# **Transcript of Proceedings**

Issued subject to correction upon revision.

THE HONOURABLE JUSTICE C HOLMES, Commissioner

MR JAMES O'SULLIVAN AC, Deputy Commissioner MR PHILLIP CUMMINS, Deputy Commissioner

MR P CALLAGHAN SC, Counsel Assisting MS E WILSON, Counsel Assisting

IN THE MATTER OF THE COMMISSIONS OF INQUIRY ACT 1950 COMMISSIONS OF INQUIRY ORDER (No. 1) 2011 QUEENSLAND FLOODS COMMISSION OF INQUIRY

#### BUNDABERG

- ..DATE 10/10/2011
- ..DAY 44

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COMMISSIONER: Ms Wilson, I will just take the appearances for this session. So you are appearing, Mr Callaghan, Ms Kefford. Mr Ure?

MR URE: If it please the Court, my name is Ure, initials S M. I appear on instructions of King & Co for the Local Government Association of Queensland on behalf of Bundaberg Regional Council.

COMMISSIONER: Thank you. I know for a fact that Ms McLeod and Ms O'Gorman are appearing for the Commonwealth and they will be here in a matter of minutes. Those are all the appearances? I am sorry, Mr Rolls.

MR ROLLS: I appear with my learned friend Ms Brasch for the State of Queensland instructed by Crown Law.

COMMISSIONER: Thank you very much.

MS WILSON: Thank you, Madam Commissioner.

Today the Commission commences public hearings in the Wide Bay Burnett region.

These hearings in Bundaberg today and tomorrow will significantly focus on aspects of land use planning for the purpose of considering how local and regional planning systems can minimise infrastructure and property impacts from floods.

Matters of flood preparedness, such as Queensland's disaster management arrangements, forecasts, warnings and emergency response, each of which required consideration before the onset of the coming wet season, were dealt with in an Interim Report delivered to the Premier on the 1st of August this year.

Bundaberg is divided by the Burnett River with most of the city lying south of the river. The Burnett River catchment is vast and includes parts of the Bundaberg Regional Council, North Burnett Regional Council, and South Burnett Regional Council.

Major flooding in the Burnett River is relatively infrequent. However, heavy rain was experienced in the catchment throughout December of last year and by the end of the year the catchment was saturated, the water levels in several of the catchment river systems began to rise, and on Thursday, the 30th of December, a peak of 7.92 metres was recorded in Bundaberg making this flood the fifth highest flood in 140 years and the highest since 1942.

The river level ebbed on the 2nd of January. However, in less than a fortnight, flooding again returned and Bundaberg was

subject to moderate flooding with the Burnett River peaking at 5.76 metres.

The Bureau of Meteorology issued its final flood warning for the region just after 10 a.m. on Saturday the 15th of January 2011.

The flooding that occurred this year was less severe than the December flooding. However, the recurrence of flooding so soon after the December peak hampered the clean up and recovery program already underway.

It will be seen that the times and dates at which over-floor flooding of residences and other buildings in the region were not the same for all properties. On Tuesday the 28th of December 2011, the SES door-knocked about 250 residences and advised of potential flooding.

We will hear from Mr Barry Underwood of Bucca who on that Tuesday, the 28th, was experiencing his second day of what would become a month of restricted vehicle access to his property, as a ford crossing over a creek could not be traversed.

By Wednesday, the 29th of December, the Bruce Highway was closed at Currajong Creek, south of Gin Gin and at the Isis River south of Childers.

Other major roads, such as the Bundaberg-Gin Gin Road at Splitters Creek were also closed because of floodwaters and this had the consequence of stranding many travellers.

In Gin Gin, for example, travellers could not continue on their journeys and the town ended up hosting about 400 people in addition to its residential population. This, of course, had follow-on effects for the supply of essential goods such as medication. In Bundaberg City, local residents were also confronting access issues of their own. The only bridges across the Burnett River between north and south Bundaberg, the Tallon Bridge, and the Burnett Traffic Bridge, were inaccessible to ordinary vehicles due to the inundation of the streets approaching these bridges.

However, by Thursday, the 30th of December, floodwaters were receding over the Tallon Bridge and it was possible for vehicles with clearance to travel through the floodwaters. The Bruce Highway to the south of Gin Gin was also re-opened.

During this period of flooding, evacuation centres operated at various locations in Bundaberg, Childers, and Gin Gin. Some of these centres primarily housed local residents while others provided respite to stranded travellers.

Summarising the flooding in this region in such short compass and by reference to dates and river heights does not reflect the scale of damage and destruction brought by these floods, nor the individual and personal consequences for affected communities.

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The Commission has obtained statements from people involved in managing the immediate response to the flooding in the Bundaberg and North Burnett regions at the district, local and subgroup levels of the disaster management framework. These statements provide an account of how the flooding events unfolded and the way in which the relevant authorities reacted to the changing circumstances of those wet and hectic days.

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Although it is not proposed to call these persons to give evidence, we will tender their statements later in these hearings so that they form part of the public record of the Commission's investigations into the management of flooding in this region.

It is noted that some consequences of the December and January flooding arose not directly by riverine flooding but due to flooding from backwater flowing through local tributaries, open channel stormwater drains and piped stormwater drains that were not capable of discharging in their normal way.

Residents of Gooburrum, a suburb that is not sewered, experienced flooding because stormwater was unable to drain away from their properties. One such resident, Mr Goodwin McLeod, will give evidence today about the drainage problems he experienced and the floodwaters in his area being contaminated by the contents of underground septic tanks that had leached into the water.

Moore Park Beach is another area for which residents say the flooding was significantly exacerbated by insufficient drainage. Mr Larry Borg and Mr George Shuter will both give evidence and raise their concerns about the drainage in that area.

Mr Neville Cayley, a cane farmer with farming properties in Alloway, will give evidence about the issues he sees in his area, including inadequate drains and the construction of levees contributing to flooding.

The Commission is calling Mr Andrew Fulton, the Director of Infrastructure and Planning Services of the Bundaberg Regional Council to give evidence about the way in which the council regulates development and manages its stormwater infrastructure to protect against flooding.

Mr Peter Byrne, the Chief Executive Officer of this council, will also be called, and in these hearings the Commission will be calling Mr Robert Savage, the Director of Development and Environment of the North Burnett Regional Council, to give evidence about the recent flood studies conducted for that council area including the Gayndah Inland Flood Study.

This flood study was undertaken as a partnership between the State Government and the Local Government Association of Queensland for the purpose of improving Queensland's resilience to extreme flood events. The township of Gayndah was selected as a case study area for the purpose of

considering how climate change may be taken into account when assessing inland flood risk.

During the last wet season, Paradise Dam, on the Burnett River about 80 kilometres south-west of Bundaberg, spilled for the third time in history. Fred Haigh Dam on the Kolan River near Gin Gin, overflowed for the first time in two decades and Cania Dam north of Monto spilled for the first time in history. The operating procedures and emergency management of these dams and other dams in the region during the 2010/2011 wet season has been considered. It is important to note that none of these dams have a flood mitigation capacity.

Many of the issues and recommendations made by the Commission in its Interim Report regarding emergency management at dams are also applicable to the dams in this area. For that reason, dams in this region will not feature in today and tomorrow's hearings.

These public hearings are only one part of the Commission's process. If after these hearings there are matters that need further clarification or investigation, this will be done within the time constraints of meeting the final report deadline.

Madam Commissioner, if we could now have a short adjournment before we call the first witness?

COMMISSIONER: We will adjourn briefly.

THE COMMISSION ADJOURNED AT 2.46 P.M.

THE COMMISSION RESUMED AT 2.52 P.M.

COMMISSIONER: Yes, Ms Wilson?

MS WILSON: Thank you, Madam Commissioner. I call Goodwin McLeod.

GOODWIN DAVID JAMES MCLEOD, ON AFFIRMATION, EXAMINED:

MS WILSON: Is your full name Goodwin David James McLeod?-- That's correct.

You provided a statement to the Queensland Floods Commission of Inquiry?-- I certainly did.

XN: MS WILSON 3850 WIT: McLEOD G D J 60

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Can I show you this document, please? -- Thank you.

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Is that your statement?-- That is.

Okay. Attached to that statement is some photographs?-- Yes.

There is also a map there, too, Mr McLeod, is that the case?-- That's correct.

Madam Commissioner, I tender that statement.

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COMMISSIONER: Exhibit 750.

ADMITTED AND MARKED "EXHIBIT 750"

MS WILSON: Now, Mr McLeod, you have got a copy of it there. That's your evidence but I am just going to take you to some parts of that statement?-- Thank you.

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Now, you reside at Zorzan Drive, Gooburrum?-- That's correct.

When did you purchase that property?-- In February 2004.

Okay. How big, approximately, would that property be?-- It is one acre. 4,000 sq m.

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What's that?-- 4,000 sq m.

Now, attached to your statement is a map. Perhaps if we could get that on the screen. Can you just go to that map?-- Is this the one of the scene of the water?

No, is there a map that's attached to----?-- There is. I saw it before.

Yes?-- Yes. 40

There is a marking on that map, number 24. Do you see that marking, Mr McLeod?-- Yes, I see it now, thank you.

Is that your property there?-- That is it, yeah.

Okay. Now, in your statement at paragraph 3 - we will just get to this, though, while we discuss these matters - your property shares a common boundary with a tea tree forest owned by Bundaberg Sugar?-- That's correct.

