

**STANDING COMMITTEE ON
ESTIMATES AND FINANCIAL OPERATIONS**

2011–12 BUDGET ESTIMATES HEARINGS

**TRANSCRIPT OF EVIDENCE
TAKEN AT PERTH
THURSDAY, 16 JUNE 2011**

**SESSION THREE
WATER CORPORATION**

Members

**Hon Giz Watson (Chair)
Hon Philip Gardiner (Deputy Chair)
Hon Liz Behjat
Hon Ken Travers
Hon Ljiljanna Ravlich**

Hearing commenced at 3.15 pm

HON HELEN MORTON, MLC

Minister for Mental Health representing the Minister for Water

MRS SUE MURPHY

Chief Executive Officer, Water Corporation

MR PETER MOORE

Chief Operating Officer, Water Corporation

MR ROSS HUGHES

Chief Financial Officer, Water Corporation

MR LLOYD WERNER

Manager, Pricing and Evaluation, Water Corporation

The DEPUTY CHAIR: On behalf of the Standing Committee on Estimates and Financial Operations I welcome you to the hearing. Before we begin, I am required to ask the public servants to either take an oath or affirmation.

[Witnesses took the oath or affirmation.]

The DEPUTY CHAIR: You will have all signed a document titled “Information for Witnesses”. Have you read and understood this document?

The Witnesses: Yes.

The DEPUTY CHAIR: This hearing is being held in public, although there is discretion available to the committee to hear evidence in private either of its own motion or at a witness’s request. If for some reason you wish to make a confidential statement during today’s proceedings, you should request that the evidence be taken in closed session before answering the question. Government agencies and departments have an important role and duty in assisting Parliament to scrutinise the budget papers on behalf of the people of Western Australia, and we value your assistance.

These proceedings are being recorded by Hansard. A transcript of your evidence will be provided to you. It will greatly assist Hansard if when referring to the budget statement volumes or the consolidate account estimates members give the page number, item, program and amount in preface to their question. If supplementary information is to be provided, I ask for your cooperation in ensuring that it is delivered to the committee clerk within 10 working days of receipt of the questions. Should you be unable to meet this deadline, please advise the committee clerk immediately. An example of the required *Hansard* style for documents has been provided to your advisers. The committee reminds agency representatives to respond to questions in a succinct manner and to limit the extent of personal observations. For the benefit of members and Hansard, I ask that the minister introduce her advisers to the committee, and for each adviser to state their full name, contact address and the capacity in which they appear before the committee.

[The witnesses were introduced.]

The DEPUTY CHAIR: Do the witnesses or the minister wish to make an opening statement?

[3.20 pm]

Hon HELEN MORTON: A very short one. I just want to make it absolutely clear that these people represent the Water Corporation and consequently, the elements within the budget papers relating to the Water Corporation are the only areas of work that they are able to discuss. It is not the broader context of the Department of Water or any of the other aspects of this; these people represent the Water Corporation.

The DEPUTY CHAIR: That is a very limited page of information we have. It is only two pages I think, is it not? That is all we have. Okay, let us just see how we go. I suspect that there will be some overlap and we can then make the judgement about whether there can be any explanation coming from the executives.

Hon KEN TRAVERS: I should have said that there are a number of pages in budget paper No 3; particularly as a starting point, page 50, which refers to the West Pilbara desalination plant. I am particularly interested in the first instance about how much money the Water Corporation has already spent on planning and design for the West Pilbara desalination plant?

The DEPUTY CHAIR: Which page was that Hon Ken Travers?

Hon KEN TRAVERS: In budget paper No 3 there is a reference to the fact that there has been a re-cashflowing or a deferral of expenditure on the West Pilbara desalination plant. I am trying to find where it would appear on the capital works, but I would have assumed that the Water Corporation would have done some planning and design work on that project in the current financial year, or previously, and so I am keen to find out how much has been spent on that project.

Hon HELEN MORTON: I have asked the chief executive to speak on that.

Mrs Murphy: It is very difficult to pull from what we have spent on planning for that plant as distinct from planning in the Pilbara. We have spent in the order of \$5 million on planning in general for the Pilbara Cities water and wastewater work to this stage—that is for the whole suite of projects. So, the desalination plant is just one part of that suite of projects.

Hon KEN TRAVERS: So, there is no specific planning and design work that was commissioned for that actual plant at this stage?

