

**THE LEGISLATIVE COUNCIL SELECT COMMITTEE MET AT HENTY HOUSE,
CHARLES STREET, LAUNCESTON, ON WEDNESDAY 10 DECEMBER 2008.**

INQUIRY INTO MANAGEMENT OF THE TAMAR ESTUARY AND ESK RIVERS

Dr OWEN INGLES WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Mr Finch) - Thank you, Dr Ingles, for making time available to join us. I think everybody has an understanding of the select committee reference, which is seeking information about how people feel about a statutory authority being established to oversee the Tamar Estuary and catchment areas.

Dr INGLES - I assume you have read my submission, which had four points to it. I don't know that I need to enlarge on that, other than to say that the fourth point is, in my opinion, one of the most important of all. That is the establishment of a single authority whose decisions must have legal precedence - I have put in brackets 'subject to appeal', for instance to the RPDC - over all other authorities operating within the defined area of the Tamar and Esk river catchment. These include Marine and Safety Tasmania, Parks and Wildlife, Rivers and Water Supply, local government, councils, Hydro Tasmania, Forestry Tasmania and the Launceston Flood Authority, of which I am a member - and I think they have the same opinion as myself on that - insofar as those bodies currently practise or propose operations prejudicial to the wellbeing of the river system and its inhabitants.

In the course of my practice as a civil engineer I have seen too many cases of inaction or overlapping actions which are adverse in their outcome due to the overlap of authorities. No doubt these various authorities say they don't overlap, but let me quote a couple of examples. I look at term of reference No. 1 where you say 'to alleviate or overcome flooding, siltation and other problems associated with the Tamar Estuary'.

Let me just mention in passing three such other problems. One of these obviously is riverbank erosion. Riverbank erosion is occurring in places down the Tamar. It has always occurred. When I was a boy I lived down the Tamar at a holiday home and it was occurring then. It is a function of the wave action of the boats on the river. This ought to be policed by MAST. For instance, where I live at Swan Point, there are declared areas where there should be no waterskiing. There have been waterskiers going inside the proclaimed limits. A few years ago I went round to remonstrate with one group and was physically threatened with assault for telling them that they were inside the proclaimed limits. But the police are not there. MAST have their speed controls for wave action and that wave action is having an effect on the river banks so that is one point that is not often realised.

Another point of overlap: who is responsible for the oysters in the Tamar? When I was a lad you could go swimming at Paper Beach or the Spit and so on and you did not get your foot sliced on a sharp oyster shell, but nowadays it is thick with them and nobody

seems to want to own the oysters. I think MAST says that they do not have any control over the riverbed. Well, who gets rid of the oysters? Nobody wants a hard job.

Mr DEAN - They probably do not want to own the wild ones but they want to own the others.

Dr INGLES - Yes, that is right but there were not any wild ones 70 years ago. They were brought in with an oyster farm and they got out of hand and now nobody wants them.

Mr WING - They came around from Port Sorell.

Dr INGLES - Another typical overlap: there is a bad infestation of gorse down at the mouth of Muddy Creek but again the council says that is the responsibility of Parks and Wildlife. Parks and Wildlife do not want to know anything about it so ultimately it will spread into private properties and get out of hand simply because nobody wants to know about something that will cost money. There are a series of these overlaps which I think - and I have put this in my submission - would be ameliorated if we had an overarching authority. Whilst I agree that every one of the present authorities has areas of responsibility that they should and could address, where there is a clash with some other authority or an overlap of the responsibility, they might be entitled to a right of appeal to put their case for what they need to that overarching authority. How it would be best arranged I do not know but at the moment there are these overlaps, or the lack of interest in something that is costly - 'We do not want to know; you can have it.' And this, of course, extends to the siltation.

As you probably know, my background is as a soil scientist with half a century's experience and the siltation in the Tamar is largely clay minerals coming down out of the catchment and being deposited as mud, and I would prefer to use that word rather than silt because the silt gets dropped earlier on in the yacht basin and neighbouring areas.

This really should be dealt with up in the catchments. We do not want to lose productive soil - and it is good soil. What is being dredged out of the river is excellent material for growing. I know that the appropriate authority says, 'Oh dear, there's a bit too much zinc, cadmium or whatever in this' but they overlook the chemistry of the matter which is that clay minerals fix heavy metals, so they are not normally available - maybe for plant uptake at most. I do not see the sense in not using good productive soil by sending it down river rather than trapping it from where it is being eroded. One way to do that, of course, is to have off-stream dams so that stock do not go into a river and muddy it and send the result downstream for somebody else. It is like shipping your garbage into the next-door neighbour's property. If you have an off-stream dam then you pump out of the river into it and your stock only muddy the local area.

Mr DEAN - Doctor, on that issue when you say that the siltation is coming from the catchment areas and down into the river and that is really the cause of the problems that we have, how do you account for the fact that over the last few years some people are saying there is a great accumulation of silt in the river when we have been in an absolute drought and there has been little flow down those rivers? How do we account for that, then, the extra build-up in the river?

Dr INGLES - The extra build-up is because it is all staying near the yacht basin; it is not being washed down with large floods. There is a very small percentage of these materials in the water all the time but the great volume of the water means that there is a great volume of silt. You may call it silt if you like but it is actually precipitated clay.

Mr DEAN - If I put this position to you, then. The water flowing out of the gorge as such is very clean water. It has been very clean and until we get a flood -

Dr INGLES - Not as clear as you would think.

Mr DEAN - No, perhaps there might be a little siltation but because of the low flow of the river there has been little -

Dr INGLES - That is right; there is very little silt trapped in Trevallyn Dam. Normally you put a dam in and when the water stops flowing the heavier material settles out but very little settles out in Trevallyn Dam. The reason is that clay is held up all the time in Brownian movement in that water. It looks clean to you but if you did a turbidity test and measured the suspended clay you would find that, compared with the volume of water travelling each year, the suspended clay, when it is flocculated, approximately equates to what has been dredged out. I did a recent calculation myself and it is very close to the 30 000 cubic meters that is being dredged out each year. It is coming down in Brownian suspension until it meets that salt wedge where it precipitates into the river.

If you have higher flows it travels further downstream. I will put it this way to try and explain it for you. It is a great disaster that the Invermay plain was ever built on because that was a natural sedimentation basin for the two Esks. You can calculate, as I have, that over the past 10 000 years the Invermay plain was building up at between one and two millimetres a year from what was coming down naturally out of the catchments. Now once you build up that plain and you protect with levees and you narrow the channel of the river, all that material that was settling there has to settle in the river basin. If there is not enough flow to wash it further down it is going to be looking very obvious.

Mr WING - On the question of the build-up is it not mainly as a result of the lack of scouring in dry periods -

Dr INGLES - Yes, there is not much scouring in a dry period.

Mr WING - the influence of the incoming tide being stronger than the outgoing, washing the mud sediment back into Home Reach and also the lack of dredging since the PLA moved down the river? Aren't they three factors which caused this two-metre build-up?

Dr INGLES - Yes. There are a few things that perhaps have not been fully studied at this point. We are discharging Launceston's waste water, and for that matter I believe Riverside's waste water, into the Tamar at Ti Tree Bend - and near the tailrace in the case of the West Tamar. In the last 20 or 30 years, everybody uses detergents for their washing machines, plus their other wash water and so on. What do those detergents do? They lift dirt off things. Where do they go with the waste water? The council dumps it in the river. So what do you think it does? If it lifts dirt off clothes, it's going to lift dirt off the river beds and so on. It's not surprising to me that some of this stuff starts to

congregate where the tides will place it. That hasn't been properly investigated at this stage. Are they shooting themselves in the foot with the effluent? I don't know.

CHAIR - I wanted to ask a little bit about what comes down the North Esk River, not what comes down the gorge. Is that the one that's causing the extra silt or mud problem?

Dr INGLES - Again, I need more information on this, Mr Finch, because the volume of water coming down the South Esk is probably at least four times, and more likely six times, what is coming down the North Esk. Consequently the bulk of the clay that is being precipitated is off the South Esk. If we had X-ray analyses of the types of clay coming down, I think that would prove my point.

The North Esk is contributing but its catchment area is much smaller, the amount of water coming down is less, and therefore the contribution in terms of the silt clay is probably very much less, depending on the type of soils there. I don't have enough information on the clay minerals in the soils of these two areas to say very clearly what the proportion is.

Mr DEAN - Regarding the Ti Tree Bend issues you have raised, the effluent that is now released into rivers is all properly treated. It has to meet the required specifications and the rest of it, so -

Dr INGLES - Yes, but they don't take out dispersants.

Mr DEAN - It is properly treated.

Dr INGLES - There is probably phosphorus and so on still in it.

Mr DEAN - Are you saying that if we have a single statutory authority, and that is what this is all about, there isn't a place for the current authority that is in place - the local government, which you are a member of - or that that should be still there and be a part of, or subsumed into, the new authority or as an add-on to the new authority?

Dr INGLES - No. I believe that all those authorities do have an area of jurisdiction and an area for input of their expertise but they are not aware of the overlaps with other areas. This is where you need an overarching authority which could say you should do this or you should do that, and could listen to the complaints from the individual peripheral authorities - which they could justify if there was to be any change.

Mr DEAN - So you would see a position for the existing authority that is now in place to continue to run and work with the new statutory authority?

Dr INGLES - Yes, but subordinate.

Mr DEAN - Subordinate to the new statutory authority?

Dr INGLES - Yes.

CHAIR - Regarding that sense of frustration you were talking about before in respect to the departments that you turned to to help solve your problems or to take responsibility, did you get a sense of that through your work with UTRIA?

Dr INGLES - At times, yes. I suppose the classic case for that was the derelict ships tied up at Kings Wharf. Nobody wanted to have any responsibility. I think they are reaching some solution through MAST at this stage, but there was a lot of angst for a long time as to whether you could just tie up a ship there and leave it forever.

CHAIR - What was the recommendation of UTRIA, to have them removed?

Dr INGLES - Yes.

CHAIR - And then subsequently legislation has made that possible, if my memory serves me correctly.

Dr INGLES - I think there is a law case pending on this.

Mr WING - There is.

Speaking of UTRIA, it is my impression that that body did its best to curb the build-up of silt with the funds available but was constantly hampered by lack of funds?

Dr INGLES - Yes, I would agree with that statement. They did a good job while they were there. It is extremely difficult to handle a problem when you don't know fully all the ramifications. There is more research needed in the catchment areas.

Mr WING - And UTRIA, like the new flood authority appointed by the city council, has no jurisdiction outside the Launceston City Council boundaries?

Dr INGLES - Exactly right.

Mr WING - We are told that only 14 per cent of the area in the city council boundaries is within the catchment area.

Dr INGLES - Yes, that would probably be right.

Mr WING - That evidence was given publicly by the mayor and the city manager. With the rest of the catchment areas, 86 to 90 per cent being outside the boundaries, it is important, I think you were saying, to have an authority which has jurisdiction over the areas causing the problems of flooding and silt.

Dr INGLES - Yes.

Mr WING - It seems self-evident, doesn't it, and it is surprising that the State Government has not realised the responsibility it has for these issues?

Dr INGLES - I agree.

CHAIR - Dr Ingles, just an expansion on your thought in respect to the catchment areas - and you mentioned off-stream dams - there may need to be more done. Do you have any other solutions to problems?

Dr INGLES - There are engineering solutions to this. There are appropriate catch structures for eroded material. The coarser material gets caught anyway in the natural streams. You only have to go up the Meander River and you will see areas such as at Knights Bridge where there are deep deposits of silt and so on - real silt, not what we have in the basin here, which is more mud. Rivers naturally catch this. We don't want to stuff up the rivers so it is better to have catch weirs and this sort of thing appropriately placed, and off-stream access for stock. There are a number of things that you can do to reduce soil erosion. Soil erosion is a problem in Tasmania.

Mr WING - I would be interested if you could elaborate on the difference between silt and mud, particularly in relation to Home Reach.

Dr INGLES - The international definition of silt is particles between 2 microns and 60 microns in size and particles less than 2 microns in size are termed clay. It so happens that some very coarse clays can have particles that go up into the silt size and may be as high as about 10 microns but the common clays that we find in the South Esk catchment have particle sizes that are way below the 2 microns, they might be down to 0.002 microns and so on, quite invisible in the water but nevertheless there. When those sort of clays meet a flocculating medium - salt water is one such, alum is another and so on, and they differ in their effectiveness; alum is an extremely good flocculant, much better than salt water - they agglomerate into very open masses which are nevertheless in the silt size. They have gone from being 0.01 but 100 of them together comes up to 2 microns and so on and that is why you find the clays, as I prefer to call them, here in the Tamar yacht basin so high in water content. This silt that they are dredging out is at least 200 per cent water content. There is twice as much water as solids in it and yet it feels and looks solid because it is like a card-house structure; the little bits of card are enveloping large amounts of water and yet it still looks stiff.

Mr WING - Is that drying-out process in the area beside the West Tamar Highway?

Dr INGLES - Yes, that is very important.

Mr WING - I saw that about a month ago build up and I thought, 'Oh, that's very good' and then all of a sudden it is below ground level, so the water has been draining out, has it?

Dr INGLES - Yes, that is right, and they have been excavating it for more silt to be pumped in later.

CHAIR - Could you explain to me the principle of how that works, please, Dr Ingles? The sludge is pumped in and does the water drain out -

Dr INGLES - Yes, that is right, under pressure. It is just the pressure that drains it out.

Mr WING - Of the weight of it?

