THE LEGISLATIVE COUNCIL SELECT COMMITTEE ON CLYDE RIVER WATER MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART ON WEDNESDAY 11 AUGUST 2004.

Mr JOHN DIGGLE, DIRECTOR, INLAND FISHERIES, WAS CALLED, MADE THE STATUTORY DECLARLATION AND WAS EXAMINED.

- **CHAIR** (Mr Hall) Mr Diggle, we have your submission. Is there anything you would like to add to that?
- Mr DIGGLE I don't really want to go into to lots of things. I am really here to answer any question that you might have. In relation to lakes Sorell and Crescent, it is important that people understand that there are significant natural values associated with Lakes Sorell and Crescent in terms of significant wetlands, threatened species, including threatened species of fish and snails and a range of other fauna. Water quality in that catchment is a significant issue in terms of ecosystem health and health of the river system and water supplies to towns downstream. I just made that point in case it's been missed.
- **CHAIR** A question I have for you. You claim that the filling of off-stream storages during the winter months has a deleterious effect on the river. Can you just expand on that?
- Mr DIGGLE Yes, that's in terms of environmental flows, particularly in dry years. Years like this year have been really good years and will have no impact. Over the last few years we have had a series of really dry autumns and winters and we've seen significant, really low flow, events in the Clyde River. Everyone is trying to really low-flow events in the Clyde River and everyone is trying to fill their dams in that period outside the irrigation season and it can have an impact on the environmental flows and help the system.
- **CHAIR** Do you think that when the water management plan comes into effect the quantum of waters that will be able to be taken into off-stream storage will then be regulated so that will fix that problem? Is that your understanding?
- **Mr DIGGLE** It will help improve the situation. If it is naturally dry it is dry; if there is no water in the river, there's no water in the river. It is the extent and duration of those events. If it is year after year after year then you start to build up impacts on the health of the system.
- **CHAIR** On the other hand with some of those large, especially those large off-stream storages, at times I understand that water is released from those during the summer months to help pump the flow up so that has a positive effect, in your view?
- **Mr DIGGLE** Yes, exactly. We have to try to get a balance in the system between the environmental values and the other values and the other needs in the catchment for irrigation and town supply and those sort of things. It is not a simple story; you cannot just say, 'This is all down to this or all down to that'; we are trying to deal with that in the

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- water management plan, how best to manage the available resource to meet the needs of all.
- **CHAIR** Yes. I think you mentioned that whilst the trust has an allocation of water from the two lakes, there has never been a quantified allocation from the Clyde itself.
- **Mr DIGGLE** Yes, not that I'm aware. The trust have always taken water from the river but it has not been quantified as far as I am aware. That creates difficulties, I guess, in terms of the allocation process downstream.
- **Mr FLETCHER** Do we assume that your gut feeling perhaps is that if the amount of water coming out of the Clyde was quantified, the amount of water available for irrigation might need to be reduced?
- **Mr DIGGLE** It's an interesting story; no-one knows exactly what's used in terms of water from the river. I do not know how that might impact on availability.
- **Mrs SMITH** The metering system that is talked about happening should help to give some indicators, is that correct?
- **Mr DIGGLE** Yes, I think it will and from my point of view that would be a much fairer system for all involved.
- **Mrs SMITH** You also made the comment that in dry winter months off-takes into dam storage creates some difficulties for the river. I think, to our indication, there are only three large dams and a couple of smaller ones. Do I take it from that that Inland Fisheries does not support further dam storage?
- Mr DIGGLE Not necessarily. It is how you fill the dams; it is when you take the water. The issue is do you fill it as soon as there is a flow in the river or do you let it get to a threshold level and then start taking water, they are the issues. I am not saying it is a bad thing to have storage in the system. I think it helps. It takes pressure off the lakes at the top of the catchment. There is a benefit in having storage but the data that I have been shown from DPIWE suggests that the capacity of the system to deliver water on a reliable basis is almost reaching its capacity. There is still some water available to be taken into storage sustainably but it is not a huge amount so there is not a lot of capacity for expansion in that area. From my point of view, it is good in that it takes pressure off the storage at the top of the catchment but it is the impacts from trying to fill those storages and how you manage the filling of those storages that is the issue.
- **Mrs SMITH** If there was a plan to increase the usage of Lake Meadowbank for the lower part of the Clyde water process, do you have a comment on how that may or may not effect the inland fisheries?
- **Mr DIGGLE** I would like to see it happen. I think that would be beneficial for the system. It gives greater surety within the system to meet the requirements of irrigators so I think it has to be advantageous and ultimately it should take pressure of the catchments right at the top of the system.

