the contours that we are required to do under the deed, we would have had our good friends from the Friends of Hinchinbrook jumping down our necks and saying, ‘Look at that terrible bastard putting sand all over the beach, which he is not supposed to do.’ That has happened a dozen times already. So we are playing it in a responsible manner and putting it out there part by part as it meets its natural angle of repose.

There is another point: the wall that has been built there is not as long as it is supposed to be. That, again, is only because of the comments of the Friends of Hinchinbrook and their like. In other words, I am being squeezed between a rock and a hard place. The day will come when I will put that wall out to its correct length and perhaps the foreshore will find its natural angle of repose more quickly. If we had been allowed to go ahead with the plans as originally submitted, there would have been a 100 metre long breakwall there. All the real professors of coastal management agree that that is what should be there. I caution you that there will come a day in the not too distant future when the people will be screaming for those walls to go back there.

We finished up just giving up in disgust and not applying for them because of the stupid statements that were being made in reports to Senator Faulkner, such as, ‘We don’t think the colour of the stone in the wall will be environmentally friendly. We don’t think there should be navigation markers in the channel at that point.’ They are the sorts of stupid statements—which were never supportable at any time—that have been preventing us from doing the job in the proper manner. I would love to go ahead and do it in the proper manner.

Senator WOODLEY—You claimed that, in answer to a question, Jes Sammut lied to the committee about the visit that he made to the site. I understood that he said he had visited the site, that he had called in at the management office and had simply walked around the housing—

Mr Williams—No, he did not say that, but that is what did happen. He said—and I repeat word perfect—that he called in at the office and got permission to go over the site. That is a lie because he did not call at the construction office for a start. He went to the sales office and he would have been given permission only to walk along the frontage, that is the area that has been developed. We do not allow anybody, unless they have some pretty good credentials, to go onto the rest of the site because we are not permitted to do so under the Workplace Health and Safety Act.

Senator WOODLEY—I understand that, but I understood that he had said that he simply visited the—

Mr Williams—I think if you go through his whole testimony—

Senator WOODLEY—We will do that.

Mr Williams—You will find he implied that he knew what was happening there. He cannot possibly have known what was happening, unless he inspected the whole site, as you did.

Senator WOODLEY—I am trying to get at whether or not he lied, which is what you claim.

Mr Williams—Let me say he is trying to deceive the committee.

Senator WOODLEY—We will have to check the *Hansard*.

Mr Williams—All I am saying is that nearly all of those people, with the exception of Dr Bowman, carried on as if they knew all about it. The only thing is, they have never been there and done a test. How can you know anything without a test?

Senator WOODLEY—It is a serious accusation to say that someone lied. You gave an example of how he lied, so we need to go back and check that because I think it is important.

Mr Williams—I am very happy if you do and I think you will find that I am right.

Senator WOODLEY—We will do that. I am conscious of the time.

Mr Williams—I have a car waiting for me now. I have to catch a plane.

CHAIR—Senator Payne still has some questions. She is happy to put those questions in writing.

Senator WOODLEY—I have a couple too.

CHAIR—I have a few questions as well. We have just had a brief discussion and agreed that the committee should meet again and hear from Professor Saenger and perhaps one or two others. So we will take up your suggestion in that sense.

Mr Williams—I congratulate you for taking a responsible attitude in regard to that.

CHAIR—Thank you for appearing before us today.

Mr Williams—Thank you for your patience.

[10.40 a.m.]

MAROHASY, Ms Jennifer Joyce, Environment Manager, Canegrowers, GPO Box 1032, Brisbane, Queensland 4001

SHEEDY, Mr Peter Edward, Manager, Canegrowers Herbert River District, PO Box 410, Ingham, Queensland 4850

CHAIR—I acknowledge for *Hansard* that you are making a submission today, and that, on 30 July, you sent to each of the members of the committee a letter and a two-page submission.

Mr Sheedy—Yes.

CHAIR—Do you wish to make a brief opening statement or shall we proceed straight to questions?

Ms Marohasy—Actually, we appreciate the opportunity to respond specifically to the allegations from Sunfish regarding environmental impacts of sugarcane production in the Hinchinbrook region. Those allegations were made at Cardwell on 30 July. Peter would like to refute some of the specific allegations and explain some of the detail that relates to the Herbert region.

I am hoping that, as manager for the environment for Canegrowers, I will have the opportunity this morning to explain something about the sugar industry and recent efforts to ensure that we are having minimum impact on receiving environments, as well as developing cane lands, to achieve a balance between sustainable sugar production and the conservation of important natural environments.

As environment manager for Canegrowers, I work for Canegrowers state council. My job principally is to implement Canegrowers' ambitious environment management strategy. Today I want to put the Sunfish allegations in some context by, as I said, firstly telling you a little about the industry.

Sugar cane has been grown in coastal North Queensland for over 100 years. Around the very early sugar mills—and I think the first sugar mill in Queensland was around 1886—grew our prosperous coastal towns and industrial cities. We still have a healthy environment in North Queensland. We have some of the best fishing spots in the world, including the Hinchinbrook Channel, in part because sugar cane is one of the most environmentally benign land uses.

In this submission that Peter is going to refer to in detail that I think you have just received, appendix 8 is from last month's *Herbert River Express*. It talks about a documentary soon to be filmed which talks about the Hinchinbrook Channel as a fishing hot spot. It puts it in the same category as Fraser Island, the Blue Mountains, the south Burnett region and New Zealand's Lake Taupo. What I would like to do is table this video which talks about fishing in the Hinchinbrook region and the associated estuaries.

CHAIR—Thank you.

Ms Marohasy—I do not know how many of you have spent much time in North Queensland, but sugar cane is essentially a perennial grass. The growing of sugar cane involves minimum use of chemicals and, with the advent of green cane trash blanketing, which I will tell you a little more about, it is not chemical intensive. There is minimum tillage used in the production of sugar cane. To the extent that the Department of Fisheries encourages drainage lines between retention basins and artificial wetlands on cane farms and natural water courses, it recognises that the areas that drain our cane farms are quality fish breeding areas.

Because of the long history of sugarcane production in North Queensland, perhaps combined with our visibility—we are a very visible industry—and our tight organisational structure, we have not in the past tended to share a lot of information, although that situation is changing. I would argue that our incredible ability to make a profit while selling sugar in an increasingly competitive world market has made Canegrowers a continual target for all those within our communities who are perhaps anti-development.

As an example of the mischievous statements that are recorded in the media, I was amazed to hear at the Cardwell hearing that Sunfish blamed Canegrowers for chemical burns sustained by a woman who took her horse swimming in a local creek. The burns were attributed to the chemical rogor. I am actually an entomologist by training, and rogor is a systemic insecticide used in orchards. It is not registered for use in sugar cane production and, indeed, has no place on a cane farm.

The claims—like most of the allegations against the sugar industry—made at that meeting in Cardwell on 30 July, were completely outrageous. Ian McPhail, Chairman of the Great Barrier Reef Marine Park Authority, has acknowledged on numerous occasions that the Queensland cane growing industry is probably more advanced than any other agricultural industry in the implementation of an environment management system.

In 1995, Canegrowers commissioned an independent environment audit. A year later, that audit was handed down and made public. From the audit, we have developed an environment management strategy. This strategy is an integral part of Canegrowers' five-year strategic plan. Our environment management strategies recognised, amongst other things, the need to develop a code of practice for sustainable cane growing. This code of practice was recently endorsed by the Department of the Environment. I know we are the first agricultural commodity group in Queensland to have a code of practice endorsed under the Queensland Environment Protection Act, and I do not know of any other agricultural commodity group that has gone down that path or has an endorsed code of practice in Australia. I would like to table a copy of the code of practice for senators.

Based on your discussion with Keith Williams, I am not sure whether it is worth referring to the section on acid sulfate soils in our code of practice in this document. What we do is outline that acid sulfate soils are the common name given to soils which contain iron sulfates. You can get into trouble when you develop acid sulfate soils. I am not quite sure whether the senators would like us to go into any detail along those lines.

Senator WOODLEY—We will do that with questions.

Ms Marohasy—We would accept that sugar cane has been produced in potential acid sulfate soil along the Queensland coast since sugar was first cultivated in Queensland, and here we are going back to the 1860s. We manage the impacts and, for the most part, we avoid the oxidation of the pyrite in the soils.

I mentioned before that Ian McPhail said that, as an industry, we have put a lot in place administratively to ensure that we are doing the best we can to minimise our impact on surrounding environments. Let me give you an example with some facts and figures. I am giving you an example that relates to the Mackay area, because the Australian Conservation Foundation actually undertook a study and tabled a report about what they would like to see in terms of the adoption of more sustainable practices in that region. They have not done a study in the Hinchinbrook-Tully region, but they did do a study in the Mackay region, which is one of our biggest sugar producing regions.

This study, undertaken by the Australian Conservation Foundation, concluded that the best thing growers could do, in terms of minimising their impact on the environment, was to harvest their cane rather than burn it and leave the trash on the ground as a trash blanket, as a green manure. However, the report by the Australian Conservation Foundation—the study was undertaken in 1992-93—acknowledged that there were a lot of impediments to the rapid adoption of green cane trash blanketing, including the need for sugar cane growers in many situations to invest in new farm machinery, to change their farm layout and to really make a lot of changes in how they do things. There were benefits to be gained in the longer term, including moisture retention and the benefits that would come from this trash blanket layer. The report made some predictions. At that point in time, only 11 per cent of our Mackay growers used this minimum tillage green cane trash blanketing system—this is in 1992. The report predicted that the adoption of this system would probably peak at around 50 per cent by the year 2000.

What has happened—I think this is fairly reflective of the speed with which canegrowers are adopting all sorts of more sustainable practices—is that the actual percentage of Mackay canegrowers that green cane trash blanketed last year was 83 per cent. So a number of growers have invested in new machinery and new farm layout and done the difficult thing, and it is difficult for a lot of us to accept and make changes to the way we do things. They have made those changes and they have bitten the bullet to the extent that last year 83 per cent green cane trash blanketed. That percentage far exceeds the expectation of the Australian Conservation Foundation report. I am yet to hear or acknowledge what the Mackay growers believe was a tremendous effort on their part at a cost to them, but they are starting to recognise that there are other benefits.

Growers in the Tully-Murray region—that is, the region north of the Hinchinbrook development of Cardwell—and growers in the Herbert region south of Hinchinbrook are now 100 per cent green cane trash blanketed. This is, as I mentioned, the management practice that the Australian Conservation Foundation promoted very vigorously until the Queensland cane farmers started making great changes to how they did things and adopted that. Now they seem to be interested in other things.

One of the most contentious environmental issues facing Canegrowers—the one you perhaps want to hear about—is vegetation clearing in our coastal areas and the development of new lands for cane farms. This is a particularly important issue for the sugar cane industry because we are one of the few agricultural industries that is actually expanding, which is in contrast to many rural industries which are contracting. Some of our new cane lands were previous cattle stations.

When I say Canegrowers, I am talking about Canegrowers the organisation. Perhaps at question time you would like me to outline how the organisation operates. I did indicate previously that we have a fairly tight and a very democratic organisational structure. We are implementing productive strategies to promote better vegetation management within the industry. Local cane production boards are developing environmental land use guidelines, with input from the Department of Natural Resources and the Department of Environment and Heritage. This is fairly revolutionary because what we are actually doing as an organisation is placing the environment front and centre in the industry's decision making process. Without the approval of the local cane production board, it is impossible for sugar cane growers to get their sugar milled in Queensland.

Environment land use guidelines are at various stages of development along the sugar growing coast of Queensland, which extends from Mossman in the north to Rocky Point just north of the New South Wales border. The guidelines are fairly advanced in the Plane Creek region, which is just south of Mackay. An example of how this approach is working is that under the guidelines it is clearly stated that pre-emptive clearing is not an advantage in the granting of cane assignment. Land suitability is based on land in its uncleared state, and the local board specifies plant communities that are to be retained. These plant communities are determined in conjunction with, and on the advice of, the Department of Environment and Heritage.

It is also significant to note that in the Plane Creek region—where the growers have to a large extent come up with these guidelines through a process of consultation, but they are probably driving it harder than government agencies and others—they actually specify 50-metre buffer zones from two creeks and 10-metre zones with respect to other creeks. The current guidelines for the Herbert region are detailed in appendix 5 of the report that Peter has put together on behalf of Herbert River Canegrowers. While he has tabled those guidelines there—which talk about riparian buffer distances and conditions that apply to the development of land which is below three metres AHD and with acid sulfate characteristics—I think it is very important to note that these guidelines are soon to be superseded. The Herbert River Canegrowers are working with the local shire council, the Department of Environment and Heritage, and the Department of Natural Resources.

