

REPORT ON PROCEEDINGS BEFORE

**PORTFOLIO COMMITTEE NO. 7 - PLANNING AND
ENVIRONMENT**

**RATIONALE FOR, AND IMPACTS OF, NEW DAMS AND OTHER
WATER INFRASTRUCTURE IN NSW**

CORRECTED

At Jubilee Room, Parliament House, Sydney, on Monday 3 May 2021

The Committee met at 09:15.

PRESENT

Ms Cate Faehrmann (Chair)

The Hon. Mark Buttigieg
The Hon. Ben Franklin
The Hon. Shayne Mallard
The Hon. Mark Pearson (Deputy Chair)
The Hon. Penny Sharpe

PRESENT VIA VIDEOCONFERENCE

The Hon. Catherine Cusack

The CHAIR: Welcome everybody to the sixth hearing of Portfolio Committee No. 7's inquiry into the rationale for, and impacts of, new dams and other water infrastructure in New South Wales. Before I commence, I acknowledge the Gadigal people, who are the traditional custodians of this land. I would also like to pay respect to the Elders of the Eora nation, past, present and emerging and extend that respect to other First Nations peoples present. Today we will hear from witnesses regarding the Mole River dam project, including impacted landowners, ecologists and First Nations groups. We will then conclude the day by hearing from the Department of Planning, Industry and Environment; WaterNSW; and Infrastructure NSW. Before we commence, I would like to make some brief comments about the procedures for today's hearing. Today's hearing is being broadcast live via the Parliament's website. A transcript of today's hearing will be placed on the Committee's website when it becomes available.

Parliament House is now open to the public. All visitors, including witnesses, are reminded that they must have their temperature checked and register their attendance in the building via the Service NSW app. All witnesses have a right to procedural fairness, according to the procedural fairness resolution adopted by the House in 2018. I remind everyone here today that committee hearings are not intended to provide a forum for people to make adverse reflections about others under the protection of parliamentary privilege. I therefore request that witnesses focus on the issues raised by the inquiry terms of reference and avoid naming individuals unnecessarily. There may be some questions that a witness could answer only if they had more time or with certain documents to hand. In these circumstances, witnesses are advised that they can take a question on notice and provide an answer within 21 days. I now welcome our first witnesses. I remind you, Ms Boyd, that you do not need to be sworn as you have been sworn at an earlier hearing before this Committee.

JULIA HARPAM, Secretary, Mingoola Progress Association, before the Committee via teleconference, sworn and examined

WENDY HAWES, Individual, Ecologist, before the Committee via videoconference, affirmed and examined

KATE BOYD, Convenor, Mole River Protection Alliance, before the Committee via videoconference, on former affirmation

Ms HARPAM: I am representing the views of the Mingoola Progress Association and community, and Bonshaw Country Women's Association.

Ms HAWES: I am a principal ecologist for the company called The Envirofactor, based out of Inverell.

The CHAIR: Some of you, I assume, have short opening statements to make. I will go to you first, Ms Harpham, to see if you have a statement to make.

Ms HARPAM: Yes, I have a statement. The views I am expressing reflect the concerned voice that was expressed to me by community members—and there were many of them—which I have passed on to WaterNSW. There were more than 50 different concerns and, largely, our community is looking for evidence-based answers to their concerns. Many are opposed and many more are unable to make a decision because of a lack of information. The paramount important thing that keeps coming up is that the Border Rivers is clearly in need of increased water security for critical town water supplies throughout its catchment, as well as downstream Darling River communities, irrigators and the environment. Increased storage capacity is, without a doubt, one fundamental part of the solution to addressing issues with water security in our catchment, along with, potentially, many other mechanisms and infrastructure investments. The Border Rivers Regional Water Strategy [RWS] is currently assessing 51 such options against a set of objectives aimed at delivering water security in the future.

The Water Supply (Critical Needs) Bill 2019 passed legislation to build Mole River dam with seemingly little background study or reference to the RWS. So, in our view, the legislation could thus be seen as a political kneejerk reaction to the terrible drought, without sound analysis. Rather than spending the allocated public investment of \$24 million on analysing the best combination of measures to improve water security in the Border Rivers and for downstream Darling communities, the State critical water infrastructure legislation specifying the requirement for a final business case for the Mole River dam limits analysis and expenditure to this one option. It works backwards in attempting to identify scenarios of possible benefits from the dam rather than starting with objectives and some clear course in mind in terms of priority of purpose, access, rights of existing customers, and sharing what reflects those objectives and then researching and analysing how to best meet them.

The CHAIR: Ms Harpham, can I just interrupt for a second there? Probably for our purposes, but also particularly Hansard's, could I ask if you could just slow down slightly? What you are saying is incredibly interesting and we need to capture it all. Thank you.

Ms HARPAM: Okay, thank you. Sorry. Building the dam has been deemed not viable twice in the past and the proposal presently being examined is seen as too small as a water storage to benefit downstream irrigators and domestic supplies. There are many other issues: social, environmental, Aboriginal heritage, cost of licences, the effects on high-flow supplementary licences and on groundwater and bores. Our community feels the Government ought to be considering all options, not just one in isolation. The many unanswered questions far outweigh the vague, unsubstantiated benefits expressed to us. The consultation process has so far been unable to clearly answer the questions from our community and we want to be sure that there would be a net benefit to everybody before any decisions were made. Of paramount importance to us—and this is something that has come through again and again and again—is that the social issues ought to have equal rating with any monetary cost-benefit analysis. As a community, we are deeply concerned about the mental health of those affected both in the inundation area and below. Their lives are as precious to us as the environment. The potential loss of very significant environmental features both within the river and next to the river, and of Aboriginal heritage items, is also a deep concern. They are irreplaceable, because there are no offsets available to replace what is totally unique.

There is, of course, a finite amount of water, and building a dam does not mean more water; it just means it is going to be differently regulated. This is a major concern to everybody. Going from unregulated to regulated in the Mole River itself will mean higher licensing costs and higher water costs. For those below the Mole River, their biggest concerns are what will happen to our water harvesting licences and the infrastructure dams we have built to harvest, because the Mole River is the major supplier as they are harvesting. The other major concern is, over the past few years there have been many, many bores built and the groundwater supply is unable to be assessed as to where it comes from. During the drought the bores became a bit less viable or totally unviable, so nobody really knows how their infrastructure is going to be affected. There were many other things expressed to me, mostly environmental—a lot about the fish in the river, a lot about frogs and other native animals, the

environmentally protected Blakely's red gum, white gum areas and, of course, the Aboriginal heritage areas. I think I have tried to express most of the concerns of our community, but over 51 different people expressed their views to me personally to pass on and I know that WaterNSW had many others as well. Thank you.

The CHAIR: Okay, thank you very much, Ms Harpham, we will explore some of that more during questions no doubt. I will throw to Ms Wendy Hawes now. Do you have an opening statement?

Ms HAWES: I do. Thank you for this opportunity. As an ecologist with more than 30 years' experience, I despair that our natural resource management in Australia seems stuck in the 1950s, and this is exemplified by these dam proposals. When numerous countries around the world are removing dams, including the USA, France, Sweden, Finland, Spain, the United Kingdom and Japan, what is New South Wales doing by proposing the construction of new dams? The Mole River is one of a very few unregulated rivers in New South Wales and, as a consequence of its free-flowing water, supports habitat for a number of species now rare in the landscape. This includes the threatened tusked frog and the purple-spotted gudgeon. As a free-flowing river the aquatic and plant populations it supports have the resilience to withstand prolonged droughts and to respond relatively quickly to improved flow conditions, but this will rapidly change once the dam is constructed—species, including the tusked frog and purple-spotted gudgeon will be lost. Other listed species in communities that are threatened by the dam construction include three threatened ecological communities including the critically endangered Box Gum Woodland, the endangered semi-evergreen vine thicket and the endangered Candidate Native Grasslands. We have identified by the scoping study 41 plants and 35 animals.

The downstream impacts of dam operation will be enormous. This, notwithstanding the assessment of these impacts on a range of ecosystems including a number listed as threatened is, at best, a governmental afterthought. In my opinion, the dam will inevitably impact downstream on three endangered ecological communities which are known as the aquatic community of the Darling River, the Coolibah-Black Box Woodlands and the threatened species known to occur in the downstream environment. This includes a number of bird species listed under the international agreement to which Australia is a signatory to protect their habitat. Severe, detrimental and ongoing impacts of dams on riverine and floodplain ecosystems are well understood, so much so that the construction and operation of dams is listed as the key threatening process under both the New South Wales Fisheries Management Act and the New South Wales Biodiversity Conservation Act. So it beggars belief a dam construction is proffered by the Government as a viable operation to supply further water to a small number of downstream irrigators at the expense of floodplain graziers, downstream and town water supplies, Indigenous communities and the environment, both natural and cultural.

I also believe it is irresponsible and hypocritical of the Government to promote the protection of species through programs such as the Saving our Species and the Threatened Species Strategy while simultaneously promoting projects such as the Mole River dam, which will place many listed species at further risk of extinction. I would ask that once completed, the business case and the environmental data collected be made publicly available before progressing to an environmental impact statement [EIS]. Thank you.

The CHAIR: Thank you very much, Ms Hawes, for that statement. Ms Boyd, did you also have an opening statement for today?

Ms BOYD: Yes, I do. The Mole River Protection Alliance is opposed to damming of the Mole River because the adverse impacts and higher cost of the dam would greatly outweigh the limited benefits, and we do not believe that damming and regulating this river is wise or sustainable resource management. All of the Mole River's flows are currently providing benefits either to people, environmental assets or both. The natural unregulated flow patterns are what riverine species and ecosystems are adapted to. Most species depend on aspects of the natural flow variability. People can also learn and adapt to live with the higher variability of flows and have been doing so with considerable success. For example, down in the floodplain, to some extent along the Dumaresq River but particularly on the Macintyre, there is an enormous area where the waters from floods are trapped and stored in much greater capacity than the current proposed dam.

The alliance is concerned about impacts in the local area and you will hear from local residents, some of whom are members of the alliance, later this morning who are concerned about the social and economic aspects that they will speak about and about the environment including the tusked frog, which is the only site on the western side of the Dividing Range where that species has been found this century. It was affected by the chytrid fungus pandemic and now it occurs east of the Dividing Range, but this is the only site where it has been found west of the Dividing Range and it is still known to occur.

We are also concerned about the downstream environment, starting with the Mole River environment— for example, where people have been putting effort into rebuilding, recreating fish habitat for threatened fish species, yet the dam is likely to change the flow patterns and change the general hydrology of the river, capturing sediment to make up for the sediment trapped in the dam and that is likely to destroy the habitat for some of the

fish species downstream, the type of habitat that is being deliberately created there. We have a concern about the impacts of the people, which Julia has been referring to, including impacts of groundwater use in the next reaches of the river downstream. As some landholders have said to me, the soil and the groundwater are the best place to store water, but by trapping flows, high flows, particularly after a drought, the opportunities for flooding of the floodplain and the storing of the groundwater will be greatly reduced. We are concerned about the impacts on people further downstream, down into the Barwon and the Darling and we are concerned about the impacts on taxpayers of having to fund a proposal which, from the previous feasibility study, appeared to be uneconomic. There are better ways to manage our natural resources, to manage our water resources—in particular, trying to rehydrate the landscape in the catchment, trying to get people to get more carbon into the soil so it absorbs a bit more and can hold a bit more and have slightly less speed of flow, have slightly less impacts of flooding but the water can come out a bit more gradually and keep going downstream more.

The cumulative impacts with the existing works, the massive extent of use of water in the border rivers and the cumulative effects on the remaining ecosystems, the cumulative effects on the people downstream, we are well aware that the people preparing the business case put a lot of time into assessing the ecosystems of the dam site and the construction area, but we have seen no indication of anybody going to assess the habitats downstream. The fish population is being assessed but not their habitats. We have seen no indication that the business case will actually include any substantial assessment of the costs to the community of this proposal in relation to downstream impacts. We are therefore very concerned that the business case should be made public before the Government makes any further commitment to do any further work on this project and before they make any decision to proceed towards an environmental impact statement. We do not wish to wait until the environmental impact statement is prepared to have a last-minute opportunity to make comments when the Government may have already made its mind up.

The CHAIR: Ms Boyd, we might leave it there, if that is okay. You just froze for a second, as well. We will leave it there so we have time for members to ask questions. Those were very comprehensive opening statements from all of you. Thank you very much. We are going to have questions asked by members in a fairly informal manner; we will not allocate time. I will ask the first question. A couple of you have suggested—and the submissions say, as well—that the Mole River dam has been deemed unviable twice by, I am assuming, government-commissioned studies. Do you know the reasons why it was found unviable? Can any of you speak to that? I will go to Ms Boyd first because she is looking like she can answer that.

Ms BOYD: I do not know why it was found to be unviable in 1991 when the Government decided to enlarge Pindari Dam, having also been looking at the Mole River dam site. I do know that there was some consideration of where New South Wales and Queensland should build a dam in the border rivers in the 1970s and that they chose to jointly fund the Glenlyon Dam in Queensland rather than the Mole River dam, but I do not know the details of why they made that decision. The last occasion on which it was assessed was in 2017, with a feasibility study released, which was prepared by a company called Jacobs. That involved a benefit-cost analysis, which was a proper benefit-cost analysis. I have shown that to a number of economists, who have commented on particular aspects that were limited or left out.

The analysis did include the type of use of dam as might occur now under the Murray-Darling Basin Agreement, trying to make better use of basically the same amount of water in the border rivers. It was referring to an assumption that the cotton growers might [audio malfunction] more money if they were surer that they could have water further into drought periods, and an assumption that people might be prepared to do more planting of permanent crops, such as nut trees, if they were able to have a higher security licence. But a dam of this size could only provide a very, very small amount of high-security licences, particularly if it was trying to give more security to people who were basically planting annual crops as well. They found that, from the three sizes of dam that they looked at, the larger dam was the least economic because it cost more but really could not provide very much more benefit.

The 100-gigalitre dam was the most economic of them. It would have had no net benefit under any discount rate if they had not included—if I remember correctly, that is the case. I am not absolutely certain of that. They did include benefits assumed to come from recreational use of the water storage. They did not subtract any costs associated with reducing benefits from the river as it is; for example, fishing for species that might not be there in the long term when their habitats are changed by a dam. That addition of recreational use of the dam made the difference that meant that it could just get a net positive benefit under a discount rate of 2.8 per cent instead of the 7 per cent Treasury normally requires for projects or the 3 per cent discount rate that we understand Treasury might accept for major water supply developments. Basically, it could not meet the 3 per cent test, even when you were adding in extra presumed benefits.

The CHAIR: Thank you, Ms Boyd. That is very valuable information, actually. I just want to check whether Ms Hawes or Ms Harpham also have anything to contribute to that question.

Ms HARPAM: My understanding is, having not read the Jacobs report or the other one—but I have spoken with people who did in detail. It was simply deemed uneconomic in relation to what benefits that would supply. There is a thought amongst our community and from those reports that small dams—and we have seen that in our droughts—fail to provide water security for local communities and also degrade the river systems and cause a host of environmental problems. Weighing up some benefits against some not-so-great benefits has been part of that thinking, I think.

The Hon. MARK PEARSON: Thank you very much for being here today and answering questions. Did any members of your organisation or your group make representations to the Government seeking the Mole River proposed dam? Nobody from the community in the area has actually made representations to the Government explaining a dangerous situation or situation where a dam is critical for the area?

Ms HARPAM: I do not think that the people directly affected are the people who made representations. I am not aware of any representations from my part of the world, but I do think that the Tenterfield council, perhaps—and others—may have made representations because Tenterfield was running out of water. Mind you, we all think that the Mole River dam—it is a ridiculous thought to pump it 26 miles uphill. That cost of water would be hilarious. Anyway, that water in the Mole is already allocated to people in our own water supply system. I do not know of anyone along the Mole who has ever made a representation to build a dam.

The Hon. MARK PEARSON: There was reference made to impacts downstream. Could you elucidate a little bit on which businesses, which interests would be impacted in a negative way and in what way they would be impacted?

Ms HARPAM: I think I can answer that because I have had a lot of talk with major irrigators downstream. The Mole River, when it flows, is the major supplier. At the moment, with border rivers narrowing, the Glenlyon Dam is, of course, the dam, and the Severn and the Tenterfield Creek never really flow constantly. The Mole can flow quite high and give the opportunity to downstream irrigators who have built harvesting dams—and built them at great expense, I might add—and I am aware that they have great concerns because if the dam is there, they may no longer get the high flows.

I think I mentioned earlier as well, since 1984, when the first bore was sunk in the Dumaresq Valley, we now have many, many bores, and many of those are used by irrigators. Our big pecan farm uses bores. Many of the others—the cotton farmers, lots of people all the way down past Texas, way beyond Texas—use bores now. So their concern is—and nobody really knows—where the groundwater actually comes from. Is it related to the existing river system or something else? The thing we do know, which I mentioned before, is that during the drought many bores became unviable, so it is a great concern that if we take out one more flow-in river, then those bores that were put in and cost a lot of money will not be viable. Thank you.

The CHAIR: Any questions from other members? I can jump in quickly. I want to check on what will happen—I think it was around the yellow box, the Blakely's, the woodlands. I do not have it in front of me. I will just find the right name for Hansard. I am trying to find which endangered ecological community I am talking about.

The Hon. PENNY SHARPE: The Coolibah-Black Box Woodland?

The CHAIR: No, not that one. We can do that one—

Ms HAWES: Are you talking about White Box-Yellow Box-Blakely's Red Gum Grassy Woodland?

The CHAIR: Yes, that one. Thanks, Ms Hawes. Ms Hawes, if that is cleared, how much of that do you think will be impacted or cleared, as far as you are aware, for the proposed dam?

Ms HAWES: I do not know the exact amounts, but the scoping study said there were 15.5 hectares, which does not sound like a lot. However, their interpretation of that particular community was incorrect. They were relying on the New South Wales veg mapping, which is exceedingly inaccurate. At best, it is about 30 per cent accurate. And that particular community, it is derived grasslands, so you do not have to have trees to have that community; you just have to have the ground layer.

The other thing that they had not accounted for in the scoping study was that in the Nandewar region, which I believe the Mole River falls into, *Eucalyptus moluccana*—so coastal grey box—is also listed as a dominant within that community. So that community can be dominated by, basically, four tree species in the Nandewar. It can be dominated by white box, it can be dominated by yellow box, it can be dominated by Blakely's red gum and it can be dominated by coastal grey box. They did not account for that, so I would expect that the 15.5 hectares that was mentioned in the scoping study is a great underestimation of the amount of that that will be cleared by the inundation and dam construction.

Ms HARPAM: Can I jump in with another concern that was expressed to me? It is trap rock country we are talking about, which is fine-grained sediments that have undergone significant deformation and are highly fractured. Because water flows in the Mole River are erratic, it is likely that the water level in the dam will fluctuate significantly, stripping away topsoil below the high-water mark and exposing the erodible rocks underneath. This process has been demonstrated in many other areas, even Glenlyon Dam—you go there, it is just awful when it is down—and Lake Eucumbene. Large areas of exposed and denuded country has been the consequence. Many people feel that that would be environmental destruction and ought not be allowed. Thank you.

The CHAIR: Thank you very much. We will go to a question from the Hon. Ben Franklin from the Government.

The Hon. BEN FRANKLIN: Thank you very much, Chair, and thank you all for being here today. I hear all the points that you have made today in your opposition to the proposal. My question is predominantly to Ms Boyd, but I am very happy for any of the three of you to jump in. My question is around the fact that you are opposed to the dam—understood, on the table—but Tenterfield basically does not have irrigation, and it nearly ran out of water during the drought, so I am looking for what you would suggest would be alternatives. I note, Ms Boyd, in your submission you talked about off-river storages, but you also spoke about the fact that building more dams does not make it rain—quite correctly. I would have assumed that that would then apply to off-river storage as well. I am just trying to ascertain what your views are about other alternatives that could be done in order to protect the water security for Tenterfield and surrounds if we do not proceed down this line.

Ms HARPAM: I think we all fail to see how it could protect Tenterfield as a town because, as I said before, it is 26 miles and all uphill, so the cost of supplying water through a piping system would be prohibitive. I am not saying it could not be done, but it would be prohibitive. I look at the cost of supplying water in New Zealand from the Waikato River to the big town close by, and that was absolutely enormous. However, Tenterfield itself, as a town—and we are on the western slopes, remember—has put in other options. They now have bores. They have several bores in the town. I think by the end of the drought they had almost solved their own water problems. Stanthorpe, of course, has taken a long time to recover, but as far as pumping water from the western side is concerned, I do not believe it would ever be economically justified on a cost-benefit analysis.

The Hon. BEN FRANKLIN: Ms Boyd, I am particularly keen to hear what your views are about potential alternatives.

Ms BOYD: Thank you. Ms Harpham has pointed out the geography of the situation is such that this dam would never have been appropriate for supplying town water. The volume that is proposed to be trapped is really a volume associated with other sorts of uses. But to use any of it in the higher tableland areas around Tenterfield, which are the places where it has been suggested there could be more agriculture, would mean that it would have to be taken away from existing users downstream under the Murray-Darling Basin Plan, as well as having to be pumped uphill. So I think what we were referring to in our submission was for town water supply needs way down in the river system further downstream.

I am aware of an off-river storage that was built beside Nyngan to take water from the Macquarie system so that it could be stored for a long period in a relatively deep ring tank similar to what is used on the flood plain by irrigators but a deeper storage. That has the advantage that it can be filled from the river system during times of higher flow and the water kept for the town. There is a system that has been developed for reducing evaporation from situations like that, that are not in a river, with plastic shapes that float on the top. So it would be possible to use river water putting it into a storage for places such as Collarenebri. If Collarenebri needed more water from the rivers stored for its needs during the drought, it could be stored from high flows rather than having to store water in the river channel.