Dr INGLES - Yes.

Mr WING - Not any induced pressure but the weight?

Dr INGLES - Yes.

CHAIR - How do you stop the silt from going back out with the water as it drains?

Dr INGLES - All you need to do is cut a trench beside the pond and just let it flow out itself and, as I say, it is like a sponge. The card-house structures of the clay do not allow it to disaggregate easily. The nearest parallel I can give you is like a sponge and if you put a bit of weight on the sponge then the water comes out but the sponge does not.

CHAIR - If you fill up one of those basins with this silt, how long does it take for that water to drain out?

Dr INGLES - Quite a while.

CHAIR - How long does it take before you are ready to harvest the soil that is left?

Dr INGLES - I could not put an exact figure on it for you. This all depends on the depth, the length of the drainage pass, the material itself. Normally you would only harvest when it has reached a stage that it will carry a bit of weight. I find it hard to describe some of these processes. Let me simply say that when I was investigating silts in the mouth of the North Esk near Town Point some years ago we were taking deep core samples and 4 metres deep there was not enough strength in it to sustain the weight of a man. I have at times said to the city council, 'If somebody stepped out of their boat onto one of these mud flats they might suddenly find themselves in a bit of difficulty.'

Mr WING - There is the risk of fatality, isn't there?

Dr INGLES - Yes.

Mr WING - We heard evidence that if somebody on a water ski got into that sort of area and if there were not a boat nearby that person might be submerged and unable to get out.

Dr INGLES - It is deadly dangerous. I know of cases in Japan where people have gone walking on mud banks a similar situation and they have just vanished. At one stage near Osaka they had a line of police with poles trying to find the body. It is very dangerous.

Mr WING - If somebody in a small boat capsized or rowers -

Dr INGLES - Hopefully they would swim.

Mr WING - We did hear some evidence that it would be rather difficult swimming in the area where there is a large built-up of silt - Home Point, Royal Park, Tamar Yacht Club, Tamar marine area. You probably could not swim if anybody finished up in the silt.

Dr INGLES - And it might be difficult and dangerous to come ashore if you managed to reach shore because you would sink in so far.

Mr WING - In that area that I have just described - Home Point, Royal Park, Tamar Yacht Club, Tamar marine - is it silt or mud? How would you describe what is there?

Dr INGLES - It is silt-sized mud.

Laughter.

Mr WING - You differentiated between mud and silt -

Dr INGLES - Because of this international definition. Particles above two microns are silt.

Mr WING - Do you know areas in other parts of Australia or the world that have similar problems and that have such a statutory authority that you are recommending or some similar body?

Dr INGLES - I know of places that have similar problems but I do not know about their authorities.

Mr WING - Which places have similar problems to the ones here in the Tamar estuary and Esk rivers with siltation and/or flooding?

Dr INGLES - Parts of the Inland Sea in Japan.

Mr WING - Any others that come to mind?

Dr INGLES - Every major river in the world has deltas that they live off but not all of them, of course, have such very fine material in the delta. That is a function of these particular types of soil, which are probably more abundant here than in many places. I have not been around all the world. I know Europe and North America and parts of east Asia. The strongest parallel would be in Japan.

Mr DEAN - I want to come back to the single statutory authority and the Launceston Flood Authority. What you are saying is that there would need to be a clear delineation of responsibilities and so on to make sure that there was not this overlapping - one group blaming the other group et cetera. So in this instance you would say that the Launceston Flood Authority would have responsibility for the area in and around Launceston and the greater authority, the statutory authority, would have responsibility overall for the catchment areas and so on?

Dr INGLES - Yes.

Mr DEAN - I wonder how that would operate in all the circumstances? Would that Launceston Flood Authority then be responsible to the statutory authority?

Dr INGLES - Yes, I would think so.

Mr WING - The same as Hydro, Parks and Recreation and all the other existing authorities that are uncoordinated at the moment.

Dr INGLES - Yes. To give you an example of the sort of problem we would face administratively, there is debate as to whether Hydro's discharge of the tailrace is wise compared to having discharge from the Trevallyn Dam that goes down the gorge. In other words, is it possible that the yacht basin silts up because the main flow has been sent downstream from the yacht basin and the gorge is deprived? There may be some argument for that, but the principle still applies that this material that is coming down the South Esk in suspension is only going to deposit when it meets a salt wedge.

Mr DEAN - It has been suggested that we should have a single statutory authority; they should have total and absolute responsibility for it all. You do not need another authority or other groups in there. The Launceston Flood Authority should be disbanded and you should just have a single authority. You wouldn't subscribe to that position?

Dr INGLES - That would assume that the overall authority was all-knowing in the details of multidisciplinary requirements, not just for flood but also for erosion and all these other things. I think it would be difficult to establish a large enough authority to be multidisciplinary in every respect. To a certain extent they would have to rely on the expertise and needs of these subsidiary authorities. If I come back to my Hydro example, somebody would argue that we need to flush the river better by sending it all down the gorge and the Hydro will say, 'That's going to cost you an awful lot of money and electricity and it's not economically feasible from our point of view'. All of that has to be assessed by a multidisciplinary body, one that is looking at the economics of it, one that is looking at the economics of not doing something in increasing the flushing.

Mr DEAN - But wouldn't a statutory authority be able to bring in that sort of knowledge as they wanted it? If they were looking at that issue they would bring in the background knowledge, experts and professionals they would need to get that advice.

Dr INGLES - Hopefully they would do that, if they were properly funded.

Mr WING - That is the other important element, isn't it? A single statutory authority would not only need to have the requisite powers over all others, subject to rights of appeal, but adequate funding?

Dr INGLES - Yes, that is correct. This has been a problem for UTRIA all along; it has struggled along with barely enough funding to do the dredging. It has barely kept pace with what is coming off the catchments. It is what I call 'transfer pricing' because the farmers save from not having to put in off-stream dams but the Launceston citizen has to pay to get the material out.

Mr DEAN - The Foster report was done in 1986. Do you believe that report still has significance, that it is a report we should be taking notice of, or have we moved on another 20-odd years since then and perhaps it is not as relevant now as it was?

Dr INGLES - In my opinion that is the best report that has ever been done on the river, right up to this present time. It is still very relevant. There is only one hole in his report that I am aware of and that is that he was not a clay chemist, he was an engineer. Consequently his knowledge of the behaviour of the clay minerals in the catchment is not included in that report.

But, other than that, it is an excellent report and up-to-date.

Mr DEAN - Thank you, Dr Ingles.

Mr WING - One of the matters that a single statutory authority could look at would be whether or not the silt - mud - in the Tamar, if extracted, could be used for commercial purposes or for gardens and other public facilities. For example, it could build up the land that the Grammar School have access to - they could convert it into lovely playing fields. What potential do you think there is for the silt to be used for worthwhile purposes, once extracted from the Tamar?

Dr INGLES - I, personally believe - and I am only giving you my personal opinion - that it is a very valuable resource for these very reasons, but I am aware that UTRIA has also looked at the possibility of selling the silt to help defray their costs and provide more revenue, assuming they can find buyers.

Mr WING - The cost of transport is a factor, isn't it?

Dr INGLES - That is correct, yes. It is excellent material. I have used some of it in my own backyard and it grows things like crazy. It is the best topsoil in the State, actually.

Laughter.

CHAIR - Time is of the essence. Do you have any closing comments?

Dr INGLES - No, other than that I would particularly stress this fourth point that I made in my submission.

Mr WING - About the single statutory authority?

Dr INGLES - Yes.

CHAIR - We thank you very much for making yourself available and for sending us your submission and for coming in today.

Mr WING - And sharing your expertise with us, indeed.

Dr INGLES - Thank you for giving me the opportunity to be heard..

THE WITNESS WITHDREW.

Mr PETER NEWMAN WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Peter, thank you very much for joining us today.

Mr NEWMAN - It's a pleasure.

CHAIR - It's good to see you again and you bring, of course, a lot of experience to this hearing today, having been involved with UTRIA over many years. How many years did you serve with them?

Mr NEWMAN - Seven years.

CHAIR - Of course, now mainly your involvement is, or you are here today to represent the Grammar Boat Club, am I correct in that?

Mr NEWMAN - And the Tamar Yacht Club.

CHAIR - And the Tamar Yacht Club as well. Peter, we are prepared to hand over to you and to hear what you have to say and then we'll ask questions.

Mr NEWMAN - I was interested in Dr Ingles' presentation and I totally agree with him - well, 99 per cent anyway. I served with UTRIA for a long time and he was a great help there.

CHAIR - Are you able to speak up a little bit, Peter, please? We don't want to miss anything you say.

Mr NEWMAN - I am here to represent that area and I have been involved in the river for many years. I started sailing with the yacht club when I was 12 years old and served on the board of the port authority for 10 years as a warden so I have an allegiance to the river.

CHAIR - You've seen quite some changes over those years then, Peter.

Mr NEWMAN - Yes, disappointing changes, of course. The silt has become a huge problem. UTRIA did an excellent job over the years with limited expertise and money available. They kept the cataract open for pleasure and commercial interests - the Tamar marine and Home Point ferries and the yacht club. The yacht club runs training courses for unfortunate youth and things like that so it is very important that the estuary is looked after. I do not think the people realise how important the estuary is to the City of Launceston.

CHAIR - You would have seen quite a change, Peter, from the time when it was used as the major port. Before the Bell Bay operation was put in place it was quite an active port, wasn't it?

Mr NEWMAN - Yes, a very busy port. It went back to the days of the *Taroona*, which came through to Launceston. That ship was only able to come to the river right up to the town

because of the dredging program that was conducted by the Launceston Port Authority at the time.

Mr WING - It was round-bottomed vessel, too, wasn't it, which would have helped?

Mr NEWMAN - Yes, and she only came up on the tides of course. On average there is a 3-metre rise and fall of tide in our river, which causes a lot of problems to navigation, but we are the only river in Australia that ends in the city. It is 40 miles of navigable river, so it is an asset to the city. You may have noticed the synchrolift, which is a very busy operation in Launceston now, and it is essential that that is kept open.

CHAIR - From your knowledge, Peter, did the dredging only occur in the Home Point area? Was there ever any need for dredging further up the river?

Mr NEWMAN - I think they only dredged down past Home Reach but I am not 100 per cent sure on that, but that was done for eight years I think by the port authority and that is what kept the cataract operation and also the flow of the water down the South Esk more than the North Esk.

CHAIR - You may care to comment on the changes that you have witnessed at the Tamar Yacht Club in particular.

Mr NEWMAN - In 1983 I brought a yacht down from Sydney and she drew 7 feet of water. It was half tide on the Tamar Yacht Club pontoon but we made it up to there and moored the yacht there.

CHAIR - When you say 'drew 7 feet', do you mean from the waterline it was 7 feet to the bottom?

Mr NEWMAN - Yes, but now that pontoon is 60 feet to 80 feet out of the water at low tide - and that is since 1982.

Mr WING - Did you say 60 feet to 80 feet out of the water?

Mr NEWMAN - Yes. The mud and the silt has built up and that pontoon is just about unusable. It is only usable for three to four hours at the tide - two hours before and two hours after.

CHAIR - Which pontoon is that?

Mr NEWMAN - The Tamar Yacht Club. It is the same with the Tamar Rowing Club pontoon, that is right out of the water at times, but they have had that dredging program to keep that open.

CHAIR - Yes, I noticed there is a channel that goes over to the rowing club.

Mr NEWMAN - UTRIA did that for them in the last five or six years so that kept that open. At Home Point we have opened up the canal, the entrance to the river at Home Point for the ferries and fishing boats to come through. The silt has built up dramatically over the years.

CHAIR - Would you say that this is the worst you have ever seen in respect to the build up of silt in the Home Point area?

Mr NEWMAN- Yes. I have never known it so bad. We have never known the silt build up like this. I personally think the silt is coming from down at Rosevears at the moment because there is no flow in the North or South Esk.

CHAIR - So it is coming back up on the tide?

Mr NEWMAN - There is salt water now at Grammar School boat shed and that has been unheard of.

CHAIR - That has not been heard of before are you saying?

Mr NEWMAN - We had the same thing at Freshwater Point at Dilston where the water changed from salt to fresh and that was brackish water, but now the willows and things are dying off Grammar School because of the salt water and that is an indication that there is no fresh water coming out to push the salt away.

CHAIR - That is what you put it down to - that we are going through a dry period and we haven't had a substantial flood in 79 years?

Mr WING - Yes, 79 years - not since 1929 - and in the preceding 77 years, including the 1929 flood, there were three of that magnitude.

Mr NEWMAN - The last good one we had was in 1969.

Mr WING - Yes, and that was less than the 1929 one.

Mr NEWMAN - When the floods were on the port authority raked the river but the tables had changed whilst it was raked so the mud kept on going right down to Rosevears. The dredging and the raking sent it on to Rosevears.

CHAIR - Would that work occur again; if we had floods again would there be a raking of the river?

Mr NEWMAN - We could if we had the money. It is a very expensive operation. Tugs are \$10 000 an hour plus the rakes. It would help the river, yes.

CHAIR - Are the tugs available in the river?

Mr NEWMAN - The tugs are available. There are three tugs at Bell Bay.

CHAIR - Do the accoutrements do the raking?

Mr NEWMAN - Yes. I think the port authority probably still has that equipment lying around. Someone would have it. It is like a big scallop dredge; it rakes it up and the tide takes it out. It must be done on an outgoing tide of course.

Mr WING - It takes it out how far?

Mr NEWMAN - Sorry?