Over a period of six months, with meetings every two weeks, they have come up with a process through which growers are applying for new assignment work. The new guidelines are sort of implicit in the process. We have a mechanism that is based squarely on ecologically sustainable development principles, which is what the new Hinchinbrook shire plan is all about. We have a situation where the requirements for the development of new cane assignments actually mirror what the local shire council requirements are, on top of which there has been a lot of consultation with fishermen, the Department of Environment and others.

We have not tabled the new guidelines because there are still several points of contention, but everybody is amazed at the progress that has been made and the extent to which the local canegrowers are prepared to self-regulate and prepared to place conditions on themselves when issues are talked through. It is perhaps worth noting that the new guidelines were developed from our code of practice for sustainable canegrowing, which I tabled earlier, although they do not look much like this document now to the extent that they work from the farm plan area and it is now a quite substantial guideline.

The Hinchinbrook Shire Council, as I mentioned before, has a shire plan based on ESD principles and with a clause whereby changes in land use trigger the provisions of the integrated planning act—that is a new integrated planning act that has been introduced in Queensland. This is not the case in the Tully-Murray region north of Cardwell. The local government provisions are different in that shire. I am talking about canegrowing regions south and north of the Hinchinbrook development.

In the Tully-Murray area, changes in land use do not trigger provisions under the state's integrated planning act and, incredibly, the Tully-Murray SIT process appears to be being held up because there are requests that the sugar cane growers somehow change the shire government land planning process in the Tully-Murray region because they want it to be more like what is happening south in the Hinchinbrook region, although this is obviously outside the control of the local canegrowers.

What I am trying to say is that Queensland canegrowers are perhaps more advanced than any other agricultural industry vis-a-vis our ability to self-regulate and place conditions on primary producers through the assignment system and the fact that if local boards do not give assignment then that cane will not be milled in Queensland. I have not made copies of all of these documents but with respect to SIT, which I mentioned, these are three reports on environmental impact studies that were undertaken. This one relates to the first phase of the Herbert region—

Senator HOGG—Could you please identify those by name for the record.

Ms Marohasy—Certainly. This is the project overview document for the existing Herbert water management project. It was presented to the Great Barrier Reef Marine Park Authority, Environment Australia and the Queensland Department of Environment in Townsville in May 1997. This report is about better management of drainage in existing cane areas as well as—

CHAIR—Are you proposing to table those reports?

Ms Marohasy—Yes. Peter is going to go into the specific allegations that were made, but a lot of allegations were fairly difficult to answer because they were sort of saying that development in cane areas is a wish-wash, that we do not know what we are doing and that we do not do environmental impact statements. What I am saying is that for the canegrowing area south we have library shelves full of these things, but these are the more recent studies that have been done and they are about improving wetland conditions, tree planting and all that sort of stuff for the Herbert.

CHAIR—I understand.

Senator HOGG—Could we have the title of the document? It is very hard, when reading *Hansard*, to tell if this was a document.

Ms Marohasy—Okay. Sorry; I am a little nervous.

Senator WOODLEY—You are doing well. We are convinced, actually.

Ms Marohasy—This relates to the first phase of the sugar infrastructure package. It has also been a very controversial process. I have been working for the sugar industry for about 14 months, and I have been very confused about why the process has been so controversial because it is really about ensuring that management is planned, that we are putting in artificial wetlands, that we are putting in retention basins, that we are doing all the right things. And the big winner is the environment.

A necessary part of this process is that canegrowers are being forced to think in detail about how they are laying out their farm and what they are doing, et cetera. It is resulting in a lot of consultation and discussion, and that is pretty painful for a lot of people. As I said, the development of the new guidelines for the Ingham area resulted in meetings every two weeks, but people are starting to feel happy about it because they are recognising that, in actual fact, they all want the same thing.

The other relates to phase 2 which is very much about whiz-bang monitoring. There is the Riverdale-Murray Valley water management scheme and a supplementary report. There is a water management scheme for the Riverdale-Murray Valley area technical report, and then there is the water management scheme for the Riverdale-Murray Valley area impact assessment statement and environment management plan. This is basically to illustrate that we follow due process and that we take the process very seriously.

Not all regions are as advanced, I would say, as the Tully-Murray and the Herbert in the area of vegetation management. I recognise that in some regions—I am talking about cane from Mossman to the New South Wales border—the self-regulatory approach is yet to be effectively implemented. In some situations the local canegrowers lack the resources and/or the will.

In order to resource these regions and develop recognition of the need for a proactive and planned approach to vegetation management, Canegrowers has plans for a very ambitious tree planting initiative. It has four components to it: to develop and implement vegetation management strategies for cane lands by canegrowers; to promote best practice amongst canegrowers to the development, publishing and marketing of guidelines, including guidelines for the management of riparian zones; canegrowers to plant native locally-sourced trees focusing on riparian areas and linking remnant and riparian vegetation; and canegrowers to implement projects to protect and improve management of remnant native vegetation.

I would like to table this as well. This is the *One Million Trees for Queensland Cane Catchments: Funding application to the Natural Heritage Trust for the 1998-99 round* document. It is a 153-page report which has also resulted in a lot of discussion and

generated a lot of interest within different canegrowing areas. It has really forced growers to think about the value of native remnant vegetation.

As an industry, we have been supportive of the sugar coast environment rescue package and have assisted the Department of the Environment to negotiate the resumption of critical mahogany glider habitat. Canegrowers promotes—and this is from our environment management strategy—a balance between sustainable cane growing, the protection of natural systems and the fostering of biodiversity. I think that is not bad for canegrowers who are, to a large extent, finding it pretty hard making a dollar out of an increasingly competitive world market situation. Canegrowers are concerned about the environment. They are residents of North Queensland, and protecting the rich landscapes that are part of canegrowing regions is important to them.

I am personally concerned that the Department of Environment and Heritage in Queensland is spending a lot of time and money mapping Queensland's native vegetation, defining endangered ecosystems and, in some situations, developing conservation plans. We have been supportive of this process. However, the department has limited resources and we continually stress to them the importance of explaining the processes that they are undertaking and explaining the significance of these endangered ecosystems to primary producers, including canegrowers.

Primary producers manage 87 per cent of Queensland and are the logical guardians of our remnant vegetation. I see a real need for more resources to be committed to explaining the significance of these areas to growers so that they have ownership over the strategies that are implemented to conserve and protect these important environments.

The Department of the Environment recently appointed four officers whose job it will be to help local cane production boards develop guidelines. They are still coming to grips with the fact that, in different regions, in different local cane production boards, the guidelines are at different levels of detail and at different degrees of getting close to a finished product. I am hopeful these officers, in part through this process, can work with the industry to further engender an understanding and ownership within canegrowing communities of the value of our remaining native lowland vegetation.

The sugar industry spends approximately \$38 million per year on research. We do not have a separate category for environment. Research in the environment area permeates all research programs and dominates many. We have a CRC—a cooperative research centre—for sustainable sugar production based at the James Cook University. I do know that more than a third of its budget goes into environmental projects. Program 1—and it has three main programs—is actually entitled 'Protecting the environment'.

I am now tabling the annual report from the Cooperative Research Centre for Sustainable Sugar Production, which comes with the compliments of its director, Bob Lawn. We sponsor, as I said, research to the tune of \$38 million a year, and much of this relates to environment, including groundbreaking research into the management of acid sulfate soils and extensive water quality monitoring. We have also done work looking at organochloride insecticides used by the industry—for example, up to the 1970s—and potential impacts off farm.

All of this information indicates that we are not having an impact on the Great Barrier Reef. Certainly, with the coral bleaching event that happened recently, because of all the monitoring and work that has gone on at the CRC through AIMS—the Australian Institute of Marine Science—and the Great Barrier Reef Marine Park Authority, those scientists could say categorically that the coral bleaching event had nothing to do with agricultural run-off, it had nothing do with us.

CHAIR—Ms Marohasy, can I just interrupt you for a moment? We are a bit tight for time. We did start 10 minutes late with you, I acknowledge. If Mr Sheedy has a lot to say, we will have questions that may remain unanswered. Can I just encourage you to conclude fairly soon?

Ms Marohasy—Okay. I was going to talk about some of the water quality monitoring work, but perhaps I will leave that to question time and I will let Peter talk about and reply to some of the specific allegations from the Cardwell submissions.

Mr Sheedy—Canegrowers really wants to correct some of those wrong, misleading, mischievous and potentially damaging statements that were made by Sunfish. Also, I think Jennifer has just done something to set the record straight with regard to the other distortion that Mr Veitch went on with about the environmental record and behaviour of canegrowers. Mr Veitch did state that the Hinchinbrook Channel is sick, and then he presented some samples of fish with red spot disease. Then he attempted to say that that red spot disease was a direct result of acid sulfate soils. What I want to do is to again put the record straight. We have had to make our own inquiries. We found out that Mr Veitch knew a lot more than he was prepared to tell the Senate about acid sulfates and red spot disease. We have some good information for you in our submission.

In appendix 2 of our submission we have the results of some examinations of fish with red spot disease. The highlighted part there is epizootic ulcerative syndrome, which is known as red spot disease. Appendix 2A of Dr Callinan's report says:

However, other causes of skin damage, combined with the presence of the fungus, could also induce EUS lesions.

That is, the fungus that is mentioned up there—aphanomyces. That is actually an exotic fungus that is thought to have been introduced by the ornamental fish trade from Japan where, apparently, it is endemic. It was first noticed here in Australia in 1972.

Also, in appendix 2B there is a report by the Department of Environment and Heritage on some other reports of ulcerated fish caught at Taylor's Beach. Highlighted there are some more references to that EUS disease. It says that it is an infectious disease which is always present in river systems now. It has spread throughout the east coast of Australia. In fact, at appendix 3A there is material that was given to us by Dr Ian Anderson, a veterinary biologist from DPI at Oonoonba, Townsville. It shows you the progression of the reportings of that disease up through south-east Asia. I am told it has now spread into India as well.

The important thing is that, whilst it is a fungal disease, if you read the notes at appendix 2B—the bit that is highlighted there—you will see that it says it is an infectious disease of complex etiology often involving one or more invasive fungi and a range of opportunistic

bacteria. It says that outbreaks occur in a wide range of fresh water or brackish water fish species following periods of heavy rainfall. It also says that environmental parameters are thought to play a role in outbreaks, including reduced salinities, cooler water temperatures and greater fluctuations in ambient water temperatures. It says that changes in environmental parameters cause some stress to the fish, allowing greater susceptibility to disease outbreaks.

Dr Callinan also did a paper back in 1992, and that is at appendix 3. Dr Anderson actually has a library of material on this disease. But the important thing is that, whilst there is an association with sub-lethal doses of acid sulfate at times, he also points out that this disease is found in streams where there is no development of the land at all up in the Northern Territory and the Gulf—the Mary River is one of the areas. In fact, at appendix 3B there is a list of field report sightings of that disease. It is right through the Gulf and the Northern Territory where there really is no development.

I said to Dr Anderson, ‘It’s a pity the Sunfish people did not know anything about this.’ He said, ‘Oh, they know it very well. I’ve spent hours explaining it to them. You’ll recall that when you were at Cardwell that was certainly not the impression that Mr Veitch wanted to give you.’

I will say a little more about the acid sulfate soils. On page 23 of the transcript of the 30 July hearing in Cardwell, Mr Veitch said that some 30,000 hectares of acid soil has been exposed for the benefit of agriculture over the coastal region from Hull Heads in the north to Palm Creek. If you look at the satellite image that I have laid on the floor in front of you, you can identify Hinchinbrook Island, and then you can see developed land inland. You will also see a coastal fringe of undeveloped land with dark green vegetation, some mangrove and rainforests et cetera. Hull Heads is just to the north of where the Tully River enters the sea, and Palm Creek is about halfway down the Hinchinbrook section. I will put up a slide of this. This slide also appears in appendix 4.

The brown hatched-in area is an area that is given to us by the Department of Natural Resources through our Herbert Resource Information Centre. In data supplied by the Department of Natural Resources we are told that those areas are potential acid sulfate soil areas. The blue areas are areas where there is cane block development and the orange areas, which are in appendix 4, are the very small areas in the Herbert River district that overlay potential acid sulfate soils. There is some 898 hectares in that brown area. There is some 67,000 hectares of cane land development in those blue areas in the Herbert River district.