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So we can see from behind your property there is a forest area?-- Yes.

And that forest area is owned by Bundaberg Sugar?-- That's correct.

Now, when you first purchased your property, was there any

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drainage between your property and the forest that we can see on that map?-- No, not until very recently.

When you say very recently, what - can you give us some estimate?-- Oh, approximately a year.

Okay. A year ago?-- Yes.

COMMISSIONER: Ms Wilson, can you just help me? I can gather that Mr McLeod's property is one of the right-hand ones----?-- Yes.

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----next to the forest. How far up? I see a property that's got three white sheds. Where is it in relation to that?-- It is the top one. The others above that on the southern side have a comparatively higher level that the blocks have been built up to.

I see?-- Before - that is before the estate was developed. But there is three - or even four - part of the fourth one down toward the north, those blocks had no work done on them and really should have had. It is a reflection on the planning of the estate.

All right, thank you for that.

MS WILSON: As I understand it, Madam Commissioner, you will see on that map, or that photograph, that aerial photograph handwritten number 24. On the roadway.

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COMMISSIONER: All right, thank you.

MS WILSON: Now, Mr McLeod where that 24 is - can you see that 24 on your----?-- Yes.

That's where your property is, is that the case?-- That's correct.

COMMISSIONER: All right, thank you.

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MS WILSON: Now, there is an Energex easement also at the back of your property?-- There is. It is partly in the properties in the estate and partly in the Bundaberg territory. I think, from memory, I think it is about 10 metres either side.

Okay. Now, you refer in your statement to a spoon drain as part of the original development?-- Yes.

On this map that we have in front of us and that we're looking at can we see where you are referring to a spoon drain? Can we see the spoon drain on this map here?-- Well, when it reaches these properties that have not been brought up to sufficient level, there is no evidence.

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Right?-- But the rest of the estate going southward----

Okay. So that you can assist me?-- Yes.

XN: MS WILSON 3852 WIT: McLEOD G D J 60

Going southward we see Zorzan Drive?-- Yes.

Can you tell me which way is north and which way is south in relation to this map?-- Well, the entrance to the estate is to the south.

Okay. Well, you see at the bottom it has got "menu"? Down the bottom?-- Yes.

Is that south?-- Pardon?

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Is that south? -- That's south, yes.

So south is down the bottom of the page and north is at the top of the page?-- That's right.

And this spoon drain, is that located south of these properties?— Well, the majority of it. It was supposed to drain right through the estate or along that side of the estate but, like I say, there wasn't any depth in it when it reached the last one. But further down there is quite good evidence but local people, once they bought a property, were very anxious for the water to be diverted into that drain even though it was part of the development.

Okay. Just looking at this map - we can't see any evidence of the spoon drain on this map. It is further south?-- It wouldn't be further south because Culvins Road is that other road at the end of it on the southern side and the spoon drain would end there anyway.

Okay. It is ----?-- It is in the back of the properties.

So it is east, is it?-- Yes.

Okay. Now, when you purchased your property, you spoke to a neighbour about flooding?-- Yes.

And that neighbour had been living in the area for about eight years?-- Yes.

And what did that neighbour indicate to you when you spoke to him before you purchased the property?-- That any time that they had inspected it - and they didn't actually own it for eight years - but they had been contemplating buying and they had inspected it, and they had not had any indication from anywhere that there would be a risk of flooding.

You refer in your statement that since living at the property you have spoken with a former resident of the area?-- Yes.

And he informed you that this area had been known as a swamp?-- Yeah.

Prior to the development?-- Yes. He was an 88-year-old man and he lived there when he was a youngster.

Yes?-- And he used to drive the dairy cows through the swamp.

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So he knew what he was talking about.

And----?-- But I didn't meet him until after I'd purchased, unfortunately.

Do you know when this area was developed?-- No, I don't, precisely, but it wouldn't be very many years back. It is a relatively new area of development.

Do you know whether the property - any of this property flooded in 1999?-- No, I wasn't even aware that such an estate existed in 1999. I happened to be a resident of Monto then, so I know about the Cania Dam and the first time it's been filled.

Now, if we can go back to your statement now, Mr McLeod. And if we can go to paragraph 7 of your statement, which is just on that front page, right at that front page?-- Right on the front page?

Yes?-- Yes, the bottom one.

Now, you refer to there being no flood control measures in the area at paragraph 7?-- Yes.

When you refer to flood control measures, what sort of measures are you considering?-- Well, anything that would combat a more than usual rainfall event.

Okay?-- There are a certain amount of things that would drain parts of the estate within the development that was made but not over it all.

Okay. And flood control measures, are you thinking about levees or are you thinking about drains? What are you thinking about?-- I was thinking of even street development and enough kerbing and channelling.

Okay?-- Just where we are at 24 and for quite a distance along there is no kerbing and channelling.

In that same statement - same paragraph, that is paragraph 7 right at the bottom of that page, you refer to bore water being nine feet underground?-- Yes.

And it is a good source of water suitable for gardens and lawns?-- Yes.

Does this bore water have any impact on flooding?-- It is a high water table, and in that sense if bore water was added to the scene, naturally it would be above the ground eventually. And that's what's happened with this flood. So I guess in that sense it would have a bearing on it. It is not going to go down because the water table is already high, which we considered when we purchased that was quite an asset because we were interested in water for gardening.

If you can turn the page, Mr McLeod. And in paragraphs 9 and

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10, you recall some flooding that occurred in the early part of 2010?-- Yes.

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There was some rain in 2010 and that caused stormwater to run off?-- Well, there already was an accumulation of water - stormwater in that tea tree forest.

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Yes?-- Originally known as the swamp, it lived up to its name, and the water table became much higher.

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Now, where was the stormwater coming from?-- Straight from the sky.

Okay. Straight from the sky. When it hit the ground where was the stormwater coming from?-- To our properties, it was actually coming out of the tea tree forest.

Okay?-- Because it must be the lowest point in that water table.

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So there was water coming out of the tea tree forest. Was the drain there then?-- No, no, there was no drains then.

Where did the water go when it came out of the tea tree forest?-- It just stayed month after month. There was no going.

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You contacted the Bundaberg Shire Council and you wanted drainage to be provided along the boundary lines so that water could not come into your property?-- Yes.

And what - so if we can go back to that photograph? -- Yes

You see that photograph that we've been talking about?--Sorry, about the fumbling but I'm one of those people short of fingers.

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Do you need a hand? We can provide - we can help you find that one with you?-- This is the statement.

That's the photograph?-- Yeah.

Now, you contacted the council and you wanted drainage provided along the boundary line. Where did you want - whereabouts did you want drainage to be provided?-- Well, actually we made an attempt ourselves to drain it.

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Right?-- Towards the north.

Okay?-- But that didn't work. We found that the lower, say, coastal plain, and it looks flat. There's an uphill side to it and we were trying to drain the water uphill.

So you tried - were you digging some drains along the boundary of the Tea Tree Forest?-- Dig it with the drain line there.

Okay?-- But that's what we discovered that it didn't drain that way.

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Did the water eventually recede?-- Eventually being the optimum word, yes.

And which brings us to December of 2010?-- Yes.

Where, again, you received a lot of rain?-- Yes, yes. Yes, I don't know when the water receded but between the end of March and the end of the year somewhere in there it did disappear.

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And was there again stormwater runoff during December 2010 when you received that lot of - that significant amount of rain?-- The end of the year, yes.

And where was the water flowing, over - over ground then?-- It flowed - actually the course of it was that the lowest block was the one next door to us on the northern side.

Okay?-- And it - water entered there first. Well, that was happening all along and then it came back to - between the back between the two properties and submerged the back. When I say the back half it went right up to the front. Only our - we were fortunate that the builder that put the house up did satisfactorily raise the level under the house, you know, like preparation for building. So we've never had any trouble with water entering the house area.

XN: MS WILSON 3856 WIT: McLEOD G D 60

And, Mr McLeod, you've got some photographs that you've attached----?-- Yes.

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----to your statement. Now, if we could have a look at those photographs. Now, I'm not too sure if you can see, Mr McLeod, but behind you there on a screen - is that too difficult for you?-- No, I cannot see anything on the screen.

Just wait a moment. You will be able to get something there. There we go. Can you see that, Mr McLeod? Is that too difficult?-- You don't mind if I stand up?

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Madam commissioner, could the witness be able to stand up?

COMMISSIONER: Yes, of course?-- Yes.

MS WILSON: Okay. What's this photograph of, Mr McLeod?-- The house is in that direction. Then there's an addition that we've made with a - I think they call them a relatives apartment.

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Sorry, what was that?-- Relatives apartment.

Relatives apartment?-- Yes, just there. And there's the two sheds and two big tanks between them and then the back of the property is that way.

So where is this photograph taken from?-- It's taken from just inside our boundary and standing against the northern neighbour's fence.

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And it's looking south? -- And looking south, yes.

Okay. And to the left of that photograph would that be the Tea Tree Forest?-- It would be, yes. You can't see it there but it's - it is back there.

Can we have the next photograph, please? Mr McLeod, can you see that one?-- Yes.

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Now, can you tell us about this photograph?—— It's hard to get a bearing just where it was taken from. But the deeper water would be toward the Tea Tree Forest and back here it must be taken more or less from the same direction from the next door neighbour's, but probably in our boundary.