We have got rather used to using river channels as our storage where the rivers are being used as a free pipe system and as a free storage place where we build up weirs. But that changes the river for a very long distance when you are looking at the Barwon and the Darling and very flat areas. Just raising the weir at Walgett by one metre damaged—if I remember the figure correctly—about 60 kilometres of fish habitat that is no longer flowing habitat. If water is needed for storage for towns down in the lower parts of the river system, then it may be better to use an off-river storage rather than an in-river storage. Our comment related to that as being a better way to achieve critical water needs than building another dam way up in the top of the catchment.

The Hon. PENNY SHARPE: Thank you very much for your submissions. They are very comprehensive. I have got a question for Ms Hawes. You are very critical in your submission about the scoping study. I assume that is the one by EMM Consulting. It seems to be a fundamental problem if you are trying to assess the full impact of these projects that—I am concerned about the fact that it is called the Ecological Constraints Assessment rather than what is the impact on the environment, rather than how do we get around the problems that will occur. I am just wondering if you could comment particularly on your concerns around the way

in which WaterNSW establishes those surveys and what you understand to be the requirements for them and what is missing. You go to some of that in your submission.

Ms HAWES: The thing that I think is missing is the downstream impacts. You cannot build a dam and presume that the impacts are only going to occur where you are building the dam. I do not think they take that into account. We are very bad at managing dams. I have had a little bit to do with the dam upgrades, including the building of auxiliary spillways and the raising of walls on a couple of dams including Keepit and Copeton. The impacts downstream of the dam go for kilometres. As Ms Boyd said, even a weir has a 60 kilometre impact downstream. We release water into the river to suit our needs as human beings rather than the needs of the environment. Fish breeding and invertebrate breeding all depend on the erratic flows of natural rivers. If you do not have those and you are releasing water going, "We release water in the spring", but it is freezing water that comes out of the bottom of the dam, these insects and animals depend on the water temperature to tell them when to breed.

The other issue is that it is not restricted to the river channel itself. You have to imagine the river channel and the flood plain as one entity. So when the river floods, it provides a nutrient pulse within the river itself. The water goes out across the flood plains and as it recedes back it pulls all the nutrients with it. That also tells species to breed. If you do not have that—if you mitigate flooding—then your animals and plants do not know that they can breed. Things like coolibah-black box only germinate around the edge of standing water on the flood plain. The same with river red gum—they actually germinate in shallow water. If you do not have flooding, then those particular species are not going to regenerate over entire areas of the flood plain.

As humans the reason I am very critical is that we are really bad environmental managers. We rarely understand the systems that we are managing and, when we do, we are conflicted because there are economic constraints on what we are doing and there are social constraints, because we do not want towns flooding because that costs people. But we forget that the primary agricultural land is primary agricultural because it floods. That is the critical thing that gives it its fertility. If we are not allowing that to happen, then we are basically shooting ourselves in the foot long term. Agricultural systems depend on the natural systems more than we accredit.

The CHAIR: Thank you very much to all our witnesses that appeared at this session. We have run out of time, I am afraid, for further questions but just rest assured your submissions will be used as well—the information contained in there. I do not believe any of you took any questions on notice but you may receive some supplementary questions from members via the secretariat. Thank you very much for your work in this area and thanks for appearing today.

(The witnesses withdrew.)

BRUCE NORRIS, Landowner, Ringtree, Mole River, before the Committee via videoconference, on former affirmation

HELEN NORRIS, Landowner, Ringtree, Mole River, before the Committee via videoconference, affirmed and examined

ROBERT CALDWELL, Landowner, Alister, Mole River, before the Committee via teleconference, affirmed and examined

SANDRA SMITH, Landowner, Mole River, before the Committee via teleconference, affirmed and examined

The CHAIR: Mr and Mrs Norris, do either of you have an opening statement to make before the Committee today?

Mr NORRIS: Helen and I own Ringtree which has the proposed Mole River dam situated in the driveway of our property. The dam will inundate about 300 acres of the property of highly productive river flats and a lot of the farm infrastructure, including our newly constructed house. We have owned Ringtree for 19 years. It was bought as a career and lifestyle change for both of us. Ringtree offered us a unique opportunity to develop it as a working farm and tourist operation. To this end we have invested a serious amount of money into infrastructure believing in its potential. We believe this river system because of its pristine environmental state it has significant tourist potential. Everyone who utilises our three holiday cabins comes here to enjoy the unspoiled natural beauty.

The point I would like to note with the current business case is to investigate the current level of tourist activity as well as its future potential as an un-dammed river compared to that of a dammed river. I believe that the natural flow of this river has far more economic benefit in its potential tourism than that of a dammed river to provide extra water for farmers. I believe that this belief is backed up by a TV report the other night regarding the recent flood event that is still progressing down this river system. The statement was made by one of the people interviewed at Brewarrina, "If the river does not flow, the tourists do not come". This dam adds no new water to the system and given the state of the Murray Darling river system I find it hard to see the justification for extraction from an already over allocated river system.

The destruction of the environment that we have all witnessed in the Murray Darling has devastated many communities and I see this dam as another contributing factor to its further demise in this part of the system. Through independent environmental investigations we have been able to discover that the Mole River in its current state supports many endangered species, two of which were discovered on this property: the tusked frog and the purple spotted gudgeon. The tusked frog was last seen in the river system in the seventies. The purple spotted gudgeon is now assisting fisheries in a breeding program to restock other creeks and river systems where it has been lost. On a personal note, I would like to state that this dam proposal has placed a significant level of stress on Helen and myself.

I have had New South Wales water tell us that we should just carry on as usual and I can tell you that is impossible. It affects every aspect of our life; the motivation to invest in restocking after drought to everyday operations around the farm. As we are not likely to have an answer to our fate until the end of this year, this represents two wasted years of our lives. While I answer the questions of the Committee I ask, why is my right to farm any less important than that of farmers downstream whom this dam is designed to benefit? I would also like to request the public release of this business case so there can be public scrutiny of it before the Government decision is made.

The CHAIR: Thank you, Mr Norris. We have just heard from Mr Bruce Norris and he has provided an opening statement. Ms Smith, if you have a short opening statement please fire away.

Ms SMITH: Thank you for allowing me the opportunity to speak with you today. As you will be aware from my earlier submissions to the inquiry I am a landholder and irrigate on the Mole River below the proposed dam. I irrigate lucerne during the summer months and make hay to store and feed my cattle when needed and sell any excess. I also irrigate fodder crops such as oats to add value to my sale cattle in winter and spring if there is not enough rain to do the job. My property is dissected by the river with two-thirds on the other side. It is a well-known fact that dams are detrimental to river health and the Mole River, as it is with no artificial interferences, is a healthy diverse little river with many aquatic species calling it home.

The high flows for long periods during releases, which are usually out of sync with the weather, will I believe have severe consequences on the health of the river and its value as a natural habitat for the likes of platypus, water rats, endangered fish and so on and make management of properties such as mine that are dissected by the river challenging. I think there should have been widespread discussions with all the stakeholders from

Tenterfield to the lower Darling before the final business case commenced, presenting and developing through consultation the objectives of the proposal. Quite likely the message would have been loud and clear that a 100- to 150 gig dam on the Mole River would not be the popular, quick and easy fix to the many issues of lack of water security for towns, irrigators, the environment et cetera that the government thought it would be, and the \$24 million allocated to the final business case could have been much better spent. Instead the process has been shrouded in secrecy and there has been a sad lack of community input to ensure consideration of all the relevant issues that have been raised. On a local level I think how and to what extent the landholders in the inundation area would be compensated and how irrigator licences downstream would be converted from unregulated to regulated should be able to be explained upfront and should be included in the business case. There have been no new dams since the Murray Darling Basin plan has existed, so we are unaware of any precedent for how changeover from unregulated to regulated licences may be handled. Irrigators need certainty that if the dam is built and we consequently become regulated water users we will not become worse off.

Those of us without substantial water licences may well find ourselves having perhaps more security over less and more expensive water than we currently use and need making our businesses less viable. Irrigation is the heart of our operations and it would be a sad day if it becomes more economical to trade our water downstream than to use it ourselves. Unfortunately, with progress some people invariably have to give up something they love, but this dam is not progress in my opinion. I think the personal cost to the people in the inundation area, and others, and the damage to the natural environment of the river will be much greater than any perceived advantages of the dam. In line with the New South Wales Government's commitment to improve transparency in water management I ask that the Committee recommend that, when complete, the final business case into building a dam on the Mole River be made public so as to ensure transparency in any political decision to continue to an EIS is economically sound and responsible spending of taxpayers' dollars.

Ideally public comment should be sought before Cabinet even contemplates proceeding any further with the Mole River dam proposal. It has been found to be unviable at least twice in the past. Spending more taxpayers' money trying to find a different answer is questionable to say the least. Encouraging downstream irrigators to grow higher value crops such as nuts is irresponsible as nuts require a lot of water. They are permanent plantings and therefore require higher security water. There would be no new licences issued from this dam, which would mean some general security water would have to be given up for these high-security needs, which creates winners and losers. Many questions put to WaterNSW since the announcement of the proposed Mole River dam have generated a response that the information will be in the business case. The reports generated by the business case would then go into the EIS if the decision was made to proceed. Then it would go out for public comment. It needs to be made public in full before it proceeds to the EIS in my opinion. I plead with you to encourage this to happen.

The CHAIR: Mr Caldwell, did you have an opening statement to make as well?

Mr CALDWELL: Yes, just a little one. I have lived here all my life. My wife, Ruth, joined me 50 years ago. My family were here since 1925. We have been through droughts, floods, crises and all those sorts of things, but we are still here and struggling on. If they build this dam, we lose our home, woolshed, two hay sheds, workshop, cattle yards and all our best land along the river. That leaves the hills on both sides of the dam. The need for this dam is hard to see because all they are going to do is convert the natural flow of the river into regulated water and give that to the people on the border rivers. There would be less water going down the system and into the Barwon-Darling and the people down there will suffer even more than they are at the moment. It says in the Mole River scoping report and Jacobs' 2017 report that this is mainly to improve the viability of the border rivers. It says nothing for anything or anyone further down the river. It is such a shame that they are prepared to spend so much money just taking from one group and giving to another. That appears to be all it is doing—and destroying a lot of the stuff here, the environment, the river. I really do not see the need for it. I support Sandra in saying that we would like to see the business case before any decisions are made on building this dam.

The CHAIR: Ms Smith, you said in your opening statement that the Government is encouraging downstream users to grow nuts. We have heard that a bit already this morning. How are they doing that?

Ms SMITH: I am not sure if it is in the scoping report, but it is in some of the literature they put out. To make it viable they would be talking to downstream regulated water users—for example, cotton growers—to see if they would be prepared to grow higher value crops—for example, almonds—if they had more security of water supply. I read that as meaning that there has to be higher value crops grown to make the numbers stack up for this dam to be viable. So it is in the literature somewhere from either WaterNSW or the Government.

The CHAIR: And so by encouraging—what are your general views around growing, say, almonds? We have heard about the extraordinary increase in the cost of water as a result of almonds being grown much more south than what we are talking about now. Is there a sense that this is being encouraged, first, locally, if you like?

What are your views on that in terms of what impact that will have on the river? Mr or Mrs Norris, do you have any comments on that?

Mr NORRIS: As far as I can understand, it was the Jacobs report that mentioned the nut growing and stuff like that to justify building this dam. As far as I can see, those plants, as Sandra said, are going to require a lot more high-security water and, if anything happens like the last drought we had here two years ago, basically those trees would probably suffer just as much because the supply water from these dams—Glenlyon Dam was dry for basically that period during the drought. This dam would probably be dry in a similar situation and those permanent plants they are talking about would probably die simply because they would lack that water during those dry periods during the drought.

Mr CALDWELL: I will make a comment. This dam is supposed to secure the water for the towns and the communities down the river in the border rivers area. But if they have to ask the irrigators to convert to high-value crops such as nuts, this tends to spoil the whole thing, because nuts take more water. There will be more water taken by nuts as they are permanent plantings. I assume they will get the high-security licences and have first bite of the cherry when there is a drought and I wonder if there is going to be enough water left for the cotton-growers and towns. It just seems that if they do this they are putting out a huge amount of money and it is not going to improve the situation down the river. One of the reasons they say they need this dam is water security through droughts, but there will be no more security if they use more water in nuts.

The Hon. MARK PEARSON: You have all been on the land for a long time. You have obviously had to grapple with terrible climate changes and very long droughts, but none of you have called for a dam, so how did you manage water during the worst of the droughts?

Ms SMITH: So I am probably at the moment the only one who irrigates out of the three of us. When the water is not there, we do not irrigate. We know that we cannot have it when it is not there, so we manage. Obviously fodder crops fail and lucerne is quite resilient so it hangs on—not through something like we just had of course—but there is normally enough pools for stock and domestic to keep us going for that. The year 2019 was the first time in the hundred-and-something years that my family has been here that that failed. So mostly we have been able to cope with that. But the thing is that we expect that. We know that that is going to happen. That is the natural thing to happen, but it would be much more debilitating emotionally if the water was there flowing past to go to the environment or a town downstream or somewhere else and we were not allowed to touch it, which is what can happen in regulated streams.

So you are put out by the fact that the water is flowing through and making it difficult for you to get over and so on and so on, but the fact that you cannot access it can be incredibly depressing and it does happen because our licence is probably—well, we do not know—but our licences will probably be smaller. Often with regulated licences you get access to 50 per cent of your licence, not 100 per cent, and we have all got very small licences, or most of us have got very small licences, and only what we have always needed rather than being greedy and applying for much bigger licences. It will be detrimental if we cannot access all the water we are allowed to; but if it is not there, it is not there. We are accustomed to that.

The Hon. BEN FRANKLIN: Just one question for all of you, and please anyone jump in. I just want to ask a very gentle question. What do you think needs to be done or should be done to improve water security? Obviously, there are droughts; they are likely to get more regular and water security is going to become a greater challenge. Broadly, what do you think needs to happen to improve water security in the communities in which you live?

The CHAIR: Okay. We will go to the Norrises first, then Mr Caldwell and then Ms Smith for that. Mr Norris?

Mr NORRIS: Trying to build this dam is not going to solve it. I truly believe that building this dam is not going to solve any of those issues. We have actually had to live with the current environmental seasons that we get naturally. We have destocked over here for the last two years during the drought. We have not restocked mostly because we do not know whether we are going to be here or not to basically continue our farming operations or not, but I believe that we seriously need to look at better ways of dealing with and managing the drought situations in these properties.

The CHAIR: Thank you very much. Mr Caldwell?

Mr CALDWELL: Yes. I think they can improve the reliability of the water if they return some of it to the towns. I think they have over-allocated the water. Way back in 1980 they were over-allocating it then. As somebody said, there is plenty of water down there. They are just using it for the wrong things. So that would be one possibility—to buy back some of that water from the irrigators and use it to support the towns. To help, the

Government could help the irrigators and even the towns reduce the evaporation in their on-farm storages. That would be one way.

The Hon. BEN FRANKLIN: How would you—

Mr CALDWELL: I guess when you get into town, they should have a tank on every house and every shed—a couple of tanks.

The Hon. SHAYNE MALLARD: Yes.

Mr CALDWELL: And get all the water from the roofs and that and they probably should ban the spas. They are a waste of water.

The Hon. SHAYNE MALLARD: You are going too far now!

Mr CALDWELL: These are things to improve the reliability of the water for the communities when it gets dry.

The CHAIR: Mr Caldwell, we just have another question from Mr Franklin.

The Hon. BEN FRANKLIN: Just to follow up, you said the Government could help by providing assistance to minimise, or limit, or lessen the amount of evaporation from on-farm storage. What have you found is the best way to do that?

Mr CALDWELL: I am not too sure how to do that but they can put things, float things, on the dams if they are cheap enough and cool the dam, and that reduces the evaporation. That is about the only thing I can think of—to study it, or look at it, and come up with a good way to reduce the evaporation—something on the dam.

The CHAIR: Thank you. Ms Smith, do you also wish to make a comment in response to that previous question of Mr Franklin's?

Ms SMITH: Well, I think the same with carting electricity for miles, water should be more available closer to where it is needed, so taking water down a river where it evaporates and it soaks out, it does all those sorts of things to get to a town 500 kilometres away or more is incredibly inefficient and just poor management. I know we cannot deplete all the underground reserves but dams probably contribute to that anyway, but maybe you could have more desalination plants at the towns where the underground water is not suitable. Just using things more efficiently.

Obviously some of the townies use probably more water than they need. I think a lot of lessons have been learned through this drought and I think a lot of people have got used to using less so that is good. All the pipe schemes, from capping the bores and so on, have saved a tremendous amount of underground water, which then can possibly contribute to town water supplies further down. But, seriously, we cannot keep trapping water way up here to the detriment at the communities much further down. They need those big flows, but this dam, if it is that size, it would fill often, probably, and be empty a lot because it is just too small. It would have to have a translucent flow coming out of it all the time to keep our river a natural flow. Whatever was going in would have to come out. It is just a no-sense proposition, particularly when it is proposed to be so small. It would not stop a big flood like 2011 and it would not help with the drought like 2018-19. It is just too small.

The Hon. BEN FRANKLIN: I just have one quick final follow up, if that is okay.

The CHAIR: Okay.

The Hon. BEN FRANKLIN: Ms Smith, I am just wondering what your thoughts were about Mr Caldwell's suggestion about the irrigators selling some or providing some of their allocation back to the town water supply. Is that something you would support?

Ms SMITH: Look, if they are not using it, I suppose, but I do not like robbing Peter to pay Paul. It would have to be voluntary. There have been a lot of issues with the water buybacks in the past of taking money away from communities. Yeah, I would not like to put too much into that. I do not like to take away from farmers to give to the towns. I think other opportunities have to come up. If people are not going to use the water that they are allocated, then that should be good for the environment and whatever. It makes water more available to those who do need it, or whatever, so buying up licences that are not being used and giving it to someone else actually creates more use.

The Hon. PENNY SHARPE: Thank you everyone for appearing before the Committee this morning. I have a question to Mr and Mrs Norris. First I just want to acknowledge that it must be incredibly stressful to have so much uncertainty hanging over you and all your decision-making and so I just wanted to acknowledge that. Particularly I am interested if you could tell the Committee about the submission in which you talk about

what has happened in relation to lack of consultation with the WaterNSW but also the fact that you have got contractors coming in doing preparatory work or various surveys. Can you just take us through what the process for that is, how they actually engage with you as an individual landowner who is going to be directly affected?

Mr NORRIS: Well, pretty much from the outset we had a phone call, basically, two weeks before they were coming out here that we needed to sign an access agreement with them. They had to have it so it was basically sort of a no-option thing for us to actually have to sign this document to allow these people on our property. Since then we generally get about a week's notice that they are coming. Sometimes it is the day before that they are actually going to turn up. We have had drillers through here drilling all the dam wall site. We have had excavators running through digging pits all over the place and new roads everywhere for their drill sites and things like that. We have had a few other sites dug up around the place in the Aboriginal heritage sites and stuff like that.

It has all been very short notice-type stuff. We rent holiday cabins in it. We cannot have anyone here while these people are on site. It has just been a bit of a nightmare for us. We still have people coming out here and they tell me now they have actually finished their current investigations to this point. We still have them coming out doing the water bores that they have drilled here for water monitoring processes and they are still carrying on those sorts of things every now and again. That has pretty much been the process. There has not been a lot of consultation as to what happens to the information they are gathering. We do not know what that is. We are pretty much out in the cold here not knowing what is going on with it at all.

The Hon. PENNY SHARPE: Just to be clear, there is no compensation once you have signed that access agreement. You sort of sign this and then they just come. Is that the way it works?

Mr NORRIS: I did actually ask that question: is there any compensation for what is going on here? Basically they have said there is not, which I think is justly unfair for the stresses that they have actually put us under.

The Hon. PENNY SHARPE: Given that there is a direct impact in terms of your own tourism business, I would have thought that that was something that was at least contemplated.

Mr NORRIS: We did ask that question and we got no reply.

The Hon. PENNY SHARPE: You signed the access agreement. You have now got people coming onto your property all the time—all of those issues. But has anyone from WaterNSW at any point sat down with you and taken you through where you think this is all going to go?

Mr NORRIS: We have actually had a number of people come out here. They do have the liaison officers. About two months ago we actually had the chief project engineer—I cannot remember his name—come out and sit down with us and discuss and have a good chat to us about what is going on. But every time we write to him to ask questions, the answer you only ever get from him is pretty much that you will have to wait for the business case to be announced before we can actually give you that information. You are still in the cold; you have got no idea what is actually happening.

The CHAIR: I would not mind seeing if Mr Caldwell as an affected landowner also has a response to the questions from the Hon. Penny Sharpe.

Mr CALDWELL: I am having trouble hearing. Could you repeat that question?

The Hon. PENNY SHARPE: Mr Caldwell, the question is: What has been your experience of having people coming onto the property? Do you have an access agreement? What has that been like for you? We are fairly unfamiliar with how this operates, so just give us a picture of what has happened on your property.

The CHAIR: Did you hear that okay, Mr Caldwell?

Mr CALDWELL: I think I have, yes. They did not cause us too many problems, but it was a bit of a worry having all these people roaming around sometimes. We might want to go shooting and shoot a feral pig or something like that and we suddenly realise we have got people roaming around the place doing studies, so we cannot really go shooting. Otherwise, it was not too bad. We did find that when they first came here, they were often given a map with spots on it and they had to go and look in these spots for what they were looking for. The ladies doing the fish survey, the spots on their map were nowhere near where our purple-spotted gudgeon is and we had to point them to that gully ourselves so they could find them. The Aborigines, they turned up with a map with a lot of spots on it and—

The CHAIR: Mr Caldwell, the Hon. Penny Sharpe has a question on what you just said.