CHAIR—By development, do you mean under existing cane farming? Is that what you are referring to?

Mr Sheedy—Yes, and cane farming is basically shallow cultivation.

CHAIR—We would like to ask a few questions while you have the map up on the overhead.

Senator HOGG—On a question of clarification: you refer to a certain number of hectares that have been identified as possible acid sulfate soil. Has that been mapped rigorously?

Mr Sheedy—That is the mapping. It has been mapped by the Department of Natural Resources in Queensland.

Ms Marohasy—There are levels of mapping and levels of mapping. They have mapped those areas as three metres AHD and said that there is potential for acid sulfate soil there. That is soil which is rich in pyrite. If that pyrite were oxidised, there would be potential for there to be acid leachate. That does not mean that this whole area contains acid sulfate soils, but they would say that there was a risk of it. They have mapped some areas much better than others.

Mr Sheedy—I guess you could say that that is the lookout zone. If there is development on there, as we are now advised, that is relatively new information to us. When we actually applied under the sugar industry infrastructure package for those water management projects, there was precious little known and little literature available on potential acid sulfates and the treatment of acid sulfates in Queensland at the time. I am talking about 1993.

We have brought a lot more literature and knowledge into the area. In fact, at the Canegrowers Sugar Environment Forum held in March this year, there was a workshop dealing specifically with managing potential acid sulfate soils. Again, as we gain knowledge of problems, we try to manage them.

CHAIR—Mr Sheedy, while you have that map up, a few of us would like to ask questions.

Senator PAYNE—Your evidence being given now relates just to cane blocks in the potential acid sulfate soil areas, is that right?

Mr Sheedy—Yes. Mr Veitch referred to 30,000 hectares of acid sulfate soil having been exposed.

Senator PAYNE—For the benefit of rural industries.

Mr Sheedy—That is absolutely wrong. We are saying that, at the most, there are 898 hectares of shallow cane cultivation overlaying an area that could have potential acid sulfate soils beneath the surface.

Senator PAYNE—But on your appendix 4, the area described as potential acid sulfate soils as opposed to cane blocks in potential acid sulfate soils would be—

Mr Sheedy—On appendix 4—that is the slide—the light brown hatched area that extends right up the coast there—

Senator PAYNE—They are the cane blocks in potential acid sulfate soils.

Mr Sheedy—No. That is the coastal zone, which is three metres and under.

CHAIR—Mr Sheedy, is this also what is marked green on the submission that you gave us this morning, on appendix 2?

Mr Sheedy—That is right. The areas marked green are the cane blocks that are over those potential acid sulfate areas.

CHAIR—It relates to their depth, to their relative level, as much as anything, does it?

Mr Sheedy—It relates to their contour height above sea level. They are below three metres above sea level, essentially.

Ms Marohasy—I do not know whether it might be useful for us to actually go through what are potential acid sulfate soils; it is outlined in the code of practice.

CHAIR—No. We understand that.

Ms Marohasy—This is fairly rough mapping by the Department of Natural Resources, and they will not necessarily tell us at what depth the acid occurs or whether it occurs or not.

Senator PAYNE—I understand that.

Mr Sheedy—The important thing is that the 30,000 hectares that Mr Veitch plucked out of the sky is absolute balderdash. It is not substantiated by any factual information. The nearest we can go to is this data which has been supplied by the Department of Natural Resources. We do know spatially where our cane blocks are, and we do know that there are 898 hectares above potential acid sulfate areas, but we are certainly by no means exposing that 898 hectares. They are deep down under the soil profile.

Senator TIERNEY—Mr Sheedy, just to get this into perspective, the yellow shaded areas on the map that we have here represent 898 hectares out of 67,955 hectares. By my rough estimate, that is a little over one per cent that have potential acid sulfate soils.

Mr Sheedy—That is absolutely right.

Senator TIERNEY—In that one per cent, which is mainly on this eastern margin, where there is a potential for acid sulfate soils, have the people who are developing the cane actually tested for it?

Mr Sheedy—You saw all of those environmental impact studies that are being done for a water management project that is shown in appendix 6. We have phase 1 and phase 2. The phase 1 area has some water management projects—that is actually all existing cane in those areas. Phase 2 is where there is a fair bit existing and also potential for further development.

The categories of lands are explained further in appendix 7. If you look at page 7 of appendix 7, under item 5 relating to project area, it shows you what categories A, B, C, and D are. The areas that we have there are potentially acid sulfate. We have had the QASSIT team monitoring in there. They have done a lot of drilling and taken bores in areas where those water management projects are proposed. There is a management plan being developed to completely mitigate or ameliorate any impacts from those particular projects.

CHAIR—The legend refers to categories A to C. Can you tell us where the definition of those categories is?

Mr Sheedy—That is on page 7 of appendix 7.

Senator TIERNEY—In those areas that have been tested, what have they discovered in terms of the potential?

Mr Sheedy—They have discovered that in some areas there are acid sulfates beneath the surface and in some areas there are not.

Senator TIERNEY—With canegrowing, which is relatively like surface tilling, is there any potential problem with the way cane farms are managed for this acid sulfate to become active?

Mr Sheedy—We are very confident that, in all of those areas that are under existing production, there is not going to be any further disturbance. They are developed to the extent that they are ever going to be developed. Where those drainage projects are proposed, there may be some disturbance. That is the disturbance that is going to be managed and mitigated through the management plan, which Jennifer handed up earlier, for our existing cane area water management projects.

The positive side of those water management projects is that they also include the enhancement of wetlands in those areas. Most of them have been under cane cultivation for more than 100 years but they have experienced some downstream inundation from upstream development as cultivation over the decades has improved. We do not expect that that will have a detrimental environmental impact because the acid sulfate problem there will be completely managed.

What I cannot emphasise enough is what the stream monitoring, which we have done under our water watch program, has come up with. It is mentioned in appendix 10. If you look at appendix 10 and the water pHs you will see there levels of 6.7, 7.4, 7.1 and 7.5. There is not a low pH amongst the lot; 6.4 is about the lowest. Most of them are above seven.

Senator WOODLEY—Seven is neutral?

Mr Sheedy—Seven is neutral to slightly alkaline in those streams where we have a water watch program. We started that water watch program because last year there was a big fish kill in Victoria Creek, which Mr Veitch referred to. I have made a reference to it in part of the submission there as well. Vern mentioned that it was acid sulfate run-off, then he really did not know what to blame. He blamed mill waste and farm run-off.

I hasten to mention that unfortunately there are some streams with a lot of invasive weeds and decaying vegetation, and when you get a significant flush that vegetation gets disturbed and sometimes it deoxygenates the creek. That is potentially one of the causes as well. We would submit that that does not have much to do with anything other than a natural event.

Senator TIERNEY—Finally, in relation to the map, all the farms that are over potential acid sulfate soils are on the eastern margin. For how long have they been developed? Is that recent development or are they long-established farms?

Mr Sheedy—Most would have been around for decades. The Halifax area was the first developed part of the Herbert delta. That is over 100 years.

Ms Marohasy—That is just north of Ingham. Halifax is around here.

Mr Sheedy—I will just distribute a few of these Herbert River catchment atlases.

Senator TIERNEY—Just before you do, given that it has been developed for decades, are you aware of any environmental damage coming from these farms that are over potential acid sulfate soils?

Mr Sheedy—Certainly not. I stress again that there is sometimes that association of acid sulfate with red spot disease in fish, but the veterinary biologists tell us that the problem occurs in a lot of cases where there are otherwise healthy streams simply through desalination with a major flush, changes in temperatures and things of that kind. In appendix 3, I have highlighted a number of cases where that has been mentioned. In 3(f), for example, it says that the disease does occur in environments with good oxygenation and low levels of nitrogenous compounds, and further down the page it says that the ulcerative condition was not solely located in such waters—he is referring to acid waters—but was linked to periods of heavy rainfall and more alkaline environments. The veterinary biologists have certainly come to grips with it. I am associated with the Townsville zone advisory committee for the Queensland Fish Management Authority. Mike Cappo is on the committee. He is from the Institute of Marine Science and Mike has certainly come to grips with it, but some fish unfortunately have not.

Senator HOGG—In relation to the monitoring process that seems to have been going since March or April this year at various sites that you referred to—

Mr Sheedy—The water watch program?

Senator HOGG—Yes. Is there any previous history of monitoring and results?

Mr Sheedy—There is no requirement. We have been very confident over the years that we are basically fairly environmentally friendly in what we are doing. We are 100 per cent trash blanketing in a green cane harvesting trash blanket, so there certainly are not many sediments running off from the cane lands in the Herbert. We use relatively low levels of nitrogenous and other fertilisers compared with other industries.

Senator WOODLEY—You are 100 per cent green trash?

Mr Sheedy—We are 100 per cent in the Herbert.

Senator WOODLEY—I was trying to work out the symbols. What does the black symbol with the yellow cross on it indicate—the one on the roadside as you drive through? Does that mean that it is a non burn-off area?

Mr Sheedy—No. That does not have any—

Senator WOODLEY—It does not relate to it?

Mr Sheedy—No. Every harvesting machine in the Herbert is green cane capable. At great expense, they have been fitted out with green cane capabilities and it is 100 per cent trash blanketed.

Ms Marohasy—With respect to that question, in those specific areas in that appendix, we are talking about water watch monitoring. Water watch monitoring has been undertaken fairly recently in that area, as Peter indicated, but there has been water quality monitoring going back a long time undertaken by the CSIRO, the Department of Natural Resources, DPI's fisheries section and also the Great Barrier Reef Marine Park Authority.

Senator HOGG—Do we know if those surveys showed any significant leachate in either the Herbert River or any of the other rivers in the area?

Mr Sheedy—I think that is the one that Jennifer is referring to. It has been probably under more scrutiny than Monica Lewinsky's dress. There is run-off from the John Row Bridge near Ingham, and at various times you see up to four people during a rainfall event taking samples of water out from that site. In this atlas that I was going to hand up, you will see that the report from CSIRO is that the water quality is generally very good and certainly well above ANZECC standards.

Ms Marohasy—You asked for other regions as well. The Herbert certainly, as Peter indicated, has been studied to death from the water quality perspective and none of the reports has thrown up a problem with acid sulfate. If there was, we would want to be on top of it, but that has not been the case. A lot of these results have been published in the deep downstream effects of agricultural production reports as well as in scientific papers because scientists, to a large extent, are doing this quantitative and rigorous monitoring. The monitoring has never made the front page of any of our newspapers because the results have never been startling. The results, for the most part, are good.

This very detailed monitoring has shown that you do not have a problem with sediment from cane fields, particularly not under a green cane trash blanket system. We have levels equivalent to erosion in a natural rainforest situation. Erosion does occur in a natural rainforest situation. When there are big flood events, cyclonic events, in some situations in the Herbert, there are potential problems with the levels of nitrogen going down and exceeding the ANZECC guidelines, and this has been for two- or three-day periods when we have had some of our big cyclones go through. This monitoring has been undertaken, and I think the CSIRO monitoring would go back the longest. For most of the year and in most years the quality is good.

There have been some very detailed studies done in the Johnson River catchment area where they have actually looked at different land uses and the impact on water quality. The greatest contributor to nitrate levels is your septic system, and Keith Williams made reference to that previously. One of the only areas where that have actually looked in urban settlement—they did not even look at the sewerage in the Johnson study. In the areas that were still under septic, there were problems.

That does not mean that we are not looking to make sure that the growers are being very responsible in terms of obvious usage of fertiliser. We are continually monitoring nitrates in run-off leaching to groundwater as well as volatilisation to the atmosphere. We are on top of all of that. But the scientifically rigorous, quantitative monitoring is not startling and it is not interesting anybody because it looks like we are doing a reasonably good job.

Senator PAYNE—Mr Sheedy, I just wanted to ask you a question about some more of the evidence we received in Cardwell, particularly from Mr Vitale and Mr Veitch, on clearing. They indicated that clearing was continuing at a rapid rate and that it was done in a secretive manner. For example, they said:

They start from the inside and they work out up there, so by the time you see what they are doing they have done it all. They say, 'Well, it's already gone.' It is 200 acres, 100 acres, whatever it is.

Could you tell me what clearing is currently being done, what systems are in place to address that and also who controls that in North Queensland?