Mr WING - How far down the river would it be taken before it is deposited again?

Mr NEWMAN - It drops at Rosevears for some reason.

Mr WING - And then is washed back up?

Mr NEWMAN - It sits there for a while and goes down and then it comes back up. The incoming tide is stronger than the outgoing so that is what is causing our problems at the moment.

Mr WING - So the only solution to the silt that is in the river now is to physically remove it from the river and take it away, is it not?

Mr NEWMAN - Yes. UTRIA is dragging out 60 000 to 80 000 cubic metres a year and that is just holding it.

CHAIR - Before we get a comment from you about a statutory authority, Peter, could you give us some understanding of the Launceston boat club, the Grammar boat club, and how they are faring with their activities?

Mr NEWMAN - There are 130 children who row at the Launceston Church Grammar School, there are about 100 at Scotch College and about 100 at St Pats plus the two senior rowing clubs so there are a lot of people involved in rowing on the Tamar. There can be a hundred boats out there training in the morning so it is essential that the Cataract is kept clean and open. There was a comment made about someone falling into the river and in the mud. That is a problem but we have a policy now that the children do not try to swim ashore because that would be a disaster. They would just swim in the mud. There is no substance in it, it does not hold anything, so they have to hold the boat if they fall in or else we have rescue boats. The mud will not hold a body.

CHAIR - I am curious, Peter, in respect of the opportunities that are available for the young people to get out in boats and to do their training. Are you held up or not able to go out because of the build-up of mud and silt in the river as compared to previous years?

Mr NEWMAN - The area for rowing training is becoming limited because of the build-up of mud. We have a very strict regime on passing. We have a lot of collisions on the river because of the limited water space. That is a bit of a problem. The mud is building up on one of our rowing ramps so we have to wash it down with fire hoses, so that is another cost factor. I do not think the people of Launceston realise how bad a condition the river is in at the moment.

Mr WING - Talking about people's knowledge of matters, I think there has been a perception until recently that the Launceston City Council is mainly responsible for dealing with these matters rather than the State Government. What is your understanding of the perception of people? Is it changing; are more people realising it is mainly the responsibility of the State Government?

Mr NEWMAN - I think the people of Launceston think that it is totally the Launceston City Council's responsibility and I think it is at the moment but it is too big a problem for the Launceston City Council; it needs State Government funding or Federal funding. We have tried Federal funding. We weren't successful. We got a little bit but only the State and the councils contribute. It is too big for one council.

Mr WING - Most of the problems are outside the city council boundaries anyway.

Mr NEWMAN - Yes, but at the moment the silt is coming up the river.

Mr WING - I mean the cause is mainly outside the city boundary.

Mr NEWMAN - Until the Hydro dam went in we didn't have such a silt problem. They flushed the river out a few months ago because the E. coli system wasn't working. When it was bad, we would not let our children row. The Hydro flushed it out in two or three hours and improved it. We had clear water at our boat ramp at the Tamar Yacht Club.

Mr WING - Clear, blue water.

Mr NEWMAN - I wouldn't say blue.

Mr WING - It was; I have photographs showing it.

Mr NEWMAN - It probably was, compared to what we are used to. It is essential that a flushing system is put into place and an authority needs to have the power to do that.

CHAIR - Could you talk more about your thoughts on an authority, Peter? Have you turned your mind to that?

Mr NEWMAN - Sitting on UTRIA was a great experience. I thoroughly enjoyed it and I was disappointed when it shut down. We had two or three very community-minded representatives on it; it represented a cross-section of sport and social areas of the Tamar River. We have lost that now because of the Launceston Flood Prevention Scheme - the core committee. I agree with the committee that it has to be done if there are problems with the levees and flooding. I don't think they can look after the river and the catchments as well. There are five people there and that is enough to look after what their commission is, to look after the levees. It needs a separate authority with probably five or six people with expertise in all areas of social, recreational and managing the river. It is badly needed and it has to happen. I can't see the Launceston Flood Prevention Committee having the time to do it.

Mr WING - Or the jurisdiction or the funding to deal with the whole catchment.

Mr NEWMAN - Yes, that's right. The funding is a big problem. The council has to work on its own funding for its own prevention.

Mr DEAN - Peter, on that, what model would you support there? You heard me questioning Dr Ingles. Would we be better off with a single statutory authority, properly resourced and funded, to take control of the whole thing and bring in the expertise and

professionals as needed and/or could that authority work with the Launceston Flood Authority in place as well and answerable to the -

Mr NEWMAN - My personal opinion is no, they have enough on their plate. We need a separate authority with a cross-section of interests, expertise and funding and that is going to be quite a job. That is enough for a committee on its own, without worrying about flood levees et cetera.

Mr DEAN - So you are saying that we probably still need that body on the levee side of it?

Mr NEWMAN - Yes, we've got that.

Mr DEAN - No, that is what the Launceston Flood Authority is responsible for. The Launceston Flood Authority now takes over the role of UTRIA but it also takes on the role of the levee protection, maintenance of the levees, responsibility for the levees. It also picks up the levees, apart from the UTRIA functions and issues.

Mr NEWMAN - I don't think they would have the time or the funds to look after the river and catchment as well. It's a big job.

Mr DEAN - That is currently their responsibility - the siltation in the river plus the levees and everything else.

Mr NEWMAN - There is a social aspect of it, too, because people want to come back to the river. People are coming back to the river and it needs an authority to look after that area - the beautification of the Cataract and the river banks around the city, which are important to the city. The Cataract is a great asset.

Mr DEAN - There are separate authorities and committees for that - the Cataract Gorge Authority and so on - and they are still there and functioning.

Mr NEWMAN - Has it got any funding?

Mr DEAN - They do have some funding from council. It is not the amount that they would like but they certainly are funded. The State Government have provided funding as well for certain activities up there - the inclinators and other things.

Mr NEWMAN - I personally think the council has enough on their plate.

Mr DEAN - I do not disagree with you.

Mr NEWMAN - It is badly needed for an authority to look after the river and the environment, especially in the city. It is critical. You can see the people around the river on Saturdays and Sundays and you cannot get a parking space in Park Street anymore.

Mr DEAN - It is a real drawcard, isn't it?

Mr NEWMAN - Yes. It is an asset to our city.

Mr WING - Who was responsible for building the concrete wall on the north bank of the North Esk River, the one that collapsed?

Mr NEWMAN - It was Federal Government money. John Howard gave \$2.5 million, from memory. GH&D, local engineers, designed it and Shaw Contracting put it together. It has not been successful, unfortunately.

CHAIR - Has it been resurrected, though? I looked at it just yesterday and it seems that there is the edge around there with the fill coming up to it, so it seems to have been rectified. Am I right in my belief there?

Mr WING - I went to have a look at it on Sunday, the tide was in and I could just see the top of it out of the water but it was mainly covered.

Mr NEWMAN - Is this committee in camera?

Mr WING - No.

Mr NEWMAN - I will not comment, then.

Mr WING - Who is responsible for that? Was it just GH&D or council or UTRIA or the State Government or -

Mr NEWMAN - It had nothing to do with UTRIA. It was the City Council with funding from the Federal Government.

Mr DEAN - The council let out a contract.

Mr NEWMAN - To Shaw Contracting, yes.

Mr WING - I see. With the silt being pumped into the container areas adjacent to the West Tamar Highway, I saw that built up several feet above the normal land level there and now it has sunk down, the water has drained out. What is the overall plan there; to build it up or just use that for draining and then take the silt away?

Mr NEWMAN - It is piled up into heaps. The loaders are loading the trucks with bulldozers to push it up into heaps.

Mr WING - And to take it away?

Mr NEWMAN - Yes.

Mr WING - I see. Where is it taken? Is that taken to Grammar School?

Mr NEWMAN - Yes, and that will continue as there is more land made available for the northern end of that sports ground.

Mr WING - Yes. It is not intended to build that up permanently there -

Mr NEWMAN - Eventually it will be a park. That is the idea.

Mr WING - To build it up for a park?

Mr NEWMAN - Yes.

Mr WING - What effect would that have on a major flood if that level is raised? I am told that in the 1929 flood, water spilled out over the West Tamar Highway there. If that space is occupied by a build-up of silt will that not raise the level of any future flood, perhaps endangering some houses?

Mr NEWMAN - It is built up quite high and it will probably stop flooding of the West Tamar Highway. It will be quite high, two or three metres above the highway, so that will all be grassland and filled in.

Mr WING - So the intention is to build it up about 3 metres above the northern -

Mr NEWMAN - If you look at the road now there is a slope up to the side where they have landscaped it; that will be the level. That will stop a lot of flooding. It will not flood across there, unless it is a 1929 flood, of course.

Mr WING - Yes, that is what I mean, if it flooded to that magnitude.

Mr NEWMAN - The committee know what happened in the 1929 floods, you have obviously studied that.

Mr WING - In what respect?

Mr NEWMAN - It was pretty unique. It rained right across northern Tasmania from Queenstown to Swansea for a week or 10 days. Then the Briseis dam collapsed and brought a wall of water down to Launceston and it also coincided with a high tide in Launceston. It was pretty unique in 1929 but that is not to say it cannot happen again, but there is more control over it. The South Esk has some control with the dams. To see a 1929 flood would be pretty rare, I think. The engineers are talking about a 100-year flood and now they have gone to a 200-year flood.

Mr WING - There was one of a similar magnitude in 1852 and another in 1864, and then 1929. I understand they were all of similar magnitude.

Mr NEWMAN - I think the 1929 one was a lot bigger.

Mr WING - Bigger than 1852 and 1864?

Mr NEWMAN - They could have been similar. It was unique when the Briseis tin mine dam collapsed.

Mr WING - With climate change, global warming and unpredictable weather, we have seen the massive flooding in Queensland. Bearing in mind that we've had three of the magnitude of the 1929 flood over that 77-year period and none of that magnitude in the last 79 years, don't you think it's inevitable that there'll be one of the 1929 proportions?

Mr NEWMAN - I personally don't think it will happen - it was pretty unique. There is a lot of control over the water now with dams and things, and a lot of water has been drawn out. We are only getting minor flooding in Launceston in the car parks around the yacht club because of the level of the silt. If we get a normal 3.3-metre high tide then it is up a bit higher because the silt is so high, so that is minor flooding only because the tide's in. That is not to say we can't get another 1929 flood.

Mr WING - So the drained silt in the basins beside the West Tamar Highway which is used for topsoil for the Grammar School and sporting fields, is that commercially viable, as is happening for those sporting fields?

Mr NEWMAN - No, it's not commercially viable. I think it's \$5 to \$6 a cubic metre to move it and you get 20 cubic metres on a truck. But if you look at it as an asset to the city in cleaning the river up, it's viable.

Mr WING - And establishing the sports grounds.

Mr NEWMAN - Yes, that's right.

Mr WING - They're making that a beautiful area now whereas it was a bit of an eyesore before, wasn't it?

Mr NEWMAN - The outlets of Launceston are not pretty at the moment, are they? So that's an asset to the city.

CHAIR - You talked about the recreational limitations that are now occurring. Do you hear much feedback in respect of the effect on tourism and tourists and how they view the situation, having never seen the Tamar River before? Do you think they just accept that this is part of the river process or do they get a sense that something is wrong?

Mr NEWMAN - There was an American couple in the yacht club a couple of weeks ago and the tide was in, luckily. They said, 'What a beautiful river; what an asset you have in the centre of the city' - and the tide was filled right up. They came back for dinner that night, six hours later, and they just stood there in amazement. They couldn't believe how much silt was there. I explained to them that we were dredging and trying to clean it up. They said, 'Look, you have the best assets - the gorge and the cataract - and all the tourists that come to Launceston go to the gorge and the cataract'. On Saturdays and Sundays, I go after tea and there are tourists walking through there. The boardwalk was a great asset to the city. Any city that has water around, you go to it. So we have to keep it clean; we have to get the mud out of it. The mud takes about three years to dry out enough to cultivate it.

CHAIR - Yes, I was trying to get that from Dr Ingles.

Mr NEWMAN - Yes, he is a very learned man and he might say four years, it depends sometimes. It might dry out quicker. If we have a dry season then it will dry quicker, but it has been averaged at about three years. We used to take 80 cubic metres out and that was just holding it.

CHAIR - Not wishing to put words in your mouth - but I probably will do - your suggestion is that the tourists and people who visit the river would see us in a bad light when they see the river at low tide?

Mr NEWMAN - No, I don't say that because when we talk to people we indicate that we are trying to fix it and they accept that. They can see the problem. We are trying to fix it. That's why we are here.

Mr WING - We heard evidence recently about a couple who were intending to settle in Launceston and when they saw the silt they decided against it and have now settled in Hobart.

CHAIR - No, the north-west coast. They went to Burnie.

Mr NEWMAN - There would be other reasons, I suppose.

Mr WING - No, no.

Mr NEWMAN - Solely because of the silt?

Mr WING - Yes, that was the evidence.

Mr NEWMAN - You don't know what every tourist thinks; they may all be thinking that.

Mr DEAN - I suppose it is a matter of how much silt you take out. That was UTRIA's position, how much silt you can take out. You cannot take it all out because if you do that, it will collapse in all over the place. It is a matter of getting that fine line. I suppose a single statutory authority with the ability to get reasonable funding and so on would be able to make those judgments at the end with the expert advice that they would need.

Mr NEWMAN - Yes, for sure. If they had access to funds and expertise, you could employ expertise to give us the best remedy. It is about 80 000 cubic metres we could take out a year.