The Hon. PENNY SHARPE: Obviously they have been looking in the wrong place for the purple-spotted gudgeon. Was the only way they found the fish because you were there and you said, "No, you will not find them there, you will find them elsewhere"?

Mr CALDWELL: Yes.

The Hon. PENNY SHARPE: So if you had not been there, they would have just gone looking in the wrong spot and would have said, "No, no fish here."

Mr CALDWELL: That is right. I think I heard that right and, yes, that would be right. They were looking in the wrong place.

The CHAIR: On the topic of threatened species, Sandra you particularly mentioned platypus in your opening statement. I think you have all mentioned the Mole River and the biodiversity it supports. Are platypus found along the river?

Mr CALDWELL: Yes.

Ms SMITH: Yes, just about everybody has seen platypus, even since the drought when we were really worried that they may not have survived. They have turned up again because there were still a few pools a long way apart, but they must be quite smart. Also, rakali or water rats have been spotted since. In fact, when Fisheries came here when the river started flowing again in February last year, they found everything they had always found plus something extra which I am not sure what that was. Everything still appears to be here. There is a lot of different sorts of fish, frogs, obviously the tusked frog and little things.

The CHAIR: Thank you. Mr Norris, you mentioned that the tusked frog was found on your property as well, and that is a very rare species. Is that right? Would you like to talk about how that was found?

Mr NORRIS: From what I understand, the tusked frog was vastly different. I think it was about the 1970s when they thought it had actually died out in these western river systems. Basically, it has been discovered here since. We had an independent environmentalist up here. We had an open day along the river to basically showcase the river to people. We had about 70-odd people turn up for that. We had a couple of environmentalists come up and basically we discovered that the tusked frog was here as well as a number of other species. It was actually located here on this property in one of our small dams and along the riverbed just down where the dam wall is actually going to be positioned.

The CHAIR: Is the New South Wales Government putting any money into the finding of that species of frog and trying to save it? Are you aware of anything there?

Mr NORRIS: Not that I know of.

The CHAIR: Okay, I can ask them later.

The Hon. MARK PEARSON: I am just reading your submissions and listening to your evidence. Is it true that you feel that even though you are the landholders and the landowners, you are also stewards or custodians for those fauna and flora that you obviously interact with, you observe and you have come to know over generations? Do you feel a sense of responsibility or stewardship to the animals and the flora on your land that are native?

The CHAIR: We will go from the Norris's to Mr Caldwell to Sandra for responses to that question. Mr Norris?

Mr NORRIS: Absolutely, yes. This whole process has been quite an eye-opener to some of the species that I did not even know existed here that we have actually found since. It has been quite a revelation to us.

The CHAIR: Thank you. Mr Caldwell?

Mr CALDWELL: Yes, I have been here for 70 years and sort of realised what is here. When I was younger, it was just get up and go and make money and do things like that. Being here for so long, I have found things like the platypus and the water rats and turtles and all those things and I realise the value of them. Their natural environment was so nice; it was lovely. I have come to realise in the last 20 or 30 years that it is very important. There is so much of it being destroyed everywhere else in the country, I think we must look after what we have got left, especially in the rivers.

The CHAIR: Thank you. I will go to Sandra. I think this might be the last answer because we are almost out of time.

Ms SMITH: I have probably never thought of it that way, but I guess we have always taken it for granted until it is threatened. There is a reason we stay here. It is a lovely part of the world. As Mr Caldwell said, there

are not a lot of rivers left that are in such good condition as this one and that has not been interfered with. That may be the reason we have got biodiversity available. I probably should say that where the inundation area is, obviously in a dry time things dry up down this bottom end sooner than up there. That is more the area that maintains the diversity of life and species when things are really dry, and there is very little left down here. I think that the country that is going to be inundated is extremely important to be left as it is.

The CHAIR: That is very useful information to finish with that we had not thought of and that has not come up before. Thank you very much for appearing before this important inquiry. I do not believe any of you took any questions on notice.

Ms SMITH: We look forward to getting a copy of your report.

(The witnesses withdrew.)

(Short adjournment)

CHRIS McCOSKER, Executive Committee, Border Rivers Food and Fibre, before the Committee via videoconference, sworn and examined

KYLIE CRAIG, Executive Committee, Border Rivers Food and Fibre, before the Committee via videoconference, sworn and examined

TIM NAPIER, Executive Officer, Border Rivers Food and Fibre, before the Committee via videoconference, sworn and examined

Mr McCOSKER: I also represent [inaudible] and Wenaline Pty Ltd.

Ms CRAIG: I am also an employee of [inaudible] and Wenaline Pty Ltd.

The CHAIR: Welcome back to our hearing today. Mr Napier, do you have an opening statement you would like to begin with?

Mr NAPIER: Only a brief one. Obviously, in primary production our key limiting factor in everything that we do is water. We have plenty of fertile soil, we have plenty of agreeable climate and we have the expertise and technology to do amazing things. But our biggest limiting factor is water. So obviously the conservation of water is a massive thing not only for us as an industry but particularly for our communities as well as the State and the country more broadly. That is where our interest in this matter lies. Obviously there is a project which is proposed or being looked at in our valley and we are keenly monitoring that as we go forward. We are keen to provide whatever input we can to the Committee and to the decision-making process.

The CHAIR: Thank you very much. Mr McCosker, do you have an opening statement or was that statement for the Border Rivers Food and Fibre as a whole?

Mr McCOSKER: Yes, that was the statement for us.

The CHAIR: I will kick off with a few questions to begin with. I note as well that I do not believe you made a submission to this inquiry. We have heard a fair bit this morning about the potential impact downstream of a dam on what is currently an unregulated river. The Mole River is in quite a natural state, with platypus and various native fish which are threatened using that river as habitat. We also heard that the feasibility study in 2017 has highlighted the fact that this Mole River dam would need to be paid for or supplemented by potentially more crops grown in the region, particularly nuts. What conversations has the Border Rivers Food and Fibre had with the Government about that? I might go to you first, Mr Napier.

Mr NAPIER: So far we have been involved in the consultation process on the Mole River dam. Our position on this project has been very much along the lines of, yes, we are interested because it is in our valley, but we cannot for the life of us see how it is going to stack up economically, purely on the basis that it is not creating any new water. It is only managing the existing that we already use in a slightly different way. We have members of ours from the Mole River and we have a range of views across our membership. Some of those guys are going to be directly impacted by it and they are not keen on the idea. We are waiting with interest, like everybody else, to see the business case project to be completed and all those in-depth analyses to be done to see if it is actually going to stack up. But I cannot see how it works with the current production systems that are in place and the fact that it is not creating any new water. All it is going to do is it may slightly increase, over the entire valley, the reliability in its supply, but not much. To that extent, we are not strong either way but we are watching with interest.

The CHAIR: Mr McCosker or Ms Craig, do you have anything further to add?

Mr McCOSKER: I think Mr Napier has covered it well. We watch with interest. We are not convinced there is no new water. I dare say one should not be negative towards it, but we cannot see the benefits in the format in which it is being built at the moment. The business case—we sort of see them as way too small for what you could get out. So, where we sit is not overly happy with what we are hearing, but we will watch it as we go.

The CHAIR: Okay. I wonder if you could just explain for the Committee a little bit about your organisation, Border Rivers Food and Fibre. How many irrigators do you represent? What is the majority of crops grown?

Mr NAPIER: The organisation is a peak body for 10 smaller water users groups which are scattered throughout the valley between Tenterfield in the east and Mungindi in the west. We have the unique distinction of being a cross-border organisation as well. Half of our membership is in Queensland. Because of the nature of the river, or the water resource, being a shared one we have that distinction of having to manage both States, or trying to coordinate both States. We have over 200 individual water users on our books. Again, that ranges from the small horticultural guys in the east and on the slopes, through to the bigger broadacre operators down on the

flat country. Water wise, most of the water is used on the most economically viable crop, and that is cotton. We have seen an increase in recent years—there have been some nuts planted in the upper reaches of the valley. Interestingly, where the nuts have been planted is where, historically, that area used to grow tobacco. That started off back in the forties and fifties. So some of those areas are now being planted to nuts.

We also have a range of horticulture—there are berry tomatoes and wine grapes and all those sorts of things—again, grown up on the slopes. There is some hay production, some fibre production, but I think that is fairly limited now and tends to be on the smaller acreages where they have got the higher returns. But, yes, predominantly, in terms of the volumes of water, it is used on annual crops. Because the nature of our system is that it is a summer rainfall climate, so most of our rainfall falls over the summer months and typically in the form of storms. That is compared to the southern connected system, which is a predominantly a snow melt system with massive storages and is run very differently, and for very good reason. I guess that is a quick thumbnail sketch of where we are as an organisation.

The CHAIR: Say that this dam does go ahead, I understand, again from that feasibility study, that may see a shift—for example, some of the farmers up there planting cotton may shift, as you said, to a more economically viable crop, which I understand is nuts, if the water is available. What impacts do you see this having, whether on some of the landholders who are farming perennial crops who do not move to nuts—will it impact other landholders if you see a big increase in nuts being planted, irrigated and a whole industry up there?

Mr NAPIER: Look, I think in terms of nuts and other permanent plantings, for them to be economically viable then they need the security of supply, which currently we do not have with our existing water storages. There are a couple of reasons for that. We have had water storage—I think the first ones were built in the late sixties, early seventies. Our two major dams are only built on second order streams. Our two main tributaries, being the Macintyre and the Dumaresq—neither of those have dams on those streams per se. The dams that exist are only on the tributaries to those main streams. So, again, that is for good reason and that is that typically most of the rain in our part of the world, when it falls, is on the plains rather than in the hills, which is different to many other areas, especially down south. That water security is the number one factor that is required and supply of that water every year without fail. That is because, as we have seen in many other areas, including the Murray, when you have drought years, that is when the system falls over if it is not adaptable enough, and once you commit to permanent plantings then you lose that ability to have a spell for a year.

The CHAIR: Yes, if permanent plantings do go ahead there as a result of this dam and many more nuts are planted, it will have impact on other crops and potentially landowners that do not, for whatever reason, go down the nuts path though, will it not?

Mr NAPIER: It could. But, again, people will grow what is in their interests to grow, what is going to return the greatest return for the resources that they have. One of the biggest risk factors, as I said, in permanent plantings, especially in our part of the world, which is naturally ephemeral, is that it is very much a boom and bust system, and it always has been, the dam that we—

The Hon. MARK PEARSON: So, could I—

Mr NAPIER: I beg your pardon?

The Hon. MARK PEARSON: Sorry, you finish that. I was going to ask a question right on that point, but you finish.

Mr NAPIER: Okay. The size of the dam that they are proposing is only in the order of 100,000 megalitres or thereabouts, which is only going to raise—you know, the valley total at the moment is only just over 500,000, so we are only looking at an increase in storage capacity of about 20 per cent or thereabouts. It is not going to make that much of a difference in terms of volume stored and where that is used. So, yes, it will have some difference, obviously. But the other thing that I think is really important to consider is the fact that it is only a small dam and it is going to cost a lot of money to build, which means that it is going to be expensive water. So whatever water comes out of it is going to need to go onto something very lucrative and will need that surety of supply for that to work.

The CHAIR: That is very useful, thank you.

The Hon. MARK PEARSON: It is quite a puzzle actually. So why, in such a dry country where we are getting drier and hotter, would there be such a push to grow nuts from water that is going to come from a dam which is going to cause quite a lot of damage, according to a lot of the evidence, and not necessarily benefit the farmers in the area unless you are growing nuts? Have you been able to get your head around what is going on?

Mr NAPIER: I think it is easy to get caught up in the detail of what may or may not be grown. Crops tend to come and go in terms of what is profitable, what is good, and that has got lots to do with global markets,

all those sorts of things. I mean, it was not long ago that citrus was the flavour of the month and everybody was growing citrus, and before that it was wine grapes. Those things come and go with the influence of global markets and other factors as well. I think it is potentially dangerous to get fixated on the fact that it might be nuts. It could be something else entirely. I mean, we have had trials of hemp and all those sorts of things. There is all sorts of research going on into different crops that could be grown. But, fundamentally, farmers are going to grow what is going to keep them in business and if there is perceived to be too big a risk in something, then they are not going to go down that track, especially if the water is going to be so damn dear that they cannot afford to put it on anything.

The CHAIR: Mr McCosker or Ms Craig, do you have any comments?

Mr McCOSKER: No, I support what Mr Napier has said. I think that if water is available, markets or farmers have the ability to quickly determine what there will be money in. I agree with the idea of nuts, yes; it is a bit of a catchcry. Catchcries are not always what come to the face when reality sets in. I have no problem in saying that farmers will determine what gives the best value. What we do need is a reliable water source and that is a thing that the water just does not have, and that is our biggest, I suppose, issue that we have with any moving forward—security of water. This one dam I think will create a little bit of animosity between States and will be a New South Wales initiative that our Queensland friends, of which I have on both sides of the border, I know will not be happy because it will affect that water to both States by what it does. It will affect our licensing conditions rules; it is opening up a can of worms far greater for them as well.

The CHAIR: Thank you. The New South Wales Government's submission to this inquiry—in fact, they have made a supplementary submission, it is submission 152 I am referring to—but they do say here, and they are talking about the Mole River dam, that a new dam would have the potential to secure more water in flood sequences so that in drier times more water would be available to communities, agriculture and the environment. Mr Napier, is that a sentence that you agree with and see that that is fair enough?

Mr NAPIER: I can understand the statement. I guess fundamentally by increasing water storage capacity then you are going to be increasing security longer term. Our issue remains that we are yet to see how much that water is going to cost that is held in those dams and just how viable it is going to be in terms of commercial production. It may be that it supplies a horticultural boom on the granite belt or around Tenterfield, where I know there are guys up there who have been screaming for water for years but because they are up above the water supply they have not been able to get hold of it. That may help in promoting a new industry in those areas, but I struggle to see how it would be viable in terms of commercially. But again, that is why we are waiting to see the business case until we can actually see the facts and figures about this, because we are really only speculating until we see that.

The CHAIR: Because again with the increased water cost that you said or if, for example, you were saying it might spark new industries in particular parts of, say, the catchment, but that water will have to come from other users, will it not, because of course we are hearing it is over-allocated, if anything? So where do you think the water would come from to grow these new industries? Is it downstream? Will people have to sell water? What would happen?

Mr NAPIER: Well, again, that is why we are waiting to see the business case. But you have got to understand that in the border rivers, being a shared resource between two States and the border rivers agreement, which has been in place since 1946, means that the resource is to be shared 50/50 between the two States. If one State builds a dam and upsets that balance then that has to be addressed. My understanding is there have been some preliminary discussions with Queensland but I am not sure how far that has got as yet, but obviously being a New South Wales tributary then the water that is impacted at the moment belongs to New South Wales until it becomes part of the shared resource. Once it is in the main river then it is a shared resource. So by building a dam then you are going to reduce Queensland's share of the resource. That means that that is going to need to be redressed as well or Queensland are going to buck over the change in balance in the viability of the resource to their people. So there is a lot in this that needs to be sorted out which has not yet and, again, we are waiting to see the details of the business case as to exactly how that is proposed.

The CHAIR: So the Mole River dam sits upstream at a point. Even though Queensland is north you are saying that the potential—I am just trying to get my head around this—that the dam is situated at a point where it flows back into Queensland somehow and will impact. Is that what you are saying: it will impact Queensland? Some of the users are actually in Queensland. I need a map in front of me in trying to work out the topography of the river system.

Mr NAPIER: Currently the way things sit is that some of the water that comes from the Mole into the Dumaresq, which is where it becomes a shared resource, some of the water that comes out of the Mole is used by Queensland water users under current arrangements.

The CHAIR: Which river does it become a shared resource? I missed what that was.

Mr NAPIER: Into the Dumaresq. It is probably worth a quick history lesson here too on the way that these dams have developed over time. You will see on the map also Glenlyon Dam, which actually sits in Queensland, but of which New South Wales owns 57 per cent of the water which is stored in it. This is fairly mind-numbingly detailed, but the reason for that is that when Glenlyon Dam was built it was proposed that the Glenlyon would be one of two; the second one would be the Mole River dam and then Queensland would own a similar share of the resource in the other dam so that there would then be a balancing out and the interstate agreement would be observed that way. Obviously, that dam was never built.

Instead, at the time, New South Wales governments allowed and promoted the building of on-farm storages because you have got to remember that in those days, in what we now refer to as a historical climate, flooding was a major problem for all the towns and businesses in the region and that by allowing access to store water on farms that removed the requirement for the New South Wales Government to have to build another headwater storage, but it still managed to capture water and to promote regional development, which was a priority of all governments at the time. So that is how we have ended up with this imbalance of water storage in the valley.

The Hon. BEN FRANKLIN: Thank you all for being here today. I just wanted to go back a step and to just ask from your perspective what you saw in terms of the impact that the drought had on you and your communities. I would be interested if you could look at three areas: obviously, environmental, social and economic.

Mr NAPIER: The impact of the most recent drought has been, I do not think you can call it anything else but catastrophic. We consider that we have basically been in drought since about the year 2000 with about four wet years which have interspersed that and provided us with the continuity to get through. At a farm level it has been very, very destructive. Obviously in a farming context or in an annual farming context you can tighten your belt and you can make allowances and struggle through until it does rain, in many cases. In some cases that has not been possible; people have gone to the wall and have sold up as a result of a complete lack of production over, I guess, particularly the last five or six years.

But when we look historically we go back 20 years when we are referring to this drought. In terms of production on-farm, I do not know the figures exactly but I think that there would have been an 80 to 90 per cent reduction in productivity in the agriculture sector. That then flows on to all the businesses and everything else in town, in terms of the lack of cash flow that is coming into suppliers—things like supermarkets, fuel and even schools, and that sort of stuff. That has also been devastating.

The Hon. BEN FRANKLIN: Thank you. In your view, what role did existing water infrastructure like dams and weirs play in ameliorating, if at all, the effects of the drought in your region?

Mr NAPIER: It has allowed us to maximise the benefit that we had from those—as I said, there have been breaks on the way through, but we have had more drought years than we have had wet years. It extends the benefit of those wet years, because one of the fundamental principles of water conservation is that you store it when it is wet and use it when it is not. That is a fairly basic principle behind the whole thing, so that is what storage capacity has allowed us to do. It has meant that we have been able to have some production and extend the benefit of that production over a number of years, not just the one year when it occurred.

The Hon. BEN FRANKLIN: I understand that your jury is out until the business case comes back on the potential Mole River dam. Are there any other specific projects that you think should happen in terms of improving water security in your region?

Mr NAPIER: Yes, there are, and there have been many proposed over the years. Initially there was a dam proposed on the Dumaresq at a site called Mingoola, which would have captured not only the Pike Creek where Glenlyon sits now, but it would also have captured the Mole and the Tenterfield Creek and everything else upstream of that. I think that was proposed back in the 1940s or 1950s. My understanding is that the technology did not exist at the time to build a dam in that particular geological feature. I understand that it does now but that there is already a dam in place, so the benefit is not there so much. That would have been a far better outcome had they done that back then, but they did not.

Beyond that, there is also the likes of the Coffey scheme—again, it is one of those ones that has been proposed for many years—which is a diversion from the Clarence. I understand that it is part of some of the Federal Government's proposals that they are looking at under the National Water Grid. Looking at the bigger picture rather than the micro local impacts, a project like that would be on a similar scale to parts of the Snowy Scheme, in that it would be a large storage. It would incorporate hydro renewable electricity. It would carry enough water to potentially completely drought-proof the Darling and all points below it. It would be an entire game changer, I think, for the basin. Nobody is expecting this to be built overnight. The political reality seems to be that

building water storages in this day and age is a bad idea. From our point of view, we think that is a very naive and a very selfish view to take on it.

The CHAIR: I have another question in relation to something you said earlier, Mr Napier; I just wanted to get clarification on this. Just going back to the Glenlyon Dam being built, I think you said the share between Queensland and New South Wales was something like 48-point-something—not quite fifty-fifty.

Mr NAPIER: Yes, 57/43 is the split, with 57 being New South Wales.

The CHAIR: When you then talked about the Government allowing and promoting the use of on-farm storages, was that New South Wales and Queensland?

Mr NAPIER: Both. Look, in this context we are only talking about New South Wales, but that was certainly promoted at the time as a way of achieving the outcomes without having to build a storage.

The CHAIR: What time, roughly, were you talking about? What years?

Mr NAPIER: I think that would have happened in the 1980s and 1990s. I am not sure about New South Wales, but I know Queensland actually subsidised the building of on-farm storages. Mr McCosker, you might be able to help me here. I am not sure whether they did in New South Wales or not, but it was certainly promoted.

Mr McCOSKER: Not so much proposed, but promoted as being a means of bringing our security levels up.

The CHAIR: Yes. Also, with the statement that you made about therefore removing the requirement to build another storage, were you specifically referring to the potential for the other storage being Mole River dam, Mr Napier?

Mr NAPIER: Yes, that is my understanding. That was the initial intention; the two States were to build two dams as twins, essentially, and manage them together.

The CHAIR: And were the on-farm storages that were then built in New South Wales—in terms of the amount that has been captured by those on-farm storages, have they matched in terms of how much they have been able to hold? Have they met their purpose in terms of not requiring another dam—a Mole River dam?

Mr NAPIER: Yes, absolutely. Absolutely. They did the job they were designed to do and were the perfect solution at the time, in terms of enabling the development to occur.