Mr Sheedy—Unfortunately, what Mr Vitale and Mr Veitch said was coloured from their point of view.

Senator WOODLEY—Most of us have a coloured view.

Mr Sheedy—That could be, but we try to be fairly logical and objective in what we do.

Senator WOODLEY—Very good presentation.

Mr Sheedy—Jennifer made reference to the planning for agriculture in the Hinchinbrook Shire. Basically, it is a proposal that now goes under the shire's planning scheme. An application for intensive agriculture goes to the shire council. This set of questions and answers is based on the sustainable canegrowing guidelines. At the back of it, it also covers the local boards' standard conditions for grants of assignment. There is no short-cut to this in Hinchinbrook; this is the process.

Senator PAYNE—How is it policed?

Mr Sheedy—We have come through a period of fairly rapid development, if that is what Mr Veitch and Mr Vitale refer to. We grew from being an industry that earned this country \$80 million a year, which was in the Herbert, to now earning \$240 million a year from export income by producing more sugarcane. That means that there is additional land developed for sugar cane.

An overhead transparency was then shown—

Mr Sheedy—Those other maps over there show mangrove accretion and loss over the years, and they almost balance. I have a slide here that shows the difference. Importantly, if you look at the red chart on the one that is furthest to the left you will see that, for the last five to seven years, it has been virtually static. Here are the data.

Senator PAYNE—Meaning it is not diminishing?

Mr Sheedy—Yes.

CHAIR—Are you able to leave us with a copy of that overhead?

Mr Sheedy—Certainly.

Ms Marohasy—A lot of cane development has occurred. A lot of cattle stations have recognised that they cannot keep paying rates on the land and they have moved over to cane. So a lot of development, particularly in the Tully-Murray area, has been of existing cattle stations including, for example, King Ranch. Through the assignment system, local boards—some explicitly—and others down the track are going to write in, even though it is actually part of canegrowers' policy, that pre-emptive clearing is not going to be an advantage in the granting of assignment so that the local board—

CHAIR—How much land is actually being cleared annually? Can you give us the exact hectareage?

Mr Sheedy—Right now, for example, there is very little land that is being cleared because there has been a pause on further grants of assignment.

CHAIR—Is it possible to give us the figures over, say, the last four or five years on land clearing?

Mr Sheedy—Probably until 1996 it may have been at the rate of about 1,500 to 2,000 hectares per year for a period that kicked off in the early 1990s. We did have a period of fairly rapid growth then but, as I say, we have trebled our export earnings. Those charts prepared by the CSIRO—they are not our work—show that we have had virtually no effect on the near shore area. The mangroves that were there in 1943 are still there.

Ms Marohasy—Perhaps you are concerned about endangered ecosystems. We cannot get the Department of the Environment to share with us their endangered ecosystem mapping. Where that information has been shown, for example in the Mackay area, the local boards have explicitly stated that the areas of these ecosystem types are not going to get assignment, even if they are cleared. We do not really care that you have already cleared them. In other areas there has been a problem with getting that information. Although we can get that information on mangroves, in some situations we cannot get the information on endangered ecosystems. Another issue is that we have been incredibly supportive of the mahogany glider program—the sugar coast environment rescue plan—and the negotiations to repurchase land that was critical habitat.

Senator PAYNE—Is that what you mean by ‘incredibly supportive’—repurchasing land? You said you had been incredibly supportive. What do you mean by being incredibly supportive? Do you mean repurchasing land and things like that?

Mr Sheedy—Yes, that has happened, as Jennifer said. If I could elaborate a little further, we do have the benefit of having the data that Jennifer referred to in Hinchinbrook at our resource information centre. That vegetation mapping is considered in this planning process.

If you want to talk a bit further about the mahogany glider, just last week one of our growers signed a voluntary conservation agreement for a property of about 4,300 hectares, making it a sanctuary for the glider on that property. There are a couple of other large properties that have some glider habitat. We have had an assessment of some of those properties by a consultant who understands what is glider habitat and what is not. Warps Holding is one such property, which comprises 10,900 hectares. There are something like 3,000 hectares there that are not glider habitat and will not be a threat to the glider habitat.

With regard to this planning study for the phase 2 SIIP project, we would like to consider that in this holistic planning study so that we can, in the process, consider things such as land swaps for some of the areas in order to take the pressure off some of the marginal coastal areas. If that project does not go ahead, that will be unfortunate. We would like to see it go ahead. In the end it is going to be up to the reviewers.

Senator PAYNE—Following on from Senator Allison’s question in relation to cleared land, could you also give us some idea—and I am happy for you to take it on notice if you do not have the statistics with you—of the amount of cattle country that has been changed to cane farming in your region?

Mr Sheedy—You could probably say that most of the development from 1992 to the present time would have been cattle country that went to sugarcane. It would have had various degrees of timber treatment prior to it coming over to sugarcane, ranging from fully improved pastures to partial clearing.

Ms Marohasy—The areas assigned in the Hinchinbrook and Tully areas are shown on this overhead.

Overhead transparencies were then shown—

Ms Marohasy—That is from 1989 to 1998, showing the area assigned to cane in the Hinchinbrook area, including the Tully area as well as the Herbert area. You can get some idea of the new area over the last 10 years.

CHAIR—Is that the total area we are looking at or does each part of the graph indicate a new area?

Ms Marohasy—No, that is the total area. The first two bars refer to the total area assigned to sugarcane in 1989: the blue refers to Tully and the green refers to the Herbert area. The next two bars refer to 1990 and so on. So there has been an increase. The area assigned in the Herbert area, for example, increased most dramatically between 1993 and

1994 but has basically plateaued. The increase in the area assigned in the Tully area has been very gradual.

CHAIR—So in the Herbert River area that has gone from 40,000 hectares in 1989 to about 65,000 hectares last year.

Mr Sheedy—This year, 65,500 have been assigned and there are about 67,500 hectares under cultivation, of which 65,000 are assigned. We now have really good data on that through our mapping project.

CHAIR—What do you mean by ‘assigned’?

Mr Sheedy—‘Assigned’ means that crop grown on that land has an entitlement to be received at a sugar mill and paid for. If it is not assigned, it cannot be accepted for milling.

CHAIR—Will you leave us with that table?

Mr Sheedy—Yes, certainly. Could I draw your attention to appendix 11 at the back of the submission—I think Senator Allison has a coloured copy. It shows some of the work that people are doing in terms of holding onto remnant wetlands and vegetation and actually building wetlands. The first one is Paul Steine’s at Blackrock. These are just a sample; there are numerous others which space just does not permit. The second one, 11(b), is under construction at Burnside. You will see they are repairing vegetation along Cattle Creek in the background. He has spent about \$30,000 to date and still has about another \$5,000 to be spent on landscaping and completing the work. This work is done at fairly considerable expense.

The next one shows the work on one at Alan Larsen’s where has he spent \$40,000 to date, with a further \$40,000 to be spent. You will also see on 11(d) a community rainforest reforestation program at Hawkins Creek on the property of Tony Palmas.

CHAIR—Mr Sheedy, I am sorry to interrupt you, but we have that. We will make sure that that information is taken on board. We are now running more than half an hour over time.

Mr Sheedy—I am sorry, Senator. If there are any further questions, we are happy to have a crack at them.

Senator TIERNEY—Mr Sheedy, in response to the Chair asking about clearing what was cattle land for sugar cane, I take it that cattle land is pretty much cleared of timber anyway, is it not?

Mr Sheedy—Pretty much, yes, but sometimes not fully—there are clumps of trees and so forth. The emphasis now, as we develop sugar cane, is still on trying to preserve the riparian areas along flow paths and wetlands, things like that. They are certainly being identified. A lot of priority is now given to holding onto those. It is the sort of practice that is widely promoted.

Senator TIERNEY—In northern New South Wales there is a view that surplus cattle land should be converted back to its original use which was cabinet timbers. Is there any move in this area for people to reforest cattle land for high value timbers?

Ms Marohasy—The CSIRO has been very interested in the Herbert catchment for a very long time. They have looked at that area pre-European settlement. The Herbert flood plains were actually open grasslands; it was not a forested area. If you go further north up into the Babinda Gordonvale area, that was rainforest and growers 100 years ago cut down rainforest and started growing sugar cane. In that area, they are actually looking at the potential for exploiting farm forestry with respect to the growing of sugar cane, depending on where it is on the property. I think canegrowers in the Babinda area have actually started the first cooperative forestry venture in the last few months.

Senator TIERNEY—What sorts of timbers are they putting in?

Ms Marohasy—I am not sure of the exact species. There is a fellow called Errol Wiles who is very excited about the potential because you can put in species which are not only cassowary food but which also have potential as cabinet species down the track. We are talking about this as an industry and we are encouraging growers who have an interest in planting trees, be it from a farm forestry perspective, be it because they would like a wetland on their property, be it from the riparian management perspective or be it because they would like to conserve some remnant on their property.

Senator WOODLEY—You are aware of the Douglas Shire and all of those far northern shires doing a lot of that work.

Ms Marohasy—That is right.

Senator TIERNEY—We would appreciate it if you could get any information for us on what they are planning in the Herbert area.

Ms Marohasy—If you are interested, we could get the studies that have been done. A paper, which has been published by Andrew Johnson of the CSIRO, talks about the fact that this area was actually open grassland, probably burnt annually by the Aboriginals that inhabited that area pre-European settlement. There was a period of time when, without the firing, you got the development of timber species. There are melaleuca swamp areas as well which are probably more recent and have come in with European settlement.

Senator TIERNEY—Finally, with regard to the CRC on sustainable sugar production, you mentioned the protection of the environment project. I do not know whether it is in this annual report or whether it is a new project. Is that information in the report that you have just tabled? If not, could we perhaps have that information?

Mr Sheedy—It is one of the big programs.

Senator TIERNEY—It is ongoing and has been going for some time, has it?

Mr Sheedy—Yes.

Ms Marohasy—The CRC has three main programs, and under those programs there are a variety of projects. One of the three programs is called ‘protecting the environment’.

Senator TIERNEY—Do you know how long that has been running for?

Ms Marohasy—The CRC has been up and running now since—

Senator TIERNEY—No, that project.

Ms Marohasy—It started with the CRC. It was identified—

Senator TIERNEY—It will be in here, presumably.

Ms Marohasy—Yes.

Mr Sheedy—It has had good horsepower in it for at least five years.

Ms Marohasy—When the CRC for sustainable sugar production was established they recognised that there were three different areas that they wanted to focus on. One of them, which became program 1, was protecting the environment. A lot of very clever work has come out on acid sulfate soil management, specifically for New South Wales where they have had problems with acid sulfate soils in the Tweed area. The CRC has supported them and has developed systems for ameliorating the problems that they have.

There are programs that are part of the CRC that are actually monitoring the Herbert and the water quality there in a lot of detail. Interestingly, land use programs are part of that. Dan Walker has been looking at different concepts of what is a riparian area, why a local government might want this sort of buffer area and why a cane farmer might think that this is more appropriate. There are others looking at residue from when we did use organo-chlorines in the sugar industry, a practice which finished in the late 1970s. They are finding that none of it has moved off farm and that what is on farm is almost impossible to detect. So there are a lot of different projects going on.

Senator TIERNEY—In the environmental area, who in the CRC are the partners with the university?

Ms Marohasy—The aims—

Senator TIERNEY—I am just asking who the partners are. CRCs are usually cooperative with industry.

Ms Marohasy—The CSIRO, the Department of Natural Resources, James Cook University—

Senator TIERNEY—Any private companies?

Mr Sheedy—Yes. CSR as the sugar millers, a lot of cooperative sugar millers, and canegrowers. Our organisation is in it as well.

Ms Marohasy—We also have representation from the Australian Conservation Foundation and others on the various programs. Bob Lawn sees himself as an independent broker. He says that the work is to progress, for example with respect to program 1, to enable them to understand what is going on so that if there is a problem they can provide feedback and we can change our management practices. The CRC definitely sees its clients as the community at large as well as canegrowers and sugar millers in the other components of the project.

One of the projects under program 1 also relates to reuse of sewerage sludge and run-off from urban areas. Looking at the whole concept of recycling, not only do we recycle effectively within the industry and use the gas to power our mills but we are also now looking at providing energy to towns around sugar mills. We are also looking at sometimes using cane lands as almost the kidneys of some coastal settlements. That is all being looked into as part of program 1. So local governments are players as well.