And looking more towards the Tea Tree Forest?-- Yes.

Okay?-- You'll see the sheds aren't there. You might be looking at a greater angle back toward the - probably the darkness in the background and it is to - I can see a couple of banana trees there in the back of our block.

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Could we have the next photograph, please. There we go, Mr McLeod. Do you see that photograph?-- Tea Tree Forest there all right.

Yes?-- Taken from much the same position overlooking that bit

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steeper angle out toward the east.

Okay. Is this taken from your property, Mr McLeod?-- Yes. Yes. And on the northern side. This is the pump house for -I think it's probably the bore mentioned earlier.

Yes. And looking back towards the Tea Tree Forest?-- Yes, Tea Tree Forest, but it's actually looking out over the neighbour's place as well.

And the left of that photograph, would that be looking north, would it?-- Yes, it is - it is north through that fence would be north.

And, finally, we have one - sorry, we have two more photographs. Now, Mr McLeod, can you tell us about this photograph?-- This photograph is of the drainage that tends to peter out here just the same as the spoon drain did because of the elevation and the sand up beside it is the disposal of what was dug out of the drain. It runs parallel with the power authorities easement, the power line, and Colvins Road is down beside - and that's where the attempt was made to drain the water by the council.

And when you say the attempt to drain the water?-- Yes.

When was that attempt made?-- It was after the flooding.

Okay. This year some time?-- Yes, yes.

And we have one further photograph, Mr McLeod?-- That's the street. That's our southern corner post on the front street of Zorzan Drive and that's when the storm came and filled most of the street and it's pretty obvious there's no drainage.

Okay. Thank you, Mr McLeod. You can have a seat. I'll just ask you a couple more questions about some matters that you raised in your statement. You went at some point in time to the SES to get some sand bags?-- Yes.

The SES then came out to visit your property?-- Yes, they also came especially to visit a neighbour who had young children.

Yes?-- And the problem there was two septic tanks had been flooded, the one next door to our property on the - on the northern side and it actually floated up. It was a plastic one. And it floated up out of the ground and then the next neighbour down that had the young children to the north, their septic tank was covered and between one another the SES declared that it was polluted water.

Okay?-- And that's the main reason why we got extra hearing and consideration from the council.

When the SES declared it polluted water?-- Yes.

What water were they referring to?-- All the water that was

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lying stationary in the backs of our blocks.

Okay. We saw some photographs of some water and then the Tea Tree----?-- Yes.

----Forest, so that water there?-- Yes, that water, yes.

And then we see in your statement that the council began to fix the drain, drainage area?— They did and they made, you know, quite a valiant attempt for something that they'd inherited from - from the Burnett Council and all this lack of planning I thought they, you know, put up a very reasonable effort to try to correct it. It took time to get to them, but eventually we did and I can only commend them on - on what they tried to do. The only thing is it didn't quite work.

What did they try to do?-- They tried to drain the water across Colvins Road or under Colvins Road and down into the Tantitha drainage system which crosses the road, Tantitha Road a little further down and goes through cane land which I think I mentioned and then down to Tantitha Creek.

And more work, you say, is required by the council to rectify the problem?— Well, I haven't got the knowledge about the detail of it. I mean, it's fairly obvious what is happening, but I couldn't say just what the council could do about it. I'm hopeful that something could be done, but just at the extreme end of that drainage that was put in by the council and I also must say that Bundaberg Sugar showed quite a deal of cooperation in consenting to the council having the drain put on their country.

Everything that you say, Mr McLeod, is typed down so we just have to----?-- Yes.

----pick up every word. And your view is that when developers are developing blocks like yours that they provide proper drainage in the estate before building approvals are granted?-- Oh, yes, it's - inadequate planning is the main problem. We can't fight against the forces of nature and we can't blame the Tea Tree Forest even though that is the source of the water. It's - it's just a matter of - that if adequate planning had gone into the estate these things could have been avoided.

Mr McLeod, they're all the questions I have for you, but some others may have some questions for you as well.

COMMISSIONER: Mr Ure?

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XN: MS WILSON 3859 WIT: McLEOD G D 60

MR URE: Thank you. I'm appearing on behalf of the Bundaberg Regional Council, Mr McLeod. I've just got a few matters for you. Would you look, please, at this document. This may be helpful for everybody. This is a contour map of the Zorzan Drive estate with which we're concerned?-- Yes.

Can you see that your property is highlighted in yellow?--Yes.

And that indicates correctly when your land is?-- Yes.

All right. Now, the drain that you speak about----?-- Yes.

----in paragraph 24 of your statement----?-- Yes.

----which is Exhibit 750 before the Commission is indicated with a dashed red line; you see that?-- Yes, yes.

And as you pointed out Bundaberg Sugar helpfully consented to the council constructing that on the Bundaberg Sugar land and it's - taken south, there's a culvert which runs under Colvins Road which you can see----?-- Yes.

----the name mid way along to the east?-- Yes.

And then it runs down Zorzan Drive, Tantitha Road and ultimately exits into Tantitha Creek?-- Yes.

Correct. Now, can you also see a notation on that plan, "drain to be upgraded", and there's a blue line with a little yellow or dark tan insert a little bit to the south of the intersection of Colvins and Zorzan. You see that?-- I'm not just following that.

If you come to the intersection of Zorzan Drive and Colvins Road?-- Yes.

Look a little to the south west there's a notation "drain to be upgraded". Do you see that?-- That's one that drains down from the hilly country behind the whole estate.

Yes. I see that?-- Up to the west, yes.

But do you see the notation - you see the words "drain to be up graded"?-- I haven't picked that up just yet.

Can I have a look at your copy, please? Just turn it around.

COMMISSIONER: Would you like Ms McGree to help?

MR URE: Yes?-- Oh, yes. I wasn't looking far enough afield. It's big enough, isn't it?

Just to the east of the notation----?-- Yes.

----is the depiction of the drain?-- Yes, yes.

Now, it's the council's plan to concrete line that. Are you

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aware of that?-- Well, no, I'm not, but parts of it are in the more recent development on the higher end of it toward the west.

All right?-- It's already concreted.

Are you aware that the council is looking at taking water from Zorzan Drive to the new drain that's indicated in red?-- Yes.

In a similar way to the way you tell us that you've done - you say in your statement in paragraph 29 that you dug a drain along the common boundary between your land----?-- Yes.

----and number 22; correct? That's what you say it tells us?-- No, that wouldn't be correct. It's the opposite direction that we tried originally.

Stop for a second. Can you go please to your statement?--Yes.

Look at paragraph 29. It's on page 4?-- Yes, I've got it now. Thank you.

It says, "Since the floods I have dug a drain between - along the boundary of my neighbour's at number 22 Zorzan Drive."?--Yes.

"To allow the water to run back towards the drain at the back fence."?-- Yes.

Now, number 22 is the property to the south of yours; is that correct?-- Yes, it is. Yes.

I'm just asking you are you aware that the council is also looking at constructing a drain between Zorzan Drive to the west and the newly excavated red dashed drain on the plan----?-- Yes.

----to the east?-- Yes.

Were you aware of that?-- I had heard about it but I didn't know officially about that.

Just a couple of other matters. You tell us in paragraph 17 that the underground water rose, not allowing the water to run away; do you recall that?-- Yes.

You also told us that one of the septic tanks popped out of the ground?-- Yes.

That's consistent, Mr McLeod, isn't it, with the ground water rising?-- Yes.

One of your photographs shows that the soil from the drain constructed by the council?-- Yes.

Which is heaped up on the SEQ easement?-- Yes.

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WIT: McLEOD G D

Is sand?-- Sorry?

Sand?-- Sand, yes, it's all sand.

Is the whole of the estate based on sand?-- It is, yes.

Well, one would expect if there's water falling from the heavens as you've described----?-- Yes.

----on sand?-- Yes. 10

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If it's not percolating into the sand it's likely that the ground water is out on near the surface?-- Yes.

Thank you.

COMMISSIONER: Mr Ure, would you like to tender that this map?

MR URE: Yes, I do. My apologies.

COMMISSIONER: That's all right. Exhibit 751.

ADMITTED AND MARKED "EXHIBIT 751"

MR URE: And may I have the copy of that exhibit back please, 30

Mr McLeod. I have nothing further

COMMISSIONER: Thank you, Mr Ure. Ms McLeod?

MS MCLEOD: No questions.

COMMISSIONER: Mr Rolls?

MR ROLLS: No questions.

COMMISSIONER: Anything further, Ms Wilson?

MS WILSON: No. May Mr McLeod be excused?

COMMISSIONER: Mr McLeod, thank you very much for your time.

You're excused.

WITNESS EXCUSED 50

MS WILSON: I call Neville Cayley.

XN: MR URE 3862 WIT: McLEOD G D 60

NEVILLE DAVID CAYLEY, ON AFFIRMATION, EXAMINED:

MS WILSON: You're Neville David Cayley?-- Correct.

You've provided a statement to the Queensland Floods Commission of Inquiry?-- That's correct.

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Can I show you this document, please. That's your statement?-- That's correct.

And attached to your statement is some photographs?-- Yes.

And a letter - rather some attachments?-- Yes, that's correct.

May I, Commissioner, I tender that statement.

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COMMISSIONER: Exhibit 752.