Mr McCOSKER: I agree with what Mr Napier said. The on-farm storage was a means for us to stay in business, meaning the industry within New South Wales. It was certainly not a means to where it brings our reliability factor up to one that is acceptable, which does and must include new water, and it does include Government storages. I may not be quite following the page, but we need to increase Government storages, there is no ifs and buts, to make this valley and this reach of the river—and we are talking New South Wales. Queensland will come to bite us a little bit here. We need to do something to bring our security levels up to something that is acceptable to keep our communities alive. What we have at the moment will not keep the socio-economic needs of this valley and these towns alive. We have seen that. I have been here for 40 years and I have seen three droughts [audio malfunction] three times the people have [inaudible] and that is because of lack of security.

The CHAIR: Thank you very much. I think that was all very comprehensive. We are out of questions, I understand, so thank you so much for your time and for appearing today. That was very valuable and we appreciate it. I understand you did not take any questions on notice, so I do not think you have anything to worry about there. Thank you very much for appearing today.

(The witnesses withdrew.)

(Short adjournment)

THEO WRIGHT, Ngarabal Elder, Director, Severn River, Ngarabal and Kwiambal Aboriginal Corporation, sworn and examined

LYNETTE MARLOW, Director, Severn River, Ngarabal and Kwiambal Aboriginal Corporation, affirmed and examined

HELEN DUROUX, Chief Executive Officer, Moombahlene Local Aboriginal Land Council, before the Committee via teleconference, affirmed and examined

The CHAIR: I welcome our witnesses for this next session. Aunty Helen Duroux has joined via the WebEx link, but her video is not on. Aunty Helen, can you hear me and will you be turning the video on? We have had some technology problems today. While we are trying to sort that out, we will swear in the other witnesses. You cannot beat good old-fashioned in-person witnesses. We will try to dial in Aunty Helen. Welcome, Aunty Helen. I am Cate Faehrmann, Chair of the Committee that is enquiring into the dam projects.

Aunty HELEN DUROUX: Thank you. I am sorry about the hiccup there.

The CHAIR: That is okay. We are sorry. It was probably tech issues on our end. In the room are Uncle Theo Wright and Ms Lynette Marlow. Provision is made for witnesses to make a short opening statement. Ms Marlow, I believe you have an opening statement.

Ms MARLOW: We would like to start by paying our respects to the Gadigal people of this land, past, present, and future. We would like to thank Uncle Colin Isaacs for giving us permission to bring Ngarabal issues to this country. We would like to introduce ourselves. Uncle Theo Wright is a Ngarabal Elder. Aunty Helen Duroux from the Moombahlene Local Aboriginal Land Council is attending. I am Lynette Marlow, a Ngarabal and Darug woman and student at the University of Western Sydney, Master of Education (Social Ecology). We would like to thank the parliamentary Committee for inviting us today.

The Severn River, Ngarabal and Kwiambal Aboriginal Corporation began in December 2019. The reason why it began was that we were quite concerned about the Murray-Darling Basin. We wrote a letter to the Murray-Darling Basin in mid-2019. The reply from the Murray-Darling Basin was that it was not possible to repair over 100 years of damage to a vast river system overnight, suggesting that the New South Wales Government had mismanaged a resource that our people, the Ngarabal, and many other nations had managed since the beginning of time. Secondly, the corporation began because the Murray-Darling Basin Commission had published a report named *Culturally Appropriate First Nations Consultation Report with Ngarabal Nation*. They went to one land council and spoke to nine people, and in that report there was sacred women's business that should never have been placed in a public document.

The objectives of our corporation are to advance, maintain, preserve and protect the Ngarabal and Kwiambal law, culture and heritage; to protect the sovereignty and self-determination of the Ngarabal and Kwiambal people's homelands on the Severn River and its catchment areas of Frasers Creek, Marlow Hill and its surrounding areas of Deepwater, Edgerton, Pindaroi, Mole River and Nucoorilma Aboriginal mission stations, the Beardy Plains and the border rivers and catchment areas in New South Wales and Queensland; and to advocate on behalf of our rivers, their flora, fauna and ecosystems. The Ngarabal land management is part of our being, our heritage and our spirituality. It affects our wellbeing and our health.

The issues with the EMM consultation began with a letter sent to Moombahlene Local Aboriginal Land Council on 22 April 2020. The Severn River, Ngarabal and Kwiambal Aboriginal Corporation was not informed of the EMM consultations. We were informed through Facebook. We are not voting members of every land council because our land is divided by three local Aboriginal land councils, so consultations like those with WaterNSW and the Murray-Darling Basin Commission do not particularly involve traditional owners. At the beginning of the consultations, Uncle Theo and myself gave EMM a copy of our genealogy, which goes right back to colonisation and proved our connection to country. I want to stop here and note that under the United Nations Declaration on the Rights of Indigenous Peoples we have the right to make decisions where we are fully informed and with our own representation under our laws. Secondly, in January this year the United Nations committee against racism and discrimination had advised the Australian Government to change its consultation methodology with Indigenous people to make sure that there is meaningful consultation.

We have found that EMM has tried to separate our members and our communities in this consultation. They wanted to have two or three spokespeople to make decisions. However, at the meeting at Tenterfield in October 2020, our Elders told EMM that we come together as one mob and we will not be divided. The timing of the consultations coincided with the COVID pandemic. On 31 March 2020 the Prime Minister Scott Morrison advised all Indigenous people over the age of 50 to stay indoors and self-isolate. We are a vulnerable community. Even though there was a pandemic, WaterNSW continued with the Indigenous consultations.

These consultations, we felt, were set up to fail, and if it were not for our self-determination of our communities, we would have been railroaded. This also ended up in a series of problems in our community where Elders could not attend meetings. It placed our Elders at risk. Our Elders do not readily use Zoom or telephone conferencing, and most of our meetings are face to face. Uncle Theo, for example, was in lockdown in a remote community in Western Australia. He had to get three passes to come across to New South Wales for the meetings. Effectively, WaterNSW placed our people at risk emotionally, mentally and physically, and they stifled the consultations.

At one time the consultant had arranged a meeting in Toowoomba. Under our law and protocol, business cannot be discussed in another tribe's country without the permission of that other tribe. This was explained to the consultant, and we complained accordingly. But no-one turned up to the meeting in Toowoomba. The consultant had kept an open-door policy for the consultations. However, our business about country is usually done face-to-face, not on the phone or videoconferencing. Uncle Theo had no choice but to have telephone interviews when he was in Western Australia.

We felt quite patronised by the consultant. There were times when our community felt that our intelligence was insulted. For example, William Wedge Darke's map, 1849, was presented to the consultant. This map shows our Dreaming track. The map showed evidence that the Mole River is a major walking track for our people. The consultant suggested it was a terrestrial map. We have also given photocopies of that part of the Mole River and a legend to the Committee. We have found evidence in William Gardner's manuscripts pre-1855 that the Upper New England-Lower Darling tribes met at the junction of the Mole River and Pikes Creek before going to war against the early colonists. In this war the early settlers walked off the farms up to Boggabilla. In the mid-1840s, to facilitate peace on the Severn, Sovereign—which is at Dumaresq—and Macintyre rivers, the native clans were given these areas on stations to live peacefully. These are our water rights. This may have been the first treaty or co-existence. This information is confirmed in a Colonial Secretary record 1848/2590. Other clans were placed along rivers up to the Barwon. There is also substantial archaeological evidence that the Mole was a major area that was inhabited by us as a native highway. However, when our people told EMM of the archaeological evidence in the diggings, we were basically ignored. I think Aunty Helen will expand on that.

The Mole River consultancy included a cultural heritage study but no historical scoping study. As far as we are aware, the anthropologist, who we thank for his service, was not procured in a merit-based selection. We had little say over the consultant anthropologist. The selection was against the normal government practice, as far as we are aware. The anthropologist was a friend of the EMM consultant. He had worked previously for him. This, we believe, is a conflict of interest. Secondly, the anthropologist was from South Australia, not from universities that had built a rapport with the Ngarabal people—for example, the University of New England or one of the universities in Sydney. The anthropologist met with us for four days. The term of reference was distinctly on the Mole River imprint, not on the surrounding areas which the dam would affect. The report was returned to the knowledge-holders who EMM had chosen to be part of that report. People within our community, including myself, suggested that this report needed to be signed off by our Elders. But EMM said no, and it has not been signed off.

Next, with the cultural mapping, the anthropologist said that there was little evidence of the Ngarabal living on the Mole. However, the Mole River is significant to the Ngarabal. For example, in the Norman Crawford manuscript, found at the University of New England, it suggests that there was a massacre on the Mole by poisoning. The massacre was covered up by authorities. The story is corroborated by a Colonial Secretary record 1840/4716 which describes a poisoning of blacks which was covered up. This poisoning was on the Beardy Plains, which in those days included the Mole River. Both stories correspond with each other. We note that the University of Newcastle's study on massacres use one manuscript. We have actually found two regarding this massacre. The school records of Mingoola and the Mole River suggest that the Ngarabal lived in that area in the 1900s. Some of our Elders who attended the consultation worked on the Mole River. This was not included in the report. I have to say that EMM have acknowledged that the historical data was not collected and they actually paid to go and get the historical data in the last few weeks.

Jacky Power's grave is another issue. We believe that Jacky was a child spared from a massacre by a shepherd called William Bates. The NSW Water documentation states that Jacky's reserve was revoked in 1907. Jacky died in 1903. But there was no record in the New South Wales archives, department of Aboriginal Protection Board, that this land was officially revoked by the Aboriginal Protection Board. As suggested by NSW Water, there is not a stamp from the Aboriginal Protection Board on the manuscripts that they have given us. The land was not vacant by our law as Jacky is still buried there. We demand that this land be handed back to the Ngarabal people.

We have requested EMM provide the Ngarabal with documentation regarding the tusked frog and other marsupials that are endangered species on the Mole. We have requested information on the effect of the dam on

the long-necked turtle and the spawning of the Murray cod. The Murray cod—Goodoo—is specifically part of our Dreaming stories. The cod does not spawn in cold waters of dams and to date we have not been given any information so that we can make an informed decision about our cultural and heritage. The flora and fauna in Ngarabal country is our concern and these are our Dreaming and song lines and our law.

We have requested EMM provide information regarding the effect of the arsenic mines on the water system. We were told by the consultant that there were ways to take arsenic out of the system. However, this is only for the water for human consumption. To date we have had no further information about the effect of the arsenic on the waterways of this dam. In our mind the river system requires more sustainable and alternative crops and farming that do not require as much water. These industries may include hemp and fish farming, and we have had a solar panel farm recently on the Dumaresq. Maybe the Government should enact legislation to enable more sustainable farming practices and industries.

Lastly, an alternative dam site—there is a private dam in Rangers Valley. This dam is over two kilometres long and one kilometre wide. The dam is easily seen on Google Maps and this water is already taken out of the Severn catchments. It could help townships of Emmaville, Deepwater, Dundee and Glen Innes and would benefit some of the closest dams with larger populations.

The CHAIR: Thank you Ms Marlow, that was comprehensive and useful. Aunty Helen, do you also have an opening statement?

Aunty HELEN DUROUX: Yes, but not as complete as Ms Marlow. I would just share a little bit of my history, if that is okay. I am currently 64 years old. I have lived and worked on this land around here and down the Mole River since I was old enough to work. I started work when I was 16 and I have been working ever since. I have lived in Tenterfield since I was born with my mum and dad who moved from Toomelah and resided at Tenterfield at Curry's Gap. Our aunts and grandparents and mum and dad often took us down to the Mole River where we camped, lived off the land down there and I was taught all my cultural knowledge from down around the Mole River area. I feel that that land belongs to me even though I am of Kamilaroi ancestry. I have lived and worked on this land since I was old enough to walk. I have been with the Moombahlene Local Aboriginal Land Council, this year is my ninth year. So I am quite familiar with what happens around the town.

I have made it my job to be aware of what is happening and to step up if needed in regards to issues such as this proposed dam. I was involved since EMM Consulting came to town by organising an Aboriginal focus group here of elders to represent and receive information about what was happening with the proposed dam. Our focus group and our cultural workers have been involved on the ground on site since the first works started, which was on the site of where the dam wall is proposed. We have had local experts that have been on hand, local elders that walked to see where it was and how much land it was going to affect and how the landowners down there are going to be impacted and which ones were going to be impacted as well. We have been on the ground since the proposal for this dam was first put on the table. We have concerns, now that some of the reports have been given back to our focus group.

We have concerns about the truth in reporting from EMM Consulting. We have evidenced more cultural heritage on the proposed dam site than has been reported on and feel the evidence of cultural heritage is an incomplete report. I am part of the Mole River alliance which encompasses a lot of property owners from down that way. I have been in touch with those as well and I see their reports and some of the reports that are given to them do not disclose as much cultural heritage as our Aboriginal cultural workers have come back and reported on. That is why I am saying that their evidence of cultural heritage that is on that proposed dam site is not a truthful one, or it is not based on thorough facts, and has not been reported on in a cultural heritage sense truthfully. When our cultural heritage workers offered their knowledge, which is one that has been handed down over time by their parents and grandparents, mostly their cultural information has not been respected by EMM when it has been offered by local Elders.

Our cultural expertise has often been disregarded as not expert as the educated archaeologists and anthropologists that have been involved. As we all know our knowledge is not learnt in books, it is cultural knowledge that has been handed down to each generation and it is knowledge that I have a lot of confidence in the truth of it. What we will be asking for from EMM is that we have an independent archaeologist or anthropologist, and for somebody of local knowledge of local people to participate in a cultural mapping for our community as well. We are feeling like our focus group—it is hard not to get angry when we are sitting in our meetings because the community has been split, as Ms Marlow said. You have people that were going to participate in Toowoomba. You have people that were participating in Tenterfield and then there was a meeting that was held in Inverell as well.

In each of those meetings we were not given feedback about what was actually happening. In one of the meetings in Inverell EMM were asked to step out while the community over there decided whose voices could be

heard to prove their connection to that land. I spoke to Ms Marlow the other day and I expressed my concern that very few of the people that put their hand up over there at Inverell had actually lived and worked on the land of the proposed dam site. All I am saying is that I understand all the information that Ms Marlow and Mr Wright have has been accepted by us all here in Tenterfield because it has been proven. All I am saying is we want local knowledge of that site down there to be upheld as well as the educated people EMM Consulting have employed. That is all I am saying. We would have really loved to have had our cultural knowledge respected.

The CHAIR: Thank you very much, Aunty Helen, for that. We do have a few questions and it is important that you have the opportunity to give us your views on this proposed dam. Thank you both very much for your opening statements. Uncle Theo, Ms Marlow said that you had a couple of conversations, phone calls, as part of the consultation. Could you let the Committee know what you conveyed to the consultant during those conversations. What did you tell them about how culturally important the Mole River is and what impact damming the river would have on the river and your people?

Uncle THEO WRIGHT: Mr Williams seems to not want to listen.

The CHAIR: Just to get it clear, he is from EMM?

Uncle THEO WRIGHT: Yes. He just doesn't want to listen. When we have meetings he doesn't ask us questions. This man comes in there and railroads us. He tells us. He doesn't ask. "This is the next step. This is what we have to do next time. This is what we have to do." He hasn't even got back about the arsenic in the mines. He hasn't even got back to us about the gudgeon and the frogs. He is ignoring us. He thinks our intelligence is back in the sixties.

The CHAIR: We do have to be a little bit careful on these Committees about making adverse mention of individuals because they will then be given an opportunity to respond and—

Uncle THEO WRIGHT: I just can't think of his company, that's all. That's why—

The CHAIR: Yes, and possibly what you are saying is very valid, but if you could talk about your concerns in terms of what you have tried to tell him, it may be better for us to then hear him not getting back to you because—

Uncle THEO WRIGHT: He does not want to listen about our culture. We tried to explain to him.

The CHAIR: But if you could explain now to the Committee what you were trying to tell him so we can hear that.

Uncle THEO WRIGHT: What I am trying to tell him is—and I have said it to him—you want to put a dam up there. I said, "You are destroying our country". He said, "No, I'm not". Well, he must be if he is going to put a dam there. He has got to get machinery in there. Not only that, I have asked him about—okay, we had a meeting on the phone. I asked that we need our own independent anthropologist because I said all along it was a conflict of interest because this man worked for him once before. Wouldn't you think that you would do everything right by the book, by the guidelines that the Government set out? No, he has not. Not one bit. When it comes to us and our culture, he doesn't listen. If you look in the cultural report, he has only got two families sitting there.

The CHAIR: So, Uncle Theo, what is the cultural impact on your people of the Mole River dam?

Uncle THEO WRIGHT: The impact on my people when that dam gets built—then you have killed our Dreamtime. You have killed my walking track. You have killed all my storylines, my dance lines—you killed them all. So to this day we're still getting killed, no matter which way you look at it. And being a cultural man like I am, I feel very strongly about what you people are doing. You haven't even stopped since you've been here. I feel very sad for my people because you are going to put water—you are going to put an old man that's in the ground, and that's wrong. The company wants to move him out of the ground. That's wrong. That's against our law.

When we find artefacts, where are they? They took them. Where are they now? There is no decision—he hasn't come back. He's been telling too many stories, listening to people that have got no connection to country. Yet we're sitting there trying to do the right thing with him and educate him but he looks at us like we're not educated. We're not "yes" people. We stand up for what we believe in and we don't want this dam. It is not only for us—think about all the people, all the farmers. This man can't even come back and say nothing to them, as you heard. The reports—what reports? We keep asking him. Nothing. He just keeps going the next step, the next step.

My people are getting tired of being run over. Our country—you took us from the coastline, you pushed us inland. So we made a home. So there is our storylines, our songlines. Our walking tracks—it is a highway. Yet there are massacres there. That is my people that are dead there, not you fellas. What respect have you got? None, but you ask us to give you everything and take everything from us. But you leave us with nothing. These people,

you have got to understand how we are and how we feel. When you are going to go and put a dam on our country, did you ever think about what's on that country? No.

You have another dam there but it's privately owned. Why can't you use water from there? No, because it's privately owned. But you want to take our land and all our songlines, all our walking tracks. There are caves there. This man went and saw the caves. He didn't even bother getting them bone tested. "Oh, it's probably a cow." Well, how did that cow get in there? "A dingo might have dragged it in." Look at the size difference. Come on. When there's massacres on, black fellas don't run and hide in paddocks: They look for caves but this man doesn't want to even know nothing about it. And we're trying to explain to him but he doesn't listen. Wonder why we're sitting here today talking to you people. For the same reason: Nobody wants to listen to us. You all want to steamroll us, and that's wrong. Very wrong and disrespectful. He is a very disrespectful man.

The CHAIR: Thank you, Uncle Theo. Just so you are very clear, this inquiry is made up of people from all political parties. We have not approved the dam and in fact we are looking very critically at whether it should go ahead. You can be assured that we are looking very strongly at the evidence and are very glad that you could appear today and be heard. This is not the body that has approved the dam and I think you will find a fair few views on this Committee are quite critical of what has happened—possibly everybody is. Rest assured that is who you are talking to today, so we are very glad you could come before us and be heard.

I have a question for Aunty Helen. I just wanted to be clear with this. You said in your statement that your Aboriginal cultural workers—I understand what they come back and report on is more extensive than what is in the report. Is there any written evidence that you could provide the Committee, or would you like to now just explain to the Committee more of what your Aboriginal cultural workers are finding that is not in the report? Now is quite a good time to put that down. Before we do that, can we get a copy of your opening statement, Ms Marlow? There was a lot in there and the secretariat could take a copy now to make some photocopies.

Ms MARLOW: Yes. Could I say that when we met with the anthropologist—because I do a lot of historical research—I gave the anthropologist all of Tindale's background papers. It was about a two-inch binder. I met with the Elders at Inverell the day before to have permission to give these to the anthropologist. I told the anthropologist to look at the Crawford records at the University of New England and to look at the William Gardiner records. He didn't, and this is where all the information was about the massacres and about where we were given our land in the 1840s after the colonial wars on the rivers. He did not put any of that in. This was evidence that could have—it was unbiased evidence.

The CHAIR: Aunty Helen, can you expand for the Committee upon what the Aboriginal cultural workers—some of what was found that was not in the report?

Aunty HELEN DUROUX: As Theo said, there was a cave that had bones in it. None of those bones were tested. They were just put down as animal bones with no testing. I had one of the workers that was going to come with me today and talk about that but he was taken ill this morning. They said that—I am just going to relay the disrespect here that was shown to these workers. We found evidence of clay balls which were made by people who lived on the land there. They were used for—the food was put into the hole, the fire was put in as well, and the clay balls were put in to work as an oven because if they used the granite rocks the granite would bust. So they used the clay balls in the same way as the Maori people use a hangi. They put a hangi in the hole.

They went back a week later after they had reported it to EMM. They went back and those clay balls were tossed out of the way—just tossed into the grass and it was like they were disregarded as to their importance to the Aboriginal workers that were there. A few of the boys were actually going to walk off the job because when they came back the week after and those clay balls had just been tossed aside they thought, "Well, why are we doing this? Why are we trying to find evidence of prior occupation and previous cultural heritage evidence when it was going to be totally disregarded and chucked around like that?" The boys actually asked who was there and then they took it up with the property owner and he said he and them were down there and they were the last ones on the site there and they were the ones that through the clay balls around.

The CHAIR: I have just one question of clarification before I go to the Deputy Chair, the Hon. Mark Pearson, and I understand probably some other members will have questions. Sorry to interrupt you there.

Aunty HELEN DUROUX: That is all right.

The CHAIR: What about some photos? Did your cultural workers go and take photos? Ms Marlow is nodding "Yes", so there is evidence of where they were.