Mr DEAN - So that is what UTRIA was saying, that is what you need to take out?

Mr NEWMAN - Yes, just to hold it.

Mr DEAN - Currently they were taking out 30 000 cubic metres or something like that. So they would need to more than double that.

Mr NEWMAN - We only have two settling ponds so we have to come up with another idea. If you had \$10 million you would just cart it out to sea and get rid of it and it would okay for 10 years.

Mr WING - Or cart it out into the country and use it as topsoil.

CHAIR - Is the dredging continuing now?

Mr NEWMAN - Yes, until the funds run out.

CHAIR - When do they run out?

Mr NEWMAN - It depends on what the new committee wants to do.

CHAIR - So the flood authority will seek more funding from the State Government for dredging?

Mr NEWMAN - I don't know. There are some funds still available from when UTRIA was wound up. I think there was enough there to do some more dredging. I don't know whether the funding will come out of the levees or the flood prevention.

Mr DEAN - So there has been no additional funding made available, except the CPI increase?

Mr NEWMAN - No.

Mr WING - What effect has the built-up of silt had on the Tamar Yacht Club's activities, particularly in training young people and the activities generally?

Mr NEWMAN - We can only train for a maximum of four hours a day. The tide is in this morning so they are training today. There is a limit to what we can do. It has had an effect on our boat storage. We can't store any more boats because they are all aground; there are only about two boats in the whole Cataract that float all the time.

Mr WING - What measures are being taken to deal with those problems in terms of training at the new centre?

Mr NEWMAN - We have moved to Beauty Point. We have built a new clubhouse down there. Launceston won't shut down, we will always have a facility here, but to continue our operations successfully with child training and things like that we had to move to Beauty Point.

Mr WING - Do you know of other areas in Australia or elsewhere in the world with similar problems to ours?

Mr NEWMAN - I don't know a lot about overseas but they have made a world of difference to the Yarra. There is the Yarra River Authority, I think, to clean that up and that has been successful. The only one I know of overseas is the Thames and that has been a total success story. We bring students from overseas and we had one young bloke from Kings College in London. They row on the Thames and he said it is beautiful now the river is clean. They have the barrages that keep the water in so it is a full tide. He said it has changed; the Thames has come back to the people.

CHAIR - And the Yarra would be another example.

Mr NEWMAN - Yes, you look at Southbank and all those places. We have to keep the centre of the Cataract clean and tidy and keep it going because it is an asset to the city.

Mr WING - A city of rivers, isn't it?

Mr NEWMAN - Yes.

CHAIR - Peter, is there any closing comment that you would like to make?

Mr NEWMAN - Just that I am very strong on this authority being set up and a good cross-section of the community being on it - and expertise. We all have a genuine interest in the city.

I was looking through some old papers a while back. We used to have a river levy on our rates and taxes. I think we can have a look at that again. I would be quite happy to put \$100 out of my rates towards the river. It is an asset to the city. We have to do something but we have to get the money.

Mr DEAN - There would be lots of screams and a new council would be needed -

Laughter.

Mr WING - I suggest that would be unfair to the ratepayers of Launceston because it is mainly a State Government problem.

Mr NEWMAN - I suppose but what are we going to do? Where are we going to get the funding? I think we all should help.

Mr WING - It should be a State problem and -

Mr NEWMAN - I think it is a Federal problem.

Mr WING - I was just going to say and Federal as well because if we have a massive flood before the levees are fixed, which is six years, the damage would be so enormous that the Federal Government would have to come in and help as well as the State Government. It would be much cheaper to avoid the problem than to compensate if there was damage done when it occurs.

Mr NEWMAN - I totally agree with you. Let's fix it.

Mr WING - So Federal as well as State.

Mr NEWMAN - Federal with State.

Mr WING - Do you agree it is mainly a State Government authority because most of the problem comes from outside the city council boundaries?

Mr NEWMAN - It is a State problem. They would have to fund and set up the committee. The council has enough on its plate for that. We could call on another authority. It has to be separate and independent.

CHAIR - I think it deserves to be highlighted that it is opportune that the flood authority is now in place.

Mr DEAN - It is.

CHAIR - I think that has been a very positive move in recent times. At least we have them active and working to solve that problem of the flood in the Launceston area.

Mr NEWMAN - That is not going to solve the problem of cleaning up the river.

CHAIR - No, no exactly right, but at least that element of danger and concern for people's welfare is being considered, probably from Mr Wing's point of view not working fast enough or it should have happened in the past.

Thank you very much for your time, Peter, we appreciate it very much and thanks for your evidence.

Mr NEWMAN - Thank you.

THE WITNESS WITHDREW.

Mr KERRY DAWKINS WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Mr Finch) - Thanks very much, Kerry, for joining us.

Mr DAWKINS - I am a rowing person who has been going up and down the river for over 50 years. I have been often asked what is the difference in the river now to when I first started rowing. We complained then about the mud and have been complaining for as long as I can recall. However, the big difference was that when I started there were ships moving up and down the river. I always remember the *North Esk*, which was a grain carrier that came to the wheat silos. Every time it turned around, it turned around in the middle of the river and so it went nearly from one side to the other. It kept churning up the mud so the mud was being turned over and over and over again - and that is just one ship, without the others - so nothing actually sat there. It did not just keep building up; it kept getting moved all the time. Of course it may have just gone down the river and then come back again but I never recall rowing at dead low tide without being able to go right into Royal Park. Now of course you cannot do it and you have not been able to do it for some time, so in those early days we used the whole of the river.

I suppose in the last 30 years the river seemed to be deteriorating a little faster and certainly in the last 10 years it has been dramatic. There are more than 500 rowers in Launceston using that river so there are a lot of people on there.

CHAIR - We had some evidence earlier today to suggest there were more than 340 juniors -

Mr DAWKINS - Yes. There are 500-plus in all the clubs. Our club is around 100. There are a lot of people using it. I have this worry that one day somebody is going to fall into the mud on that river and I am not too sure what will happen then. I have actually fallen out of the back of the coach's boat and I actually walked to the river bank. God knows how I did it, but I did.

CHAIR - I think we know how you would have done it, Kerry, but for mere mortals, I am not sure.

Laughter.

Mr DAWKINS - Thank you, I feel better now. No doubt that one day something will go wrong. We have a lot of young people on that water. Some of them are looked after, some are supervised, but some are not supervised. I look at them and I think, 'One day, son, you're going to go terribly wrong'. They are going to fall onto the mud and I'm not too sure what happens there.

Mr DEAN - Are there any trials done to see how quickly you'd disappear and what would happen in that situation? Have you carried out any tests, to your knowledge?

Mr DAWKINS - No, not really. Even on UTRIA I don't think anybody has looked at what would happen if a weighted person, say my size, hit the mud. They have said over the years that it forms a crust. When the summer comes there's a crust on the top, but

rowing is a 12-month sport now. Everybody goes out in the middle of winter. One day something will go wrong.

CHAIR - Are you having collisions now, Kerry?

Mr DAWKINS - Oh yes. We have nearly got to the stage now at dead-low tide that we perhaps don't bother going out, because the zigzagging you have to do up and down the river is becoming so dramatic. There are mornings when there are so many crews on that water that you are running into each other. That is happening more frequently now, which is a bit of a scare.

Mr WING - Do you know what the situation was when the Premier was out in the boat when the House of Assembly was sitting here two or three months ago. There was a photo in the *Examiner* of him and somebody in another kayak, I think, and I wonder whether it was high tide then or not. Did you happen to see that?

Mr DAWKINS - No. It's always funny, no-one ever seems to go out at dead-low tide. Whenever anybody looks at the river, it never seems to be dead-low tide, for some strange reason.

Mr WING - A very convincing one.

Mr DAWKINS - It certainly is.

Mr WING - Yes. We have heard evidence before that if somebody capsized into the silted up area that it could be fatal unless there was a boat there that could get access, and that could be difficult too. It could be difficult for somebody to get out or to be brought out.

Mr DAWKINS - You can't get to them once they're in the mud. Let's think of the worst thing. It is nearly dead-low tide, and somebody is stuck on the mud after they fall out. The coach boat can't get to them. It's too late because as the tide goes out you can't get up onto the mud. This person could be just sitting there, lying there, so what happens then? Nobody knows.

Mr WING - It's probably not solid enough to keep them above the water.

Mr DAWKINS - That's right. If their boat is there you could always hang onto the boat - the boat's not going anywhere. It is going to just sit on the mud. Grammar has already been caught on the Ti Tree Bend, on the mud. They had to sit there for four hours until the tide came in again.

CHAIR - They were in a shell?

Mr DAWKINS - Yes, they went in on the wrong tide and got stuck in the mud, because the tide is going out. You can't get off it, you can't push yourself off; you just sit there. I know the river and I've been caught on the mud in a coach's boat, so the river is falling apart, there is no doubt about that.

Mr WING - To the extent that it's now dangerous in that respect?

Mr DAWKINS - I believe it is. We have rule of the club - it's a new one - that nobody goes out unless there is a coach's boat with them, unless they're experienced rowers. Certainly for anybody who is a learner, a young rower, we won't allow them out on their own. It's just too dangerous. It becomes difficult because you have a lot of people there and you can't supervise all of them but that's what we have to do, and that's what we're doing.

CHAIR - So is there any possibility of moving downstream towards the mouth? Is that what you need to do to get your open water area?

Mr DAWKINS - No, take the mud out. That is what has to happen. Being on UTRIA I have to say that the thing that annoyed me most of all was the fact that UTRIA's charter was from Tamar Island to the yacht basin. Well, the yacht basin has only ever been a part, with a bit of mud being taken out, near the ship lift, so the yacht basin just keeps filling up. It really annoyed me that because there is lack of money and there was never enough money to do the job properly the river is now silting up.

When our new rowing club was built we put in our old temporary pontoon which was on good water - not a problem. It now sits on mud. So the mud is now slowly moving down the North Esk and we are seeing it on our own pontoon where we never saw it before. So it is moving, there is no doubt about that.

Mr DEAN - Is that the new area that you are talking about, Kerry?

Mr DAWKINS - Yes, and in a year that has filled up with mud. So now we are starting to lose the North Esk. After losing the Tamar the North Esk is the next one.

CHAIR - The main job of UTRIA was, of course, the dredging program that took place - 30 000 cubic meters I think a year, wasn't it, Kerry?

Mr DAWKINS - Yes.

CHAIR - What were your observations of that in respect of funding and the quantity that you took out?

Mr DAWKINS - Obviously the funding was never enough. The funding to me was an absolute and utter joke. To think you were going to try to take mud out of the river for \$250 000 from the city council and the State Government, you are talking about millions to take the mud out; you are not talking about that sort of money.

As far as I am concerned it was a political decision to keep people happy by taking some silt out. It has never worked. I think something like \$12 million has been spent since UTRIA started, or even more than that, to take the silt out. There is more in there now than when they started. So that has been a huge success, hasn't it? And it is not UTRIA's fault.

Mr WING - A lack of funding.

Mr DAWKINS - Nobody gave them any money. So until the State Government decides that this river does not belong to Launceston, it belongs to Tasmania and puts the capital up - and the Federal Government - how is it ever going to be fixed?

CHAIR - Do you think there is a sense of that, that people seem to think that Launceston has the major responsibility?

Mr DAWKINS - There is no doubt about that and that is why it is totally unfair. Why should the ratepayers of Launceston have to find the sort of money they need to take this silt out when they are at the end of the corridor? It is coming from all over the place so why should the City of Launceston have to try to find that sort of money? It is not even right, I think, that they should have to find \$250 000; it is a State thing and I might add - I am getting wound up now -

Mr WING - Yes. Keep going.

Laughter.

Mr DAWKINS - I was talking to a senior public servant some time ago and I was making the comment that as we are going at the moment we are not getting anywhere, that it should be a responsibility of State Government; it is their river; it belongs to Tasmania, not to Launceston. His comment was, 'What do you expect? Do you think the people of Sorell would back up any money for Launceston?' I said, 'I'm not too sure whether the people of Sorell would but as it's part of Tasmania and things should be done, perhaps they would'. If Sorell needs some help then we would hope the State Government helps them. It is a huge issue but we are not going anywhere at the moment.

Mr WING - There was a lot of money spent on the causeway to Sorell 10 years ago. That is a natural function of government and we do not complain about that.

Mr DAWKINS - No.

Mr WING - Nor should people of Sorell when there is a problem here caused by most of the silt, most of the flood waters, coming from outside the city boundaries over which we have no control. The problem just comes into the city boundaries which has about 10 per cent of the responsibility.

Mr DAWKINS - That is why it is totally back-to-front and that is why I think we have been playing around the outside edges of the whole issue of what we do about the river and how we fix it.

You asked me about the new authority?

CHAIR - We are getting around to it. That is the leading question.

Laughter.

CHAIR - Please, carry on with your presentation, Kerry.

Mr DAWKINS - That is why I have a bit of a problem with the new authority.

Mr WING - Which new authority - the one that has been appointed?

Mr DAWKINS - Yes, the one that has been appointed.

CHAIR - This is the flood protection authority.

Mr DEAN - No, the Launceston Flood Authority, LFA.

CHAIR - The Launceston Flood Authority?

Mr DAWKINS - Yes.

What are they going to do about the silt in the river? They say that they have the responsibility but I am told it is not necessarily there and if it is not there, what is going to happen in the future?