ADMITTED AND MARKED "EXHIBIT 752"

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MS WILSON: Mr Cayley, your evidence is your statement, but if I can just ask you some matters that you - ask you about some matters that you raise in your statement. First of all, you're a primary produce?-- That's correct.

And you own and operate six farming properties in Alloway?-- That's correct.

And can you tell us what's your primary crop?-- Sugar cane.

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And your family have farmed in the area for some time?-- Yes, father went there about 1946.

And in paragraph 3 you describe how some of your farming properties were affected by flooding and were difficult to access due to water at the crossroads?-- That's correct.

Now, you set out some of the issues that you see in this area, your statement does that, and if I can just summarise them for you and if I can - we can go there and look at some photographs. One of the issues that you raised is diversion of water caused by roads?-- Correct.

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And relating to that issue is culverts not being able to work properly?-- And also - and levee banks that have been----

And the other one is levee banks. Okay. If we can look at some of your photographs because they best describe - best

XN: MS WILSON 3863 WIT: CAYLEY N D 60

show what you describe in your statement and you've provided us with many photographs. If I can take you to some. You see there that there is - the first one there's an Al at the top?-- Correct.

Now, this is the culvert under Goodwin Road; is that correct?-- Correct. That's on the eastern side of Goodwin Road.

And----?-- Looking towards Bundaberg city.

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And we can see that the culvert entry point and access point, we can see that in this photograph?-- Yes.

And if we go to the next photograph this is a close-up and what's the problem there that you see, Mr Cayley?-- Well, further looking north towards Bundaberg city is what we call other water holes which is a big drainage area through. What they've done in this road - this was done in about 1988 when the River Road was upgraded and they've certainly put a culvert under the road but they've diverted all this water down to New Farm Road and down on to our properties. All the water from the western side of River Road and, you know, they've just blocked the whole flow of the water, in my opinion, down River Road which would flow down to the other water holes. So it's all going down and the big problem is the New Farm Road area----

Mr Cayley, everything is being recorded so if you can talk slowly?-- Sorry.

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You were talking about going to New Farm Road? -- Yes.

Tell us about that?-- Well, New Farm Road is - well, my property is sort of adjoined to New Farm Road which is to the eastern side of Goodwin Road.

Yes. Well, if we can go to - you've got some photographs of the culverts in New Farm Road and you'll see them marked as annexure B?-- Which one is it again?

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If we can - you see you've got that tab there. You see a B on the tab?-- Righto.

If we can go to that one. So there's some photographs that you have taken of the culverts in New Farm Road?-- That's correct.

Okay. And we'll get - the photo behind it is just a wider of angle of that. Can you tell us about the problems that you see in relation to the culverts at New Farm Road?-- It's not so much the culverts, I mean, the drains have - they've just been filled up and arose from the soil and just the water is just flowing over the roads, not only through the drains. There's inadequate drainage around a lot of the roads.

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XN: MS WILSON 3864 WIT: CAYLEY N D 60

And what do you particularly see as an issue in relation to the development of New Farm Road in terms of water flow?—— In 1993, it was always called New Farm Road. It was just an actual floodway. It was sort of a bit of a joke in the area. The road was the drain. But in 1993, the then Burnett Shire Council upgraded the road — to be bitumened in 1994 — but with the amalgamation of councils it never occurred, but nothing was ever done to the drainage, nothing, and consequently I'm getting flooding and flooding from other adjoining properties and, yeah, the whole thing is — the Council, I must admit, has got a big issue on this, not only where the water comes from, but where they're going to take it.

And if we can see tab 3 there, we can see another culvert under New Farm Road, and these photographs show the obstruction that seems to be gathering?-- A, B, C - tab 3?

Yes, do you see C?-- C, did you say?

C. If you can go to Tab C. Miss McGree could come over and assist you with where Tab C is. Now, is this another culvert under New Farm Road?-- I just can't pick that photo up. The two Commission Inquiry inspectors who visited my property discussed this with me. I've got a feeling these may be a couple of pictures they've taken.

Okay. In your statement you say - and just keep the photographs and I'll read this out because it may give you some assistance - "Travelling further along" - this is paragraph 11 - "Travelling further along New Farm Road, about another 50 metres from the first culvert is another culvert going into New Farm Road. This culvert again allows the water to run underneath the road and enter the grass drains. Again this culvert was ineffective during the floods and is now totally silted up, making it inoperable.", and the investigators took photos and now you've produced the photos we see?-- Those are the photos we saw before.

That's just another culvert that has got obstruction and is affecting the flow of water?-- That's correct.

Another issue that you raise in your statement is the construction of levee banks----?-- That's correct.

----by farmers?-- Yes.

Now, if we can go to the Tab A, when you're talking about - and this is a photograph - have you got that photograph?-- Back to Gilbert Road. I must have another----

That's Al. There we go?-- Which one do you want? Oh, righto. This one over here. That one.

Okay. So, if you see that photograph there of - and you've got pointed out a levee bank. They're the levee banks you're referring to?-- That levee bank on the left is on private property. That's taken from New Farm Road.

XN: MS WILSON 3865 WIT: CAYLEY N D 60

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Yes?-- If you're to look along this way, the levee bank has been constructed on Council property.

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So, the levee bank that we've got here----?-- Is actually----

----is on private land?-- Yes.

But it doesn't continue, you say, onto Council land?-- That's right, onto Council road, and you see that water there, it's - the property on the right is my property, and that's the damage I'm getting from it, and a lot of that water is coming from a long way away, probably kilometres, but a lot of that has been diversion off Gilbert Road, as I pointed out earlier in the----

A lot of it is diversion from----?-- Gilbert Road, where we first started.

Yes, and that's because there was not adequate flow?-- And then all this water then works its way down through my property and neighbouring properties and ends up on New Farm Road further down, which really causes a major problem.

Now, Mr Cayley, if we can go to your recommendations that you set out in your statement, and you can see that as your last page of your statement before it goes to the photographs. It's headed "recommendations"; do you see that?-- Yes.

And the recommendations that you believe that is necessary to enhance flood mitigation in your area is set out there. If I can take you to some of those? More aerial photographs of the area recording water movement would assist in enhanced planning and drainage systems?-- I believe so, yes.

What do you see - what information do you see could be obtained from such aerial photographs?-- Maybe instead of all the water getting to this point, maybe we should look back further by - and say, well, let's divert some of the water into other - further south there's some massive drains been built by councils over the years which, in my opinion, just don't get filled up at all. They take some water, but they're massive drains, and maybe some of this water could be channelled back that way.

So, are you wanting more of a bigger picture being looked at?-- Yes, talking about the centre of Alloway district.

Thank you, Mr Cayley. I just wanted to get further information about what you were wanting from those aerial photographs. I have no further questions.

COMMISSIONER: Mr Ure?

XN: MS WILSON 3866 WIT: CAYLEY N D 60

MR URE: Thank you. Mr Cayley, would you look, please, at this document? This is a cadastral base - and I hope we've got it correct - does that depict some of your land holdings, particularly the holdings in the vicinity of Goodwood and New Farm Road?-- That is correct.

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I tender that.

COMMISSIONER: Exhibit 753.

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ADMITTED AND MARKED "EXHIBIT 753"

MR URE: And if you look at the plan, you can see that helpfully the Council's marked at the intersection of Goodwood Road and New Farm Road the De Maren property; is that correct?-- Yes, yes.

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And that's the property that you express some concerns about in your statement, correct?-- That's one of them, and there are two others as well, but I probably didn't----

Let's focus on this one for the moment. If we go to your photograph A - that's the one that you have noted the levee bank on. It looks like this?-- Yes.

Just wait while that comes up. The photographer is standing on New Farm Road and he's looking up the common boundary between the De Maren property and the property immediately to the east of that that you own that has frontage to New Farm Road?-- Yes, that is correct.

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And I think you told the Commission in your evidence-in-chief that the - what you describe as a levee bank in the photograph is, in fact, a feature that exists effectively on your common boundary between yourself and the parcel to the left?-- Yes.

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But the levee bank that you describe as a levee bank in the statement that you say is on Council land is, in fact, a feature that's in the road reserve off to the west of the photographer on the boundary between the De Maren property and New Farm Road?-- Yes, that's correct.

Now, if we look at the feature that's in the photograph, you describe it as a levee bank, but, in fact, a drain has been created, has it not, and the spoil from the drain has been heaped up on the western side of the drain along the De Maren property?-- No, the drain was built there by my father and previous owners because of - the road has been since built up there because of the low-lying area where the water drained to, that's----

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I'm not talking about the roadway at the moment. I'm talking about the one on the road?-- Talking about the one on the private property.

XN: MR URE 3867 WIT: CAYLEY N D 60

On the private property?-- That was constructed by the present owner - down the back of the property is a dam that he's constructed and to do that he has put the spoil right over the whole farm and, as a consequence, that's created a bank right around the whole property to stop water going on his property, yeah.

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But imagine for the moment that there's no water there in this photograph, I suggest to you that what you would see was on the eastern side of what you're calling the levee bank a triangular ditch, which is a drain feature?-- Mmm.

But on the western side of what you're calling a levee bank, the differential between the top of the levee bank and the surface level of the property on the De Maren land is only about 200 mils? Do you understand what you're saying?-- I understand what you're saying, yes, but I think the natural land, as it was naturally before, would be a lot lower than that.