Aunty HELEN DUROUX: Yes. Wally, who was going to come with me to this, he was going to come with me this morning and talk to you guys. He has pictures on his phone. He took photos of everything. They also spoke to EMM about marker trees and that was totally disregarded as well because they had never heard anything

about marker trees but the marker trees are done, are boundaries, to show other tribes that may come that this is a boundary, you know. That was more or less scoffed at because the art guys and the anthropologists had never heard of boundary trees.

The CHAIR: Thank you. We will move to questions from the Hon. Mark Pearson.

The Hon. MARK PEARSON: Thank you. I am just interested in your statement, Uncle Theo, where you sort of get very specific where you say that the Severn Aboriginal Corporation believes the dam would affect your culture, your society, the bio, and you will not be able to maintain, express and manifest your spiritual connection to Ngarabal lands. Can you just explain that a bit more if water comes up and covers these things—

Uncle THEO WRIGHT: If water comes up, what am I going to tell my kids? "Let's just jump in a submarine and I'll show you our story line. I'll show you my walking track. I'll show you where we used to camp. I'll show you where people are buried." So, what? I have to put them in a submarine? That is what is affecting us. That is what is hurting me because I cannot take them there if this dam goes in.

The Hon. MARK PEARSON: So if we are saying—if the Government is saying, "We desperately need the dam to give water security", and if the Government was to go to you and say, "What would your advice be if we are seeing this as a crisis or a fear? What would you advise us to do?"

Uncle THEO WRIGHT: Look for another spot. There is no second spot. There is nobody who ever said, "This is the next dam we could do." Nobody. They just picked one spot.

The Hon. MARK PEARSON: So you would like to be able to inform us.

Uncle THEO WRIGHT: I am not saying, "Don't have a dam." What I am saying is, "Why put it there when it is so dear to us people?" Why can they not move it somewhere else, put it up further way—no. They want to put it right there where it is cultural to us. We are not saying, "Don't build a dam." Put it somewhere else. But why put it there? When we are trying to explain to this fellow why we do not want the dam there, they do not listen. There is no backup plan he has got. We have to tell you there is a private dam there. "Why can't you drain water from that fella because it is taking it from the Severn anyway?"

The Hon. MARK PEARSON: Thank you.

The CHAIR: Thank you. We have a question from the Hon. Ben Franklin.

The Hon. BEN FRANKLIN: I was just going to pick up directly on that, if that is okay. Thank you for being here, both Uncle Theo and Ms Marlow, and as well Aunty Helen on the phone. I want to reinforce what the Chair said: "We are listening very intently to every word you are saying, so you are being heard." I just have one question about your submission, Uncle Theo Wright, where you talked about the hunting and gathering and ceremonial purposes that are important around the river. I wonder if you could explain that a little bit more for us?

Uncle THEO WRIGHT: Like I just finished saying, there are walking tracks. You see it there. There are walking tracks. We have got stories to tell and you have got to understand there are bora rings there where people have been initiated. You asked the question. I just nailed it.

The Hon. BEN FRANKLIN: Thank you. Ms Marlow, do you wish to add anything?

Ms MARLOW: I think Aunty Helen can say something about the birthing trees on the Dumaresq. Is that okay?

Aunty HELEN DUROUX: Actually, it is—you are talking about the Mole River. It is actually on another river that runs into the Dumaresq. It actually runs into the Mole River as well. I went down to a friend's place and she took me through on her property, which is up the back, way up the back from their farm but it is on the riverbank there as well. There were at least six birthing trees that are still standing on the riverbank of the tributary little creek that runs into the Mole River down further. I mean, to me to have at least six birthing trees denotes a huge population that must have lived and worked around that area and there is also evidence in that same area and in different locations of bora rings and, you know, then I am told also that down further there was an island that the Aboriginal people lived on, but she said there was a huge population of Aboriginal people there but they all contracted measles and died, except a man and a boy who walked away from that one place of residence. So, yeah, the population of Aboriginal people in that area would have been astounding to warrant having six birthing trees.

The Hon. BEN FRANKLIN: Thanks, Aunty Helen. Did Mr Williams, the EMM archaeologist, did he accept that evidence that there were birthing trees—that there are birthing trees and bora rings there? Did he agree with that?

Aunty HELEN DUROUX: He did not inspect that way because it is, according to them, that is not a site that would be impacted.

The Hon. BEN FRANKLIN: Ms Marlow, I see you shaking your head.

Aunty HELEN DUROUX: Because it is further down the river.

The Hon. BEN FRANKLIN: Yes, understood. Ms Marlow, you were shaking your head. Do you want to add something to that?

Aunty HELEN DUROUX: Yes. They have a footprint where they have to just look for evidence of cultural heritage but that is outside their little footprint.

The Hon. BEN FRANKLIN: Thank you.

Aunty HELEN DUROUX: Yes. They were not interested in looking at anywhere other than the boundary where the dam was proposed to be.

The Hon. BEN FRANKLIN: Thank you, Aunty Helen. Do you want to add anything, Ms Marlow?

Ms MARLOW: We kept telling EMM that just to look at the Mole River footprint was not good enough for Ngarabal and the impacts that go further down the Gamilaraay to Boggabilla—

Aunty HELEN DUROUX: Yes.

Ms MARLOW: —because he was not looking at it in a holistic way as we would. It was like looking through two sets of different eyes. He did not understand what we were trying to say to him. He was just very specific on the Mole River and the terms of reference for the anthropologist was on the Mole River only and it was only on the footprint of the dam.

The Hon. MARK BUTTIGIEG: Uncle Theo, on the point you made before about the cultural value to you and your people, I imagine one of the answers from the Government to your question about why they do not do it somewhere else would be that it is going to cost too much and that this is the most economically feasible place. What would be your response to a position like that?

Uncle THEO WRIGHT: If it is not economically, why is the Prime Minister and the New South Wales Government and the water board—if it is not feasible to put a dam there, why are you putting it there? I know why I do not want it there, but why haven't you fellas come up with a second plan?

The Hon. MARK BUTTIGIEG: Is the lack of ability to put a dollar price on cultural value the essence of the problem?

Uncle THEO WRIGHT: Yes.

The Hon. PENNY SHARPE: Have you been part of any process to try to get the massacre sites named as Aboriginal places?

Ms MARLOW: We only found out about the massacre sites a few weeks ago, to tell you the truth, when I was looking at the manuscripts. EMM asked us for our final okay on the cultural heritage report. When I read the cultural heritage report, I said the doctor has not put the manuscripts in that I have asked him to. When I went back into the manuscripts—it took two or three days to read all those manuscripts—I realised that there was a massacre on the river. I also realised that when there was the colonial wars that we were put on two different rivers, and different clans were basically put on two different rivers. That is almost like a water riot. It would have been like a treaty of coexistence on those rivers.

The Hon. PENNY SHARPE: That is incredibly significant.

Ms MARLOW: It is.

The Hon. PENNY SHARPE: The idea that the subject of these sites has not even been contemplated in any of the planning of this project I think is a very big issue. Thank you for letting us know about that.

Ms MARLOW: I do have to say that when I raised that with EMM, they asked me to go to New South Wales archives. I spent time to look for the Colonial Secretary records to back it up. The University of Newcastle only used one manuscript for their criteria and for the mapping of massacres. We have actually got two for most of the information that we have given.

The Hon. PENNY SHARPE: I am sure EMM were not paying you to spend three days in the archives.

Ms MARLOW: They actually did.

The Hon. PENNY SHARPE: They did. That is good. I am surprised.

Ms MARLOW: They did and it was not merit-based, but it was partly because I was one of the informants in the anthropological report and I was not happy with it because I believe that under our law and our protocols that that report should have been read out to our Elders and our Elders should have signed off on it where they only wanted to the informants to sign off on it.

The Hon. SHAYNE MALLARD: On a tangent, did you have to get permission from Aboriginal Affairs NSW to access the Aboriginal records or was that the NSW State Archives?

Ms MARLOW: The archives that I looked at were the Colonial Secretary records.

The Hon. SHAYNE MALLARD: Okay, so not Aboriginal archives.

Ms MARLOW: They are not under freedom of information. I do have some of the land records that are also in the State Archives. They are not under the 100-year rule. Jacky's land is not in there; it has not been revoked under any of those papers.

The Hon. SHAYNE MALLARD: These are not records of Aboriginality, they are colonial records.

Ms MARLOW: Yes. With Aboriginal Affairs, it is normally the people's personal records that is withheld.

The Hon. SHAYNE MALLARD: Yes, that is right. I was on the board; I just wanted to clarify because I know how complicated it is.

Ms MARLOW: No, it is people's personal records; it is not really about land or anything like that. The other issue is that the Colonial Secretary records after 30 years, anyone can access them.

The Hon. PENNY SHARPE: I just wanted to know whether across your corporations there are any Indigenous land use agreements in place.

Ms MARLOW: There is an Indigenous land use agreement with Boorabee Aboriginal Corporation on the Severn River and I think that that started in early 2000, and there is Edgerton station. My great-grandfather was born on Edgerton and Uncle Theo's great-uncle was also in Edgerton.

The Hon. MARK PEARSON: Do we know how many people were murdered by the poisoning and where their bodies are?

Ms MARLOW: No.

The Hon. MARK PEARSON: Or where their bodies would likely be?

Ms MARLOW: I have transcribed the Colonial Secretary records, which is a few letters, and it said that they died like rats. It was like rat poisoning, and the person, Humphries, who told Reverend Threlkeld—Reverend Threlkeld was a missionary who did a lot of work with the Aboriginal people in Newcastle and in Windsor, so he was a witness at the Jack Congo Murrell case and was a very well-known person. Some people went to him by the name of Humphries. Humphries was actually sent to Norfolk Island. They got him completely out of the country to Norfolk Island and it is exactly what is said in the other manuscript, that it was pushed under the carpet.

The Hon. MARK PEARSON: So for all we know, the bodies of those people who were murdered are still there.

Ms MARLOW: Are still there.

Uncle THEO WRIGHT: Either still there or they are burnt.

Ms MARLOW: This was at the time of the Myall Creek Massacre, just after the Myall Creek Massacre, and people were quite frightened at that time. The colonists were quite frightened I assume. There is quite a lot of dialogue about people's reputations along the river.

The CHAIR: It is fair to say that if you have just found out about this a couple of weeks ago, the submission that you have made to this inquiry back in September talked about the—

Ms MARLOW: We did not know about it.

The CHAIR: Yes, and the one thing you did refer to was the burial of Jacky and that site—

Ms MARLOW: That is right.

The CHAIR: —which is one of the reasons that triggered me to invite you to appear and obviously get more of your views and knowledge. It is fair to say then that massacre that you referred to today is not really public knowledge.

Ms MARLOW: No.

The CHAIR: Nothing that has been referred to in terms of teaching both Aboriginal history to your people as well as white culture—

Ms MARLOW: I contacted Callum Clayton-Dixon, who has done a lot of research. He was with the University of New England and he did a lot of research on massacres. Callum did not know about this massacre. He knew about the Colonial Secretary record. As we can gather, there were three major massacres in that area or more. One was the Bluff Rock Massacre. One was a massacre in 1844 with Edward Irby that is in his diary where William Bates was one of the perpetrators of that massacre, and William Bates then states in the manuscript that he took a child from the massacre and reared him, so we assume that that is Jacky. Then we have found this massacre, but there were also two massacres on the Severn River. There were lots of massacres around there. I am on the team for the movie *Demons at Dusk*, which is about the Myall Creek massacre. We are looking at all of the massacres around that area and this is completely new information, even to our team.

Uncle THEO WRIGHT: There is just one thing I would like to say to you: If a man cannot read that map, why are you giving him \$24 million to build a dam when he cannot read a map? I just wanted you to know that.

The CHAIR: Thank you. Thank you Aunty Helen, as well, for your evidence today. Thank you Ms Marlow, and thank you very much Uncle Theo for—

The Hon. CATHERINE CUSACK: Madam Chair, I do apologise for interrupting. I just wanted to say that I have not asked any questions because I have been rendered speechless by this evidence. I want to record that I am horrified and I really want to thank the witnesses for the careful and well-researched evidence that they have drawn to the attention of the Parliament today. I thank them very much for that.

The CHAIR: Thank you very much. We certainly will incorporate as much as we are able to of this into the final report so that it is there for everyone to see. We might even ask the secretariat to contact you to get some of the cultural statements and further evidence tabled before the Committee so that we can make that public.

(The witnesses withdrew.)

PETER PETTY, Mayor, Tenterfield Shire Council, sworn and examined

The CHAIR: Do you have a short opening statement to make?

Mr PETTY: Thank you very much for the invitation to represent here today. Obviously, the Mole River project is not a new project for our area. It could be more than 40 or 50 years that the conversation has been held. Over many years it has never been supported as it is today where we see the \$24 million for the comprehensive feasibility study and the business case, and the fact that it is supported by both the Federal Government to the tune of \$12 million and the State Government. I, as mayor in our local government area, think it is a good thing. It is the best way to go about it, and we are fully supportive of the business case going forward to see if the dam is a goer or not. It will be a game changer for our area. It will secure water for our region, especially with the last three years of the climate conditions that we have gone through. We look forward to the outcome of the business case because the other two dams to do with Wyangala and Dungowan did not start like this, but the Mole River dam has. That is the best way to do it: Have a look at it, talk to all the effected people, talk to the Aboriginal community and then move forward. That is what we support as a local government area.

Our council is 100 per cent behind the dam. To repeat myself, the opportunity for the dam to provide reliable water for the downstream irrigators is a huge benefit to our region. In the drought over the last two years, before we got to the change of our seasonal conditions in February 2020, the Dumaresq River, which is obviously fed from the Glenlyon Dam, had a constant flow. It was managed well and those farmers and irrigators and the people below in the townships had a regular flow of water. The Mole River dam had absolutely nothing in it for two years, and I felt for those people that were in that region. It is a reliable river system that feeds into the Dumaresq River and adds to the strength of that irrigation and farming area down below. The opportunities into the future for that dam are untold. It would change the whole region. It is what local government should be supportive of, it is what State Government should be supportive of and it is what this nation should be supportive of. It is future building for the next generation and we are fully supportive of it.

The CHAIR: Thank you very much, Mr Petty. I will just open with a few questions. You said that it will change the whole region. Could you expand upon how it would do that?

Mr PETTY: By providing a regular supply of water. It is about managing the river system. I fully support the environmentalists and the people that are there and their concerns. Into the future, that supply of water is just so beneficial to that whole region. It adds to the Murray-Darling below. It adds to all of the river systems below. It is about managing our water in a proactive way. Our region has been to hell and back over the last two years, with bushfires and drought—the biggest drought that has ever been recorded right across this country. As a nation, if we cannot learn a lesson from that then we should not be here. It is about being proactive about managing our water better.

The CHAIR: We have heard evidence in relation to the Mole River dam. Firstly, you are aware that the 2017 feasibility study that was undertaken by the consultant, Jacobs, ultimately found that going back to 100 gegalitres, which I understand is not a huge dam, is the only size that would make it economically viable. But in fact, it did not make it economically viable and people in the community—

Mr PETTY: Yes, I am aware of that.

The CHAIR: Firstly, you are aware of that?

Mr PETTY: Yes.

The CHAIR: What would it take to make the dam economically viable this time around? That was only four years ago.

Mr PETTY: Yes. Well, it is a very good question. It is only a personal view but my reply will be that I do not think the Jacobs report was done well. If I could sit here and say—and it was funded by the Federal Government—it was disappointing, that it did not go deep enough and wide enough in what it did review. There is potential, I think. Yes, it is a 100 gegalitre dam for the design but there is potential for that to be 200 gegalitre. It is only a raising of the wall that will get it there. So if that makes it more viable, well, that should be looked at also while they are doing this report. But for a government, both State and Federal, to provide the amount of money that they have to do the research and do a feasibility study at the moment—the way I see it is that that should be done properly. That amount of money should get it done properly so that the argument is over, so that at the end of the day when they come back with their final report it will be done and dusted, that either it is a goer or it is not a goer.

The CHAIR: In terms of paying for the dam itself, because it will be very expensive, who do you think will pay for it? Will it increase water rates, do you think, for Tenterfield Council residents at all?

Mr PETTY: No.

The CHAIR: No?

Mr PETTY: No, it is an irrigation dam. Into the future we would love to see that there is a—very good question. We would love to see it there with the potential to provide urban water back to our town, but also across the border. With the support of the Federal Government, I feel that that is what they are looking at into the future, if we can provide that water to be piped over to our wonderful neighbours over the border, that can be done. We need to manage our water better. That is what it is about.

The CHAIR: Will it have to change—

Mr PETTY: Can I just answer—

The CHAIR: Sorry, keep going.

Mr PETTY: Can I just answer what you said about the cost? The fact is with this dam, I think a lot of the building material for the dam is onsite and I do not think it would be as expensive to build as what the early reports are saying. So I would be very supportive of it and, knowing that area as well as I do, the material to build the dam is there.

The CHAIR: The Government says that the new dam would have the potential to secure more water in flood sequences so that in drier times more water would be available to communities, agriculture and the environment. When you say it is an irrigation dam, so it is really to agriculture? It is not really so much to communities but more really agriculture is what is being—

Mr PETTY: That is exactly right and to support the river systems below, so it is.

The CHAIR: Please explain to me how it supports the river systems below. Is that in terms of making Mole River a regulated river?

Mr PETTY: Yes, of course it is, and full respect that producers further down are using unregulated water at the moment. If things have got to change for that dam to be built—and when you use water you actually have to pay for it in your water licence, it is no different to switching a light on and you pay for it. You use a telephone and you pay for it. We pay road taxes. That is what makes the country tick. But it is managing your water better and it gives them the potential to farm in drier times and adds a huge benefit to the financial value of their country because they can provide water to farm. That is what it should be all about.

The CHAIR: Will that water become too expensive for some landholders to buy?

Mr PETTY: It is a very good question and it is something that they—as farmer groups do, they lobby together—need to have a conversation with the Government about. Obviously, every State manages their water in every State, so it will be a State government that they will be having that conversation with. Of course, it should be affordable for the people who wish to use it downstream.

The CHAIR: I will throw to other questions in a second, but I will just keep pursuing this one. I am just not sure what you mean about landholders having conversations with the Government. Is that in terms of the price of water, or buying out water licences?

Mr PETTY: Yes. Your question was that it will be too expensive to use. Well, those farmer groups and whoever is involved need to have that conversation with the Government. I mean, you cannot make something too dear that no-one is going to use it.

The CHAIR: But that is what is happening at the moment with water on the market, is it not, that a lot of people cannot buy it and the nut growers are?

Mr PETTY: Yes. Once again, it is a very good statement. It is, and it needs to be that it is a thing that is affordable for people to use, and a lot of people use it and they all benefit from it then. But that is a conversation to be held down the track. Let us work towards the business case and see how they go with it.

The CHAIR: But just to play devil's advocate with this one—my last question here—there is nothing to suggest that the Government is going to look at the price of water down the track. What is before us now is a dam that will make water much more expensive. To suggest that they will look at water pricing down the track is not necessarily feasible. You do not believe they will, do you?

Mr PETTY: Once again, as times goes on, any organisation—be it an irrigator's group or a farmer's group—that feels that they are paying too much for the water, that is the thing that they need to sort out with the Minister or with the Government as they move on. They do it all the time. Whether they have a win or not is another thing, but they have the opportunity to have that conversation. But I do not think the Government will

make it too dear for it to use. I mean, it is what it is about; they want it to be used so people can prosper and expand in the regions that are below that river system.

The CHAIR: But the market is setting the price on water, with respect, Mr Petty. The market sets the price and so what is happening with our water right across this country but in New South Wales—I am sure you are aware—is that the market has set the price and so the price of water is going to those who can afford it, which is big corporate agriculture who are planting up the nuts. That is what will happen, I would suspect, as opposed to the Government being able to do anything about water prices. What will happen is big corporate agriculture will be able to afford it and probably a lot of farmers will not or current irrigators will not. Do you see that as a potential inevitability?

Mr PETTY: It could be. It could be but, once again, that is a conversation that they need to have. So if it goes back just to that local area alone, the unregulated water that they have been using for many, many years and have not been paying a lot of money for, well, that might change with the building of that dam and they need to be aware of that.

The Hon. BEN FRANKLIN: I have something short first and then a longer line of questioning. Just to pick up on the comments that you made before, if the Mole River dam were built, would you be supportive of a pipeline potentially being built to provide certainty for the town water supply in Tenterfield, much like the pipeline potentially from Chaffey to Tamworth?

Mr PETTY: Yes, of course we would be. If the dam has got the potential to do that and it was a chance of it doing that for urban water, my word.

The Hon. BEN FRANKLIN: Okay and you think that sort of thing would have support in the community?

Mr PETTY: Yes, my word, I say it would.

The Hon. BEN FRANKLIN: Can you just give us 20 or 30 seconds about what the impact of the drought was in Tenterfield?

Mr PETTY: Well, with our local water supply we were obviously—the Mole River, in the drought there was no water there at all. So farmers just had to survive on—and I am talking they were struggling for stock water. That was a huge thing. Our local water supply got down to 26 per cent, but with support from our State Government, we were funded and secured groundwater to supplement our water supply. That has been a great success. Obviously, our dam there, with the better season and that—we are up to 100 per cent with our water supply. We are into the last stages of actually gearing up or switching on the bores so that they are good to go. They will only be used to supplement the water supply in dry times, but they will be tested a couple of times through the year to make sure they are right. It is something that we worked hard to do because, at a local level, if we did not find that water for our community, which we were always confident that it was there, well, I would have hung my head in shame that we had failed the community.