The concern I have is that the new authority may be no different to UTRIA. If UTRIA was incapable of making any difference to the river and we know it's because of money, why is this next one going to be any different? I would hate to think that in the coming months, if this authority gets up and going, we are going to have project after project, some experts coming in, we are going to do research on this and that, because since I have been with UTRIA there has been a hell of a lot research on the river. If we don't have enough information now, what the hell have we been doing since I have been on UTRIA? I am starting to wonder. If they are going to do it all over again, I think we are just wasting our time.

Mr DEAN - Just on that, the Launceston Flood Authority has responsibility for all of the siltation plus the levees, the flooding and so on. The funding they have is similar funding to what UTRIA had, plus their maintenance funding for the levees, which will still be provided by the State Government with CPI increases et cetera. So the new authority will be able to combine those two amounts and use it where they think it ought to be used and for whatever purpose it needs to be used.

Mr DAWKINS - I don't think it is broad enough.

Mr DEAN - I don't disagree with you.

Mr DAWKINS - I think the authority itself is not broad enough. It is not looking at the huge picture, which is where is it all coming from? Regulations on whether you cut the trees right down on the river edge, do farmers do something on their paddocks, all of those things are part of the picture that Launceston is paying the penalty for and the users of the river are paying the penalty because we are losing our river. It is becoming an ugly, ugly sight. Because of the lack of the money we have a dredge that is doing the best it can. I mentioned some time ago that if I gave every rower in Launceston a teaspoon, in one day I think I could take as much silt out as the dredge.

CHAIR - As to the catchment areas - and we heard a suggestion in evidence this morning about off-stream dams being employed - in your time with UTRIA did you have much evidence from the farming community, the farmers and graziers, with suggestions as to work they might have already done to mitigate this issue of the soil entering the rivers upstream?

Mr DAWKINS - No, not at all. If there was any, it was very small. There was never any major attempt to find out the whole story as to what was causing the problem. Even apart from that, let us assume that at the end of the day we find out what the problem is, we still have a problem in the river, don't we? Unless somebody gets hold of some money - big money - we will never catch up. We're back to front now. I have been at a number of UTRIA meetings where I made comments as a person who looks at the river. One was that the mud banks are now higher than they were. I was told that that is not true, that it is about the same. I went to a meeting about four months later and some more figures came in that said the mud is higher now than it was six or nine months ago. I said, 'Is that right? It's amazing, isn't it?' The other point I made was that the river is running faster. I can see that by the Charles Street Bridge. I see crews going through there - and when the tide is really running hard, getting to that bridge is quite difficult because it is running very fast. I was told at the meeting, 'No, that's not right. The river doesn't run any differently to what it was 10, 15 or 20 years ago'. However, at a subsequent meeting some more figures came out and they know that the river is now running faster than it used to and mainly because that is where the mud is.

CHAIR - The channel is smaller.

Mr DAWKINS - Yes. We don't have a big open river anymore, we have one like that, so when the tide moves it comes in closer. I am a bit worried that we're going to have a whole group of people coming up with the same things.

CHAIR - Do you think we could ever return to the time when you had that big ship turn itself around at the wharf in Launceston?

Mr DAWKINS - No. I don't think they'll ever come down to Launceston again.

CHAIR - I am not so much talking about the ship but about the capacity for the river to have open water to have that silt removed.

Mr DAWKINS - Of course, it can all be done but it still gets back to the dollar, doesn't it? Until such time as a new group, whoever they may be, sits down and says, 'We've got a problem but how do we fix it?', nothing will happen. They can have as many professors and doctors as they like but unless they find out how much it is going to cost then they are just going to sit down and talk at the next meeting and the meeting after, and that is the thing that concerns me. What is the point of anybody doing anything unless there is money to do it?

Mr DEAN - Perhaps another inquiry.

Laughter.

Mr WING - What do you think the solution is, Terry? The Launceston Flood Authority is not adequate, you are saying?

Mr DAWKINS - I think it should be much broader than it is. I really cannot see it being any different from UTRIA, to be quite honest. All they are really doing is saying, 'Give UTRIA the responsibility of looking after the flood protection scheme'. It is the same group. The difference is there are no community people on it; it is another group

altogether. Nobody can tell me the difference except that they have \$39 million to spend to put a new Tamar??? (*inaudible*). To me, that is the only difference. I think it has to be much broader than that -

Mr WING - How would you like to see it?

Mr DAWKINS - I have read what you have here and I think that is what it has to be. The parameter has to be spread wider than it is.

Mr WING - A single State-appointed authority with adequate funding?

Mr DAWKINS - The State has to come up with a lot more - \$250 000 is a joke. The Federal Government has to help. It is a job beyond the capacity of a place like Launceston and perhaps Tasmania. There is not any river really in Tasmania that is being turned around like this one. I know the west coast have Strahan and that was bad. On the north-west coast there are a couple of rivers - the Rubicon is filling up a bit and I know the Mersey is slightly, up towards Latrobe, but there is nothing as bad as the Tamar. What is happening to this city and to this river is changing dramatically.

CHAIR - Do you know of any other river system like the Tamar estuary that is experiencing the same issues that might have a statutory authority or a management authority?

Mr DAWKINS - Something I read somewhere some time ago that the whole world is turning around like that. The Mississippi is in a mess. Apparently, in India and Bangladesh the rivers are all filling up. Holland is having trouble. They have spent millions and millions of dollars in Holland. They have spent millions widening the levees in the low-lying areas. It looks as if it is a worldwide problem but we have as big a one as anybody else. I think there will be real problems unless they get the right authority with enough guts to do things and enough desire to do it. I think that is an important issue - there has to be a reason you want to do it. Nothing works unless you have somebody pushing it to work. If you just go to meetings, talk about it and then walk out, what is the point?

Mr DEAN - The single statutory authority that we are talking about then, do you believe that that should be on its own, obviously with the ability to get in the professionals and experts that they need to do the things that they need to do, or should that work with the Launceston Flood Authority? Should the flood authority still remain there?

Mr DAWKINS - I cannot see why they would not do the lot.

Mr DEAN - We have had differing sorts of views on it. A number of witnesses are saying there should be one single statutory authority with absolute control and others are saying that there is still a place there for the LFA to play some role perhaps.

Mr DAWKINS - No, I think that is just going back to Ma and Pa Kettle times. I think we really have to have one authority with the responsibility to do all the things we are talking about, not an offshoot because what is the point in having an offshoot? I think that would be a negative, personally. I would much rather it the other way.

CHAIR - With your love of, concern for and observations about the river, Kerry, have you been involved in any discussions or thoughts or think tanks about a barrage for the Tamar River?

Mr DAWKINS - Yes. A lot of people talk to me about it but it is all a bit of a little drawing by somebody at the moment. I am not too sure that we are mad keen on it. The rowing fraternity would not be mad keen on it so how would be operate with a barrage as we head up the river. A few months ago we had the British Olympic women's rowing coach at our building - he used to row with North Esk many years ago. He looked at our building and he went up and down the river and he said, 'There's nothing in England anything like what you have here' - the extent of our river. At low tide, of course, it is not so good, but at high tide it is wonderful. How would the yachting people get on with a barrage? Is there going to be a loch there somewhere? How do we get all the way down the river? I don't know how it would work. I haven't heard of anybody who has been mad keen on the idea, to be quite honest, not a soul. Even in the areas that I move in, they haven't said, 'That's a great idea'. It sounds wonderful, a big lake, but what are we talking about, \$400 million? That is one figure I heard, \$400 million to build it.

CHAIR - Yes. I think that figure was plucked out of the air - \$380 million or something. I don't think anybody has ever done a proper costing on it.

Mr DAWKINS - I would have to be convinced.

CHAIR - In a conversation last night I was talking about a barrage they have in Singapore which has traffic moving on the top, a loch for pleasure craft to move in and out and holds the sea out but contains the fresh water.

Mr DEAN - I think that is what the costing here was about, a bridge running across the top of it as well. I think that was included in the \$400 million, wasn't it?

CHAIR - I don't know. As I say, the figure can be thrown about but who did those figures? I think it would be easy to pooh-pooh the idea, to suggest that something was extravagant in cost.

Mr DAWKINS - That was the negative before because people would say, 'If we can't afford to get enough money to take the mud out now, where the heck are we going to get that sort of money from?' So you are really aiming for the top of the mountain before we have even climbed the first step.

Mr DEAN - With your background and knowledge, what do you think the mud problem is? A number of issues have been provided to us. Do you think it is still coming down the South and North Esk rivers or is the mud that we currently have ebbing and flowing?

Mr DAWKINS - Backwards and forwards.

Mr DEAN - Yes. Do you have any comment?

Mr DAWKINS - I think it is both of those things. If there is silt coming down, it is going backwards and forwards. You only have to put your boat in the water off the pontoons and you can see the water is thick with silt. You can see the particles in there. It is

because of a lack of flooding; we have not had a decent rainfall for so long. They are saying that one flood is worth \$1.5 million - so at the end of the day it is all coming down and going backwards and forwards. It is not going anywhere, it can't, so it just sits on top of the mud and builds up and builds up.

CHAIR - How many of your activities with the North Esk Rowing Club are curtailed because of the issue of the narrower working space?

Mr DAWKINS - We would not go out training. You tend to go out but you tend to come back very quickly. A lot of training sessions would not be finalised because of the river. If it is a very low tide, when the winds come now it gets much rougher than it used to. The mud is just under the water so it doesn't take much to blow it up and get the water rough, particularly for us. People in yachts can skim through it, but we can't. We seem to have a lot of rough water now. I don't know whether that is just me - there isn't the depth in the river any more. When the winds come it gets very lumpy and quite often we have to come back. That is fairly regular at the moment.

CHAIR - Does there need to be special dredging to the North Esk to enable you to get your boats on and off the pontoon?

Mr DAWKINS - It is only a matter of time before we will have to have some dredging, particularly as a wall has fallen in and all that mud has come out as well. It is moving down there, there's no doubt about that, so it is only a matter of time before we are going to be sitting on mud. They are on the other side - that has had to be dug out. It is a huge problem.

CHAIR - What about the wall that you have had built there at the North Esk Rowing Club, has that stabilised the situation there or exacerbated it?

Mr DAWKINS - Oh yes - that's great! That wall has been wonderful - and I'm being sarcastic now.

Mr WING - What is the problem there?

Mr DAWKINS - In my honest opinion I don't think it has been designed correctly. I am no expert but I do not think it has been designed correctly. There is the wall, there is the mud underneath so that when they came they got these huge boulders and tipped them in, the boulders went down and the mud came up and lifted everything. So I do not think it is designed correctly.

Mr WING - A similar thing happened in the mid 1980s near Ritchie's Mill where there was an attempt to fill it in and the weight on the mud on the river banks pushed it down and it came up just inside the river and tipped the *Lady Stelfox* over.

Mr DAWKINS - The whole wall is moving not just the part that is broken even the other end is moving out so they are going to have to try to do the whole thing. I do not know what they are going to do. It will cost a lot more money.

Mr DEAN - A huge amount more I would say.

CHAIR - With your experience with UTRIA and being involved with the river have you noticed, through your experience, that there has been difficulty in finding people to take responsibility for various issues on the river?

Mr DAWKINS - What do you mean by that?

CHAIR - If something is happening on the foreshore and you try to talk to Parks and Wildlife they might say it is nothing to do with them, it is for your local council. Or if it is in the water - say oysters in the water - MAST will say, 'No, that is not our issue.'

Mr DAWKINS - Are you asking whether there is any buck-passing going on? Yes, of course, without question.

We found that out when we tried to build our building. There is a great deal of that still going on. 'It is not our responsibility.' 'Well, whose is it?' We're told we have to do certain things so we go and do them. With MAST we had to do certain things but they said, 'We don't care anyway, don't worry about it.' 'So why am I doing it then if you don't want to know?' There is a lot of that going on. With Parks and Wildlife, there is nothing wrong with what they do but the restriction on what you do is ridiculous.

Mr DEAN - So what you are saying is that if a single statutory authority were the answer, they would need clear delineation of their responsibilities and so on, so there can be none of that?

Mr DAWKINS - Everybody has some part in it - there are just too many people. You have MAST, you have Parks and Wildlife, you have the council. There is a whole group of people -

Mr DEAN - And the State Government and the Federal Government.

Mr DAWKINS - Yes, so poor simple people like us in a rowing club who built a new building found out that there were so many organisations out there that you had to refer to that you ended up being totally confused.

CHAIR - Yes, but all these organisations of course have their own specific areas of expertise?

Mr DAWKINS - Yes.

CHAIR - So, as I say, then the statutory authority sitting above that might be the area that would coordinate the solutions to the problems and prioritise?

Mr DAWKINS - Exactly right and if this one authority had sets of rules - we will talk specifically about the North Esk Rowing Club; if we had somebody we could have gone to with sets of rules and they said, 'You have to do this and tick that off. If you have done all those, you have done everything you had to do.' But that does not exist. So you are never too sure who you are supposed to talk to. There is no-one to tell you who you have to talk to. So if one authority was running the whole thing and they said, 'Okay if the Tamar Rowing Club is going to build a new rowing club right next to you, get a piece of paper and tick off all the things that you have to do to make sure that building

complies with all the regulations' - and on the river there are a lot of them. From low water to high water, to Aboriginal middens, to frogs, rats. We even had to look out for a rat to see if there were any rats there. I did laugh.

CHAIR - You are not going to name that person?

Laughter.

Mr DEAN - What was it? Some unique rat that -

Mr DAWKINS - God only knows but we did look for it.

CHAIR - I am conscious of time now with our next witness waiting, Kerry, are there any closing comments that you would care to make?