That may well be the case, but it is the case, isn't it, Mr Cayley, that in all of this area, which is subject to intensive agriculture, there is shaping of the surface to meet the farmers' needs, sometimes involving laser levelling, sometimes not, correct?-- Yes, and I think a lot of laser levelling, in my opinion, is done to excess in some places.

Not arguing. That may well be the case. But it is also the case, isn't it, that this area is incredibly flat?-- Yes, yes.

For example, if there was a - a true levee bank was built on the surface with no excavation and no drain associated with it, even of 200 mils in height, that could hold, given the featureless nature of the terrain, an enormous amount of water?-- Yes.

It is also the case, isn't it, that these sorts of features are an integral part of farmers managing their land, particularly cane?-- It is done to stop water going on to his property, but the consequences of that is that the road has been damaged further down and also destroying my property.

Well, I think you mentioned----?-- There's probably one photo I didn't add in is the damage that's been done by-----

You're not suggesting - or are you - that any approval was needed from any local government to construct what is seen in photograph A, or are you?-- I don't think any approval would have been done at all.

No, I'm not asking whether it was done or not, whether it was needed or not? Are you suggesting that that ought to have been approved?-- Well, I don't see that any person could go and build a bank of however height and there's plenty of other evidence down there where they've gone and put a fence on Council-owned land. You just can't do it.

XN: MR URE 3868 WIT: CAYLEY N D 60

Many of the farms - again I'm focusing on this one on the private land - leave the road reserve to the side for the moment - there are many farms in the vicinity on the eastern side of Barazza Road and Rexs Road?-- Yes, that's correct.

That have features such as this?-- Yes.

Have the local farmers ever thought of getting together and seeing if a consensus could be reached amongst the practical men to try and obviate the problems that appear to be occurring as a consequence of this? Do you know what I'm saying?-- There was a discussion a long, long time - probably 25, maybe 30 years ago - with Council officers at the time with the view of putting a drain further east, to the north towards the other waterholes, but I don't think anyone could ever - I think the cost of it would be prohibitive and to try and get private land holders to contribute to it was, I think, a stopping block in those days. But I believe there could be a solution to it.

I wasn't so much suggesting that the local land owners contribute to any major items of infrastructure, but there are circumstances around where lots of farmers who farm in the same area get together and agree about a mutually acceptable construction of levee banks, are there not?-- Yes, I suppose there could be.

A couple of other things: in paragraph 9 in your statement, you deal with the impact that you see that Goodwood Road has on your farm and on New Farm Road's water carrying capacity?-- That's correct.

You deal with that at paragraph 9?-- Yes.

That's a main road, isn't it - declared main road?-- Yes.

So, that's not under Council control?-- No, that's right.

And I think you've told us earlier in the statement that until amalgamation, which I think was March 2008, you were in the Burnett Shire; is that right?— That's right. If we go further south, we've got Paynes Road which is in the area we are talking about. Water flows down it just as it does on New Farm Road, but it all ends up on New Farm Road.

I have nothing further, thank you.

COMMISSIONER: Ms McLeod?

MS McLEOD: No questions, thank you.

COMMISSIONER: Mr Rolls?

MR ROLLS: Commissioner, in so far as matters concern Goodwood Road, which has just been raised, my instructions were that they weren't matters under the control of the State. In so

XN: MR URE 3869 WIT: CAYLEY N D 60

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far as they are, my client will reserve its position and will provide a statement, as we've indicated, in Brisbane in relation to those matters probably later this week.

COMMISSIONER: Thank you.

MR ROLLS: On that basis we have no questions.

COMMISSIONER: Thank you.

MR URE: May I ask for the plan back from Mr Cayley?-- Sorry.

Thanks.

COMMISSIONER: Mr Ure, is there a local law about levees which happens to define where the levee is?

MR URE: No.

COMMISSIONER: Thanks very much for your time, Mr Cayley?-- 20 Thank you, Madam Commissioner.

You're excused.

WITNESS EXCUSED

MS WILSON: Thank you, Madam Commissioner. I call Barry Underwood.

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XN: MR URE 3870 WIT: CAYLEY N D 60

BARRY CLIFTON UNDERWOOD, SWORN AND EXAMINED:

MS WILSON: Your name is Barry Clifton Underwood?-- Yes.

And you provided a statement to the Queensland Floods Commission of Inquiry?-- Yes.

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Can you have a look at this document, please? That is your statement with some attachments?-- Yes.

And today when you came to Court, you have also been thinking more about some of the issues about property planning and development and provided a document that set out your ideas in relation to this?-- Yes.

And can you have a look at this document, please? Is that the document----?-- That's the document.

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----that you came to Court today with?-- Yes.

Madam Commissioner, I tender those documents.

COMMISSIONER: Do you want them as one exhibit or two?

MS WILSON: They can be one exhibit.

COMMISSIONER: The statement and recent witness suggestions will be Exhibit 754.

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ADMITTED AND MARKED "EXHIBIT 754"

MS WILSON: Now, you have a property located at 100 Smiths Crossing Road, Bundaberg?-- Yes.

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And the block is about 10 hectares?-- That's right.

And it's zoned Category 2 Rural Residential? -- That's right.

Now, the property is on a hill?-- On a hill, yes.

And there's a creek running through the block?-- Down the bottom, yes.

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And your residence is----?-- On the hill.

----on the hill?-- Yes.

Now, during the floods, the recent floods, your residence wasn't flooded?-- It wasn't flooded. The problem was that I lost access to the public road.

XN: MS WILSON 3871 WIT: UNDERWOOD B C 60

Okay. And that was a result of a ford crossing failure?--Yes.

And you provided some photographs to your statement?-- Yes.

Perhaps if we could have a look at those photographs?-- Exhibit 1?

Yes. Just wait a minute, Mr Underwood. I will also get it on the screen so others in the gallery can see it. So, we've got the one that's marked "1"?-- Yes.

And can you tell us when this photograph was taken?— This was taken about two years beforehand and it was showing the ford in heavy rain. It was the ford that was on the property when I purchased it and it started to blow out on the downstream side, as you can see on the left corner where there's some earthworks exposed and the surface was starting to crack severely and it was showing signs of actually collapsing. It was a very narrow ford. It was only 2.5 metres wide and it was really unsafe for any heavy vehicles to cross.

Now, you did some repair work on that?-- Yes, I asked a contractor to come in and originally I asked him to reclad that ford with reinforced concrete and he told me he could do something better, and which I allowed him to do, and that shows - part of that work is shown up in the next photograph, photograph number 2.

That's photograph number 2?-- Two, yes.

Which we'll just get there?-- Yes. Now, this requires a bit further explanation. Where the poles are showing - where the two dogs are - that's where the pipes - two 600 millimetre pipes were put in to allow for water to flow through the pipes downstream and back towards the photographer. You will see a large amount of ballast and rock that had been placed in there and that was where the contractor built a by-wash to allow excess water to flow through the system. Unfortunately, the pipes he installed were insufficient in size, the by-wash he put in didn't work, which caused erosion on the - back on the fenceline, and then, subsequently, later on, there was further - I sent him an E-mail and asked him to remove the - because he was in America at the time on a family matter - and I asked him to remove the pipes at that time because he - so that we'd allow the water to flow down the normal stream course and remove it away from the by-wash.

Now, during the floods, was there water over this ford crossing?-- Water, yes, would have been over there and caused severe erosion of the work that the contractor had done.

How far above this ford crossing was this water? How deep?--Well, it was sufficiently high enough to go over the level - the level of the ford is shown between those two - those supporting posts.

XN: MS WILSON 3872 WIT: UNDERWOOD B C 60

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So, the water was over those posts?-- Yes, over the poles that were left - put on the side to retain the works in position, so I didn't go down and see the actual amount of water that flowed over it, but it also flowed out on to the road, too, as well, and caused further problems on the road surface. I'll be quite clear about that.

Now, this ford crossing, it's on your land?-- Yes.

And during the floods, you couldn't get a car across?-- I couldn't get a car across after----

And how long was that for?-- It would be about a month, yes.

Okay. And your daughter would come and visit you?-- Yes, I had a daughter that came out and she brought over supplies that I needed and things like that and I had a friend that used to come out regularly and they would come down and I would meet them at the gate. I could walk across, but I couldn't drive.

You could walk across the crossing but you couldn't get a car across?-- No, I couldn't drive, no.

Okay. Now, if we can go to your statement and if we can go to paragraph 6 of your statement?-- Yes.

Now, your statement sets out some issues that you see in your area----?-- Yes.

----that have been caused by some infrastructure development; is that the case?-- Yes.

Now, at paragraph 6, you explain that before they subdivided the land, there was a dam?-- Yes, there's a dam on the east side of my property, about 10 to 15 metres from the fenceline, that interrupted the - what would have been the pre-existing creek, and when the water came down through that, it got sufficiently level to divert around the dam but caused additional flow and erosion through into my property.

You believe that when they subdivided, they had no regard for the dam or the creek?-- Yes, I believe that.

And how does that, in turn, affect flooding on your property?-- It means that there's been no attempt whatsoever to ensure proper flows of water through the properties - through my property and neighbouring properties and through the Council road.

You also raise the issue of levees?-- Yes.

And that is at the bottom of paragraph 6?-- Yes. They were to the west of - to the east of my property on either side of the road, and they were constructed on Council property, and I'm unsure as to when they were constructed, but they had the effect of diverting water selectively away from some properties and then ultimately they're going to come through

XN: MS WILSON 3873 WIT: UNDERWOOD B C 60

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my property.