Mr Sheedy—There is a photograph on the last page of our submission at 11(g) which shows the sort of field day held by CSIRO to give a bit of feedback to the growers on monitoring the quality of water run-off.

Senator HOGG—With respect to appendix 4 of your submission, are there any canegrowers there who can be identified as having an acid sulfate problem? I know you have identified—

Mr Sheedy—Every farm is identified with our mapping system with the HRIC, but in terms of having a production problem, we did have one management problem—an internal disciplining problem—over someone who did an inappropriate development in an area where it should not have happened. That is one only. Apart from that one, all those other developments are very old and we are not aware of any problems. In fact, our highest sugar per hectare farm in the district in 1996 was from a Mandama farmer. Dr McPhail from GRMPA, who is in the audience here, inspected that site with us.

The farmer has a wetland very near to where the mangrove fringe is, but the soil is very productive. He is using the run-off that runs into his wetland, and the pH of his water there is about eight. He has a thriving wetland that is full of fish and other aquatic life and the birds love it. He irrigates out of it a bit when it get a bit dry. He has the highest sugar per hectare rate in the district. It is all export income. It is something like \$6,000 per hectare.

Ms Marohasy—I would just like to add that we are probably less likely to have problems in the future than we had in the past because growers are thinking about drainage with respect to these issues. They are doing some very clever things using laser levelling so they do not need deep drains. They are recognising through this environmental guidelines process that there is a need for growers to hold more water on farm because they can sometimes drain things more efficiently even though they have not got the deep drains—it is the way they develop the land. So they are really thinking about these issues to an extent that they have not in the past, and so we are not having the problems.

Senator HOGG—You have no farms in the area where you are managing an active acid sulfate soil problem?

Ms Marohasy—In the Herbert?

Mr Sheedy—Not an active one in the Herbert.

Ms Marohasy—There are farms in other regions where growers have not followed our guidelines and do have problems, and we are looking at ameliorating that situation.

Senator HOGG—But there is none in this specific region?

Mr Sheedy—That is correct.

CHAIR—Thank you very much for appearing before us today. I am sorry that we had to cut it short.

[12.09 p.m.]

BEALE, Mr Roger David, Secretary, Environment Australia, Canberra, Australian Capital Territory

KING, Mr Daryl Harvey, Director, World Heritage Unit, Environment Australia, PO Box 1567, Canberra, Australian Capital Territory

MORVELL, Mr Gerry, Assistant Secretary, Environment Assessment Branch, Environment Australia, GPO Box 787, Canberra, Australian Capital Territory

REYE, Dr Susan, General Counsel, Department of the Environment, Canberra, Australian Capital Territory

COOK, Mr Clive Robert David, Manager, Environmental Impact Management, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville, Queensland 4810

McPHAIL, Dr Ian Roderick, Chairman, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville, Queensland 4810

CHAIR—Welcome. The committee has before it submission No. 157 and 157A which it has authorised to be published. Are there any alterations or additions you would care to make at this stage?

Mr Beale—No, Chair. With your permission, we would like to make an opening statement.

CHAIR—Go ahead.

Mr Beale—I am making this statement on behalf of the Great Barrier Reef Marine Park Authority, staff of the Australian Heritage Commission and my own department. The officers present here cover the range of the environment portfolio's responsibilities for the Great Barrier Reef world heritage property. The Great Barrier Reef Marine Park Authority—GBRMPA—is responsible for coordinating strategic planning for the Great Barrier Reef world heritage property, implementing procedures and standards in conjunction with other portfolio agencies, assessing environmental and technical information relevant to the administration of the World Heritage Properties Conservation Act 1983, reviewing areas which could be incorporated into the marine park and providing monitoring reports on the world heritage property.

The Australian and world heritage group of my department is responsible for promulgating national strategic policy for management of world heritage properties, advising the minister and consulting with agencies on the exercise of powers under the World Heritage Properties Conservation Act and coordination of advice to the minister on the administration of that act.

The environment protection group is responsible for the administrative procedures under the Environment Protection (Impact of Proposals) Act 1974, as they relate to actions

affecting the property. The Australian Heritage Commission is responsible for providing advice on significant effects on the national estate by proposed Commonwealth actions.

Our submission sets out in detail the Commonwealth's role in the Port Hinchinbrook development. The Commonwealth has fulfilled all of its relevant statutory requirements and obligations under the World Heritage Properties Conservation Act, the Australian Heritage Commission Act, the Environment Protection (Impact of Proposals) Act and the Great Barrier Reef Marine Park Act. That it has done so has been substantiated by the findings of two cases in the federal court.

In addition, the Commonwealth has imposed further non-statutory legal obligations on the developer to achieve best practice protection of the site and, in cooperation with the Queensland government, has taken steps to develop a regional management plan addressing all development in the Hinchinbrook region.

There have been extensive environmental studies and assessment of the impact of the Port Hinchinbrook proposal, including public consultation. As well, an intensive post-approval environmental management regime has been developed. This includes a legally binding deed of agreement to which the Commonwealth, the state of Queensland, the Cardwell Shire Council and the developer are all parties. In entering into the deed of agreement, the minister concluded that matters affecting the environment to a significant extent had been examined and taken into account to the greatest extent practicable. The deed and arrangements with Queensland relating to the management of the region were required by the minister before he was prepared to give consent under the World Heritage Properties Conservation Act to certain acts related to the development.

Due to the proclamation under the act in November 1994 of areas of the Hinchinbrook Channel, certain acts including dredging and removal and coppicing of mangroves were prohibited, except with ministerial consent. The act did not provide for the consent to be given subject to conditions enforceable under the act. The deed provided a means for ensuring a Commonwealth role and imposing contractual legal obligations in relation to the carrying out of the development.

The minister's decision to grant consent was also subject to the Australian Heritage Commission Act. The Environment Protection (Impact of Proposals) Act did not apply to the consent but did apply to the Commonwealth's entry into the deed. The consent decision was based on the best available scientific advice, including the advice of independent scientists, the Australian Heritage Commission, the Great Barrier Reef Marine Park Authority and Environment Australia. Consistent with this advice, the environment minister, Senator Hill, concluded that, given the protective mechanisms contained in the deed and the regional planning process, granting consent would be consistent with the protection, conservation and presentation of the relevant world heritage values.

The provisions of the Great Barrier Reef Marine Park Act did not apply to the Port Hinchinbrook development. The minister's decision to grant consent was challenged in the courts by the conservation group Friends of Hinchinbrook, who are opposed to the Port Hinchinbrook development. The full Federal Court found that the minister had acted in accordance with his obligations under the World Heritage Act, which implements the World

Heritage Convention. The High Court saw no prospect of a successful appeal from this decision. In addition, the Federal Court stated that the Friends of Hinchinbrook, in challenging the minister's decision and appealing the initial Federal Court decision, had 'persisted with insupportable claims' and ordered the Friends of Hinchinbrook to pay the court costs of the Commonwealth.

The environmental management regime now governing the construction and operation of the Port Hinchinbrook development is in fact one of the most comprehensive ever devised for a coastal development in Australia. Environment Australia recognises that the legislative regime under which the Commonwealth has acted in dealing with the Port Hinchinbrook development is complex and limited in its scope. The Commonwealth has introduced new environmental legislation that is intended to improve protection of environmental and heritage values and which will avoid some of the complexities that have arisen in the Port Hinchinbrook case.

The Environment Protection and Biodiversity Conservation Bill of 1998, which was introduced into the parliament on 2 July, will replace five existing Commonwealth acts: the Environment Protection (Impact of Proposals) Act, the Endangered Species Protection Act, the National Parks and Wildlife Conservation Act, the Whale Protection Act and the World Heritage Properties Conservation Act. The bill replaces the ad hoc and indirect triggers for environmental assessment with direct triggers that focus the Commonwealth's involvement on matters of national environmental significance. These matters include the protection of the world heritage values of world heritage properties.

Under the EPBC bill, actions that are likely to have a significant impact on the world heritage values of any world heritage property are prohibited unless approved through an impact assessment process under the bill. Unlike the current legislation, which operates as a last resort mechanism, the EPBC bill will provide up-front protection for world heritage. A further improvement is that the bill allows the Minister for the Environment to grant an approval subject to conditions. The inability to grant conditional consents under the current World Heritage Act necessitated the use of complicated non-statutory alternatives in order to impose binding environmental conditions on the Hinchinbrook development.

A further advantage of the bill is that it encourages cooperation between the Commonwealth and state governments, particularly in relation to the development of management plans and the implementation of environmental assessment processes. These cooperative arrangements would be set out in bilateral agreements between governments. Any such bilateral agreement may only be entered into if it accords with the objects of the bill and any requirements prescribed by regulations. In particular, a bilateral agreement relating to a world heritage property must be consistent with Australia's obligations under the World Heritage Convention.

We have closely examined the public submissions and transcripts of evidence by previous witnesses. I wish to draw the committee's attention to a number of errors of fact contained within them. These errors relate to our areas of responsibility. In drawing the attention of the committee to particular errors in some submissions, I do not imply that we agree with the other parts of those submissions or agree with other submissions. Nor do I wish to imply that we believe that the committee has examined all the possible sources of

advice. For example, we are somewhat puzzled that Professor Saenger, the independent environmental monitor, has not appeared before the committee.

CHAIR—Mr Beale, can I interrupt you there. Mr Saenger did not make a submission and did not request to be heard. This morning we agreed that it would be a good idea if he did appear. We will schedule a further hearing day to do just that.

Mr Beale—Thank you, Madam Chair. Turning again to the issue of apparent errors in the submissions to the committee, I would refer first to Mr David Haigh's submission No. 57. This submission contains a number of assertions of law and fact that are contrary to the determinations of the Federal Court from which the High Court declined to hear an appeal because it had insufficient prospects of success. In particular, Mr Haigh alleges a number of deficiencies in the minister's decision to grant consents under the World Heritage Properties Conservation Act, even though the Federal Court found that those deficiencies did not exist.

Examples of such assertions are that the minister took little account of aesthetics and ignored the advice of the Australian Heritage Commission in this regard. Sackville J dealt with this at paragraphs 168 to 171 and 171 to 181. I would also refer you to the minister's statement of reasons at attachment K to our submission, paragraphs 51 and 60 to 77. Haigh contends that the minister wrongly failed to apply the precautionary principle. Sackville J deals with this in paragraphs 200 to 202. Haigh contends that the minister applied the wrong legal tests. The Federal Court rejected all arguments made in the case that the minister had applied a wrong test—Sackville again at paragraph 107, Burchett at page 14 and Hill J at page 19.

Mr Haigh's assertion that the Commonwealth has breached the World Heritage Convention is unfounded. Although this is not a question that the Federal Court could judge directly, the court considered the terms of the convention in detail in determining whether the minister had complied with the act and did not find any inconsistency between the minister's actions and the obligations under the convention. I would refer you to Burchett J pages 11 to 14 and Hill J at page 19.

It is incorrect to say, as Mr Haigh does, that the minister's statement of reasons was 'crafted to defeat an appeal by judicial review'. That is page 180 of the evidence. The statement was prepared to reflect accurately and clearly the complex decision making process followed by the minister. The assertion that the Commonwealth did nothing to remove sand placed on the foreshore—page 181 of his evidence—is dealt with in the Commonwealth's submission at pages 25 to 26. The authority considered the placing of sand on the foreshore by Cardwell Properties in December 1997 to breach the deed of agreement and promptly gave Mr Williams 28 days to remove it. Within those 28 days sand was deposited on the beach above the relevant foreshore area by natural storm action shortly afterwards.

Secondly, in evidence on 10 August 1998, Mrs Virginia Young claimed that there was nothing on the public record to indicate whether the minister determined if there was a prudent or feasible alternative to the project. Once again, it is clear from the minister's statement of reasons at attachment K, paragraphs 67 to 72, that the minister gave full and detailed consideration to whether there was any feasible and prudent alternative to his giving

of the requested consents. This was confirmed by the findings of the Federal Court, Sackville J., at paragraphs 178 and 179.

Thirdly, Mrs Young also quoted information from a Dr Bob Morris claiming that he is 'the pre-eminent person' on acid sulfate problems on the Great Barrier Reef. This information suggests that he has analysed seagrass samples adjacent to the site and found high levels of arsenic, lead, mercury and cadmium. I am advised that Dr Morris has not done any work for the Great Barrier Reef Marine Park Authority. We are not aware that Dr Morris is now employed at or by any recognised research institutions in Australia. We are not aware that he has participated in any of the programs of the Australian Institute of Marine Science or the Cooperative Research Centre for the Ecologically Sustainable Development of the Great Barrier Reef. We have been unable to find any scientific papers published in refereed scientific journals by Dr Morris relating to studies of the Great Barrier Reef.