Mr DAWKINS - I will just go back. I think the important issue is going to be this one authority. A bigger, larger authority with much broader parameters in doing it - I think that is the way it has to go. I would hate to think that we are going to go back to where we were, which we could do. I think this is a far better option.

CHAIR - When you say back to where we were, do you mean to UTRIA?

Mr DAWKINS - To UTRIA days - I do not want to go back to that small authority. It has to be much wider than that with much wider responsibilities otherwise I do not know how it is going to work.

CHAIR - Kerry, thanks very much we appreciate that.

Mr DAWKINS - Thank you.

THE WITNESS WITHDREW.

Mr KEN GOURLAY WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Mr Finch) - Ken, thanks very much for giving up your time to join us here.

Mr GOURLAY - Like Kerry, I was concerned that I would get emotional because it is a very emotional thing for me, so I put some notes down. I understand the terms of reference and I believe some of the issues facing the river need to be understood a little bit to help the committee determine what type of committee must run the Tamar River.

There are four sewage treatment plants on the banks of the Tamar River and, presumably, they all have overflows directly into the Tamar River. Parts of Launceston have only one waste pipe under the roads from their domestic houses so stormwater and sewage are travelling in that one pipeline. This means, in normal conditions, stormwater has been treated by our sewage treatment plants and that means working the systems harder and, obviously, at an extra cost. In raining and wet conditions, the treatment plants can't cope and the stormwater, along with raw sewage, is released directly into the Tamar River. This is obviously a big bill back to the Launceston City Council but I believe there would probably be Federal government heritage funding to remedy that old problem, but that's another issue.

Today it is surely not acceptable to have a practice like this continue and it will not fix itself. I believe no private business - and I speak as a private businessman in this case - would be permitted to practise this behaviour. Where is our new environmental practice authority? This practice is continuing because people responsible for governing this are the same people who are committing the crime. Our children are not safe to sail, ski or even perhaps row on our own waterways, let alone swim. We are so lucky to have such a beautiful waterway and playground right in the middle of our city. In times when our children need to get away from their GameBoys and off the streets, the elders of our city are polluting an alternative.

We are sick of our elders ignoring what can surely be seen by them. Hence they will instigate another study, which could be seen as another way of avoiding difficult issues. An independent committee is needed, I believe, to govern these things.

Some country towns do not have rivers flowing through them. How do they treat and dispose of their sewage? They do not have the ability to direct overflows and waste into a river. We should not have overflow pipes going into our Tamar River. These country councils, presumably, don't release the waste into the environment other than when it is fully treated and a safe product. We are told that you can drink the overflow out of our treatment plants. I'll leave that to others.

Laughter.

Mr GOURLAY - In a city the size of Launceston - say 20 000 homes - what tonnage of sewage is developed? Nobody seems able to tell me. There doesn't seem to be a rule of thumb of how much tonnage. I understand it is reasonably easy to break down the waste in size but there is still tonnes and tonnes of it to be dealt with. Breaking it down in size does not reduce its mass by one kilogram, or its volume. If it is not trucked off the

premises then what is done with it? I think that is a very crucial part of where the silt is coming from. Kerry spoke of it going up and down; it can't go up and down and up and down because eventually it is going to flocculate somewhere and set. It has to be renewed.

An independent committee can look at all these issues and will not be an interested party such as the councils or other authorities are. With the blue, clear water being evident when the Hydro overflowed the dam while repairing the power station a few years ago, and with the weir at St Leonards, there is a consistent train of thought that the silt is not coming down the North Esk or the South Esk in normal conditions. Why is the river silting up in normal conditions? I believe it is in part the sewage outfalls and overflows. It would take an independent committee to establish this.

There is no doubt that the Hydro controls the water flow meticulously down the gorge. There now does not appear to be any mini floods, which all have the effect of scouring the river bed. One would imagine that the Hydro dam would never get approval to be built now. They produce power from this dam cheaper than any other source they have, but we have to pay for this lack of flow by siltation. They are, in my mind, contributing to the siltation problem. They should be requested to contribute to the cost of this problem. It would take an independent committee to establish that.

When there is a large flood tonnes of silt come over the dam and down the North Esk, and then during the quieter times, studies have proven that this slowly makes it way back up the river by way of the tidal movements. There have been so many studies into the siltation but none of these studies, and I include the present-day one, are coming to a definitive conclusion. I would like to see a study come up with useful answers such as: where and when the silt is coming from; the best means of fixing the problem - dredge, banks, locks or whatever; how we stop it continuing to happen - more levees, dredges or locks; who should pay and on what percentage basis. It may come out something like - and I just put this down as an example, not a recommendation - local government, 5 per cent; Hydro, 5 per cent; State Government, 20 per cent; Federal Government, 70 per cent. I believe this study should come up with an estimated cost for the answers they come up with. If a study such as this were held and if a definitive answer came up, then the local politicians, councillors and clubs all have something to hang their hat on and could take this as an example of where the money should be sought. Is it too hard to come up with a definitive answer from a study? No, I don't believe it is. With local councils and authorities writing the terms of reference we have not had one of these studies. We have had so many studies that we are now guilty of these studies consuming our finances - hence our inaction. I believe an independent committee could achieve this.

CHAIR - I was interested when you made a point about the Federal Government and its heritage funding going towards rectifying this problem of the sewage and water travelling in the same pipes. Can you elaborate on that?

Mr GOURLAY - No, I can't. It was just an idea I had because I would imagine those areas must be very old, with a lot of heritage. I thought there might be some funding for that, but I have nothing to back that up.

Mr DEAN - The sewerage and water system in this city is the oldest in Australia - it has combined water and sewerage systems running under the city. It takes stormwater and sewage in the same pipes.

CHAIR - So what Ken was saying in evidence is factual?

Mr DEAN - Yes, it is factual.

CHAIR - So when there is a lot of water about, when there has been a lot of rain, the raw sewage comes into the river?

Mr DEAN - I was going to suggest to this committee that we need to have a visit to Ti Tree Bend and talk to some of the people there, rather than my answering that question.

Mr WING - How has it affected the Tamar Yacht Club, particularly training the young people, and in other ways?

Mr GOURLAY - It is greatly affecting us. Unlike the rowers, they can almost still row at low tide, we in effect do not have any sailing up here now for juniors. I ran my September sailing school up here and after checking with the council, they informed us that the water was okay for that type of activity on it so we went ahead and ran it up here. We do not have any other junior sailing up here at all now and with our Elliots, the only sailing we have up here now is the odd Wednesday afternoon or Thursday afternoon midweek races for adults and we still have a scholarship program in place for disadvantaged children. Last year we had to move that to Beauty Point and I suspect it will go to Beauty Point again this year.

CHAIR - The activities, too, need to be conducted at high tide or close to high tide.

Mr GOURLAY - Up here yes, it is very small. We cannot say, 'You will sail this week, next week and the week after'. It will either be a week about or, broadly speaking, we can sail from half tide through full tide to the following half tide. If the high tide is seven o'clock in the morning, we have to be off the water by 10 a.m. and it will be low tide then at 1 p.m. and we cannot get back on the water until 4 p.m. and then we can sail for another six hours, so we can sail from 4 p.m. to 10 p.m., so that is your day gone. That weekend there is no sailing. If we are lucky to have a high tide at one o'clock, we can sail prior to one o'clock and we can sail for three hours after one o'clock. If it is low tide at one o'clock, we have to be off the water by 8 a.m. or we do not get back on until 4 p.m. It has curtailed our sailing up here to the extent that we did not even have our opening day up here this year. We did combine it with the opening of our new clubhouse. It was a convenient thing to do that this year but there really is a question now whether we will have the oldest yacht club in Australia with an opening day in the City of Launceston again.

CHAIR - Is that curtailing of activities you are talking about quite a bit different to what you experienced in years gone by?

Mr GOURLAY - It is poorer than what we have had. Definitely the silt is a lot higher and it is into areas where I have never seen it so yes, it is poorer than it has been over previous years.

CHAIR - What would you say, the last decade or two decades?

Mr GOURLAY - I have noticed personally a huge increase probably in the last four years and I do believe one of the instigating factors was the willows in the North Esk. When they were chopped down I believe we copped a fair load of silt which was disturbed from the tree roots. I think that was a poor step because that supported the bank and we ended up copping some of that but, apart from that, it is a continual growing thing. We have not had a flood now for three years. When we first got the Elliots I remember having to move six of them for a small flood that came down and I remember it being said that 100 cubic metres of silt was moved in that small flood over two days, maybe three days. We have not had anything since that so it has been a continual build-up from then.

Mr WING - With the need to conduct so many activities at Beauty Point rather than here, what effect does that have on the club organising activities and on the participants and their families?

Mr GOURLAY - It has just cost us over \$300 000 for a new clubhouse down there which has enabled us to have the facilities down there. We have to drive now the 60 kilometres to have any sailing really other than in the young, small Elliots up here but that is getting down to such a small level now that whether that is continued next year I do not know.

Mr WING - A small level of participants?

Mr GOURLAY - Yes.

Mr WING - Is that because of the distance that the young people have to travel?

Mr GOURLAY - The whole image of the Tamar is suffering terribly and if you speak to a lot of people sailing, especially in other clubs around the State or other adults, they say, 'Oh, you can still sail on the Tamar, can you?'. Well, we can but in a short period of time relative to the tide, so it is diminishing considerably.

Mr WING - Do you have any concerns about the safety of anybody who might fall from a yacht or boat into the silt?

Mr GOURLAY - Yes, I have. Because I teach kids, I have a duty of care and it is a worry for me. With all the insurance policies alive, I am the one who says the little kids go out in little boats that tip over regularly. It is a huge concern to me.

Mr WING - If one tipped over in one of the silted areas, what do you see as possible consequences?

Mr GOURLAY - As Kerry said, you need more water to get to them in a pick-up boat than they needed to get there in the first place so that is potentially a problem for a start. You have to see it happen at the same time. We are probably a little worse in a sailing boat because if they tipped over and the sail was on top of them, they can't duck down and swim out from under the sail as they are taught because they will be stuck there. I see panic as a big issue because even I would be in an environment that I would be unfamiliar with, so I would see panic as being one of the biggest issues.

Mr WING - Do you see the potential for drownings and fatalities?

Mr GOURLAY - Yes, I do without any doubt, and illness as well up here. I think it is well documented about Matthew Connolly's illness problem, catching a disease, which is a reportable disease in New South Wales, but it slides through here just as bad luck.

CHAIR - That was with the build-up of E. coli?

Mr GOURLAY - Yes.

CHAIR - Near the Tamar?

Mr GOURLAY - I am not medically informed enough but I believe it would be, yes.

CHAIR - And then of course the Hydro sent the water through to give the Tamar a flush. What were your experiences there, or your observations?

Mr GOURLAY - I requested that because of the sailing regatta we had. Through the commodore I requested that and the readings cleared the river enough to make it safe for it. I smile a bit because it is safe for our level of usage, which is not swimming, but we do swim; if we tip over we swim, we have to, because we are tipped out of the boat.

So the health scene is really a concern because I see that as coming from our sewage treatment plants. My understanding of sewage treatment is it is not hard to reduce the particle size to very, very small, very fine. That is a matter of mechanics and it happens very easily but to take the germs out is quite another issue and that is what I think is still going into the river on a regular basis.

Mr DEAN - Getting back to the single statutory authority, and you heard me questioning Kerry in relation to this, do you think that there would still be a position for the Launceston Flood Authority to exist and work with or be responsible to the single statutory authority or do you think the one authority is all we need to control and get on top of this?

Mr GOURLAY - I haven't put a lot of thought into it, Ivan, and I don't know much about the LFA. I think there is hand-in-hand to a degree. At one stage it was mooted that this retaining wall that has just been put in was going to continue around Home Point and I was told that it was going to come out to reduce the width of the channel so that the water would scour it. I told the chairman of the authority at that time, in no uncertain terms, that I thought it was a retrograde step because the more you come into the river with the banks, the less water has to come up to fill it, so you lessen the amount of water coming up and you slow down the flow. They were going to creep out from the banks to narrow it to get it to flow faster to dig deeper. I cannot see how you would use their logic because the more you come out from the banks, the less water comes up. If you use the reverse psychology and dig a big hole near the bridge, more water has to come up and flow quickly because it has to fill that hole. Isn't that better than reducing our river?

Two other points I brought up with him is that first, it reduces our sailing area because you reduce the surface area of the water and, secondly, most importantly, if you have a

flood coming down, you have less river to absorb it because you have built the banks in. To me that is A, B, C.

Mr DEAN - I think that is one of the questionable things. If we had another flood it is just what would happen because of all the reclaimed ground.

Mr GOURLAY - There is so much less catchment area to absorb that water.

You mentioned a barrage before with locks. I visited Swansea in Great Britain and in the centre of town there is a beautiful marina right and it is all on locks. They have I think about a 25-foot rise and fall. We have about a 12-foot rise and fall. If locks were put in - and I just pick a spot, the Batman Bridge, for instance - it is the narrowest neck, it is all blue metal all the way around. If we have a flood coming down, the major problem for Invermay is on high tide. When the tide comes up and the water comes down they meet and that is when the city is in strife. If you have locks, you lock the water out at low tide. For that six-hour period, whatever comes down the gorge and the North Esk has an empty river to fill. At low tide again you open the gates and let that flow through, so in theory you can flood-proof the city by putting locks down there to lock out the high tide that creates the flood. It is done in London in reverse. The Thames barrier stops high tide coming up into London to stop flooding. That is specifically what they are there for. At the peak of tide they are closed and they stop it coming through. That makes a barrage and lock sound really great but there are a million problems - like Invermay and the water table and what happens to that. There are a million problems if you start keeping the river full. When you get a big flood, and it really does come with the soil down from the North Esk and South Esk, that is the major source of silt, I believe. If you did not let that exhaust out to the sea, you would have a major problem with that dumping of silt which would fill the river up.