We found that water, with the support of the State Government—and they have been outstanding—because we did not want to come back to the Government with a cap in hand asking for help every time there is a drought. We want to fix this for the future. In our local area, just to do with our town water, Ben, we have spent—and funded by both State and Federal Government—\$10 million on reinforcing our dam wall and about \$4.5 million from the State Government to support securing the bore water. We are also just about to start, in the middle of this month, a \$10 million project for a brand new water filtration plant. So if our community is challenged that we are not fair dinkum about securing water and improving our water for our community, well, we have just spent \$25 million on that.

The Hon. BEN FRANKLIN: Now that it has rained and now that we are back in relatively good times at the moment, now is the time to do these sorts of projects.

Mr PETTY: My word.

The Hon. BEN FRANKLIN: To protect for the future.

Mr PETTY: Yes, that is what we should be doing.

The Hon. BEN FRANKLIN: I notice that one issue that had come up towards the end of 2019 was the potential for potable water reuse. Obviously there was an interesting and fairly strident view made by the community against that at that time.

Mr PETTY: Yes.

The Hon. BEN FRANKLIN: I noticed one of your comments, and I will quote it to you, which I saw in the media, that it is about "changing the mindset of the community and how we deal with the process as a council". I am really interested to drill down a bit on the potential for water reuse because that, to me, could be a really important part of the whole water debate. So I would be interested in your views about (a) are you experienced through those discussions, and (b) what you think it would take for smaller communities to accept—not necessarily embrace but certainly accept—water reuse in their water systems?

Mr PETTY: What I was referring to at the time because, to repeat myself, we are just about to start the process of building a brand-new water filtration plant. In the design of that water filtration plant it would have been good to have a mechanism in the design of it that could handle recycled water. That was what it was about. That journo—who will never be welcome back in Tenterfield again, I can share with you—when it come up in the Sydney paper "toilet-to-tap" it frightened the community. We release already 400,000 litres a day in Tenterfield Creek out of a sewage treatment plant of recycled water. That goes into the Tenterfield Creek, goes down into the Mole River, into the Dumaresq and towns further down then use that for their water supply. So what is the difference? We need to get smarter, not just think that it is a good season now and it is going to last forever. No, it will not. We will back in a drought again and we need to be better prepared for it. But that it is what I was referring to to do with having that mechanism in our water filtration plant that we would be capable, if we needed to, of reusing that water because that water is there.

The Hon. BEN FRANKLIN: Do you believe that that is something that should be looked at across New South Wales as a potential opportunity?

Mr PETTY: We are very grateful of the State and Federal funding we have had to build this new water filtration plant and I just felt at the time that it is like building a house: when it is finished you think you should have put a door or a window somewhere. I just thought it should have been in the design of it, that it should have that design, that mechanism, to handle that recycled water.

The Hon. BEN FRANKLIN: Thanks. Thanks, Madam Chair.

The CHAIR: We also have questions from Ms Catherine Cusack, who messaged me earlier, who is online. Ms Cusack?

The Hon. CATHERINE CUSACK: Thank you, Mr Petty, for appearing today. I am at a bit of a disadvantage because I do not think Tenterfield council has made a submission to our inquiry, so your evidence today is really the evidence we get from the council. When you say that council is 100 per cent behind the proposal, can you expand on that? Has this actually been considered at a council meeting or are there other council documents just giving us more detail about council's decision?

Mr PETTY: It was always—even before I was elected on council, there was a plan for Mole River left on the desk; on the first day I walked in the mayoral office actually. Malcolm Turnbull was the Federal Minister for water at the time, so that is going back to 2007, I think—I might be pulling that out of the air but it would be close I think. So it has always been a conversation that has gone on around the different councils as they have been elected and it has never gone away. This council, when I say 100 per cent, this current council I am dealing with, with the workshops we have had with WaterNSW any questions that have been asked with the current feasibility study, any questions that have been there to the council are asked and any councillor that said they are horribly opposed to it, speak up and have a yarn to the WaterNSW people at the time, and they are all committed to seeing this feasibility study run its full length and let us see how it is going to go.

The Hon. CATHERINE CUSACK: Tenterfield council on its website has a statement of acknowledgement to Indigenous owners of the land. Has that been part of this conversation that you have had when all of the councils had this 100 per cent position?

Mr PETTY: To deal with our original community, who our council has a wonderful relationship with, we have an Aboriginal Advisory Committee meeting with the Aboriginal people on a regular basis, which I proudly chair, and I feel we have a wonderful relationship. Any concerns to do with the Mole River or the proposed Mole River or the feasibility study, they are happy to raise it there if they wish to speak about it, but I feel that the connection and where it should be is WaterNSW and the Aboriginal community have been working together and that process is ongoing, I feel, while ever this proposal is there.

The Hon. CATHERINE CUSACK: So it is not the role of council to consult the Indigenous community when forming its position in relation to the proposed damming of the Mole River. Have I got that correct?

Mr PETTY: Through our Aboriginal Advisory Committee I feel that that would be the appropriate place to raise it.

The Hon. CATHERINE CUSACK: And you chair that committee?

Mr PETTY: Yes, I do.

The Hon. CATHERINE CUSACK: Have you raised it?

Mr PETTY: No, I have not.

The Hon. CATHERINE CUSACK: Thank you.

The CHAIR: We will go to Mr Mark Buttigieg from the Opposition.

The Hon. MARK BUTTIGIEG: Thank you, Chair. Thanks, Mr Petty. I guess a similar line of questioning to my colleague the Hon. Catherine Cusack. You have said that council has discussed it on several occasions and there has been no vociferous opposition, but there is no sort of policy position or anything minuted as to the support for the project?

Mr PETTY: Not to my knowledge. As far as a report, there have been reports come into council to keep council updated of where it is, but we would probably be due to meet again soon with the WaterNSW people just for an update. And the relationship between council and the support we have shown for them because obviously in our small community we have already benefited out of this with people staying in our town and having to eat there and be there. We might say with the people that are opposed to what is going on, "Oh, it's only a couple of hundred thousand dollars"; it is a couple of hundred thousand dollars into a struggling community—it means everything. We are supportive and welcoming of the group that are there doing the research for this dam right now.

The Hon. MARK BUTTIGIEG: So the officers of the council have not been asked to write a report on a policy position, a recommendation or anything like that?

Mr PETTY: Not to my knowledge.

The Hon. MARK BUTTIGIEG: Okay. In your opening statement, and you have made the point since, you said that this should go ahead based on its merits—a traditional cost-benefit analysis, I guess, and you mentioned the value of the consideration of the Aboriginal cultural heritage and the environmental concerns, but, nevertheless, you are putting a position that the council is 100 per cent behind it. So is that position from your perspective, notwithstanding what the cost-benefit analysis comes out at, or what happens if it comes back and they say, "Well, there are a few hairs on this. There are going to be issues with Aboriginal cultural heritage. There are going to be issues about the environment. It is not going to give the water flows we think it is", what is your position then? Is it subject to that or are you 100 per cent regardless, because I was a bit confused in the evidence?

Mr PETTY: I apologise if you were. I tend to do that from time to time.

The Hon. MARK BUTTIGIEG: No, that is all right. That is what we are here for: to clarify.

Mr PETTY: What we are dealing with right now is the \$24 million for the comprehensive feasibility study and business case. That is what we are supportive of.

The Hon. MARK BUTTIGIEG: Okay. That is a very important point. So you are not necessarily advocating that the dam goes ahead regardless, you are just supportive of the business case?

Mr PETTY: It goes hand in hand. We need the business case to be there for the dam to go ahead. That is where I am at right now. Me personally? Of course I support the dam, but we are working with the Government, both State and Federal, to be supportive of what they are doing—it is what they should do. Whether it is worth \$24 million or not, that is only a personal view, but we need to do the feasibility and the business case to see if this is going to be a goer or not.

The Hon. MARK BUTTIGIEG: Okay. So your evidence is that personally you are in favour of the dam regardless but the council's position is that you want the business case to go ahead before you make a decision.

Mr PETTY: That is right.

The Hon. MARK BUTTIGIEG: Okay. Thanks.

The CHAIR: Thank you very much. I think we might be out of our questions for you today, Mr Petty. Thank you so much for appearing.

Mr PETTY: Thank you for the invitation.

The CHAIR: I do not believe you took any questions on notice, so thank you.

(The witness withdrew.)

(Luncheon adjournment)

RONAN MAGAHARAN, Executive Manager – Assets, WaterNSW, sworn and examined

ANISSA LEVY, Chief Executive Officer, Water Infrastructure NSW, Department of Planning, Industry and Environment, on former affirmation

MITCHELL ISAACS, Chief Knowledge Officer, Department of Planning, Industry and Environment – Water, affirmed and examined

SIMON DRAPER, Chief Executive Officer, Infrastructure NSW, affirmed and examined

The CHAIR: Welcome to the government witnesses and the last session of the day. Do you have an opening statement to make on behalf of the Government?

Ms LEVY: No, Madam Chair.

The CHAIR: I will kick off, then, with questions. Today has largely been focused on the Mole River dam, which we had not received too much evidence on throughout the inquiry. There was the 2017 Mole River dam feasibility study that found that the dam was essentially economically unviable. What has changed between that feasibility study and now to suggest that spending \$24 million on that dam will come up with any other result?

Ms LEVY: I will hand to Mr Magaharan in a moment. WaterNSW is working closely with us and leading the work on the Mole River dam. The answer to that is that it was very preliminary work done in that initial study and we are out there doing significantly additional work to look at a program and a package of works that could deliver the outcomes that we are looking to achieve for the community up there. The investigative work has been very broad and significant, including updated modelling, working on a package of options that together might produce that outcome that we are looking for. Mr Magaharan, did you want to add anything to that?

Mr MAGAHARAN: Yes, thank you, Ms Levy. I think the key point to note there is that the original study did highlight that further work was required to be done, and that is the work we are currently doing. It will inform the business case for the dam.

The CHAIR: Who are the users of the new dam? We will start there. I am not sure who to direct my question to.

Ms LEVY: I think that might be Mr Magaharan, in terms of the water users.

Mr MAGAHARAN: Yes, thank you. That is quite broad, at this point, in terms of what is being investigated. So, there is not only some benefit for local towns, but also those—

The Hon. PENNY SHARPE: What is the benefit for local towns—Tenterfield, in particular?

Mr MAGAHARAN: Through increased security of water.

The Hon. PENNY SHARPE: There is no water from that dam going to Tenterfield town water supplies. Is that correct?

Mr MAGAHARAN: I would have to confirm that and take that on notice.

The Hon. PENNY SHARPE: That is what the mayor says.

The Hon. BEN FRANKLIN: He also says he is not opposed to a pipeline from the dam to—

The CHAIR: Order!

The Hon. BEN FRANKLIN: Well, I am just saying. If you are going to quote the mayor, I am going to quote the mayor, too.

The Hon. PENNY SHARPE: I just want to be very clear. My understanding is that this proposal means that you can say there is going to be improved water security but actually not a drop of that water is going to Tenterfield town water supply.

Mr MAGAHARAN: I have just confirmed. I understand that there is no water that will go to Tenterfield. The dam does provide increased water security for the valley.

The CHAIR: How does the dam provide increased water security for the valley?

Mr MAGAHARAN: That will be investigated through the business case process. We are currently doing a series of investigations which will then inform the final business case and any water security benefits.

The Hon. MARK PEARSON: How can you make the statement that it is going to give water security to the valley when we ask you, "How do we know that?" and we have to wait for the business case? That does not actually answer the question, does it?

Ms LEVY: The theory behind it is that we have the potential to secure more water so that in those flood sequences we can store that water, so that in drier times there is more water available. It is not about creating more opportunities; it is about that ability to store and then provide that water in drier times. I think Mr Isaacs might be able to talk to the downstream towns that would have potential benefit.

Mr ISAACS: Certainly. In the valley there are towns further downstream that have the potential to benefit from additional water security or additional storage, examples being Boggabilla in New South Wales and Goondiwindi in Queensland. They could potentially benefit from increased water security in the valley, in terms of town security.

Ms LEVY: This project is not as progressed as our other two dam projects are. We have not even completed a strategic business case, so they are still looking at a long list of options for this project. As I said, it is not simply a dam in isolation; it could be a dam with other augmented infrastructure or policy and other changes that would result in the best overall outcome. Those options are still being modelled and tested.

The CHAIR: The 2017 Jacobs report, where it says that it is not economically viable, says:

Based on the preliminary hydrological assessment undertaken to date and the current assumptions in the CBA, none of the options considered are economically viable. Discount rates lower than 3% are necessary for the Mole River dam to be economically viable.

It does say that really the only way for any of the options to be economically viable is that there is a need for greater land use change to occur, and says that further consultation with irrigators needs to happen to better understand if there is going to be likely land use change from improved water reliability and security. What further consultation did happen with irrigators and has happened with irrigators after in 2017 this Jacobs report said, "To pursue a Mole River dam, you have to consult with irrigators in terms of whether they are going to change their land use?"

Ms LEVY: I will ask Mr Magaharan to talk about the consultation with landholders, but in terms of the hydrological modelling, there has been a need for updated hydrological modelling. There have been some delays in getting that hydrological modelling. There is a lot of demand across our hydrological modelling capability as there are a lot of projects and work happening at the moment. There have been some delays. That work is still continuing and will feed into any economic analysis that we do. That is all about updating those assumptions—that early work was very preliminary—and using more up-to-date modelling, with the full paleoclimate series runs being done as part of that modelling suite. There is a consultation strategy in place for WaterNSW to be talking to all users. Some of that work has been delayed, but Mr Magaharan might like to talk to what has been done to date and what is planned to be done in the future.

Mr MAGAHARAN: Yes. Again, I would like to reinforce that we are still very early in the process, as Ms Levy pointed out. We are moving towards a strategic business case, so there is significant work being done at this point to understand that. Throughout that work we have also been consulting with the community as part of that process.

The CHAIR: Mr Magaharan, how long have you been working for WaterNSW?

Mr MAGAHARAN: I have been working for WaterNSW since 2016.

The CHAIR: Would the consultation with irrigators, as has been indicated in my question earlier—that Jacobs said to consult with irrigators. Would that be WaterNSW that would undertake that consultation as recommended by Jacobs, or would it be the department? Where would that consultation take place?

Mr MAGAHARAN: Consultation that we would be undertaking is part of the project which we have been directed to progress through the business case. That is where WaterNSW has been completing consultation.

The CHAIR: With a report like Jacobs, when that comes out—were you around when the report was handed to government?

Mr MAGAHARAN: It was not part of my responsibilities at the time.

The CHAIR: Do you know whether the consultations started to occur after that report came out to determine whether irrigators were happy to make land use changes to make that dam more economically viable? It is pretty much the key recommendation from this report. In fact, the New South Wales Government's submission, referring to Mole River dam, does state:

A feasibility study for the project was completed in 2017 with funding provided from the National Water Infrastructure Development Fund.

The National Water Infrastructure Development Fund provided money for the feasibility study. That was completed. The feasibility study pretty much said, "Further consultation is required with irrigators to see whether they will do what is needed to make it economically viable." What happened?

Ms LEVY: My team are letting me know that Department of Planning, Industry and Environment [DPIE] did work in parallel with WaterNSW just to start some of that consultation work. Part of it was around the Mole River dam study, but part of it was also to inform the regional water strategy work that is happening in that area. The outcome of that recent industry engagement showed that there was strong support from primary producers for converting general to high-security licences if that option were available and provided water reliability and security are enhanced. That is what I have been informed was an outcome of that consultation.

The Hon. PENNY SHARPE: Are those who were consulted aware that they would have to pay for that? Are they aware of the pricing mechanism by which this infrastructure would be paid for?

Ms LEVY: The pricing mechanism has not been finalised. That is part of the business case work, and that would be subject to an Independent Pricing and Regulatory Tribunal of NSW [IPART] review. IPART has a process to go through in terms of consulting and ensuring that price shocks are not passed on to our customers.

The Hon. PENNY SHARPE: But as a basic principle, though, that those who benefit will pay? It is a user-pays system.

Ms LEVY: That would not be something we would be shying away from in talking to the community about, but we do not know the outcome. We could not give them a dollar figure. We do not have costs on the dam, nor have we got all of the modelling that would be required. And it is, again, subject to an IPART review, and that IPART review, as part of its methodology, has to ensure that we protect customers from price shocks. That would be part of the IPART process, so we cannot foresee the outcome either of the work that we are doing—because it is too early—nor the IPART work that will be taken into account.

The Hon. PENNY SHARPE: Through the business case, will the option be considered that, essentially, taxpayers pick up the money? One option is that taxpayers pick up all of the money and basically fund it, and then there is the issue, which in my understanding is the water pricing policy, which is that the users who benefit from it will get the money. How explicit will that be in the business case?

Ms LEVY: The business case would canvass those options from, as you said, fully funded by the Government right through to fully funded by the water users. And the likelihood is it will fall somewhere in between those with some contribution from government and, potentially, some contribution from water users. But we have not finished that work yet, nor have any decisions been taken by government about how to fund the project. And IPART would have to be part of that process in terms of what prices could be passed on to customers.

The Hon. PENNY SHARPE: The amount of money that has been put into this project so far is \$24 million. Where did that come from?

Ms LEVY: The \$24 million came 50 per cent from the Commonwealth Government and 50 per cent from the State Government from the Snowy Hydro Legacy Fund.

The Hon. PENNY SHARPE: But at this point there is no other money committed to this project?

Ms LEVY: There is no other money committed to this project. That \$24 million is to get us to a final business case stage, and we are only at the strategic business case state at this point. And there is no commitment from either Commonwealth or State government to funding beyond the \$24 million. There will be a decision point for government at strategic business case as to whether there is merit to progress the project through to a final business case. And, again, at final business case, there would be an investment decision taken by government as part of the normal processes. This business case will be subjected to the normal Infrastructure NSW, Infrastructure Investor Assurance Framework. It will have to go through a Gate 1 business case review when we complete the strategic business case and a Gate 2 when we get to that stage, so there are a lot of governance and reviews yet to come before this project would be getting to an investment decision.

The Hon. PENNY SHARPE: What is your time frame on finalising the initial business case?

Ms LEVY: The strategic business case, we are looking in the second half of this year, so beyond June to have a strategic business case for government's consideration. And if there is a green light to continue working to final business case, it would be sometime in 2022 that we would be looking at a final business case for Mole River.

The Hon. PENNY SHARPE: Will the business case be made public?

Ms LEVY: That is a matter for the Government.

The CHAIR: What are the elements of the strategic business case? Are the environmental impacts considered initially as part of that strategic business case as well as cultural impacts? Talk us through the various elements of that.

Ms LEVY: I will also hand over to Mr Magaharan in a minute. In terms of the strategic assessment stage, it is a higher level assessment, so it is casting the net quite wide in terms of understanding from a desktop and some limited fieldwork what environmental impacts are likely to occur as a result of options. As I said, we are still at that stage of having a long list of options that are being modelled and assessed, and environmental impact very much plays a part in that. So the long list of options is going to be run through a multi-criteria assessment process that will compare options, and it will look at a range of factors from economic and costs through to environmental, community and the broader benefits that we are looking at achieving from this project.

Those options will be weighed up to come up with a short list of options that are worth continuing forward because they meet the project objectives and do not have impacts that are unacceptable across those other ones. And so, against a balanced scorecard type approach, they would then be taken to a short list. Once we have got to that short list, that is when we go into doing a lot more detailed assessment on the environmental, cultural heritage and community impacts as well as those benefits getting modelled and assessed in much greater detail. Mr Magaharan, you might want to amplify my comments there about what level of work you have done on the environmental investigations to date.

Mr MAGAHARAN: Yes, thank you. I think you have summed it up quite well, but I also note that Secretary's Environmental Assessment Requirements have been issued that outline the level and the areas we need to investigate through the process. At this stage we have—

The Hon. PENNY SHARPE: Can I stop you there and ask you about that? We had some pretty disturbing evidence this morning from Aboriginal and traditional owners about the way in which this investigation, particularly around Aboriginal heritage, has been conducted. There were two particular things. One is a relatively new thing. It appears that one part of where the dam is going to be is a very significant site in terms of being both a burial and a massacre site. It has not been listed; that is new. But the thing I am more concerned about is that allegations were made that important artefacts and objects were, basically, destroyed or thrown away as part of the investigation of some of the sites by the consultants. What oversight do you provide to consultants in relation to Aboriginal heritage?

Mr MAGAHARAN: Firstly, I would have to take on notice the first item that you mentioned.

The Hon. PENNY SHARPE: That is new; I will come back to that. But they basically talked about some examination of caves in the area. Some pretty important information was provided by the local Aboriginal people in relation to the use of clay balls, which are important in cooking, and that, essentially, the consultants (a) ignored them but (b) just threw them away. Essentially, they desecrated the site on which they were pointed out. I want to know what we can do about that.

Ms LEVY: Ms Sharpe, I would very much like to know any information about that because we would be horrified, as I know WaterNSW would be.

The Hon. PENNY SHARPE: We were, so, yes.

Ms LEVY: If that was the case, those consultants would never be working for this Government again. And that would be an outrage too. I know Mr Magaharan and his team because they take very seriously the cultural values of our Indigenous communities, as do we at DPIE, so we would like more information about that. And we would take action if that were proved to be the case.

The Hon. PENNY SHARPE: Okay. I think there is photographic evidence, so we will definitely come back to you about that.

The Hon. BEN FRANKLIN: Will you agree to follow that up?

Ms LEVY: Absolutely, Mr Franklin. We will definitely follow that up.

The Hon. BEN FRANKLIN: Thank you. Can I just pick up on this? Obviously, that allegation was appalling, and I am glad you are following it up. It was very clear to me that the representatives who appeared today from the Indigenous community felt that they were not being listened to at all and that these consultants were just going through a tick-a-box process. I think, across the entire Committee, everybody felt appalled at that. I am looking for some level of comfort about how the process works and how First Nations people are treated properly and respectfully because it appears not to have happened in this case.