Dr Morris's general allegations in relation to heavy metals in parts of the Great Barrier Reef are known to the authority and he has been asked to provide his work for review. He has not done so. He has also been asked by GBRMPA scientists to publish his results in a peer review journal or to address scientific fora. To date, we are not aware that any of his results have been published in such a journal. As we have noted elsewhere, pH values at the mouth of Stoney Creek have never exceeded the guideline values since construction commenced. We recommend that the committee bear these observations in mind in deciding how much reliance, if any, to place on Dr Morris's results as reported by Mrs Young.

In evidence on 10 August, Mr Keith Williams claimed that certain comments were made to him by an officer of Environment Australia, Dr David Kay. Dr Kay has provided to me his response to those claims. In the period between October 1994 and March 1996, Dr Kay, while occupying the position of Assistant Secretary, Biodiversity and World Heritage Branch, had many conversations with Mr Keith Williams in relation to Port Hinchinbrook. Dr Kay recalls discussing on several occasions the requests made by Mr Williams and his legal representatives for the evidence on which the proclamations had been made and also discussing the Valentine report. However, he recalls no conversation specifically along the lines mentioned by Mr Williams in paragraph 2 of page 307.

It is also apparent that a comment made by Mr Williams in paragraph 3 of page 307 relates to Dr David Kay rather than David Haigh, as recorded by the draft *Hansard*. Mr David Haigh has never been employed in the Environment Australia World Heritage Unit. To the extent that the original assertion applied to Dr Kay, it is incorrect. Dr Kay transferred to the position of Assistant Secretary, Biodiversity and World Heritage Branch in October 1994. Prior to the making of the proclamations in relation to Hinchinbrook, he transferred from that position to his current position in March 1996—some 15 months after the proclamations had been made. He has not been demoted, as claimed. In evidence on 10 August, Mr Williams claimed that:

. . . everything that I want to do has been stopped by a moratorium that was put on by the state government and the federal government . . .

He has also claimed that he has been advised that his recent application for a permit to land a seaplane would not be granted.

The Great Barrier Reef Marine Park Ministerial Council has agreed to a moratorium on the issue of tourist permits in the region until the Cardwell-Hinchinbrook regional coastal plan is completed. This is essential to ensure that the values of the world heritage property are protected. The decision in no way discriminates against Mr Williams. Mr Williams was made aware of the policy from the time that the deed was signed and was informed that all permit applications, including his own applications to operate his vessel and seaplane, would be treated in the same way.

Professor Melville, Mr Sammut, Professor White, Dr Bowman and Dr Rogers have all appeared before the committee and given evidence about the management of acid sulfate soils. While they do not agree that every element of the management of acid sulfate soil on the construction site accords with their own opinions on how the risks from this material should be managed, they are in agreement that: firstly, the team of soil scientists, who are the Queensland Acid Sulfate Soil Investigation Team—QASSIT—are recognised Queensland experts on management of these soils; secondly, their own first-hand knowledge of the management of acid sulfate soils at the Port Hinchinbrook site is, at best, limited and dated; and, thirdly, the potential risks to the environment from possible acid run-off generated at the Port Hinchinbrook construction site are slight.

The committee has seen first-hand that soils showing the potential to generate acid are being removed from the marina basin of the Port Hinchinbrook site and are being immediately buried below the watertable in pits, acknowledged by Professor White as by far the best technique available. The marine sediment, mixed with seawater, generated by the process of dredging the channel, has been directed into settlement ponds. This is not acid sulfate material but has been identified as possibly having some potential to produce acid leachate if left untreated and exposed to the air.

These settlement ponds are being dried out and will eventually be capped with topsoil. Perimeter drains have been put in place to collect any water leaching from the ponds or the pond walls themselves. These drains direct water to an acid sulfate treatment pond. Any water exhibiting acid characteristics, defined as less than pH6, is required to be treated with hydrated lime before being discharged into the excavated canal that the developer has flooded with seawater, which is alkaline. Discharge via the excavated canal further minimises any risk that acid water might escape from the construction site into Hinchinbrook Channel. These are all elements of the management of acid sulfate soil at the Hinchinbrook site that experts agree are entirely appropriate.

The measure of the success of the acid sulfate soil management plan is that there have been no instances where acid water, defined as water with a pH of less than 6, has been monitored exiting the marina access canal into Hinchinbrook Channel since dredging began. The QASSIT scientists are the independent monitors for acid sulfate soils, and a letter from the Queensland Department of Economic Development and Trade dated 13 December 1996 confirms this fact.

The committee has heard suggestions from Professor Ian White that QASSIT is not the independent monitor for acid sulfate soils. This suggestion has no foundation, in the Commonwealth's view. The committee has also heard suggestions from Professor Frank Talbot that the Port Hinchinbrook plan has fundamentally changed into a resort plus housing

development. This is not correct. All parties to the deed have accepted from the outset that a component of the development would include housing. Residential precincts were in fact contemplated in the original sketches of the site plan developed by Tekin and adopted in Cardwell Properties' own site plans. Professor Talbot has also asserted that GBRMPA has provided evidence that the foreshore was eroding. In fact, this report was drafted by the authority's Dr Jamie Oliver and was prepared in 1995, well before Senator Hill considered the adoption of a beach and foreshore management plan for the development.

The experts quoted by Dr Oliver were referring to some evidence that erosion had occurred on the foreshore over a period of nearly two decades. The experts at that 1995 site visit actually considered that the degree of erosion exhibited was only moderate and that further investigation was warranted. On the basis of this report, retention of the remaining mangroves on the foreshore was incorporated into the beach and foreshore management plan and a survey of the foreshore undertaken. Monitoring of foreshore profiles since that time has not detected any evidence of further erosion.

Mr Greg Bowman from the CSIRO Division of Soils stated in his evidence to the inquiry that, while the World Heritage unit of Environment Australia engaged the CSIRO to undertake an assessment of acid sulfate soil conditions at the Port Hinchinbrook development site, it was not prepared to fund a comprehensive study. The issue here is not, as suggested, one of Environment Australia's willingness to pay. The department engaged the CSIRO to undertake only a preliminary study of the extent and nature of acid sulfate soil on the site, not to undertake a comprehensive study or to prepare an acid sulfate soil management plan. The investigation needed only to be as comprehensive as would permit the department to assess the extent and nature of likely environmental impacts, and to provide advice to the minister. This was made clear in the terms of reference for the study.

Senator WOODLEY—Could I ask Mr Beale how much longer his opening statement will take because—

Mr Beale—It will take less than the senator's intervention. The CSIRO investigation showed that both actual and potential acid sulfate soil conditions exist at the site and that a comprehensive acid sulfate soil management plan should be prepared. Responsibility for the preparation of an acid sulfate soil management plan was addressed appropriately in the deed of variation. Thank you.

CHAIR—Thank you, Mr Beale. I will kick off, perhaps. I suppose what seems to be fundamental to this whole inquiry is this question of best engineering practice and best practice generally. It seems to me that three issues arise with question marks against them. One is the bundwalls, one of which, as you would be aware, failed at a point in time; there is the ongoing monitoring and the role of QASSIT, especially in relation to the spoil ponds, and also a survey of the area for potential acid sulfate soil not having been done at the outset. These seem to me to be the key technical questions around this inquiry.

Can I ask you, first of all, about the bundwalls? I understand that the aquaculture further down the coast, for instance, has compacted bundwalls. I also understand that there is a suggestion that there may be potential acid sulfate soil within the bundwalls that were

created because they were, as I understand it, simply pushed up and formed into the shape. Can you comment on that, please?

Mr Beale—Madam Chair, if you do not mind, I will direct those questions to the authority which is the technical management authority for the site.

Dr McPhail—The bundwalls around the spoil ponds are for permanent, longstanding structures. Presumably, at the time that they were approved, the Queensland Department of the Environment insisted that they be built in such a way that they would exist safely over a long period of time. The Great Barrier Reef Marine Park Authority used an independent engineer to look at the bundwalls. The independent engineer considered that the walls were appropriate for temporary structures. Further, the authority had requested, and it was agreed, that there should be drainage channels put around those bundwalls in order to remove leachate.

CHAIR—Can you assure the committee that this is world's best practice by drawing some comparisons with other projects which have similarly used bundwalls without failures?

Dr McPhail—The short answer to that is no, we have not done that analysis. We have simply assured ourselves that the practice adopted on the site was sufficient to ensure that the world heritage values were not affected.

CHAIR—How did you do that?

Dr McPhail—By using an independent engineer to inspect the bundwalls and to advise whether he considered they were adequate for the task, and that was his response to it.

CHAIR—Did this engineer then visit the site at the point at which the bundwall failed and make a subsequent report regarding the engineering aspect?

Dr McPhail—Yes, he did. Of course, his report was that the bundwalls were overtopped by an exceptional rainfall event that then caused the damage to the walls.

Senator WOODLEY—Did that report give any credence to Mr Williams' claim that actually the bundwall was breached because of vandalism and that somebody dug with a shovel through the wall and allowed the material to escape?

Dr McPhail—Mr Meecham, the engineer, did not speculate on that to my knowledge.

CHAIR—Could you comment on the survey of the area for potential acid sulfate soil? A number of submissions made to the committee referred to this and felt that that would be best practice. Why was that not something—

Dr McPhail—I do apologise for not having listened to the question accurately, because I believe I gave you an incorrect answer. Mr Meecham did, I think, consider whether there may have been some external activity that might have been at the cause of the overtopping. He did suggest that that was a possibility, but he had no evidence for it.

CHAIR—If we could move to that question of why there was no survey done of the area for potential acid sulfate soil before any work commenced?

Dr McPhail—As the secretary mentioned in his opening statement, there was, in fact, a survey done by Dr Greg Bowman. That indicated the presence of potentially acid sulfate soils. From that emerged the requirement for an acid sulfate soil management plan to be an integral part of the deed.

CHAIR—But you have seen the criticism in the submissions that that survey was inadequate in that it did not bore at regular intervals over a grid. Is that not a remaining area of concern in terms of best practice?

Dr McPhail—It was the outcome of that survey which was important. The outcome was the requirement of an acid sulfate soils management plan for the disturbance and removal of any soils on that site.

CHAIR—The third area I referred to was ongoing monitoring of the spoil ponds. Can you explain what that monitoring consists of and why you think that has been an area of some criticism by various people?

Dr McPhail—There are certainly some people who have monitored those ponds almost on a daily basis from outside the property.

CHAIR—Some people?

Dr McPhail—They appear to be informally monitoring those ponds from outside the site, almost on a daily basis.

CHAIR—What do you mean by that?

Dr McPhail—It means that the authority is constantly in receipt of allegations from people external to the property who believe they have seen certain things occurring on site which we have then have had to react to on a fairly frequent basis. Therefore, I am not entirely certain as to the provenance of the allegations to which you are referring.

CHAIR—What I have asked you to do, if you would, is explain the formal monitoring process that there is in place: who is doing it and how satisfied are you that this is best practice?

Dr McPhail—As you are aware—and I suspect that it was probably referred to in the previous material—we have an ongoing monitoring program for acid sulfate soils and any leachate of acid sulfates on the site. You are probably aware also that we have a series of monitoring points which, on a twice-a-week basis, are monitored for the pH of the waters passing those points. This regular monitoring is referred to the independent monitor for his review, and the independent monitor would then draw to us any matters that are of concern. So it is a very complete and ongoing monitoring program that has been put in place.

CHAIR—So each of the spoil ponds is being monitored as it dries out, as it settles; on what sort of basis is that being done, how regularly?

Dr McPhail—Certainly there is a constant and regular monitoring of or looking for any acid sulfates that may emerge from the ponds or the site.

Senator WOODLEY—That is in terms of that water?

Dr McPhail—That is right, that is in terms of the water.

CHAIR—No, my question was about the material in the ponds themselves.

Dr McPhail—On that twice-a-week monitoring the site supervisor, who is an employee of the Queensland Department of Environment, conducts a site survey at the same time. So twice a week those ponds are inspected along with the remainder of the site.

CHAIR—Am I correct in expecting that, if an area of potential acid sulfate soil or actual acid sulfate soil were detected in those ponds, it would need to be removed and buried below watertable level?