Mr DEAN - Back to the first question about the Launceston Flood Authority - you are saying it could work?

Mr GOURLAY - I think the flood authority should be involved. Whether the committee is the Launceston Flood Authority and its responsibility is the whole river, that is fine.

CHAIR - The four sewage treatment plants you mentioned on the banks of the Tamar River, which ones are they? Can you locate those for me?

Mr GOURLAY - The West Tamar Council at the tailrace, Ti Tree Bend, St Leonards - and I don't know the fourth one.

Mr DEAN - I think there are about nine releases into the river over the entire length of the river. There is the stormwater release in Margaret Street.

Mr GOURLAY - They asked me the question, 'What facilities would you like to see on the Tamar River?' and I said, 'Whoa, go back, hang on. You have to fix the river. If you fix the river, the facilities will come'. The last question is, 'What do you want us to build?'. I said, 'You've got to address the sewage going into the river', and they said, 'That would cost a lot of money'. I said, 'Yes, but hear me, I believe that is what you have to fix to stop the sources of silt'. The other one I would like to see stopped is the stormwater. I would like a settling pond for every stormwater outlet, so all the brake dust, tyre rubber,

the grime off the road, were stopped and settled before the flow went into the Tamar River. I don't know how you do that for Margaret Street -

Mr DEAN - Margaret Street detention basin holds it back.

CHAIR - Do they collect there, do they filter the water?

Mr DEAN - I think all it does is retain the water in a flood situation, and that is why it is in a nice green area currently but in a flood it all fills up and filters the water.

Mr GOURLAY - Until those pipes Margaret Street have the capacity to take the water out.

Mr DEAN - That's exactly it.

Mr WING - With the silt that is in the Tamar now, do you see any way of coping with that problem, other than having it physically removed from the Tamar?

Mr GOURLAY - I don't think so.

Mr WING - A massive project involving many millions of dollars?

Mr GOURLAY - Yes. I don't know the dollars but I imagine it would be.

Mr WING - Do you consider that the silt and mud in the Tamar is suitable for topsoil?

Mr GOURLAY - I collected a sample and sent it off to be analysed. I was then asked, 'Where did you get it from?' and I said, 'Just down near the pontoon when the tide was out'. He said, 'Do you realise if you went down a foot further it could be quite different in composition, or if you went across the other side it could be different again? Had the dredge been past there in the last six months?', so I decided to save my money and not do it on one little sample.

I believe it's a very fine particle silt. It isn't suitable for top-dressing or lovely veggie gardens, as one might assume, thinking it would be silt, soil and topsoil from the paddocks. It is full of weeds, full of fertiliser from the paddocks, I believe, and very varied over the years that it's been coming down, depending where you take that sample from.

Mr WING - It has been quite effective in building up an area used now by the Launceston Church Grammar School.

Mr GOURLAY - It looks good, yes. I am told that is because it is so fine when it dries it cracks and when it rains it only gets skiddy on top. So I believe it is not even suitable for spreading on forest floors. That is all hearsay from the guy who explained how my sample really wasn't any good.

Mr DEAN - It is said to be good only for grasses and crops and that sort of thing. Some people are saying that.

Mr GOURLAY - Okay.

Mr WING - As a Launcestonian who appreciates and uses the river significantly, are you at all concerned about the lack of water flowing through the gorge?

Mr GOURLAY - Very much so because I have heard that the Hydro almost brag about their efforts that they stopped the silt coming up because of the outfall at the tailrace. Surely that would be better going down the gorge to stop it further. It should be timed. I believe they have the ability to time it on the rising tide, which would hold it back. I believe that the technology would be there to put the power station at the foot of the dam, not where it is now.

I think there should be more outflow. It's the mini floods which really do the scouring. If you couldn't afford to move the power plants or whatever, and if they were compelled to let a mini flood go through once a year then I think that would be a great first step.

CHAIR - I am wondering if there are any other issues along the river, up to your new home at Beauty Point, that you might be aware of - bank erosion, for instance.

Mr GOURLAY - No. I think the primary thing is the silt congregation from Freshwater Point right up through. That, to me, surpasses all problems the river has.

CHAIR - Ken, is there anything in conclusion that you'd like to present to us?

Mr GOURLAY - Only the lack money. I think the lack of money is surpassed by the lack of wish to spend money. A classic case was when we were moving down to Beauty Point. Along the back of our leased land is a pathway owned by the Lands department and there was a putrid drain there with mosquitos, smelling the whole time right through summer. There is some water there that comes up through the hills. As Commodore, I approached the Lands department to repair the drain and I was told, very curtly, that they didn't have any money and couldn't do that. One of our fathers sent an excavator down, a couple of truckloads of blue metal and it was fixed in one day. It's not so much the money; the will is not there. You mentioned that a lot of Tasmanians put money into the Sorell Causeway. I don't think the money is an issue. I believe it is there but it should be proportional. I did give a little bit of consideration to those figures, but it will take millions.

Mr DEAN - Since UTRIA has been operating has the problem remained static or become worse?

Mr GOURLAY - It's still getting worse. It was still getting worse all through UTRIA's reign but they were certainly slowing down that pace that it was coming at.

Mr DEAN - That's not meant to be critical of UTRIA because I think they have done a great job.

Mr GOURLAY - Yes, the same for me too. I'm not being critical. With what they had available they did slow down that pace of deterioration.

CHAIR - Ken, thanks very much for taking the trouble to come and present to us and for giving us those notes as that will be very helpful for us. You are welcome to stay on while Mr Routley gives evidence.

THE WITNESS WITHDREW.

Mr IAN JAMES NORMAN ROUTLEY WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Mr Finch) - Ian, thanks very much for taking the time to join us here today and we did read with interest your submission and we do appreciate the fact that you have taken the time to come in and appear before us to give your evidence. If you would like to make a presentation to us please do so, whether it is from your written submission before or whether you have something new to impart.

Mr ROUTLEY - If you wish me to read it in part that just puts it on record and then I can refer to the points that are raised.

CHAIR - Yes, that is quite okay.

Mr ROUTLEY - I just preface it by saying that I think this select committee inquiry is important and really overdue for this region because we have seen a significant change in the estuary and the catchment area in the last 30 to 40 years in particular, so I commend what you are doing and hope that you will take a very broad approach and objective view to this matter.

I did attach to my document of 18 November a document dated May 2003 which had been brought to the chairman of the Tamar Estuary Working Group and was endorsed at that time by NRM. Unfortunately, some of the recommendations and suggestions in that did not go forward because of a meeting which was held by other people and which stalled that whole process. I also enclosed a letter dated 27 October which was under the signature of Laurie Carrera. I had input into that correspondence together with one other person, that being Dr Owen Ingles.

I think it is impossible to write a comprehensive submission on such a broad subject due to the maze of different interest groups that are represented through various government departments and instrumentalities without having the full knowledge of the current framework that exists. In recent years, I believe through being a member of the now disbanded Tamar Estuary Working Group, various responsible groups have transformed a framework into a strongly fortified maze with community engagement often set aside to protect one's interests. This a vastly different culture, unlike the 1990s when Landcare engaged with the people in the community at large and delivered proven outcomes. That was through the Budge (?) Report and through the 20-20 Jurisdictional Report that was undertaken by Liz Watchorn from the Department of Environment.

In my opinion, at this point in time we require the designing of a structure that has a solid foundation for the broader catchment area as defined which since the 1970s has been under increasing stress that is now impacting directly upon the upper reaches of the Tamar Estuary which we all have knowledge of.

My initial points to you, Mr Chairman, and to your committee are these. There is a need for an independent peer review of the current structural framework that applies, the functions and responsibilities of all involved. This should be undertaken by the most credible, authoritative person or group available within Australia. I think that is of absolute paramount importance.

There needs to be a comprehensive baseline study of the catchment undertaken by the CSIRO or another reputable organisation of similar ilk. There is a requirement for a baseline study to be undertaken and that should include a sedimentation study of the catchment area by a professional colloid chemist. I have to recognise that the reports by Dr Foster are excellent, but his reports in the past have not included that particular point.

The study should include, for example, the identification of risks in the catchment, off-stream storage, upstream water storages, definitions of riparian and buffer zones and a valuation of the environmental water flows.

The definition of Launceston as a port has to be also re-identified to allow the sustainability of marine services together with the provision of amenity functions in the upper reaches of the estuary for the community at large.

As to the desirability or appropriateness of a single statutory authority, as per your terms of reference, I have to say that personally I have to hold judgment on that matter pending advice and clarification as to the current structures that apply.

I think it is time for the region to take a broader objective view of the catchment and agree that we need to harness the best knowledge available within Australia to achieve the goals that are referred to in all the attachments that I have enclosed with my submission.

A number of us have been in discussions over the last few months because we have expressed our concerns; we have had meetings with the Government and I am of the view that we are very concerned about what is happening at this point in time. We do believe that we need to bring the most appropriate and the best qualified people into this region to give us some advice as to the directions before we waste any money going down and taking a Mickey Mouse approach to it - if I can put it that way.

Mr WING - You are referring to what with a Mickey Mouse approach?

Mr ROUTLEY - Anything. We need to bring in a reputable organisation, like the CSIRO for example, to provide a scoping document to give some directions as to what pathway we should be taking. There is credible information available before us relating to the matter of sedimentation that comes down the South Esk. I think if you look at the state of the estuary report that was done in 1997 by the Natural Heritage Trust, you will see that that clearly identifies and states that there is very little knowledge relating to the North Esk catchment. So a lot of work needs to be done relating to the catchment management issues before we can tackle the Tamar estuary issues.

Mr WING - How do you feel about the study being undertaken at the moment by NRM North the TEER program?

Mr ROUTLEY - We have written to NRM North to seek clarification relating to the terms of reference and I have had no response at this point in time. A copy of that letter also went to the Premier.

Mr WING - When did you send those?

Mr ROUTLEY - That was about a week ago.

Mr WING - I see.

Mr ROUTLEY - I only had knowledge of that a week ago about a possibility of some meetings, some public forums, being held and I understand that the lady who wrote that letter is now off on sick leave so I am not sure what the state of play is.

CHAIR - You are saying 'we' there sometimes. Ian, and I notice that your submission was not signed by any particular group -

Mr ROUTLEY - No, my submission is not but I did say that I enclosed two attachments that were under joint signatures.

CHAIR - So it is the Tamar Estuary Working Group?

Mr ROUTLEY - Yes.

CHAIR - And that was -

Mr ROUTLEY - That was the one under Laurence Carrera's. letterhead of 27 October and it is the document of May 2000. It was basically a joint document by two people.

CHAIR - And that group has been disbanded?

Mr ROUTLEY - That is correct.

CHAIR - You said, 'We were looking for meetings with the Government or had meetings with the Government', is this a loose grouping of people, concerned citizens or whatever/

Mr ROUTLEY - Basically it is myself, Dr Owen Ingles and Mr Laurence Carrera. The three of us have been working together.

CHAIR - As three individuals who have concerns you have grouped together to express your concerns?

Mr ROUTLEY - Yes.

CHAIR - I take note particularly of your point here about the structural framework and I am wondering if you have some suggestions or thoughts in respect of a statutory authority and how it might be established and who might be featured on an authority to give it the appropriateness that you would seek?

Mr ROUTLEY - I haven't. I think it was about 2001-02 when I was on the Tamar Estuary working group, through the then secretary of the department, we had a workshop to try to work out where everyone fitted. There was one piece of work that was never completed because it was quite disjointed. I think we need to have clarity on the roles of different authorities before we can move any further. What are the roles and responsibilities of various government instrumentalities, from DPIW through to Forestry and Hydro? To

give you an indication, local government is not responsible for the waterways in our State. It is a State responsibility. I always remember a farmer on the North Esk built a levee around his property and diverted water across onto another person's property and did significant damage, but no-one took responsibility for it and it certainly wasn't a council responsibility. As I said, I think the state of the estuary document of 1997 clearly demonstrates and highlights the weaknesses that we have relating to the catchment and the estuary. That report, which was a summation of all the reports right up until that point in time, was a very comprehensive and detailed document. To my understanding there has been no further work undertaken at a higher level by the State Government since that time. When we have been talking about, when we are talking about the baseline study and the catchment area between the Great Western Tiers and St Marys, it is a very complex and diverse area. There are many contributing factors that are impacting on the state of the Tamar Estuary.

CHAIR - Do you think that a statutory authority might be a way of prioritising?

Mr ROUTLEY - I think it depends on the power of that statutory authority. Would they have powers to override other authorities?

Mr WING - It would be an important factor. That would be the proposal, that they would have power to override a possible right of appeal of some of those authorities.

CHAIR - Would that give you some comfort?

Mr ROUTLEY - I think in part it would, but I still think that one of the great weaknesses we have in Tasmania is that we don't bring in the people at a higher level with expertise around Australia to give us that advice in that direction. This is why I am very strong on this. We have many well-qualified and good people in our State but I still think sometimes we have to go beyond that level to get that very best advice and to assure we are going to down the right pathway. That is why I am talking about the CSIRO or another appropriate body before we can really go any further.