Mrs Murphy: There have been some activities, not so much planning activities. There was an expression of interest for generic options for water in the Pilbara and we ran that process in association with the Department of Treasury and Finance and the results of that led us to move forward with an expression of interest for the desalination plant, and we have carried out the expression of interest. I have not got at my fingertips what we have spent on that, but that is in the procurement of expression of interest, not a planning piece of work.

Hon KEN TRAVERS: Maybe if we can have on notice what expenditure has been done that specifically relates to that project.

[Supplementary Information No C1.]

Hon KEN TRAVERS: I am also interested in what work of the corporation has done for the modelling for the demand of water that would have been serviced by that West Pilbara plant, the alternate sources that are now obviously going to come into play as a result of that deferral, and how long you expect those alternate sources to have sufficient water to meet the demand in the West Pilbara area.

Hon HELEN MORTON: We are just looking for a bit of clarification around that. Could you just go over that again?

Hon KEN TRAVERS: I am assuming that the Water Corporation has done a fair bit of modelling, prior to the original decision to go ahead with the West Pilbara, about when water would be required and that is why there was the original commitment. I assume that as a result of the deferral there was also further modelling done as to alternative sources that would be able to provide that water instead of building the West Pilbara plant. I guess what I am then interested in is when do we then need the West Pilbara plant to again be back into the mix, or some other alternative source of water for the West Pilbara?

Mrs Murphy: Obviously, we have done a vast amount planning. Water demand is really in three tranches for the West Pilbara. One is growth of the town, that is the traditional government Water Corporation kind of responsibility. The second is growth for industry, which has largely been seen as a requirement of the industry itself. And the third is our obligations under the old state agreements to supply water to Rio Tinto, which come from the old Hamersley Iron and the Cliffs Robe River kind of agreements. We have modelled all of those things. At the moment we are able to continue to meet the growth in the town and our obligations under the state agreement to the water we are getting out of Harding and Millstream, largely out of Harding at the moment, because it is full. A decision on further source augmentation needs to be made realistically within the next 12 months to decide whether there is either water to be procured from another party, be it a private sector party or Rio, or whether we go ahead with the desalination plant or whether there is some other option.

Hon KEN TRAVERS: As I understand it, at both Millstream and Harding—for one there has always been problems with turbidity at Harding River Dam and so your sustainable yield is fairly low from that dam compared to its size. I am interested in the modelling. You are saying that in 12 months we would need to make the decision, but when do we actually —

Mrs Murphy: Need the water?

Hon KEN TRAVERS: Yes. And again, with both of those sources there is a fairly high degree of fluctuation with the recharge of both those sources. Whilst we have had good rains go in there now, if we do not get good rains even in the next 12 months, when do we start to actually come under pressure so that we need to have that new source in place?

Mrs Murphy: Harding will empty in two years with no further rainfall. So, if there is no further rainfall at all, with projected use, Harding will be empty in two years and we would then have to switch to Millstream. Millstream holds the water longer—this is assuming that there were no other rainfall events. Realistically, if there is no rainfall at all, you would get another year out of Millstream, so within three years you would have a serious water problem. So, you have got three years before you would need more water. If there are continuing rainfall events, that gets pushed out further. But, our intent is to have the next source in place in that period.

Hon KEN TRAVERS: Within those three years?

Mrs Murphy: Yes.

Hon KEN TRAVERS: I assume that there is that constant—I mean the difficulty of that area is trying to model how much rainfall you will get. You could have five years without rainfall and then you get three years of more rainfall than you could ever dream of and the challenge is making sure you have got the sources for the long dry periods.

Mrs Murphy: Yes, it is wildly variable and there is also phenomenal evaporation, which is the risk. So, Harding, whether you use it or not, will empty almost in two years because the rate of evaporation is really great.

Hon KEN TRAVERS: I do not know about there. I think the Ord River is three metres per annum or something, is it not?

Mrs Murphy: It is more than that. Mr Moore can tell me. At Harding it is two or three metres, of that order, per annum. You do lose a lot of water anyway, so you may as well use it, if that makes sense. With turbidity, we do have a reasonably sized microfiltration plant that works on Harding and purifies the water, so the turbidity and the hardness are not an issue.

Hon KEN TRAVERS: The other issue that then fits in is that you are suggesting that there may be a further process of seeking alternatives to the desalination plant. I assume that some of that relates to some of your options for dewatering projects and piping water back. Are they the sorts of thing that you would be looking at?