Ms LEVY: I can give you some statistics. To date we have engaged with 85 different Indigenous groups from Mole River. Forty-five are registered as official Registered Aboriginal Parties [RAPs] and another 40 that

are not considered official RAPs but wanted to keep engaging with us regardless. To give you some comparison, we are dealing with 15 groups approximately each on the Dungowan and Wyangala sites. So we are dealing with four or five times as many groups on the Mole River site. I have not specifically been out on site with the heritage architects in Mole River but I have in some of the other projects and we have absolutely had really good working relationships with local Aboriginal communities who have been on physical ground inspections with us. We take them out with us and make sure they are part of any inspections. As I said, if that is not what is occurring in Mole River, I know that would not be the intent or the desire of WaterNSW and the department. If there is a need to remedy that, we will remedy it and make sure that our Indigenous communities are afforded the respect and input into this project that they deserve and should have.

The Hon. MARK BUTTIGIEG: It is a similar line of questioning. I just want to get my head around the process. I may have read too much into it. So you have the high-level strategic assessment. Can I ask how much does that part of it cost? Does that come out of the \$24 million?

Ms LEVY: It does come out of the \$24 million. I have not got the breakdown of how much was budgeted for the strategic business case stage versus the final. We would be happy to take that on notice in terms of the split between that, but the \$24 million was to get us all the way through this strategic stage and to the final business case stage.

The Hon. MARK BUTTIGIEG: So, a proportion, and that particular stage is a viability assessment based on traditional cost-benefit analysis. Are we actually going to get the water, how much is it going to cost and is it worth it—all that sort of thing.

Ms LEVY: It is a high-level economic evaluation at that stage. We do the much more detailed economic evaluation for the final business case. It would have a level of economic evaluation assessed against those options but it is more like a multi-criteria assessment at the strategic options stage because, as you would understand, the hydrological modelling and the economic modelling adds a lot of time and cost to a project. So we do that at a relatively high level when we have got a long list of options and then we start doing more detailed work and some options start to get discarded because they have a fundamental flaw—a fatal flaw—whether that be not delivering the water outcomes that we need or having a fatal flaw in terms of an environmental impact that is unacceptable. Those sorts of options start to fall away and we do more and more detailed work. So there will be a level of economic evaluation done in terms of producing a benefit-cost ratio [BCR] but it is a little bit more high-level than we would do at the final business case stage where we would have again much more detailed modelling of outputs for those last options and until we get down to a single option, and that is where we have the most detailed work done.

The Hon. MARK BUTTIGIEG: That initial stage, is that like a gatekeeping stage where anything that is major would put the wood on it and you would presumably pick it up then, or is part of it to determine the scope of the subsequent more detailed study?

Ms LEVY: It is a little bit of both. Some options could be eliminated based on, as I said, fatal flaws and you could kill those off in that early strategic phase because they do not demonstrate meeting the primary objectives or they have one of these fatal flaw type issues come up.

The CHAIR: When you say options, what do you mean by options? We have got a 100 gegalitre dam here. There are no other options, I understand, to the Mole River dam. Do you mean options in terms of construction or options in terms of where the actual dam's footprint is going to be? What options are you considering as the strategic business case?

Ms LEVY: There were options on the size of the dam. One hundred gegalitres was a nominal size, so there were options around the size, around the specific location, around the design of the dam and around other options that might augment the dam. Mr Magaharan, I do not know if you might be able to add to that one?

Mr MAGAHARAN: I would have to take it on notice for what other options are being considered, but they may include other infrastructure options which may deliver similar benefits.

The CHAIR: Do you mean other options to a dam?

Mr MAGAHARAN: Predominantly, the feasibility study as I understood it, from memory, considered a number of dam option sizes such as what Ms Levy spelt out—so between 100, 200 and up to 300 gegalitres. It also considered a number of different locations and different sites, be that upper Mole or lower Mole. And some other diversion schemes and enlargement of other dams in the area. They were considered in the feasibility study. So they are examples of what can be considered.

Ms LEVY: There were also policy-type options that were considered around downstream connectivity reserve increase options. Then you look at combinations of different sizes with different water sharing rural

options and licence options. The modelling is looking at the water sharing and the use of the water, as well as the size and location and type of dam. To finish off the answer to Mr Buttigieg, there is a Gateway process and that process is the one that Infrastructure NSW manages. We as the proponents of the project, WaterNSW with DPIE, prepare a strategic business case. The next step for that strategic business case is to go to Infrastructure NSW for a gate one review and if we pass through that gate one successfully, consideration by government would be taken before we then move on to produce a final business case and be subjected to the next gate, being a gate two. We will be narrowing those range of options down to a short list of options for further work in the final business case.

The Hon. MARK BUTTIGIEG: Let's assume that the first hurdle is jumped in terms of that higher level, strategic—the sort of more socially based considerations, like Indigenous cultural heritage and environmental concerns, they come into the mix at that second stage, do they?

Ms LEVY: They are already at the first stage but it is more detailed work that is done at the second stage. As you are progressing the design of an option, you are then looking at how that might impact on cultural or environmental heritage issues and you are doing detailed investigations.

The Hon. MARK BUTTIGIEG: Just on that point, in theory, you could actually put the wood on this project if you have a significant enough cultural despoilment like the sort of things that were outlined during the evidence today.

Ms LEVY: It would play a big factor but there are a number of options being considered. In terms of an option being ruled out because of a significant cultural heritage impact, I do not think all options would be but there would be consideration of those things as part of that option selection process. Then going forward, it would be a matter of it being part of the EIS that goes before both the New South Wales Planning Minister as part of the Environmental Planning and Assessment Act, as well as the Commonwealth Government under the Environment Protection and Biodiversity Conservation Act.

The Hon. MARK BUTTIGIEG: Ultimately, these things are questions about weighting and there is obviously a degree of, inevitably, subjectivity. How do you weigh the traditional dollars and cents cost-benefit analysis with things like cultural value and environmental value? Because we have not unfortunately got to the stage of sophistication where we are integrating those two sides of the equation yet, have we? What is the template modelling done on to integrate those considerations into the assessment?

Ms LEVY: In the way we undertake economic modelling, some things are assigned a value and they are really difficult things to assign a value to. In road projects we assign a value to a human life and lives saved gets equated to dollars in a traditional economic evaluation. We do that around a range of things. I do not specifically know whether we apply a value to costs on archaeological heritage. I do not think we do. But that is where it is not a one-dimensional way we look at projects. If we only produce projects that had a positive BCR, or a BCR greater than one, and said that they are economically productive and therefore go ahead—we look at the range of things. That is why there are two instruments. There is the business case, which is about looking at what objectives you are trying to achieve and what options or engineering solutions that you come up with, combined with policy and other things to produce a range of options, and it outlines the environmental and heritage impacts, but the place where that really comes to bear is in the EIS.

We could put forward an economically sound project that does not meet the requirements of an EIS and that is why that process is different and separate to the business case. Under the Water Supply (Critical Needs) Act we have brought those processes together and they are running in parallel. In the normal traditional model you would do the final business case first and then you would commence the work on the EIS. We are doing that work in parallel. Obviously the EIS cannot finish until the final business case elements are finished because you need to know what your final design is to do that assessment on, but we are working through those in parallel. Anything that comes up potentially as a fatal flaw could put one option off or make it much less favourable against another option.

The Hon. MARK BUTTIGIEG: Just to finish off on that thread, there is no cross-ministerial detailing on this, the Minister for Planning gets the ultimate say?

Ms LEVY: That is in terms of the EIS. The investment decision is taken by the Expenditure Review Committee. The members of the Expenditure Review Committee would make the decision about the investment. The Minister for Planning and the Commonwealth Minister responsible for the Environment Protection and Biodiversity Conservation Act would be the parties to provide an approval or not in terms of its ability to proceed under those planning laws.

The Hon. MARK PEARSON: This particular project at Mole River is considered to be critical?

Ms LEVY: It is listed in the Water Supply (Critical Needs) Act.

The Hon. MARK PEARSON: My question to you, after you have done so much of your analysis, is it? We have had irrigators and farmers here saying that they managed through the drought. It was difficult. We have people concerned about the environmental impact of building a dam there. We have the Indigenous peoples concerns about their heritage and their connection with land and now we have found out that there were quite a few people murdered their and there remains are in Mole River. The mayor of Tenterfield says that we will not be getting any water for the town and in fact the council is more in favour of recycling for drinking water. I do not know whether I am missing something but there does not seem to be anything which has come before us about this project that seems to be critical. There has not been any critical compelling evidence to say that it is a critical project. Are you being given a directive that this has to happen by hook or by crook?

Ms LEVY: No. We have been asked to produce a business case for Government to consider. Absolutely not. We are not being directed to deliver an outcome. We are being directed to diligently produce a business case that sets out the argument so that Government can take a decision on that.

The Hon. MARK PEARSON: Is there a trigger point while looking at the business case where there is so much weight to say really it is highly unlikely that we are going to recommend this goes ahead? Is there a trigger point one-third of the way along to save us so few million dollars?

Ms LEVY: That would be the strategic business case point. Once we complete the strategic business case and undertake that review with NSW that would be the point at which Government could take a decision as to whether they wanted to continue investing in completing this project through to a final business case. That is not my decision to take, that is a decision for Government. We will produce a strategic business case that gives them the option to consider progressing that project forward. That is why we have these milestones. That is why we produce many documents on the way through and give government and people the opportunity to consider our projects on the way through. The whole of the NSW gateway system has been designed around these hold points along the way. There are seven gates from zero to six before which a project will pass through. It goes through six gates before it goes into operation. The sixth gate is what we call the benefits realisation gate. You have to get through those gates nought to five before you are operating a project.

The CHAIR: I might just jump in with a question to Mr Draper. These strategic business case goes to Infrastructure NSW?

Mr DRAPER: That is correct, yes.

The CHAIR: Do you then make your recommendation based on that strategic business case or is it up to Infrastructure NSW to give their opinion on what the strategic business case has in it?

Mr DRAPER: There are a number of gateways as Ms Levy was describing. That is called gateway number one for strategic business cases. What we do is we engage reviewers. They are not necessarily our staff, they are often people with backgrounds that are relevant to the proposition that is being examined. What they will do is write a report on the strategic business case and then ultimately the final business case and then all the various stages that it goes through making recommendations about whether it is ready to move to the next stage. Our role in that is of course to provide feedback to the agency that is sponsoring the project. They will generally be responding to that. But, also more importantly in a way we provide reports up to Cabinet on the status of those projects and where they are at and what the recommendations might be for the next stages of those projects. That is our advice. We do not make a decision about it, we just provide advice to Cabinet and advice to the agency. The agency then goes through steps to respond to those recommendations. If some improvement is required in the next stage or there is a requirement to do a little more work to remedy something underdone in the business case then they will go and do that and move on to the next stage.

The CHAIR: So nothing in relation to a proposed Mole River dam has therefore gone through Infrastructure NSW gateways or stages yet?

Mr DRAPER: Not so far, because as Ms Levy said we have not yet got this strategic business case. What about the other projects that this inquiry is looking at.

The CHAIR: Is anything for Wyangala Dam or Dungowan Dam been to infrastructure New South Wales?

Mr DRAPER: Yes, they are more advanced. Some of those have been through some of those gateway steps.

The CHAIR: Let us break this down. Wyangala Dam, what has gone through Infrastructure NSW for that?

Ms LEVY: I can answer that if it helps, Mr Draper.

Mr DRAPER: I should say, as I said earlier, a lot of the stuff we do is for Cabinet so it is a bit easier for the agency to answer some of those things than for us to answer.

The CHAIR: A bit easier or a little bit more contained?

Ms LEVY: I was just going to state the fact simply that both Wyangala Dam and Dungowan Dam and Pipeline strategic business cases have been through a gate one gateway review by Infrastructure NSW.

The CHAIR: When did that happen?

Ms LEVY: Towards the end of last year. Wyangala Dam was in the middle of September towards November potentially for Dungowan Dam. I stand corrected on those months but around that time.

The CHAIR: I will finish with the other dams: Macquarie River re-regulating weir, has that gone through any infrastructure New South Wales gateway processes?

Ms LEVY: That is a different tier project.

Mr DRAPER: We have a process where we tier the projects and if they are below a certain level of significance evaluated across a whole lot of criteria they do not necessarily go through those gateways. That one has not met those criteria.

The CHAIR: The Menindee Lakes water-saving project?

Ms LEVY: No, that has not been through a strategic business case yet. We have not yet completed a strategic business case for Menindee. If I could, Ms Faehrmann, to Mr Pearson's question—

The CHAIR: I just need to finish this line and then we can go there, if that is okay.

Ms LEVY: Sure.

The CHAIR: The Wyangala Dam, with the strategic business case, has Infrastructure NSW made any recommendations back to DPIE in relation to that?

Mr DRAPER: As I say, our reviewers make the recommendations. And as I also said—

The CHAIR: Are your reviewers within Infrastructure NSW or are they consultants?

Mr DRAPER: They are often outsiders with relevant backgrounds.

The CHAIR: But it becomes Infrastructure NSW who makes the recommendation?

Mr DRAPER: Yes. I could not go into any of the recommendations because, as I say, our reports are really for Cabinet. It might be easier or more appropriate for Ms Levy to speak about anything that they have taken out of those reports. I cannot disclose the contents of those reports.

Ms LEVY: Similarly, the gateway review reports are prepared for the benefit of the project team to take on board any recommendations for improvement or other works that need to be done. Those reports are provided to Cabinet for advice to Cabinet so the detail of those are for Cabinet. In every business case I have ever seen as a proponent working on this side and when I was at Infrastructure NSW heading up that infrastructure investor assurance framework team I have never seen a project that went through a gateway review that did not get a series of recommendations and that is the value of that. Then we take those recommendations on board to enhance the project.

Infrastructure NSW hires, as Mr Draper said, experts in the field, and their advice and input is taken as valuable to the project teams. We take them on. We have a responsibility to provide a response to the gateway review recommendations, so WaterNSW would have provided a response to the gateway review recommendations in terms of what they were going to do about each recommendation. They have to provide regular reports—I think at a quarterly interval—back to Infrastructure NSW on how they are progressing to achieve the recommendations of those gateway reviews. So they are there to enhance and improve the projects. On occasion, if they find reasons that a project should not proceed, that would be identified by INSW but where there are recommendations that are addressed, that is what we take on board.

The CHAIR: I wanted to go back to the options—and other members jump in if they have any other questions—that you referred to in the strategic business case in terms of the potential size of the dam. I think you went from 100 gegalitres to 200 gegalitres. What was the other size?

Mr MAGAHARAN: Three hundred.

The CHAIR: Three hundred. Why is it that none of the witnesses who presented this morning were referring to anything other than a 100-gigalitre dam? Is that not what you are going out into the community and consulting on?

Ms LEVY: The range of options is very broad at the initial stage and many of those options proved to be not viable as we worked through. We do not go out to the community with really, really long lists of options until we have done a little bit of work around them to talk about what the outcomes of those options are and potentially we have narrowed down, but I might ask Mr Magaharan to address that.

Mr MAGAHARAN: I think it is just important—

The Hon. BEN FRANKLIN: It does say in the WaterNSW submission:

The project involves the construction of a rockfill dam and associated spillway and other infrastructure to provide nominally 100 gigalitres (GL) of storage capacity.

Mr MAGAHARAN: Yes, I was going to say nominally 100 gigalitres but obviously, through the process, we need to continue to do the detailed hydrological modelling through the project, and that will then guide what the optimal size is of the dam.

Ms LEVY: Sorry, the team are just saying some of those—

The Hon. CATHERINE CUSACK: Can I jump in at some point?

The CHAIR: Let us just have Ms Levy respond to that and then we will throw to you, Ms Cusack.

Ms LEVY: Some of those larger options were being considered as part of the feasibility study but been taken forward into this strategic business case. But there were some, I think, potentially 150-gigalitre options taken forward in the strategic business case.

The Hon. BEN FRANKLIN: That makes sense.

Ms LEVY: It is all about that narrowing down process as we have moved from many, many options to medium lists to shortlists as we go through.

The CHAIR: Ms Cusack?

The Hon. CATHERINE CUSACK: Thank you for appearing today. I want to take you to a media release issued on 13 October 2019. The headline was "Billion dollar investment in NSW":

Prime Minister Scott Morrison, New South Wales Premier Gladys Berejiklian Government, Deputy Prime Minister Michael McCormick and Deputy Premier John Barilaro said both Liberal and National governments had been working together to fund critical infrastructure projects.

That was how they announced "we'll deliver" \$650 million to upgrade Wyangala Dam in the State Central West, \$480 million for a new Dungowan Dam near Tamworth and \$24 million on a 50-50 basis with New South Wales for the border rivers project on the Mole River. I realise this is awkward, but as a member of the Government I do not understand this myself—that media release in 2019 sounds like the investment decision has already been made, and it is not a blank sheet of paper. I wanted to find out, first of all, how did that package come together? Were you guys involved in putting that package together? Secondly, what impact does that have on you as the people responsible for developing the business case when it has already been announced by the Prime Minister, the Premier, the Deputy Prime Minister and the Deputy Premier?

Ms LEVY: I cannot speak to what those Government Ministers had intended by that but my understanding of committed funds is that money is set aside but there is still a process that has to be followed. We have been asked to do nothing but follow that process. The only difference that we have with these projects is as a result of the Water Supply (Critical Needs) Act, which has enabled us to prepare the EIS in parallel with the final business case preparations. That would be the only aberration from the normal processes of producing a business case and taking that business case to the Government for an investment decision. We have been asked to do that to the normal full effect and subject it to the processes of gateway review that Infrastructure NSW do for every project in government. Yes, we have been asked to get on and do that work as a priority and to do that work quickly. We have been asked to parallel-track the EIS and the business case preparation because the Government saw these projects as a priority, but never to shortcut or circumvent the processes of government, being business cases, investment decisions, EISs and planning approvals pathways.

Mr MAGAHARAN: I think that is further strengthened by the direction to WaterNSW. As clearly outlined, we must follow the Infrastructure Investor Assurance Framework at INSW, which results in us needing to develop a final business case for the Government to make a decision.

The Hon. CATHERINE CUSACK: Thank you for those reassurances. Listening to the stakeholders—and just myself in terms of what I am reading in media releases and the media—the impression everybody has is that this decision has kind of already been made. Is it possible that this will not go ahead—any of these projects? I really think this cuts to the core of what everyone's anxiety is. Is it possible that none of these—or some of these projects—will not go ahead due to the processes that they are going through? Or is it a foregone conclusion that they will go ahead?

Ms LEVY: I cannot speak for the Government but, as I said, we have been asked to produce those projects in accordance with those government processes with the only change—

The Hon. CATHERINE CUSACK: Okay, so let me cut in there. I am not asking you to speak for the Government. Can I ask, for example, what were your instructions? Were you given terms of reference? Is there documentation of what you have been asked to do? And is it possible for our Committee to receive a copy of that?

Ms LEVY: There was a direction to WaterNSW that absolutely could be made available to the Committee. That direction instructs WaterNSW to prepare business cases for these projects and to prepare those business cases in accordance with the Infrastructure Investor Assurance Framework. That is the direction to WaterNSW. DPIE Water's role has been oversighting and working very closely with WaterNSW in the development of these business cases but that direction is what was given and that is pretty clear. They are to produce business cases.

The Hon. CATHERINE CUSACK: It would be fantastic to receive that information. Thank you. I will ask my next question really baldly. Given that it is an announcement that the investment decision was already made by the Prime Minister, the Premier and those other people, does that impact the process in any way? To me, it is inconceivable that it would not impact it. I am just trying to wrestle with that difficulty of—you are giving evidence about an independent process that could fall either way and I am reading decisions by other people who make the decisions saying investment is going to go ahead. So how do you grapple with that?

Ms LEVY: Firstly, I would say they did not announce an investment decision. I think they announced a commitment of funding. That commitment of funding, to my understanding, is still subject to those Government decisions. In the world I work in, there are many election commitments made. There are many commitments made about priority projects but we still have to go through that process for the Government to then make a decision. All I can talk to is what process we have been asked to follow and that is the normal process with the exception of the Water Supply (Critical Needs) Act and paralleling the planning approvals pathway. I believe that the Government have made commitments about setting funding aside. I think when they talk about committing funding it is about having money set aside so that it is there if those projects go ahead. I cannot speak to what was in the minds of the Premiers, Prime Ministers and others.

The Hon. CATHERINE CUSACK: So, when they announced a billion dollars of funding for these critical water projects, they are their words, where did that number come from? Do you have any idea? Somebody has been giving them advice on the cost of these projects. I am just wondering: What was that process that would have underpinned that announcement?

Ms LEVY: So, very high level preliminary investigative studies that had been undertaken predominantly by WaterNSW. So, preliminary investigative studies had looked at options for the Lachlan Valley and the Peel Valley in terms of issues and potential solutions and, as part of that work, strategic costs had been assigned to projects for a comparative purpose to assess which were potentially options that could be viable to deliver an outcome. Those very high level costs were, I believe, what informed the funding commitments that were made by the Premier and the Prime Minister and others at that time. That was the point at which soon after WaterNSW was directed to prepare those business cases.

Significant work has been done on optioneering within the parameters of what had been announced and engineering concepts and all of that significant environmental and cultural heritage work to start to inform more robust cost estimates. We are still working through a range of those issues to refine those costs, including updating hydrological modelling, talking to landowners about property acquisition, consulting with the construction sector about construction methodologies and types as we progress designs and all of those things and many others. Environmental investigations are all playing into updating a set of costs that will be put into the economic analysis and the work on the final business case to help inform that Government decision.