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And how high are these levees that you're talking of along Smith Creek Crossing Road?— Over the period of years, they've eroded down, but they would be around about — could be anything from 500 to 900 high, but they're above the road surface on both sides. On the south side, they would be slightly higher than what they are on the north side. I haven't actually measured them.

Okay. But they're about 500 to 900 mil?-- Mmm.

Now, do you know who constructed these levees?-- No, I can only assume that they were done after the properties were sold, but - and I assume that perhaps - rightly or wrongly - that it was done by the Council. I don't know.

And you also raise the issue of culverts to the west of your property?-- Yes, they had the effect of diverting the road from the south side across to my property - not necessarily straight into my property, but into neighbouring properties - and added to the flow of water that's coming down my property.

Now, Mr Underwood, if you can go to paragraph 21 of your statement, and you believe that if due regard had been initially paid to the subdivision and development of these allotments, access to your property would not necessarily have been through a creek?-- Yes.

What should have been considered then in your----?-- Well, they could have - could have effectively reduced the size of the neighbouring property to my west and allowed me to go back on the north side of the creek bank, back on to Smiths Crossing Road without having to cross across the creek at all, and it would have alleviated any problem. They would have come back out of Smiths Crossing Road about the neighbour's entrance, and it would have been clear there.

And that then feeds into your recommendation, does it, at paragraph 27, that there needs to be proper control over planning developments?-- Yes.

And this must include any necessary flood and access mitigation?-- Yes.

So all you're just asking for is when property developments are considered, flooding, such as flood infrastructure, is also considered?-- Yes.

Thank you very much, Mr Underwood. They're all the questions 50 I've got, but there may be some questions from others.

COMMISSIONER: Mr Ure?

XN: MS WILSON 3874 WIT: UNDERWOOD B C 60

MR URE: Thank you. Mr Underwood, look, please, at this document. This is a plan on a cadastral base showing Smiths Crossing Road in the vicinity of your property. That's your property identified in yellow, is it not?-- Yes.

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I tender that.

COMMISSIONER: Exhibit 755.

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ADMITTED AND MARKED "EXHIBIT 755"

MR URE: You can see there is pretty impressive topography in the vicinity, is there not?-- I understand that.

Just a quick glance shows that midway back from Smiths Crossing Road along your property, we've got an area with a contour of 16.5?-- Yes.

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And it rises as one travels to the north?-- Yes.

And the highest contour - it's a bit hard to see - but it's probably well into the 30s on the north eastern - yes, it is, 35.5 on the north-eastern corner----?-- Yes.

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----of the land. And we can see that the creek that you're referring to, across which you have to travel to get access to Smiths Crossing Road, is the one that starts - is outlined in red, or the contour is outlined in red, starts near the dam feature that you've told us about on the property to your immediate east, correct?-- I would dispute that, because looking at the land itself, you'll find that going into those neighbouring properties, there are small dams that have been put across what would have been an existing creek line.

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XN: MR URE 3875 WIT: UNDERWOOD B C 60

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No argument about that because if one looks at this retreat up here----?-- More or less----

----going to the north - let me finish please, going to the north across the boundary of your neighbour immediately to your east, it is clear, isn't it, that your property and the creek is part of a significant valley feature in the topography?-- Yes, but I would say that the valley feature has a depth running parallel to Smith Crossing Road when you look at it physically. But just to enlighten, further in my statement I said that some of the - a lot of the water flowed past - circumnavigated around my property to the north and that was due to some erosion on a neighbouring property that was actually diverting the water back down into that property where the dam was.

But----?-- That's not shown there.

Without being in the least unsympathetic, Mr Underwood, it is really the case, isn't it, that you have been pretty hard done by by the contractors that you have engaged to do the works that we're here discussing now?-- I - yes, I would not dispute that.

Because in reality, it is not an extraordinarily difficult exercise to ford the sort of watercourse that you, from an aesthetic point of view, are fortunate enough to have on your land?-- Yes, I agree with that.

You have talked about some levees on Smith Crossing Road. Can you just assist me, please, whereabouts are they?-- They would be up about - about - the next - the block that's going to the east of my place, about halfway along that and along the next block further east, and then there is a break for the gate entry, and I think there is a bit further to the next adjacent property and they are on the other side of the road immediately opposite the second block along Smith Crossing Road from----

Are they associated with table drains?-- No, there are no table drains there at all.

All right. We will see----?-- A straight levee has been put there evidently to divert water away from properties and that it was to take the water flowing from the south and the southside across - directly across the road it diverted to culverts.

How far away is your property from Bundaberg CBD here, time wise?-- 20 kilometres exactly from the post office - from gate to post office.

How long does that take to drive? -- About 20 minutes.

We might see if we can have somebody have a look at it. Just one small point, you say in paragraph - in your statement that

XN: MR URE 3876 WIT: UNDERWOOD B C 60

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your land is zoned category 2 rural/residential?-- Yes.

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I suggest it is in fact just zoned rural?-- Well, I thought on the rate notice I received it was zoned category 2. It has never been - it wasn't zoned a simple rural on the contract when I purchased.

I tender an extract of the zoning map for the subject land.

COMMISSIONER: 756.

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ADMITTED AND MARKED "EXHIBIT 756"

COMMISSIONER: But would you like Mr Underwood to have a look at it to see - is it something he can orient himself with?

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MR URE: Well, look, please, at this document. Can you identify your land on that zone----?-- Yes, I can identify that. The DPI map I originally saw when I purchased the property was that - was clear.

DPI map?-- Yeah, the map I got from the DP - out of the DPI, I meant, and I am sure the rate notice showed it was category 2.

I have nothing further.

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COMMISSIONER: That was Exhibit 756.

MR URE: Thank you.

COMMISSIONER: Ms McLeod?

MS McLEOD: I have no questions, thank you.

MR ROLLS: No questions, thank you.

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MS WILSON: Madam Commissioner, before Mr Underwood goes, I will give him my copy of that contour map, and I will give you a pink pen. Can you just mark on that where you are referring to those levees on that map there?-- That would be very approximate.

Just so we can have some general idea where you are referring to?-- Yes.

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Thank you, Madam Commissioner. I tender that marked up map by Mr Underwood.

COMMISSIONER: Exhibit 757.

ADMITTED AND MARKED "EXHIBIT 757"

XN: MR URE 3877 WIT: UNDERWOOD B C 60

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MS WILSON: And I have no further questions. May Mr Underwood be excused?

COMMISSIONER: Yes, thanks, Mr Underwood----?-- Thank you.

----you are excused.

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WITNESS EXCUSED

MS WILSON: Madam Commissioner, Ms Kefford will be taking the next witness.

MS KEFFORD: Madam Commissioner, I call George Shuter.

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MS KEFFORD: Your full name is George Vladimir Shuter?-- It is.

You have provided a statement to the Queensland Floods Commission of Inquiry?-- I have.

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Can I ask you to have a look at this document, please? Is that a copy of your statement? And it has got a number of attachments to it including photographs?-- Indeed. Yes.

Madam Commissioner, I tender that statement and the attachments.

COMMISSIONER: Exhibit 758.

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ADMITTED AND MARKED "EXHIBIT 758"

MS KEFFORD: Now, Mr Shuter, that's your evidence but if I could ask you a few questions about it, I understand you live in the Moore Park area?-- I do.

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And Moore Park is a small beachside suburb of Bundaberg?--Yes.

It is about 20 kilometres from the city centre?-- Yes.

And its current population, what is that in approximate figures?-- About 3,000.

And has it reached its limit, or is there signs that it is still growing?—— It certainly is. There is new development that's been applied for and considered with council, 129 lots at Moore Park Road and Murdochs Road, plus there are further developments north of that near the primary school that continue along Isaac Moore Drive, so there is still lots of development area been allocated.

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And in your statement you mention at paragraph 5 that at the time of the flood - and I take that to be the 2010/2011 floods - you helped with getting residents access in and out of isolated areas around Moore Park. Can I just ask you about that? And if you turn to the first page of attachment 1, there is an aerial photograph that looks like you've used Google to identify a number of spots on that photograph?--That's right.

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Do you have that?-- Yes.

Are you able to explain where the access was cut for this

XN: MS KEFFORD 3879 WIT: SHUTER G V 60

Moore Park area by reference to that photograph?-- Yes, number 7 at Royal Palm Boulevard was where I was mainly involved. I made about two or three trips into either access people out or get supplies in. There was one woman I know at least that damaged her car trying to get through about a metre's worth of water and it was only four wheel drives that could get through at that point.

Is that how you were able to get through----?-- Yes.

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----by way of four-wheel drive? And at paragraph 6 of your statement you say that Moore Park - you were told by the Council Disaster Coordinator that Moore Park needs to be self sufficient for a period of three days. When were you told that information? -- That would have been at a meeting - and I would have to go through the minutes of the Community Association minutes to verify, but it would have been two meetings ago, which would put it earlier this year - Mal Campbell - actually, I am not sure if Mal was actually there or if it was a representative via Mal - but at a meeting he said basically that all the local villages would have to accommodate themselves; the emergency situation would have to be that we would need to be self sufficient for a period of days because the emergency services just couldn't cope with everyone all at once. So the plan would be - and Mal has said this before - he has been invited to a future meeting to come and explain the further emergency procedures - that what we would need to do as a community to suffice all to be safe, to be fed, to be clothed, to be sheltered, and what the plan would be. So it is in the process at the moment of SES, fire brigade and council to work out some manner of what would need to be done in those first days if an event occurred.