Mrs Murphy: There are some commercial discussions that are taking place that I am not sure I can share at the moment. I do not think so. We have some options involving groundwater as well as mine dewatering. We have a number of options that are being pursued to make sure we get the right solution.

[3.30 pm]

Hon KEN TRAVERS: Will all or any of those require government funding at some point to make them a goer, or can some of them be completely funded by the private sector?

Mrs Murphy: Clearly, the preference is to find sources that require the least borrowing, as well as have the lowest long-term cost, and they all vary in that. But there are a number of actions that we are doing as well. The Water Corporation owns and operates a small seawater desalination plant to supply water to Burrup Fertilisers, and we are looking at Burrup Fertilisers self-supplying and pulling that offline, which would give us more water back into the scheme. We already have that plant. We are also doing, in conjunction with the federal government, a very large water demand reduction campaign across the Pilbara, working with both industry and residential customers one on one. That includes the retrofit of water-efficient products in houses. We are aiming to absorb quite a bit of the growth going forward through per capita demand reduction. We are not just sitting around waiting for rain.

Hon KEN TRAVERS: I would not have thought the Water Corporation would ever do that! You raised another question that I might come back to in a minute. I am trying to get an idea of the quantum of borrowings that the Water Corp expects it will require within that three-year period. What would be the minimum that you would expect you will probably have to find in that three-year period to ensure security of water for that West Pilbara area?

Mrs Murphy: For water only, the minimum is zero, I guess. The ultimate aim would be to get something totally off balance sheet, although to bring in the volume of water we will need for the future, inevitably, wherever it comes from, it will require upgrades of our existing network along the way, because our existing network is sized for a smaller West Pilbara than will be the case in the future.

Hon KEN TRAVERS: So that money is not included in that?

Mrs Murphy: No. The scheme upgrades, the piping upgrades and the upgrades to the waste water treatment plants—everything other than the source—are in the numbers in the budget.

Hon KEN TRAVERS: But, of course, the other issue will be that if it is off your books, it will be on someone else's books and we may be paying for it in a higher fee than you may otherwise be able to provide it for yourselves.

Mrs Murphy: If that made it a non-commercial decision, we would not recommend it. We would recommend the lowest whole-of-life cost.

Hon KEN TRAVERS: If you have to provide it yourself, what would you estimate would be the least amount of money that you would require to provide a water source to meet the demands of the West Pilbara area?

Mrs Murphy: The proposal that we previously had on the table for a desalination plant was \$370 million, so if we have to build a desalination plant, it would be of that order.

Hon KEN TRAVERS: Just to finish off on this, you mentioned the retrofitting schemes. Are you running an incentive for those companies to do that, or are you encouraging them to do it off their own back and they are taking it up?

Mrs Murphy: No. We are encouraging them. We have found, historically, that mandating these schemes does not necessarily give you the change you want. We have a program that is co-funded, as I said, federally that is about

behaviour change. A lot of work we are doing with the industries there are because the industries are the big landowners and the big property owners in a way. We would normally have a billing relationship with a lot of the residential customers in Perth, but that is not always the case in the West Pilbara because many, many people live in a home supplied by their employer. To that extent, we are working with industry to gain access to their tenants, if you like, to make those behaviour changes with them. We are also working with industry groups such as swimming pools, outdoor leisure centres and schools, as well as the big Rio Tinto-type industries, to come up with lower water use. There are a whole lot of tiers to that work. We are working with all of them, but none of them is a mandated scheme. All our large customers across the state are required to have water-efficiency plans and water-management plans in place.

Hon KEN TRAVERS: I was wondering more whether you were providing, say, rebates to them to put back into the houses more water-efficient appliances and the like, rather than mandating, and giving them a financial incentive to do that.

Mrs Murphy: It is more than that; we are actually putting the things in the house for free for a lot of the upgrades that we are doing. The federal funding enables us to do the water-efficiency work that we have been doing with our customers. Yes, it is more than a rebate; it is actually providing a waterwise showerhead or whatever the particular thing is in the circumstance.

Hon KEN TRAVERS: Are you able to give us how much you are spending on those programs and a brief outline of what you are doing with them? I am happy for it to be supplementary.

Mrs Murphy: Mr Moore might have the numbers off the top of his head. They are in the public domain already. Because our Waterwise programs are co-funded with the federal government, they are quite a public campaign.