The Hon. CATHERINE CUSACK: Thank you. Can you help us to know how we can access that? Because that is initial advice or brief or recommendation would really assist us to understand how we ended up in this place now. Is that something that you can provide us with, or WaterNSW provides us with?

Ms LEVY: I believe that some of those preliminary studies have been made public. We might be able to come back, and take that on notice if not. But some of those studies have been released—those preliminary studies.

Mr MAGAHARAN: Yes. In fact, some of have been released to date.

The Hon. CATHERINE CUSACK: If something that adds up to a billion dollars and underpins that announcement, that is the document that I would dearly love to be able to read to understand this.

Ms LEVY: I do not think there is one single document.

The Hon. CATHERINE CUSACK: But those were the three priorities. There was funding there and then everybody has gone off and announced this whether you consider it to be a decision or not.

Ms LEVY: So, there were feasibility studies done for each of those valleys so there would be a separate document for each of the three dam projects that would point to the options work that had been done; so, these pre-feasibility studies were done for each of the valleys.

Mr MAGAHARAN: That is correct.

Ms LEVY: I believe some of them have been provided to this Committee.

The CHAIR: But with respect to those feasibility studies, we have been through this a number of times on this Committee, but those feasibility studies have not exactly determined that this dam, this dam, this dam is going to be the best option for water security.

Ms LEVY: That is part of the work again—

The Hon. CATHERINE CUSACK: There is something in between the feasibility studies and the announcements and that is what I am trying to identify because that is I think will explain it and answer a lot of questions. I think you would agree that somebody did not dump three feasibility studies on the Prime Minister's desk who said, "Oh, that looks like a billion dollars. I might announce that next week." I mean, that is not how this works. We all understand that.

The Hon. MARK PEARSON: Don't be too sure.

The Hon. CATHERINE CUSACK: What has happened? We do not know what has happened. This is a genuine question.

Ms LEVY: Ms Cusack, I was not here at the time leading up to that announcement or in this role so I cannot talk to what informed Governments, Ministers, to take the decisions that they did. I am only aware of those pre-feasibility studies. I do not know if anyone else on the Committee here is aware of any other further work that had been produced to inform that, but I am not aware of any. I can take that on notice and find out if there was any additional work being done.

The Hon. CATHERINE CUSACK: Thanks. I do not have any other questions.

The CHAIR: Okay. I have a few more. You are not sure whether the strategic business case will be released publicly.

Ms LEVY: Normally, a strategic business case is not released. If a business case is released, it is normally a final business case that is released, but that is not consistent with all. Some projects they release and others they are not and it is a matter for Government to take that decision as to whether they release them or not, so I cannot speculate to that.

The CHAIR: Okay. Then the feedback or suggestions from my Infrastructure NSW are not released publicly. Is that correct?

Mr DRAPER: No. That is advice to Cabinet.

The CHAIR: The final business case is expected to be, and usually is—

Ms LEVY: Not expected to be and usually is. Sometimes final business cases are publicly released and sometimes they are not.

The CHAIR: So how do we know if, for example, Infrastructure NSW—I just want to get clear on this. Infrastructure NSW is there to provide like an independent assurance framework for Government for major projects like this.

Mr DRAPER: Yes.

The CHAIR: Say if you are recommending sending something up to Cabinet, having a look at the strategic business case and it is a bit of a shocker and clearly be Mole River is not going to stack up, hypothetically.

Mr DRAPER: Hypothesising, yes.

The CHAIR: Hypothesising, yes, that the Mole River is not going to stack up economically and you send that recommendation to Cabinet, that does not see the light of day. It is a political decision made by, you know, the National Party that wanted these dams built. The public does not know that Infrastructure NSW thought it was a pretty bad idea. Is that the case?

Mr DRAPER: No. I would not quite characterise it the way that you did.

The CHAIR: No. You characterise it how you want.

Mr DRAPER: It is a report to Cabinet so, of course, as many members of Cabinet see this—Premier, Treasurer, all senior Ministers—so, it is a fairly, I do not know, methodical and sombre process.

The Hon. BEN FRANKLIN: Robust, perhaps?

Mr DRAPER: Robust. That is a good word. Thank you.

The CHAIR: But not transparent though.

Mr DRAPER: We do actually generally publish summaries of final business cases on our website, so if you go to our website you will see a list of a whole lot of summaries of those final business cases there. So, we have tried to make that as transparent as possible. I guess it is trying to find a balance between Executive Government being able to make decisions in a methodical robust way but also provide transparency to the public, as you were discussing. That is the balance we have found at the moment. It allows Government to consider those things without having to respond to every sort of public piece of input or media inquiry around that. It is a fairly normal Cabinet convention.

The CHAIR: Are the summaries of those final business cases just the summaries of the final business cases, or are they of your analysis all recommendations in relation to those?

Mr DRAPER: It has a section at the back on Infrastructure NSW view, so we give our view of it as well as the contents of the final business case.

The CHAIR: Okay. Earlier, Ms Levy, you spoke of the project's objectives that the strategic business case is looking at: What is the best way to meet the project's objectives? What are the best options, I think you said. What are the project's objectives—Mole River I am referring to?

Ms LEVY: Yes. The benefits that the project is intending to achieve are improvements in on-farm productivity as a result of more reliable and secure water supply; increased reliability for agricultural production which would, in turn, help to secure jobs and create new opportunities; and an improvement to security of town water supply for downstream communities. They are the stated key objectives for the project. There would be other ones in addition to that but those are the three primary ones, unless you wanted to add anything to that, Mr Magaharan?

The CHAIR: Okay. So, I did want to get back to this 100 gegalitre versus different sizes issue. When I asked what the options were that the strategic business case could potentially look at—I think part of potentially Ms Cusack's questions as well—it is almost like, "What is the point of a strategic business case?" It seems like the Government has said that it is wanting to look at the feasibility of 100 gegalitres. I understand you have spoken with people about potentially acquiring their land. Have you gone to the three different locations that I think you referred to, Mr Magaharan, to speak to landholders?—I think three different locations were mentioned earlier—or is it just the one footprint for one location for the people we spoke with today? Are there more landowners that need to be spoken to? Is it really three footprints that you looking at?

Ms LEVY: When I was talking about the land acquisition costs, I was referring to some of the other projects where we are more progressed and so conversations with landholders, particularly around the Wyangala Dam, have commenced in terms of the potential impacts. I would have to defer to Mr Magaharan.

The CHAIR: Just to be clear: In terms of the questions and the response to this, we have all along had this 100-gegalitre potential dam for Mole River. The fact sheet for the Government—the fact sheet for WaterNSW—says:

Mole River dam is approximately 20 km south-west of Tenterfield in northern NSW, in the Border Rivers Catchment. Its proposed to capture 100 GL of water storage to improve water security and reliability and flood mitigation for water users.

I am just surprised that WaterNSW has come here today and said that in fact all options are on the table when the fact sheet that the community has been—you have undergone community consultation sessions and forums. Are you being advised now by your people that in fact it is only 100 gigalitres? I think people need to have that reassurance because that is what they have been consulted on.

Mr MAGAHARAN: To be clear, when we were responding to that question I was responding to the various dam sizes considered in the feasibility study, which were a number of different sizes. When talking about what is being considered now, yes, the announced dam is approximately 100 gigalitres. What is occurring as we work through this process is the hydrological modelling to understand what the final optimal size would be for that dam.

The CHAIR: I think that was in response—Ms Levy was talking about options. So it is 100 gigalitres. That is good. Anybody watching this forum can be relieved that that has not changed and they are not told that suddenly everything is on the table again after however many years of not being on the table. But, secondly, can we just clarify the location then? Is it the same thing with the locations? You said potentially three different locations: upper Mole River, lower and something else. I understand there is just one location, is there not, that the community is consulting on, or is there more than one?

Mr MAGAHARAN: As I understand, it is just the one location. Again, those were various options considered in the feasibility-level investigation.

The CHAIR: So what we are talking about and the questions that were asked earlier, and I am pretty sure that is what you did respond to, Ms Levy, were questions about the strategic business case. There are not really any options that the strategic business case is looking at in terms of weighing up this option, that option and everything I think you referred to. There are really not any options, are there? It is a 100-gigalitre dam at a certain location. In terms of what the strategic business case looks at to recommend it goes ahead to the final business case—

Ms LEVY: When we are doing an analysis and a business case, there is always at least one other option we consider it against and that is do nothing. So we look at the future going forward if nothing occurs and we compare that with a scenario of a number of dam options. We have also considered some non-build options, changes to licence and water sharing options to see whether that would produce an outcome. There is a "do nothing" option, there are options to just look at non-build solutions, and there are a range of build solutions. I believe that the strategic business case has looked at between 100- and 150-gigalitre options, and those options modelled against other different water sharing and licence arrangements. That produces a range of options when you compare those type sizes with other potential augmentations to licence options that produces a range of options from do nothing, no build and make licence and rule changes only through to 100- to 150-gigalitre dam options.

The CHAIR: Can I just ask Mr Draper from Infrastructure NSW then, from your perspective as the CEO of Infrastructure NSW, if the project's objectives are as stated—improving on-farm productivity and agricultural production, and improving town water security—would it be usual for a government to look at more options than just one option of spending however many hundreds of millions of dollars on a dam or do nothing? Would it be usual for a government to say to look at what off-river storages could do for those same objectives at the same cost or less cost, or, if we are talking water security for towns, to look at water reuse, or to look at what reduced evaporation could do as well? Is it usual to get other options?

Mr DRAPER: Yes. I will just talk generally, but in most strategic business cases probably one of the more common pieces of feedback we provide or the expectations we would have is good option analysis going on so that there are a number of options examined. Often you have infrastructure-type options and sometimes you have more policy or pricing-related options for those sorts of things. Yes, you would expect them all to be canvassed to some degree or other. You may have particular levels of impact that you are trying to achieve and some of those may not reach that standard, but, yes, you would have a look at them and see what they could contribute, and I think that is a fair comment.

Ms LEVY: We have looked at non-build options as part of the development of this work. A working group has been formed that brings people from various parts of government together to work with WaterNSW—DPIE Water, DPIE water modelling and policy people, Treasury, Department of Regional NSW. A range of others including representatives from Environment, Energy and Science, Fisheries and other people are part of these working groups to help inform the work that WaterNSW is doing, and part of that work was that that group did want to see a range of options including non-infrastructure options. So that will be part of this strategic business case, including non-build options.

The CHAIR: We have had quite a few witnesses talk about the potential for deep off-river storages. We heard about one today from one of our earlier witnesses—which I am trying to find and I cannot, but I will get to in a minute—of an off-river storage, very deep, for the town of Nyngan, actually. Yes. It is situated off Nyngan. It has been very good and it is very deep and does not evaporate as much as dams, and there was a suggestion for that.

Ms LEVY: I do not know whether that specific option has been part of the options that we have considered, but I could take that on notice, Ms Faehrmann.

The CHAIR: Thank you. Quite a few witnesses in our previous hearings as well have also recommended that and made submissions to that effect, including many of the water scientists and hydrological modellers that we have had before this inquiry. In relation to the dam's users in the end, you said that you consulted with irrigators and producers and that there was a suggestion they would need to, or are looking to, convert from general to high-security licences. Could you expand on that for a little bit? I do have a follow-up question to it.

Ms LEVY: I will do my best. I might refer to Mr Isaacs on that. The advice that I have been getting in addition is that the drought for this region has been catastrophic. A number of people have sold up after no production for five to six years. There are some areas that have had an 80 to 90 per cent reduction in their production outputs in the valley. The region is heavily dependent on irrigated agriculture and being prone to severe droughts and varying in terms of their depth and duration and frequency. The low level of water security exposes that industry in the border rivers region to high direct economic and social costs through those drought periods as well as those indirect costs that affect all of the people in the valley.

The intent of this is to provide that storage capacity that gives some level of security against the length and severity of those droughts. It does not necessarily drought-proof against every event but can ensure—and the feedback that the team said was that those irrigators that we had consulted with had said, yes, they would be interested in converting their general to high-security licences if the option was available, provided that improved their reliability and security.

The CHAIR: It is not more water, because it has to be within the Murray-Darling Basin cap, is that correct?

Ms LEVY: It is about storing it. It is boom and bust there. It is flood and drought. When we are in the flooding times, when there is excess water, it is about catching it and storing it so that when we start to get into those drier times we can prolong the length of time before that drought would bite.

The CHAIR: Capturing it and storing it in a dam like that is storing it away from other people who would necessarily use it, in terms of downstream users.

Ms LEVY: I am not an expert, and I might refer to one of my colleagues, but if we do not store it, it passes through. There is more water than is needed in those flooding times and that water goes through the system. Catching it and storing it for the dry times means that when the flows are not there we are able to release flows from the storage.

The CHAIR: For those who can afford to buy that water at the time. The feasibility study that you keep referring to from 2017, which, let us remember, found it not economically viable. You keep referring to that feasibility study as though it was this fantastic document that recommended the Mole River dam. It did not. It suggests that to make it feasible, essentially we have to see more farmers in that part of New South Wales planting permanent tree crops or almonds. You have consulted with the irrigators, they have come back to you and said, yes, they are looking at needing high-security licences. This essentially will result in large-scale conversion of land use in the border rivers area and potentially Barwon-Darling from cotton to almonds. That is what this feasibility study has said is needed to justify. The irrigators have come back to you and said, yes, they want high-security licences but the only way they can afford the high-security licences is by converting their crops to almonds. Is that not true? The Chief Knowledge Officer, I am not sure what that means as a role, but maybe you have knowledge of that?

Mr ISAACS: You were speaking earlier and just then about land use. The land use really comes about from a range of factors, such as the resources available and market forces. When you look at the sustainable diversion limit, which is what has replaced the Murray-Darling Basin cap, it is a long-term average. It is made up of a series of unders and overs. Some years you will be under, some years you will be over. The requirement is that on an average basis you are under that limit. What the conversion from a general security to high security would do, is it would smooth out that series of unders and overs so that each year you would be closer to that limit, rather than some years way under and some years way over. What that allows you to do is to grow permanent crops, which might in this case be almonds, the example you have used, and shift from an annual type crop, such as cotton. The land use will come from the resources available. What the irrigators are saying is that if we had the

opportunity to convert a general security licence—which in some years they will get very little and some years they will get a lot, which is very well suited to the growing of annual crops, such as cotton or cereals—if they could convert that into a smaller number of high-security licences, which they would have a smaller volume of water on a more reliable and regular basis, then they would convert to a permanent style of crop, such as almonds—

Ms LEVY: Citrus, table grapes, intensive livestock, abattoir, poultry, piggeries, and in terms of the nuts, pecans, macadamias, walnuts. There is a range. We do not tell farmers what to grow, we work with them to provide access to water and the decisions that they then take as to what they grow. There are mixed views on farm enterprise mix. Some have said that there is an appetite to make changes over the long term and they would do so if they had that level of security. But there are a number of factors for them to review and consider as part of that. We are still really in the early stages of having those conversations with the water users in the agricultural sector.

The Hon. MARK PEARSON: Is the question there that large, corporate, intensive farming, agriculture can only really grow in that area if they were to have a much larger supply of water?

Ms LEVY: I think it is about security, not so much supply.

The Hon. MARK PEARSON: The evidence we have been getting is that there is security in the main already—

Ms LEVY: No, we are saying that there have been long periods of drought.

The Hon. MARK PEARSON: That is correct, but what we are hearing is that it is very difficult, but there are ways of managing that.

The Hon. BEN FRANKLIN: That is different to security.

The Hon. MARK PEARSON: The industries you are talking about are the industries that use the most water of any industry at all, whether it be nut trees, intensive agriculture, abattoirs or dairy. They are the largest users of water in this country, as opposed to what is there now.

Ms LEVY: What we are saying is, we are looking at options for how we could provide water and working with those sectors to say, is there interest and appetite for those changes to the water licences. And what would it mean for them are decisions that they would then have to take.

Mr ISAACS: The way the water allocation system works is a certain amount of water is made available and it is up to the water user to determine what they use it for. When a user gets water it is up to them to decide if it makes most economic sense to dairy or to grow nuts, or cotton, or wheat. They do not get more or less water depending on the type of crop they grow.

The Hon. MARK PEARSON: But they can afford it more.

Mr ISAACS: They would want to grow the most economically viable product for that quantity of water. That makes sense for a government, because the water is a limited resource. If we say, we are giving you X number of megalitres, the Government would want to see the maximum economic return for that limited resource. It would not make sense to use that precious, limited resource and get a suboptimal economic return for that resource. Only a certain amount of water is made available and it is up to the market and the water user to determine what to do with that water.

The CHAIR: What that means with this situation is that the dam will capture more water, that water is able to be sold to high-security licences but less landowners downstream, for example, will be able to access that water and afford that water. Just to be clear, that is what that means in terms of being left up to the market, those people who—

Mr ISAACS: Not entirely.

The CHAIR: Not necessarily?

Mr ISAACS: Because the water that is made available under a licence, the Government does not sell that water. The water is made available under a type of licence and if that licence holder wishes to sell it on the market, they can do so, or if they wish to use it to produce something, they can do so. On a long term average basis, there is the same amount of water that is being captured and made available, but what it means is that for some years very little, and some years there is a lot. It means that each year there is a similar amount being made available, which means you can invest in permanent crops, such as nuts or citrus, things that need water, every year. That smaller amount, but more stable amount is more valuable to those types of crops, whereas annual crops, like cotton and cereals, for example, are well suited to a boom-bust style, because if one year you do not have water, you have a much smaller amount of water, you do not need—

you do not grow all the crops.

Ms LEVY: The drought has been the worst on record. To say that they have been managing is, I think, unfair.

The Hon. MARK PEARSON: I am quoting.

Ms LEVY: The 24- and 36-month inflows were the lowest on record and the observed storage levels had dipped. We have figures about how many farmers have had to walk off the land because of the lack of water through this drought and five to six years of 80 to 90 per cent lower production, so there has been an impact. This is about trying to create a storage that can level that out over those years.

The CHAIR: We also heard today of people whose properties will probably be acquired for this dam, so that is obviously impacting on people as well. We also heard a lot of evidence of endangered ecological communities that will have to be cleared of endangered animals. It is very rare that their habitat would be impacted. The unregulated Mole River apparently has a lot of platypus and platypus habitat. How much in the strategic business case are the downstream environmental impacts and impacts on downstream users? I think you are talking about may be one particular group of people that the dam could benefit, but the others downstream are very concerned about this. How much does the strategic business case take that into consideration?

Ms LEVY: It looks at all of those things in a slightly more high level than we do as we move into the final business case, but it does look at all of the costs. Costs are broader than just the capital costs. They are the costs to upstream and downstream users. It is unfortunate that when you build large infrastructure like this, there is impact on landholders and that land has to be acquired. But there is a fair and just process to go through for the acquisition of land. We have to work through the government-mandated process for land acquisition that ensures fair and just terms are offered to those landholders whose land is acquired. We are looking at upstream and downstream impacts at that high level. We will refine that assessment and we will have to look at both aquatic and terrestrial biodiversity offsets as would be required under the Biodiversity Act. Ultimately we would be looking at avoiding any impact on any ecology and cultural heritage, but where those impacts are unavoidable then the mitigation would be to ensure that, through the biodiversity offsets, that is worked through. But it is never the intent to want to have an impact on ecological communities, but where it is unavoidable we would have to be subject to that process.

The Hon. MARK PEARSON: How can we fairly and justly remedy flooding someone's home, which has been since three or four generations? You used the term "fair and just" or "offset", but how is that possible?

Ms LEVY: It is about economic fair and just terms and treating those people, but is not unlike any infrastructure when we build schools or hospitals or roads: There is land that has to be acquired. What we are making sure is that those people are offered fair compensation for the cost of their land and any improvements to that land to ensure that they are compensated. As to the family history on the land, that is a very sad outcome and not one that we certainly take lightly. That is why these projects are subjected to the scrutiny that they do under business cases and environmental assessments to consider whether those impacts on individuals and communities stack up against the benefits that a project is offering. It is a very difficult one and one that our team takes very seriously and treating particularly affected landholders like that with the greatest respect. If we could avoid impact on people and the environment we absolutely would but sometimes it is not possible.

The Hon. MARK BUTTIGIEG: On that point, we heard evidence this morning that there were access agreements signed by those landholders. The message we got was that they did not much choice in that. Could you articulate and tease out how that works? Do they have to sign those agreements? Is it a sort of a—

Ms LEVY: I could not answer that; I do not know whether Mr Magaharan can. If not, we would very happy to take that on notice. But I do not know that we ever force access for investigations.

Mr MAGAHARAN: I would have to take that on notice. I do note—

The Hon. MARK BUTTIGIEG: If you could. There were two things that came out of that which left us a bit quizzical: One was the fact that the access agreements were signed and the implication was that the owners did not have much choice in that; and the second one was that there was no talk of any compensation or no process or consultation about how that would happen. There were two things that came out of it.

Ms LEVY: The access would likely be for either field investigations to look at environmental, ecological, cultural heritage impacts or to potentially do geotech or other surveys. Generally, there is not a physical impact other than an imposition of our people coming in and having a look about their land, but certainly if there was any impact on the land, we would and should be talking to them about any reparations.

The Hon. MARK BUTTIGIEG: I think there was mention of bore holes being drilled—

The CHAIR: Excavation pits, bore holes.

Ms LEVY: If we could get more details on those people, we would be very happy to talk to them about if there is any reparation needed to address those issues.

The CHAIR: This is the Norrises.

Ms LEVY: Okay, thank you.

The CHAIR: Thank you very much for appearing. The time is up for today's hearing. Thank you to the government witnesses for appearing today. I declare the hearing closed.

(The witnesses withdrew.)

The Committee adjourned at 15:45.