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COMMISSIONER: Mr Shuter, can I get you to slow down a bit, because every word has to be taken down?-- I am sorry.

If you can just take it steady?-- I am sorry.

Thanks.

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MS KEFFORD: Was this information conveyed before or after the 2010/2011 floods?-- I can't say for sure. I would have to check the minutes but my belief is it would be either between the 2010 flood and '11 or post '11.

And in your statement you express a number of concerns about drainage problem areas throughout Moore Park - and if we could just bring up again the aerial photograph image, the first page of the first attachment. If I could just ask you a few general questions? There is eight numbered balloons on that photograph. You express concerns about drainage problems in each of those areas, is that correct?-- That is correct.

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And in terms of those drainage problems, is it difficulty with water flowing across the land and getting away, or how is the drainage - where is the water coming from that is causing the drainage problem?-- Most of the water appears to be from rainfall, and with farmers taking measurements of groundwater

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level, it appears that on any event that there is a consecutive three or four days of rain, that the groundwater level is at zero, so it is basically sitting there, and any further rain then that falls will simply expand beyond the boundaries that can contain it and cause either localised flooding, or at each of those eight points some manner of water remaining. In my opinion - and I have spent a fair bit of time to look at the evidence to support it - number 1, which is on the "O" in Google, that that point, there appears to be a blockage preventing water going from a weir that was put in approximately 1965 but has not been maintained by successive councils since, and has now apparently been declared abandoned by DERM, that the sediment between numbers 1 and 2 is preventing any flow for the distance of seven kilometres further back all the way back to Heron Close and Royal Palm Boulevard. The evidence is that at high tide and low tide, I have been at the weir and there is absolutely no difference on a 3.7 metre tide, high tide, or at a .2 low tide, the water at that weir remains at 20 millimetres above the outlet pipes.

So if I could break down a couple of things that I think flows from what you've said, do I take it that your understanding is at point 1 on the diagram, that point is lower than the topography at point 7 and there is a gradual change in topography from point 7 down to point 1?-- At a meeting at the Community Association, one of council's engineers said that there was a three millimetre drop in that distance, and we took that at face value and said we accept that. Since then, though, we have found that that measurement is incorrect and there is more likely a distance closer to a metre or two between those points. I can't substantiate that without having an engineer verify it.

But that's the basis of your----?-- That's the basis of it.

----expectations?-- That all of the water flowing from points 8 and 7 must go along a channel along those numbers indicated, and at the weir at number 2, that's the failure to be able to proceed any further into Moore Park Creek at 1.

So your expectation that siltation between points 1 and 2 is causing drainage problems in the area generally is based on this expectation of change in topography between points 1 and 2, and the higher land around the points 6, 7 and 8?-- That is correct.

And what do you - does this have a heightened impact during times of flood?-- Apart from the immediate impact of access to areas that would have - and Sandpiper Grove certainly had water in both of the events in 2010/2011, and so did Royal Palm - so apart from that immediate effect, I have great concerns that DERM has extended the boundaries of what they are calling the wetland trigger areas, and that people's insurances and the value of their land and properties will be affected once DERM has allocated that the trigger land has been widened and, therefore, properties will fall within those boundaries.

XN: MS KEFFORD 3881 WIT: SHUTER G V 60

And in terms of the - during these times of flood or significant rain, the areas that get isolated because of this inability for the water to get away, are the isolated pockets only those residents around Royal Palm Boulevard, or are there other pockets that get isolated?-- Sandpiper Grove certainly was cut off and there is, I think - I have left in one of my attachments, the front page of News Mail that showed residents walking through knee deep waters trying to get through to Moore Park Road.

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And at paragraph 29 of your statement, you express concern about a further 128 lot residential development and the concern that you have about the additional restriction of water flow as a consequence of that development. Can you just explain, perhaps by reference to the aerial photograph again, where that development - where your understanding is of where the development is to go and how you say that will cause additional restriction of water flow?-- The Bundaberg Sugar development that's been approved by council, 129 lots, sits directly below number 2. So it is on the junction of Murdochs Road and Moore Park Road. So that wetlands area is going to be developed-----

To the east of Moore Park Road? -- To the south-east.

South-east?-- Yes, of Moore Park Road. So basically opposite the junction of Murdochs Road and Moore Park Road. My concern is that the impact that that property development will have with roof areas, and tar, and other non-absorbing surfaces, that that will simply exacerbate further the water that will be running along that space, and added to all of the water that will continue flowing along that channel, 8 to 2, the development, in my opinion, would be affected greatly come wet weather events.

And at paragraph 32 you tell us that you're fearful of a third heavy wet season in 2011/2012 cutting off Moore Park beach for days or weeks. When you talk about cutting off Moore Park beach, is it those pockets of Moore Park beach that you were telling us of before that is around Royal Palm Boulevard and Sandpiper Grove?—— No, there is other areas that are affected, and they are not on the map. Continuing along Moore Park Road off the map there is a series of Ss that appear — an S bend — that appear to be lower, near Coombs Creek, I believe it is, and that area is consistently cut, that road area would be non-traversible in heavy rain and has been cut on both events in the past, 2010/2011.

Do you have a perception as to what the issue is - what is causing that area to be cut? Is it the same drainage problem between points 1 and 2 on your Google map?-- Look, that's not something I could probably make a statement about. I can only assume that there is a drain - and a very workable drain close to that. If this watercourse is part of that problem, I think a hydrologist would have to make that claim. In my opinion I could only see that it could exacerbate it further, but whether it is a direct effect, I am not sure.

XN: MS KEFFORD 3882 WIT: SHUTER G V 60

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And, finally, at paragraph 36 of your statement you make a recommendation that you would like to see affirmative action taken by the council to clean or repair the existing drainage channels and restore the system to what it once was. And is that the drainage channel that runs along those points on your Google map that's the first page of your first attachment?-My view is that number 2 to 1, that space is primarily the
area that needs to have action. Communicating with council, I have certainly been told that by Peter Byrne and other members of council that Sandpiper Grove is getting attention and also Royal Palm in drains heading directly to the ocean or other formats from that, and I believe at number 5 as well at Olive Street, I believe there is a plan to do something with that area as well? However, I'm concerned that the dollars that are being talked about are excessive compared to what may be achieved by looking at number 2 to 1, that area. There has been a quote of \$20,000 to clear that drain from a private contractor, and that doesn't include the issue of testing for acid soils. Now, council has said if there is acid soil there we're going to have a problem with putting it somewhere or treating it. My contention is that if they're talking either 80,000, or in the latest bulletin that I've received half a million dollars, that that could be better spent attacking it at the bottleneck rather than looking at the individual items further up the channel, and my suggestion would be that if more attention was paid to the issue of number 2 to 1, that area, that it may actually save an enormous amount of cost further up along that channel.

And that area between 2 and 1, that's the bottleneck that you are referring to?— That's the bottleneck. If I could just go further, in most of those spots, 5, 6, 7, et cetera, the pipes are around about 400 millimetres round and there is a series of four, or three, or six pipes in most of those spots. All of that water is access to a point where there are only three 20 millimetre pipes, and I can't see how the volume of water that's allowed to flow that distance could then be able to cope with trying to flow through a tidal pipe that's — or three tidal pipes that are only 20 millimetre round.

And the three tidal pipes are located?-- 20 centimetres, I am sorry.

The three tidal pipes, their location is at?-- Number 2, that is the weir in Gangers Road tidal pipes.

Thank you. I have no further questions.

COMMISSIONER: Just so I can orient myself, Mr Shuter, which direction are you from the town centre?-- I live not far from number 8, which is - I guess that's north-west.

What's your main access road into town or is there more than one?-- I mainly would access Moore Park Road but if that was cut I can go via - I think it is Woodlands Road - no, it is not, sorry.

XN: MS KEFFORD 3883 WIT: SHUTER G V 60

There is another way?-- There is another access road Mauldon's Road.

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But it doesn't get cut?-- It may but the days that I was trying to get through, it certainly was available.

Thanks. Mr Ure?

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MR URE: Thank you. Mr Shuter, you just told Ms Kefford then that the pipes at the weir - this is the extreme downstream end that you consider to be the blockage - were three pipes that were 20 millimetres round and I think you corrected yourselves to say 20 centimetres round?-- 20 centimetres.

20 centimetres, all right. Can you look, please, at paragraph 10 of your statement? They are the pipes you are discussing there, aren't you, and you describe them there as three 45 centimetres pipes?-- I am sorry, maybe they are 45 centimetres. It is a while since I've been there. If they are 45 centimetres - it is a little hard to measure seeing as they are underwater most of the time----

Right?-- Okay, I will correct myself again, 45 centimetres.

Don't do that too quickly because I suggest they are not 20, they are not 45; they are three by 375 millimetre pipes?-- Millimetres? Three pipes at 375 millimetres?

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Sorry, no, they would be centimetres. 375 millimetres?-- Okay, that's somewhere between 20 and 45. I will concede.

Can you go, please, to paragraph 29 of your statement? You told the Commission that you were concerned about the 128 lot residential development which has been passed by the Bundaberg Regional Council. See that?-- Yes.