Mr WING - We do bring people in from outside the State. For example, the chairman of Aurora is from Victoria. The chairman of the Port Arthur Authority is Barry Jones.

Mr ROUTLEY - I'm talking about the scientific people in that particular field. I'm not talking about actually bringing people in but about going out and getting that advice to assist people in formulating the right directions.

Mr WING - An authority could do that, and it hopefully would, but there is no body at the moment that is responsible, solely or specifically, for the Tamar River. You have a whole different set of organisations and authorities that have something to do with it, but not any one that has specific and sole responsibility, which could coordinate the information and expertise of these other bodies and have power over them. Do you not think that would be an advantage?

Mr ROUTLEY - I think it would be an advantage for all our catchments areas in Tasmania.

Mr WING - Having one authority covering all, you mean?

Mr ROUTLEY - I believe that we do need it. We're only a very small island. We are dealing with a very important issue here - the catchment areas of the State. I think we need to look beyond this particular region and take a broader approach for the State, as a whole.

CHAIR - Are you aware of the work of the catchment statutory authorities on the mainland?

Mr ROUTLEY - No, not sufficiently enough to make any comments.

Mr DEAN - You mentioned that a comprehensive baseline study of the catchment should be undertaken at CSIRO. Where would that leave us or the persons making the judgment - bearing in mind that myriad reports have already been done on the Tamar River? For instance, I can remember the Foster report, the Jones report, what TEER are currently doing, the GH&D report that has just been contracted out by the local government and with State Government funding et cetera. So there are heaps of them out there.

Mr ROUTLEY - We've had a lot of reports done on the Tamar Estuary, but have many of them been of any value? I suggest to you they haven't been of value. We need to go beyond the Tamar Estuary and look at the catchment. That work has not been done. That is the point that I am raising, with the support of other people.

Mr WING - That is what the authority would be responsible for. It would have the jurisdiction, if appointed by the State Government, to deal with catchment areas.

Mr GOURLAY - I understand what you are proposing but not knowing the current framework and the legislative matters I am not sure where everybody fits into the picture.

Mr DEAN - Taking your position a bit further about the authority having overall responsibility right across the State, the position, as you are aware, in Launceston with the Tamar is unique in this State. An authority set up like that might not devote the time necessary to this area, which is predominantly the trouble spot in Tasmania for river silt and so on. Do you not think that might be the case?

Mr ROUTLEY - I would be looking for an authority for the State. I think that water is a precious commodity. Our farmlands are drawing on more water et cetera. I understand we have some critical issues relating to the Tamar Estuary, but I don't like to be parochial. I like to look at it as a Tasmanian thing. With environmental awareness now more acutely before us we have to look at the bigger picture.

Mr DEAN - Do you think that the current Launceston Flood Authority would be sufficient to handle the Launceston situation?

Mr ROUTLEY - Certainly not.

Mr DEAN - I am not saying it would be.

Mr ROUTLEY - The streams or rivers are a responsibility of the State. Is that not so, including the riparian reserves?

Mr WING - That is so.

Mr ROUTLEY - I do not believe that you should have a local authority trying to manage something where there is a State responsibility.

Mr WING - I know, but a State-appointed authority -

Mr ROUTLEY - I understand.

Mr DEAN - A witness has indicated that Launceston people should be accepting a good responsibility for what is happening in this river and that perhaps we should consider upping rates by \$100 to get the funding that is necessary to spend on this river. Have you a view on that?

Mr ROUTLEY - I think you may have lost sight of the capacity of ordinary people to pay, and 35 per cent of people in Tasmania are on social benefits. Certain matters are the responsibility of the Federal Government and certain matters are the responsibility of the State or local government. This is where we are getting into trouble and why we have not moved forward in this area, because we have allowed confusion.

Mr DEAN - You were with UTRIA at one stage?

Mr ROUTLEY - Only for a very short time.

Mr WING - It was the predecessor body, wasn't it?

Mr DEAN - Have you any issues that you can refer to while you were there that you believe were good, bad or otherwise?

Mr ROUTLEY - I prefer not to comment. There was one incident and I prefer not to comment on it.

CHAIR - Over 30 to 40 years you have seen changes in the catchment. Can you elaborate on the changes you feel have taken place?

Mr ROUTLEY - I have seen ever-increasing erosion on rural land in the catchment area. I think we have been a little bit tardy in our approach to address those things. We need to clearly identify and be consistent in relating to the riparian and buffer zones on our water streams. I do not believe we are applying best practices.

CHAIR - Have you seen that first hand or is it anecdotal evidence?

Mr ROUTLEY - I have seen at first hand the erosion, particularly around the Meander and in the North Esk catchments. I am talking about over a period of 30 years, not just recently. This is where I am really concerned about it because our waterways are precious.

CHAIR - So you think over 30 years to 40 years there has been a stronger contribution from the catchment areas to the silt issue? We have had some evidence that there is a body of silt that moves backwards and forwards and we have had other evidence that it is being contributed to, even to this day.

Mr ROUTLEY - I have heard both. When I was on the Tamar Estuary working group it was very evident, for example, that the siltation downstream had decreased dramatically and it had increased from Freshwater Point back to the upper stream. There is no doubt about that. There has been significant movement in the silt over the last 40 years.

CHAIR - Could I get you to comment on the work of Landcare? On reflection now, Ian, on the work that Landcare did with the farming community, do you think that lessons were learnt by the farming community that might have mitigated some of the issues that we are talking about?

Mr ROUTLEY - Yes, I think Landcare did an excellent job because they connected with the people at the coalface.

CHAIR - The farmers.

Mr ROUTLEY - The farmers and the community as a whole. I am really quite disappointed that the Federal Government effectively has set aside Landcare or given them relatively minor support. If you are going to have changes in the community you have to take the community along with you - the small property owners, the large property owners and the little towns.

CHAIR - You felt that Landcare did that and perhaps NRM are not doing it as effectively?

Mr ROUTLEY - I can honestly say from first-hand experience, being on the board at Glenara when we were basically the project managers of the North Esk Landcare project, that all our profits from those work programs went back into the North Esk River. Glenara would have contributed many hundreds of thousands of dollars back into that particular project through the profits that we had from training the long-term unemployed. So I think that there were benefits, yes.

CHAIR - Do you have a comment on the work of NRM? They have had some years of, I suppose, re-structuring and they are starting to stabilise now.

Mr ROUTLEY - They have had a number of years of re-structuring but I am unable to comment on where they stand at this point because I have had no direct involvement with them in any shape or form for the last two years.

CHAIR - Could I ask about the peer review that you talked about? What are your suggestions there, Ian, in respect of the peer review? I think you are suggesting the CSIRO should carry that out?

Mr ROUTLEY - I am talking about some leading scientists. The peer group of scientists in this particular field should be the ones giving us advice and a scoping document for the best way forward.

CHAIR - People might view that as yet another study that might gather some dust somewhere?

Mr ROUTLEY - I would not suggest that at all. Peer reviews can be done for very little cost and very speedily. I would not see that as a big issue at all. I would say the dead opposite to that. With their knowledge and expertise they will identify things that have to be addressed and how they should be done. I do not see that as a major issue at all.

CHAIR - Do you think that is something that could be developed under the aegis of NRM or the TEER group?

Mr ROUTLEY - Again, I am not really sure where NRM fits into the slot and we need to have clarification relating to that. We started off with an NRM group that was only responsible basically for the Tamar Estuary and a little wider area, and now it is the catchment area. I think there were good reasons for that to occur because I have always endorsed the view that we should be looking at the catchments as a total thing, not just parts of a catchment. We have seen some dramatic changes over the last 40 years. The last significant flood was in 1969 and we have had one or two minor floods since. There has been a significant build-up in the sedimentation in the river but it is not too far off what it was in the early 1960s when I was rowing for Tamar. At low tide there is not really much difference.

Mr WING - Do you think we have a particular problem here that other areas do not have with the built of the silt which is causing significant problems?

Mr ROUTLEY - No, I don't. I think you have that in a number of other river systems in our State.

Mr WING - Where else in Tasmania do they have that problem to the same extent?

Mr ROUTLEY - Well, you certainly have that in parts of the Derwent and in some of the rivers on the north-east and down at St Helens. Although they might not be at that same level as we have here, there are rivers that do have these problems.

Mr WING - At St Helens, are you referring to the barway?

Mr ROUTLEY - Or the upper river system, the Georges Bay area.

Mr WING - What problem do they have there which is in any way comparable to the silt problem we have here?

Mr ROUTLEY - The Derwent's problems are quite evident at Bridgewater.

Mr WING - Silt?

Mr ROUTLEY - Yes, with sedimentation build up.

Mr WING - Causing problems to anywhere near the extent of the ones here?

Mr ROUTLEY - Are our problems that great here?

Mr WING - It is making the river almost unusable for yachting, rowing - and health problems.

Mr ROUTLEY - I do not think it has become any better, probably a little worse, but certainly compared to the 1960s it is very similar.

Mr WING - But increasingly worse as time moves on.

Mr ROUTLEY - Again, I would need to have clarity as to what level of dredging has been done over a period of time per year et cetera. That information is not available to comment on. When I was involved with UTRIA, for example, we established two pits down between the tailrace and the Grammar School, which worked very effectively. I am not sure whether they have been continually emptied and what has happened at that point, but when those pits were put in initially they were effective. The sedimentation, having been involved in an eight that broke up on the river one night when the rocks were there and the rocks have been taken out now, was not much different to what it is now in the yacht basin.

I am really here to push the view that we need to take a broader view relating to the catchment and the baseline study. I think they are far more important issues that need to be addressed before we can really address the issues of the upper reaches of the Tamar Estuary in a proper and meaningful way.

Mr WING - They need to be addressed in determining what is causing it and what the solution is. We are in agreement on that.

Mr DEAN - Were the meetings that you had with the State Government, which you referred to, about what you have just talked to us about? Was it about looking at this as a bigger issue?

Mr ROUTLEY - I can table this document, if you like, a report from 12 November on public buildings.

Mr DEAN - Are the issues in that predominantly the issues that you have raised with us today, Ian?

Mr ROUTLEY - There are a couple of other minor matters.

Mr DEAN - But relative to our inquiry?

Mr ROUTLEY - Yes.

Mr DEAN - We would be interested to know what that was. Was the Government receptive to your position or not?

Mr ROUTLEY - Yes.

Mr DEAN - They were receptive? Okay. Who was the meeting with from the Government?

Mr ROUTLEY - We certainly met with the Premier's adviser/representative here and there was Dr Owen Ingles, myself, and Laurie Carrera.

CHAIR - What status does the Ramsar application for the Tamar Wetlands have? Has that been accepted? Is it a Ramsar site?

Mr ROUTLEY - A document of May 2003 that was endorsed by the Tamar Estuary working group and I believe it was endorsed by NRM at that point in time was a document I put together with Mr Carrera and some council officers. Basically I wrote it.

It was our concern at that time that the State Government was not committed to resourcing, providing the resources for this region relating to the catchment area and the Tamar estuary, and that report really was involved around the Tamar estuary itself, as you would see. It spoke about the objectives: to coordinate the activities and protect the developments to the environment and the intertidal zones of the Tamar estuary; to promote the Tamar estuary as best-practice environmental world-class asset as a quality-based place to live and invest; and the Tamar Island to be assessed for accreditation as an international Ramsar wetland. They were our three objectives and I believe that those three objectives still stand today.

CHAIR - So we are no nearer to the wetlands being declared a Ramsar site?

Mr ROUTLEY - We certainly are no nearer at all and I think that has been one of the real disappointments. I think that the Tamar Estuary Working Group achieved so much from when the campaign was to maintain the flat-wall jetty. We went through to do the 2020 jurisdictional report that was done by the Department of Primary Industries and Water through Liz Watchorn. We achieved so much.

Then all of a sudden there was a lethargic approach and there were no resources at all provided to the northern part of this State to undertake further work relating to the Tamar estuary and its environs. That group had a membership of up to 40 people. It represented the three councils, it represented the State Government, it represented the university, the Maritime College, and a vast number of people with specialised interests in different areas, together with community representatives. We were quite saddened when we had to disband through the lack of commitment and resources from the State Government because it was one of the things that brought people together to exchange ideas and knowledge and encourage people to undertake further work to improve the environs of the estuary overall and so much was achieved.

I think that if an authority was to be established, we also have to ensure that it has a strong community component. The community have to have ownership. They really do have to have some ownership of it so that they are committed to it, to assisting, because we are looking at something now and we can look at the catchment area and the size of the catchment area. The improvements will only occur if people are re-engaged in the process.

CHAIR - Ian, there are some good points to close on there. We thank you very much for your time today.

Mr ROUTLEY - I put that document down there, if you want to raise any questions, but I think it just talks about the baseline study, the silt, the tidal velocities, the types of clay and their different properties and how they react. We talk about an in-depth investigation to be conducted by a body such as the CSIRO. We talk about the moisture content of the

clay and the need for the buffer zones and the off-stream storages which we believe and I believe is an absolute. We do not believe that any of our own has the expertise to complete an in-depth type of testing. We talk about the risk assessments, we talk about the sedimentation reuse and we talk about the definition of reporting.

Mr DEAN - Another witness went into some of these issues earlier today, which is good.

Mr ROUTLEY - Thank you very much, Mr Chairman.

CHAIR - Again we thank you very much for accommodating us and for coming and giving us evidence. There is certainly some good food for thought there and it was a good contribution, Ian. We appreciate that very much.

THE WITNESS WITHDREW.