Mr Moore: I cannot give you the Pilbara one, but it is in the order of \$4 million to \$5 million, I think, for Pilbara Cities.

Mrs Murphy: That is the total. Our component is 50 per cent of that, and 50 per cent of it is funded.

[Supplementary Information No C2.]

Hon ALISON XAMON: I refer to the Waterwise programs as they potentially exist in Perth.

Hon HELEN MORTON: Which page is it?

Hon ALISON XAMON: It is page 876. What I need to know is—there is not a line item here—how much has been put aside for any sort of Waterwise programs in Perth and what that consists of. Also, I want to get a final figure for the showerhead rebate scheme.

Hon HELEN MORTON: It is obviously not a line item in the budget. Consequently, that specific information that you are looking for is not here; however, the chief executive officer can make some general statements about it.

Mrs Murphy: We have a number of programs that we are running in the demand management area and we see it as —

Hon ALISON XAMON: I am specifically interested in the metropolitan area.

Mrs Murphy: We have our showerhead swap program, whereby our customers can bring in a recent bill and up to two inefficient, not-wise showerheads.

Hon ALISON XAMON: Do you have a final —

Mrs Murphy: A dollar value for that?

Hon ALISON XAMON: Yes, a dollar value —

Mrs Murphy: I think the dollar value for the suite —

Hon ALISON XAMON: — for how much you have spent to date for the last financial year and how much is projected for the next financial year. I am happy to take that on notice.

Mrs Murphy: It is of the order of \$8 million all up for those Waterwise programs, but that includes some country towns, so I would have to pull it apart. We will take that on notice if you wish.

Hon ALISON XAMON: I confirm that it is what is projected for the showerhead swap scheme for the last financial year and for the upcoming financial year. Could I also have a list of the towns that were covered by that?

[Supplementary Information No C3.]

Mrs Murphy: Was that just the showerhead swap or all —

Hon ALISON XAMON: No; that is just for starters. I want to go through the other ones as well.

Hon HELEN MORTON: So you do not want that to be just metropolitan now?

Hon ALISON XAMON: Metropolitan and the towns as mentioned by Ms Murphy.

Mrs Murphy: The showerhead swap is in Perth and Mandurah.

Hon ALISON XAMON: That is fine.

Mrs Murphy: There are no other towns for the showerhead swap.

Hon ALISON XAMON: I was going on what you said just then.

Mrs Murphy: There is a suite of demand-management programs that all-up total about \$8 million, but that is divided into a number of components—the showerhead swap; the one-on-one behaviour change with customers, which is a self-select-in option; and some retrofits in country towns. I would have to get the whole list. Because none of that is in the budget, we would have to take that separately.

Hon ALISON XAMON: Of course; that is why I am here—to try to get that information. In terms of the retrofits for some towns, could you please explain the sorts of retrofits that you are looking at? Is it going the whole hog in terms of a third pipe? It is very basic retrofits, is it? Which towns are being targeted? I am assuming that this ties in with the comments that you just made to Hon Ken Travers.

Mrs Murphy: No; it is not third pipe or anything along those lines. The retrofits are water-efficient showerheads. The biggest bang for your buck is usually in the showerhead, because, once it is installed, people, no matter how long their shower is, use less water per minute. It also helps power consumption quite dramatically. We will retrofit water-efficient toilets in areas where people do not have water-efficient toilets, and we will do water audits of people's houses and look at some of their garden areas and give them some advice about ways to cut water usage quite dramatically. It is in Albany, Perth, Karratha, Port Hedland and Onslow. In Kalgoorlie, we are doing a trial of smart metering to give people an automated meter reading—the trial is not rolled out fully yet—so that people can get a much more instant understanding of the water they have used in that period.

[3.40 pm]

Hon ALISON XAMON: How long do you estimate that trial will go for?

Mrs Murphy: It goes forever when it is installed. The trial is that we are only installing it in the Kalgoorlie-Boulder area, and then once it is installed we will be monitoring water use to see if the more frequent meter reading and the more frequent access of data for the customers allows them to drop their water use.

Hon ALISON XAMON: I will rephrase the question. When are we likely to get the initial results from the effects of that trial to see how successful it has been?

Mrs Murphy: We will have all the meters installed within the next six months or so, and, obviously, it will probably be 12 months before we have anything meaningful in the way of data, and then we will keep monitoring it.

Hon ALISON XAMON: That is still an answer, so that gives me an indication of how long you are going to be looking at.