- **Mr WILKINSON** You talk about the drawn-down level of Lake Sorell, 803.04 that should be raised to 803.2 metres. What is the level now, are you able to say, the current level of Lake Sorell?
- **Mr DIGGLE** It is approaching 804.1, so it is a lot higher than that level at the moment.
- **Mr WILKINSON** And they are endeavouring to increase the level of that lake at the moment, are they not, because of the problems that they have had with the carp?
- **Mr DIGGLE** Yes, we are currently trying to maximise the storage in both lakes, Lake Sorell and Lake Crescent. The goal all the time is to maximise the levels in those lakes so we have water available.
- **Mr WILKINSON** At this stage what are you endeavouring to maximise your storage to?
- Mr DIGGLE The full supply level that has been agreed within the water management planning process is 804.36. There is a lot of history with levels in Lake Sorell and in Lake Crescent. In Lake Sorell it has been particularly difficult in terms of landowners alleging that their properties are being inundated by excessively high levels in Lake Sorell, and that has gone on for a number of years, as far as I am aware. We have reached a consensus that 804.36 is the full supply level of Lake Sorell, and that is how we will try to manage the lake.
- **Mr WILKINSON** So the level it is at now would be the highest it has been for how long?
- **Mr DIGGLE** I think it was a little bit higher last year, but it was higher earlier this year, so we are expecting Lake Sorell by the end of the October to be at its highest level for a number of years, probably since 1996.
- Mr FLETCHER I am struggling to get to grips with it a little bit in relation to this matter. It has been put to us in an earlier submission that the lake level is critical and the off-take has been determined by 30 years of hydrological tests, which reaches a conclusion that the average or the mean take-off over those 30 years has been about 10 000 megalitres per year, and therefore 10 000 megalitres ought to be the licensed supply to the Clyde Water Trust in any year in the future. As I understand it, Crescent is above your desired minimum level at this stage.
- **Mr DIGGLE** It is, yes.
- **Mr FLETCHER** If there were to be an allocation of a further 2 000 megalitres a year provided in water take-off to the Clyde Water Trust, what difference would that make in the height rise and fall of the lake as a mean?
- **Mr DIGGLE** It is not a very high change.
- Mr FLETCHER It would be a matter of millimetres.
- **Mr DIGGLE** Exactly. In Lake Sorell 100mm is about 5 000 megalitres, and in Lake Crescent 5 000 megalitres equates to about 200mm.
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- **Mr FLETCHER** So convince me of the serious negative impacts of reducing the level of the lake by 100mm.
- Mr DIGGLE It is the cumulative impact that is the issue. Say this year we go 12, next year we go 12, the year after that we go 12, you have to add those together. That 50mm after two years is 100mm, unless the system is filling. It just accumulates, so the cumulative impact is significant over time. That is the whole basis for the termination around 10 000. It is indicated that that has a high liability as it stands in the system. The more you increase the take, the more you decrease the reliability of supply.
- **Mr FLETCHER** Yes, I see. So you are finding the balance between the intake, as represented by rainfall and snow and drainage into the lake system, as against the off-take.
- Mr DIGGLE Yes. It is a complex model.
- **Mr FLETCHER** Yes, and I guess you argued to me that over 30 years there have been very wet seasons and there have been very dry seasons, and the system that has been devised by the Water Management Group is seeking to find the balance. It is not an exact science, it is not a precise science.
- Mr DIGGLE It is as close as we can get. The hydrological modelling of the system is giving an indication of reliability. We cannot actually predict what this year is going to be. No-one can say it is definitely going to be wet or it is definitely going to be dry for the coming summer. We do not have that forecasting ability, but on probabilities we are only looking at what is likely to happen.
- **Mr FLETCHER** So if we err on the side of generosity towards irrigators and there are unusual seasons for the next 20 years, the level of the lake might fall by a metre.
- **Mr DIGGLE** Yes, it could well do and, on top of that, the interesting part of the system is that the greatest loss is evaporative loss in the system, so if we go into a dry period then we are going to have huge losses in the system.
- **Mr FLETCHER** So the shallower the water the greater the evaporation, is that what you are saying?
- **Mr DIGGLE** That is one of the difficulties we have. When we have dry periods they are dry dry. We have very little input into the system.
- **CHAIR** What is the average depth of, say, Crescent right at the moment?
- **Mr DIGGLE** The deepest part in Lake Crescent would be lucky to be 2 metres. It is not very deep.
- **CHAIR** And Sorell is similar?
- **Mr DIGGLE** Lake Sorell would be 3, 3.5 metres probably at its deepest point. At full supply it is approaching 4 metres at its deepest point, but average depth is a lot less than that.
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CHAIR - Mr Diggle, thank you very much for your submission.
THE WITNESS WITHDREW.