Dr McPhail—The material that goes into those ponds is dredge material, and that dredge material has been buffered by salt water. So the material that is going into those ponds from dredging is material that has been neutralised in relation to leaching. At the conclusion of the exercise, those ponds are then to be capped and they will become just a part of the site. So those ponds are there for the purpose of containing the dredge spoil.

CHAIR—I understand that. You are giving an assurance that there is no potential acid sulfate soil within those dredge ponds; is that correct?

Dr McPhail—That would be something on which we would have to defer to the experts. But, to our understanding, the effect of the buffered dredge spoil material that is going into those ponds has a very limited likelihood of being a potential acid sulfate soil problem.

CHAIR—The testing will reveal any acid sulfate soil, will it?

Dr McPhail—Yes. In fact, around those ponds—

CHAIR—No, not around the ponds; I mean in the ponds themselves.

Dr McPhail—To my knowledge, I do not believe testing is actually occurring within the ponds.

CHAIR—That is my question to you.

Dr McPhail—But then there is testing around the perimeter drains, and any material that leaches out that is potentially acid then has to go into an acid sulfate treatment pond. So there are very significant, if you like, interventions between the pond and the natural environment.

CHAIR—So, if there were a substantial amount of acid sulfate entering the water which comes off those ponds and goes into the treatment pond, at what point do you say there is a need to identify exactly where this is coming from within the ponds and to remove that material and bury it below watertable level?

Mr Cook—It has never actually reached that stage. At the moment the situation is that the bundwalls are constructed, as you saw on the site inspection, above the ground; the dredge spoil is pumped into it. The ultimate use of that, as Dr McPhail has indicated, is that it would be capped.

If we go back two steps to the source of the material, which is the dredging, the source of the dredge material has been identified as being not likely to be acid sulfates, partly because of where the dredge has been operating. Then, as Dr McPhail has indicated, the fall-back position for us, as it were, is that we have the perimeter drain, the sump and the acid treatment pond with the hydrated lime present. So the chance of the material seeping out into the world heritage property is minimalised through that last, if you like, barrier at the boundary of the property.

Senator WOODLEY—Are you aware of hydrated lime being applied to the dredge spoil material in the ponds themselves?

Mr Cook—No, there has not been any applied to the dredge spoil ponds themselves. I understand that it has been applied in one or two instances of discharge when the triggers were met or exceeded at some point; hydrated lime was then placed into the treatment pond. That has only occurred on one or two occasions, to my knowledge.

CHAIR—There is a storage of hydrated lime on site, is there?

Mr Cook—As we understand it, there is certainly a tank there. We have seen it and have seen that it is full.

Senator HOGG—Do any baseline studies exist as to what was in the region, say, 10 years ago, five years ago to current? We then could see over those periods of time how the system in the region has changed, whether it be in terms of siltation or effluent from aquaculture—whatever it might be. Is there any baseline data? It seems to me that is one of the things that is lacking in this particular case; and, if we look forward, it will be lacking for many future developments also.

Dr McPhail—I think we can only say that there is partial information in relation to past changes in environmental quality in the area. For instance, AIMS has been doing turbidity work in the Hinchinbrook Channel for some time; therefore, that data could be made available. You heard the sugarcane people speak about some of the work they have done; but much of it is retrospective—that is, reconstructing the past from the information we have by way of geology, then into the present through a variety of observations and then through aerial photographs.

But in terms of what the Hinchinbrook Channel was 20 years ago, there is no systematic analysis upon which that can be based. It is curious in that probably the most detailed

photographic record we have, in terms of aerial photographs, is of the Hinchinbrook site itself.

Senator HOGG—How do we get a coordinated scientific approach enabling us to sort the fact from the fiction and the various hype so that we gain some appreciation of the impacts? For example, there are a number of developments in the area which would be of concern. Port Hinchinbrook is one; the town of Cardwell itself must impact on the local area; the two forms of aquaculture: the barramundi farming, and the prawn farming; the sugar cane—and, of course, there would be other natural processes. When one cannot separate the ongoing impacts from these, it becomes very difficult to know what is causing the greater damage in the area.

Dr McPhail—In recent times, in fact, a fairly considerable body of material has become available. The task would be to bring it into some sort of consolidated form.

A great deal of land capability mapping has been done by the Queensland Department of Environment and Natural Resources. There have been, of course, aerial photographic runs over a long period of time. There have been the AIMS turbidity results. We have funded—and quite separately from this Hinchinbrook matter—seagrass mapping in the Hinchinbrook Channel, so we have gained regular reports on the status of seagrasses.

Senator HOGG—I understand that, Dr McPhail, but who is pulling all of this together? It seems to be quite disparate in nature. With the greatest of respect to the various scientific organisations that are undertaking the research, it seems to me that there is no place collectively where one can refer—and I am not just thinking of Hinchinbrook but of other potential developments which may be requested along the coast. We now have a regional coastal development management plan for Hinchinbrook and I understand that, but that has been after the event. There does not seem to be much forward looking taking place.

Dr McPhail—In terms of the Great Barrier Reef Marine Park itself, I think we can argue that we have indeed been working towards a systematic understanding of the resources and the assets of the Great Barrier Reef. I think we can provide a wide range of material on that, including a range of long-term surveys that have been done by AIMS, as well as the work that the authority itself has done. Indeed, there is a complete cooperative research centre devoted to the understanding of the Great Barrier Reef Marine Park. However, it becomes more complex when you move outside the boundaries of the marine park and into the coastal zone, which is of course managed by the state government of Queensland.

I would say by observation that the state of knowledge of the coastal zone in Queensland is not significantly different from that which you would find around the coast of Australia; that is, it is only in recent years that there has been a move to understanding the significant components of coastal zoning mechanisms. The Hinchinbrook Channel is unfortunately no better or worse than other areas. It has only been thrown into focus because of development of this sort which has caused a debate of this nature.

Senator HOGG—But it is a fairly substantial development in terms of its size, which probably stands it out from a number of the other developments which have taken place along the Queensland coast. If one looks not only back but also forward—and that is part of

this process—one can see similar proposals coming forward, and one would hope that we do not have to deal with those proposals in the same way that this proposal has been dealt with.

Dr McPhail—We would certainly agree with you. The authority is working closely with the Queensland government to try to put together a much better context in which we can assess these individual resorts. I would make the point, though, that when we are looking at individual resorts we make one set of judgments. I am not defending this development in any way, but let me say that there is nothing that is happening in Hinchinbrook that even begins to compare with the conversion of coastal wetlands from the Gold Coast through to Brisbane, which is a vast transformation of a natural wetlands system. There is nothing that is happening at this site that compares with the fact that about 70 per cent of the coastal wetlands of the major sugar producing rivers in Queensland have been drained and converted to other uses. So I think there are other relativities involved here as well. As it was set out, it was going to be about the second largest resort along the Queensland coast. But we must recall that Mission Beach is a chain of resorts, Palm Cove is a chain of resorts and Port Douglas is a whole series of resorts. Their combination exceeds this one particular development.

Mr Beale—It might be worth adding that the new bill aims to provide a legislative framework and incentive within which planning can be done proactively so that you are examining these sorts of projects in the context of a plan. In no sense does that diminish the real hard, continuing, very long-term work that needs to be done over many years to understand baseline conditions right around the coast of Australia and in the Great Barrier Reef world heritage area.

It is worth pointing out that, in relation to the comments that were made about maps of acid sulfate soils and so on, a number of those have been funded by this portfolio. For example, the coastal atlas that was referred to by the previous witnesses was developed in part by the Australian Geological Survey Organisation, funded by my own portfolio.

Senator HOGG—In relation to the ongoing monitoring of the Hinchinbrook Channel, where should the responsibility lie?

Dr McPhail—The Hinchinbrook Channel is uncompromisingly in the state of Queensland, so the obligation would lie with the state of Queensland. I believe, however, that the Great Barrier Reef Ministerial Council has already taken quite strong steps to develop the coordinated planning of that entire coastal and offshore region. I think there would be a real capacity to create a systematic long-term monitoring regime for the Hinchinbrook Channel.

Senator HOGG—Is there such a regime in place?

Dr McPhail—There is a whole series of disparate scientific activities in place. There is a consistent seagrass monitoring program under way and there is a dugong monitoring program under way. As the secretary said, the previous submitters spoke of the coastal atlas. They also spoke of water watch, which is a Commonwealth funded community based program for identifying and monitoring the health of rivers. There is considerable AIMS work being done on turbidity and water movement within the Hinchinbrook Channel. In our submission you will see many references to a Dr Wolanski who has been instrumental in that. There is a

wide range of quality scientific work being done. It is a question of having it brought together into a coherent long-term monitoring program.

Senator HOGG—Who should bear that responsibility?

Dr McPhail—It would probably have to be negotiated through the Great Barrier Reef Ministerial Council because it is fundamentally a responsibility of the state government, or it is within the right of the state government.

Senator HOGG—I would like one factor cleared up: is the Hinchinbrook site a habitat of the mahogany glider?

Mr Beale—No.

Senator WOODLEY—I have some questions for Mr Beale. You mentioned Dr Bob Morris; I think the committee may need to call Dr Morris before it in order to give a submission that would be helpful. I have to say, Mr Beale, that Dr Morris was very embarrassed by the tabling of that memo which he gave to Ms Young. I contacted him, and it was never meant to be tabled. In fact, I have a copy of it, and it was not in a form that should have been tabled. So he was certainly embarrassed about that.

In terms of whether or not he has done consultative work and whether or not he has responded to the Great Barrier Reef Marine Park Authority's invitation, are you aware that there has been considerable dispute between the Great Barrier Reef Marine Park Authority and Dr Morris and between the minister and Dr Morris? I am not surprised that in fact he has not necessarily responded in the way that the Great Barrier Reef Marine Park Authority might wish.

Mr Beale—The comments that I made went strictly to our knowledge of Dr Morris's approaches. I do not think it would be fair to describe it as a dispute between the minister and Dr Morris. As I understand it, what the minister and the marine park authority have done is to attempt to persuade Dr Morris to engage in the normal scientific manner with his scientific peers in scientific fora where his evidence, techniques and conclusions can be subjected to peer review or, if that is not acceptable, to publish that material in refereed scientific journals.

The comment I was making was that, in spite of having had an understanding of Dr Morris's deep concerns about heavy metals upon the Barrier Reef over many years—many years?

Mr Cook—Some years.

Mr Beale—And having made those approaches to Dr Morris, that material not having been corroborated by studies elsewhere that the authority is aware of, Dr Morris has not availed himself of that opportunity.

Senator WOODLEY—Are you aware, though, that the reason why he has not is that he had attempted, for at least two years, to make some of that material available and was ignored by the Great Barrier Reef Marine Park Authority?

Mr Beale—I have no such knowledge, Senator.

Dr McPhail—May I respond? I—and by ‘I’ I mean the Great Barrier Reef Marine Park Authority—paid Dr Morris’s fare to come to Townsville and to have a meeting with other scientists on some of the issues that Dr Morris has raised. I would have thought Dr Morris would have reported that meeting as having been amicable. At the end of that meeting we asked Dr Morris if he would then be kind enough to make his material available to us so that it could be subjected to the normal peer review to which we have subjected all of the scientific matter relating not only to the Great Barrier Reef in general, but also this Hinchinbrook episode.

My invitation to Dr Morris remains open. We look forward to him providing us with his material. Dr Morris complains on an annual basis about the management of the Great Barrier Reef to the International Union of Conservation and Nature but, again, we have simply asked them if they would provide us with the detailed material to support his claims, and we would be happy to have those analysed and a response made. We would look forward—

Senator WOODLEY—I am sure he will do that.

Dr McPhail—Senator, you made the assertion that the authority had taken up such a hostile position in relation to Dr Morris that he did not feel free to make his material available. My invitation is open to Dr Morris. We get many scientific arguments for and against the management of the Great Barrier Reef Marine Park Authority, and we welcome them all because they add to the texture of our understanding of the region.

Dr Morris has a research permit granted by the Great Barrier Reef Marine Park Authority to conduct research on the Great Barrier Reef, and we are glad to have provided that permit to him. We simply would look forward to the opportunity of discussing his material with him in a normal scientific context.

Senator WOODLEY—I hear that. My problem is that Mr Beale, in commenting on a submission to this committee, went way beyond correcting a statement made by Ms Virginia Young. He went on and spoke about the credibility of Dr Morris. The *Hansard* record will show that. I am just protesting, on his behalf, that there are reasons.