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I suggest to you you have been misinformed. That application still has yet to be determined?-- The information I have from council was that was approved and I can only go on what I'm told.

I suggest, with respect, it has not been approved and it is still to be determined. Look, please, at paragraph 30. You say that the options that the council are looking at include constructing a channel from Ohlaf Street to the beach?-- That was verbally what I was told at one point, yes.

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I suggest to you the council has been looking at a channel from Maultby Street to the beach. Are you aware of that?-- No.

You told the Commission that you had been advised by the council that there was a fall of three millimetres in this particular area. Your information was that it was between one

XXN: MR URE 3884 WIT: SHUTER G V 60

and two metres. Do you recall something like that?-- Closer to a metre.

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There are two drains in this area, are there not, what's called the Moore Park township drain or town drain which runs to the north and the agricultural drain which is - sorry, to the east, and an agricultural drain further to the west?-- That is correct.

I don't know whether this will assist but I suggest to you that - you are aware of Palmview Drive?-- Yes.

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I suggest to you that the - what would be the distance from Palmview Drive to the gates on the pipes at the eastern most extremity, the area you describe as being the blockage point?-- That distance would probably be----

Three Ks?-- Somewhere there.

Right. I suggest to you that there is a fall of - well, it is essentially flat. There is a three millimetre difference between the invert levels at Palmview Drive and at the downstream end at the weir, but, in fact, the weir is three millimetres higher than at Palmview Drive. Can you comment on that proposition?-- I can only go on what I have been told by council at that meeting where there was a three millimetre drop, and I can only say that there would be other further evidence probably tomorrow of the person who spoke to surveyors who can give you more information about the exact level of that drop.

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Perhaps it is convenient at this time, I tender a document described as Moore Park Beach Water Levels. They are inlet levels of drains in the vicinity.

COMMISSIONER: That will be Exhibit 759.

ADMITTED AND MARKED "EXHIBIT 759"

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MR URE: You had some discussions with Ms Kefford with respect to clearing the area between balloons, I think they were described as, 1 and 2?-- Yes.

On the aerial photograph?-- Yes.

And you - in the same line of discussion you mentioned acid sulphate soils. Can you tell me, please, what your view would be if acid sulphate soils were present and it was excavated, so you have got a tidal variation with soils being exposed to air, then they are covered by water, exposed to air, covered by water. Is that an acceptable scenario in your consideration?-- I believe so. And I am not an expert on the construction of soil material. So I can only go on what I have been told, and that is sulphate soil appears to be

XXN: MR URE 3885 WIT: SHUTER G V 60

something that's a by-product of a variety of different changes to the soil.

XXN: MR URE 3886 WIT: SHUTER G V 60

So that's accepted. All right?-- Well, on - going on expert's viewpoint I'm not - that's not my field of influence.

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Who was the expert?-- Council actually put the point forward that there may be acid sulphate soils.

Sorry, maybe you're misunderstanding me. I'm suggesting that have you given consideration to the situation which would pertain if there were acid sulphate soils you clear out this channel that you're contemplating and those acid sulphate soils that have been exposed are subjected to inundation then exposed to the air, inundation exposed to the air with the tidal range?-- It depends on - on - do you mean the soil is removed and placed somewhere and then treated or I'm not sure exactly what you mean.

If you dig a trench?-- Yes.

And there is acid sulphate soil, you take it away, the soil that remains on the exposed air is the trench, one would anticipate they will be acid sulphate soils as well, would they not?-- It's a possibility. I have no idea how the depth of the acid sulphate would go.

You're not really in a position to give an informed opinion with respect to this?-- I'm not a soil analyst and I could not make a statement of how deep the acid sulphate soil is, even if it exists, would go.

Okay. Now, you said that the - if I understood you that the water level upstream of the weir only - didn't change, was 20 mils, I think you said, above the pipes?-- No, that's downstream off the wind.

Downstream of the weir? -- Downstream of the weir. On the side that's supposed to be unblocked.

I misheard you. Now, paragraph 15 you say that the rain water - I thought you said ground water is at surface level. Yes, the ground water level is at surface level. For how long has that been the circumstance, Mr Shuter?-- Well, working on the information that I've been provided by cane growers that has occurred over a period of perhaps weeks and in some cases months. From where I live near Heron Close on the corner of Heron Close and Moore Park Road the - sorry, Heron Close and Isaac Drive, the stationary water has been sitting there for quite some time to a period of two months. That also caused concern with me, contacting council, in regard to infestation and mosquitoes but that ground water has been sitting close to or within 10, 15 millimetres of surface level for quite some months.

You accept that the ground water levels are currently at record levels higher than they've ever been recorded as a consequence of the rainfall that's been experienced in the last 12 months or so?-- I concede that and that's exactly my point that if the drains were cleared that ground water wouldn't be at that height.

XN: MR URE 3887 WIT: SHUTER G V 60

What impact does clearing the drains that you were talking about have on the ground water level?-- It would allow further flow which would then shorten the boundaries of the stationary water.

Sorry. It would - sorry, if you cut into the surface, clear the drains, what impact, again, if I can ask you does that have on the ground water level?-- In my opinion it would lower it because there would be water flow continuing further down the course.

And where does the ground water come from?-- In this case primarily it's coming from rain and not allowed to move away so it sits at ground level.

Just rain falling on Moore Park?-- And everywhere else I assume, but at every rain event the ground water has reached a - surface level.

Might this be a ground water source that's in the whole of the area between the Burnett and the Kolan rivers?—— It probably could be. I've been told by the engineers at council that and in reference to attachment one, that map again, that there are three directions that ground water flows and when I asked what's the cause of this nothing was given as evidence, but basically everything to the east of Murdochs Road flows basically south along those numbered lines. Everything west of Murdochs Road flows to the agricultural channel that is actually functioning and everything north of Pandanus Drive or in this case north of about number 5, flows further north and when asked why the ground water moves in different directions council could not give me a reason just stating perhaps that substructure in the soil was causing those flows to vary.

Do you know anything about the history of this area?-- Only verbally from farmers that have been there for some time and that's why I've been trying to be accurate with my statements in accessing a great number of people who've lived there for some time.

I suggest to you the area which is the Murdochs Road drain or the town drain? -- I'm sorry, the town drain or the agricultural drain? The town drain.

The town drain?-- The town drain, that's where the numbers flow.

Yes?-- Yes.

North of - east of Murdochs Road, historically was a wet land. Can you comment on that proposition?-- Again, I can't - I can only say that I've only lived there a short time and the time I've lived there I know it as a wet land, yes.

Well, I suggest it was reclaimed some 60 years ago so people could farm it. Can you comment on that?-- Yes, I can. I do know that farmers have told me that there was salinity that

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was coming up Oyster Creek which is near 8 on the map and it was coming to an area adjacent to the junior school which is on a little bit further down on Pandanus which isn't labelled but the salient water from Oyster Creek was coming in quite some way and affecting cane growing and several farmers barricaded that Oyster Creek access area to prevent the salinity coming into their crops. That's been substantiated by more than one farmer or at least two or three that I know in that area have made that statement.

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So do you accept that it was a wet land that was reclaimed and was farmed in the past?-- I cannot say it's been reclaimed.

All right. I have nothing further.

COMMISSIONER: Ms McLeod?

MS MCLEOD: No questions, thank you.

COMMISSIONER: Mr Rolls?

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MR ROLLS: Mr Shuter, I just want to ask you, you gave evidence about actions of the Department of Environment and Resource Management and you suggested that, as some action by the department, had extended certain wet lands; is that the case?— The proposal has been in action from about April, I think. The submissions closed in April of this year and I have since asked DERM to provide me with a - the map that would be taken over at this point. It's to be released some time this month.

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So what - what you, in fact, are saying is no action by the department at this stage, it is in fact accurate what you said in paragraph 27 of your statement that it is a proposed extension by the department and that no decision has as yet been made by that department in relation to that particular matter?-- When I spoke over the phone with - not Tim Brown, not Paul Roth, I'm sorry, the name evades me at the moment but I spoke to the person who I asked to provide me with this map in the last week and they said that it was not available. When I said to them or asked them was the area extended I was told, yes, the trigger area was to be extended.

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It was or is a proposal?-- It is a proposal, submissions are closed and the map is supposed to be made public some time this month.

But you don't know what that is? -- I don't at this point.

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And it is not scheduled for determination according to your statement in October of 2011?-- Some time this month, yes, and I've asked for it in advanced and was told I couldn't have access.

Perhaps it's not surprising, but you're not aware from anything directly from your own knowledge, only from what

XN: MR ROLLS 3889 WIT: SHUTER G V 60

people have told you, that a decision has in fact been made?--A decision I assumed has been made, but it's just not been provided.

And you don't know what it is?-- I don't.

Nothing further.

COMMISSIONER: Ms Callaghan?

MS CALLAGHAN: No further questions, thank you. Might this

witness be excused?

COMMISSIONER: Thanks, Mr Shuter.

WITNESS EXCUSED

COMMISSIONER: Is Mr Shuter the last of the witnesses?

MS CALLAGHAN: Yes, he's the last witness for today.

COMMISSIONER: What time do we start tomorrow?

MS CALLAGHAN: 10 a.m.

COMMISSIONER: We'll adjourn till 10 o'clock tomorrow.

THE COURT ADJOURNED AT 4.40 P.M. TILL 10 A.M. THE FOLLOWING DAY

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