I am not asking you a question yet, Mr Beale; I will get to the question. I do not have all his published works, but are you aware, for instance, that he did a report at the request of the Queensland Department of the Environment in 1996 on studies on habitat loss in coastal environments of Queensland? I am just saying that you went way beyond correcting the memo tabled by Ms Virginia Young and cast doubts on the credibility of Dr Morris. I am simply, on his behalf, saying that I believe that was unfair, and I believe that Dr Morris should appear before this committee on his own behalf.

Mr Beale—Senator, I simply recorded, first of all, as you have indicated, that Ms Young produced some evidence that was not evidence that I am aware of ever having seen or being available at all.

Senator WOODLEY—It was not evidence; it was a memo. It should not have been tabled.

Mr Beale—She tabled that evidence, and put it on the public record. I simply recorded our understanding of the background in terms of publications and of the opportunities we have provided to have Dr Morris submit his material so that the committee would have an understanding of at least the authority's efforts, over some time, to ensure that he had the opportunity to have his findings peer reviewed. That is all.

Senator WOODLEY—I will check the *Hansard*.

Mr Beale—If you examine the *Hansard* you will find that all the statements are ones that, on my advice, are simply statements of fact.

CHAIR—Can I ask about monitoring? Has there been any monitoring of the effects on fish or crustaceans so far?

Dr McPhail—Not to our knowledge, Senator.

CHAIR—Do you not regard that as being necessary?

Dr McPhail—Sorry, the effect of what on fish and crustaceans?

CHAIR—The effects of the development.

Dr McPhail—That would probably be extraordinarily difficult to do, given the fairly mobile nature of fish. It would probably have to be a more holistic study within the channel. We would also then have to separate any possible impacts from the downstream effects of other forms of land use. Crustaceans, of course, are more fixed and immobile. I do not know whether there has been any such research done. We will check that for you.

CHAIR—Thank you. What about long-term monitoring of the seagrass?

Dr McPhail—We have been engaged in seagrass monitoring programs for some years in the Hinchinbrook Channel, and will continue to do so. We do that not simply in response to this particular activity but because of our concerns for the long-term health of the dugong populations on the Great Barrier Reef.

CHAIR—Just coming back to that question of the spoil ponds, we did hear evidence that material, once it has dried out and been rehydrated, can continue to leach acid sulfate for 1,000 years, I think was the time, or at least 100 anyway—it was either 100 or 1,000. Given that possibility, what is the long-term monitoring regime for seepage from those spoil ponds?

Dr McPhail—The long-term monitoring regime would then be caught under the new Environmental Protection Act administered under legislation of the state of Queensland. Under section 36 of that act, I believe there would then be duties applied to the managers of the site to avoid any environmental harm.

CHAIR—Sorry; I do not quite follow the process here.

Dr McPhail—There is a licensing program under the new Queensland Environment Protection Act, and that would be the basis upon which the site would be monitoring in the long term.

CHAIR—But this site, presumably, will be finished and dealt with by the time that legislation comes into effect. I am talking here about monitoring an existing situation.

Mr Cook—If I could perhaps clarify that, Senator, the general principles involved—and this is what Dr McPhail was explaining—was the post-construction phase, if you like, of the project once it is ostensibly completed and so on, that there would be provisions already in Queensland law to monitor the effects of the project in the longer term. We have received advice from the Queensland government Department of the Environment and Heritage that these particular clauses of that legislation give them the head of power, as it were, to do that as a general principle of an environmental duty.

CHAIR—So it is not the responsibility of the developer to do this? Once the site is completed, he walks away and it is the Department of the Environment in Queensland.

Mr Cook—Yes, basically, that is it. If it is completed, he has gone and he has sold it all off, or whatever the scenario is, and, if something happens in the future, there is a general duty of care, as it were, in terms of this legislation for whoever is responsible for that land. I can only advise the committee that that is the advice we have received from Queensland in the longer term.

CHAIR—So the drains will remain in place? As I understand it, the capping will include some levelling off so you will gradually lose the distinction between the ponds and the surrounding crown land. I am just wondering how we actually understand whether there is any opportunity for monitoring and how it is all going to happen.

Mr Cook—In terms of the Commonwealth's involvement, at the fourth anniversary of, for example, the beach and foreshore management plan, the heads of the deed meet to discuss all the measures that have been put in place through that deed. I think you would recall that I attempted to explain that at the hearing in Townsville. Effectively, what that would do is that all the parties would meet to discuss where we are at now, what the likely flow-on effects are, what needs to be done, and what the state or condition of the property is from our point of view—which is protection of the world heritage values offshore.

In terms of your particular example of the retention of the drain, that would be a matter to be discussed at that time once the place had settled down and to see how stable the material is. We can only then defer to the experts in that area. The provision of the perimeter drain, sump and the treatment pond was a way of having a sort of last line of defence during

construction. Once it has become stable, it reaches another dynamic, as it were. I think all those matters have to be looked at that time. It is like a staged development. I do not know whether that answers your question.

CHAIR—Thank you. Mr Beale, this has been a difficult exercise for some years for a number of scientists. You are familiar with the diversity of opinion on this project. Are there any instances at all of scientists who have spoken out publicly or made submissions to this committee who have then gone on to be black-listed for work by the Great Barrier Reef Marine Park Authority or the minister or your own office? Can you give the committee some assurance that this has not happened?

Mr Beale—Certainly it has not happened not to my knowledge.

Dr McPhail—I accept the question in the way you asked it, because I am afraid it does make me want to react quite strongly to it. We pay for science, we do not pay for scientists and, absolutely, there are no individuals who have been in any way blackballed or have had any other form of informal restriction placed on them.

CHAIR—So we have your assurance on that matter.

Dr McPhail—As an example, Peter Valentine wrote one of the early reports on the development and we have since employed Mr Valentine to be part of a major project establishing the values of the world heritage area.

CHAIR—Did you say that he will chair the heritage forum?

Dr McPhail—No. Mr Valentine was one of a group who prepared a report on the values of the Great Barrier Reef World Heritage Area some 18 months or two years subsequent to the report that he prepared on the Hinchinbrook Channel.

CHAIR—I understand that he was invited to chair a world heritage forum about Fraser Island but that the offer has fallen through at some stage.

Mr Beale—I am not aware of that.

Mr King—I can comment on that. We have been negotiating for some little while with the Queensland government about the conduct of a workshop to carry out an exercise similar to the one that Dr McPhail has just described, but in relation to Fraser Island. A number of suggestions have been put forward as to who might facilitate that workshop. It has not been possible to agree on any one particular name as part of the consultation. I understand that because of the difficulties that that caused for other participants in the workshop, it has now been agreed that the workshop be put off until early next year. I can say that at no stage has there been any overt discrimination against Mr Valentine as part of that process. A number of names were put forward and pros and cons were argued about all of them.

CHAIR—Can I ask you for a response to Mr Valentine's comments on managing world heritage on an international scale. Presumably you have read the *Hansard* from Townsville of his remarks. Are you in a position to respond to those?

Mr King—I am not sure what you are referring to there.

CHAIR—Perhaps we can put that on notice. Can I ask you to examine Mr Valentine's remarks and give some feedback to the committee. As one member of that committee, I was quite persuaded by some of the things that Mr Valentine said. It would be good to have your reaction as well.

Mr King—As I recall it, Mr Valentine made a very wide range of comments, and I wonder where you can help in some way to narrow down precisely the point of your question.

CHAIR—We will take that on notice, condense something from what he said and put it to you.

Mr Beale—As I understand it, this is not in relation to hearings of this committee but in relation to hearings of the other committee.

CHAIR—No, it is in relation to hearings of this committee, but it is a broader perspective on world heritage than the terms of reference for this inquiry.

Mr Beale—We would be very happy to respond.

Dr McPhail—In one sentence, the thrust of Mr Valentine's argument was that it would appear that you can only get sufficient protection in a national park, which is something we totally refute and refute it completely in a marine environment where you have such a huge dynamic and where you have to manage the entire ecosystem and not just a bit of it.

CHAIR—I think he drew attention to the problems and issues of a marine environment, but nonetheless he had some good recommendations to make, I thought. Do you see the proclamation over the area being lifted in the foreseeable future?

Mr Beale—No.

CHAIR—Why is that?

Mr Beale—The minister has indicated that he would not lift the proclamations and has indicated that any transitional legislation implementing the new bill would grandfather those proclamations or preserve them.

CHAIR—Could you briefly describe how the new legislation would alter the processes that have been in place and hopefully avoid some of the problems arising from this development?

Mr Beale—Can I give a brief comment on that and then ask Ms Reye, who is our legal adviser, to correct any mistakes that as an amateur I make. Essentially, the new bill creates a positive obligation on anyone who is proposing a project that would have a significant impact on world heritage values to inform the minister and seek approval for that project to take place. So, instead of the minister having to search out issues which might impact on the

property and then only having an ability to proclaim actions in relation to those which occur on the property itself, this would relate to projects which impact on world heritage areas and it would be a direct obligation on the proponent. The minister would then be in a position to consider that project, to require the conduct of any impact assessment considered appropriate and necessary, including having that impact assessment carried out by the Commonwealth, jointly with the state or through an accredited state impact assessment process, so that the minister could make a decision. In making a decision, the minister's obligations continue to be those of protecting, conserving and presenting the world heritage values. That is the bones of a case-by-case approach.

In order to facilitate the development of plans of management for world heritage areas and plans of management for impacts on world heritage areas, the bill would allow for the minister to effectively accredit a management plan so that any project that was consistent with that management plan—and, by definition, that project would then not impact on world heritage values—could proceed without going through that case-by-case formal approval. Any plan of management of that sort and the assessment processes associated with it would be constructed under a bilateral agreement between the Commonwealth and the relevant state. That bilateral agreement would itself have to be consistent with the Commonwealth's obligations under the World Heritage Convention and any other matters prescribed by way of regulation or instrument pursuant to the act. That is a layman's summary.

CHAIR—Maybe I will not invite you to comment further. No doubt you will be appearing before the committee when it looks at this legislation.

Mr Beale—Indeed.

CHAIR—We will put these questions to you at that time. I will just go back to a couple of questions that I missed in my notes about the bundwall collapse. As I understand it, the department asked the Queensland Department of the Environment to seek the views of QASSIT. Did that happen, and has there been a reply?

Dr McPhail—We did seek the advice of QASSIT, but we did not receive a reply.

CHAIR—On what date did you seek that advice?

Dr McPhail—On 30 April 1998.

CHAIR—That is quite a long time to be waiting for a response.

Dr McPhail—However, we did seek—as we would do automatically under these circumstances—the advice of the independent monitor who, I understand, also consulted with Dr Lee Sullivan, an acid sulfate specialist, in the making of his report on that incident.

CHAIR—I understand that the Queensland state government issued a notice to conduct an environmental evaluation of the spill, including remediation required. Has that been done?

Dr McPhail—They gave notice, but I do not believe that it has been completed.

Mr Cook—The notice was provided and then Keith Williams was required to provide, if you like, a mini environmental management plan for the spill. My understanding is that that has been done, but that is a matter between the state and the developer. We have not seen that plan.

CHAIR—Would you expect to see that plan?

Dr McPhail—I would just add that, after that spill, there was no evidence, in terms of the recordings of water quality, that any acid sulfate material escaped into the Great Barrier Reef world heritage area. In other words, there was no measured impact upon the values of the Great Barrier Reef world heritage area arising from that incident in relation to the bundwall.

CHAIR—Has all of that spill material been monitored and tested for being potentially acid sulfate?

Mr Cook—As I understand it, the Department of Environment and Heritage continue to monitor that. As I said earlier, Mr Williams was required to prepare an environmental management plan. At the same time as we sought the use of QASSIT, we sought assurance from Mr Williams that he would comply with the recommendations made by Meecham and Associates—the independent geotechnical engineer—who made certain recommendations about the operation of spore ponds and also by the independent monitor. Mr Williams gave an assurance in writing that he would meet those recommendations. From that point, the Queensland government gave him a licence requirement or something and then got him to do the EMP. That is the situation there.

Dr McPhail—Just as a final point, the independent monitor did test that spill material and advised us that it had only the slightest possibility of producing acid sulfate run-off.

CHAIR—Thank you very much for appearing before us today. I neglected to apologise for the fact that we had to send you home last time without hearing from you, so thank you again for making the trip a second time.

Committee adjourned at 1.30 p.m.