I am happy to take it on notice, but could you please provide the costings that have previously been done by Water Corporation in relation to the cost per kilolitre of the implementation of various forms of water conservation measures, from rainwater tanks, obviously, which I understand are quite costly per kilolitre, right through to showerheads, presumably? Are you able to supply the full list of that?

Mrs Murphy: Yes. They vary by location.

Hon ALISON XAMON: Of course.

Mrs Murphy: And, by location, the number you are comparing them with varies.

Hon ALISON XAMON: I understand that rainwater tanks in Albany are drastically different to even Perth at this point.

Mrs Murphy: Correct. Similarly, the installation costs in, say, Onslow are greater than they are in other areas, so there are some installation costs, and then the viability of the program depends on the original cost of water supply. In Perth, the cost of water is much cheaper than it is in, say, most of our country schemes, even though that may not be what the customer pays.

Hon ALISON XAMON: I should probably put that on notice.

[*Supplementary Information No C4.*]

Hon ALISON XAMON: I was also hoping to get the costs of various types of recycling, and I will refer also to the “Wastewater Program—Groundwater Replenishment Trial” listed under “Works in Progress” on page 876 of the *Budget Statements*. I will concentrate, firstly, on the groundwater replenishment trial. Of course, the minister has indicated a desire to speed up that trial, and I note that there is nothing in the forward estimates to indicate that that is likely to occur. Would you like to comment on whether it is likely that that the program is going to be sped up, and, hence, where that will likely appear in the forward estimates?

Mrs Murphy: The trial continues to the end of 2012, and the numbers in the forward estimates include that. In the out years we have chunks of money for new sources. It is not necessarily specified in detail in the next two years which source is which, but we will look for the most cost-effective and value-for-money source. We are presupposing the outcome of the trial as being successful, and that being the case and the public acceptance is right and government policy lines up, then all of those things lead us to continuing with groundwater replenishment as a potential source option. There is money in for future water source augmentation, but which source it will be by the out years is not locked in.

Hon ALISON XAMON: I just want to clarify, because there is a difference between speeding up the trial and then determining that the trial is successful and proceeding with a permanent reinjection of waste water. Can I confirm, then, that it is not the intention of the Water Corporation at this point to speed up the trial, and that at this point, according to the budget, it is pretty much staying on track in terms of the original time frames for that trial?

Mrs Murphy: That is correct. We have signed a memorandum of understanding with the various regulators, and we are working through that process. It is a ministerial decision if that trial is to be amended in any way.

Hon ALISON XAMON: I understand, but at this point there is nothing to indicate that the original decision is going to be amended in any way?

Mrs Murphy: No.

Hon ALISON XAMON: Do I understand that if the trial, as I think we are all hoping, is determined to be successful and there is public support for this, that if you were to start implementing permanent reinjection, at the earliest it would be in 2013-14?

Mrs Murphy: Yes.

Hon ALISON XAMON: As I understand it, it actually still takes a while for the water to be able to be available for reuse anyway. At what point down the track would you be anticipating that that water would be subject to extraction?

Mrs Murphy: From when you drop the flag with environmental and all the suite of approvals to having some water out is of the order of 18 months to actually physically build. But the scheme we would be proposing—the longer-term scheme—is not to suddenly build a huge thing, but it would be an incrementally augmented scheme and we would start small and grow and grow and grow. After injecting the water there is quite a long time frame for the water flowing through, and we are doing a lot of modelling work with our water regulator, which is the Department of Water, about different ways to access that water. Depending on where you inject, you can use it to, sort of, bank some of the water that is naturally flowing out to sea. Our intention would be that from the minute we start injecting, we would be able to withdraw at least that volume of water in the same time frame, so we are not waiting for that water that we inject to physically get to the extraction bore before we would be proposing to start pulling water out again.

Hon ALISON XAMON: I am obviously going on the sorts of documentation that have been made available in terms of the likely travel time from the injection sites to the various bores.

Mrs Murphy: That is true, yes.

Hon ALISON XAMON: It is a significant period of time, which I am not objecting to, but I am trying to determine whether, as a future viable water source, we are actually looking at a fair way into the future. We are not looking at something in the immediate term; is that correct?

Mrs Murphy: No—well, it depends what you mean by the immediate term.

Hon ALISON XAMON: When I say “immediate”, I am probably talking about the next five to 10 years in my own mind.

Mrs Murphy: We would hope that it is a water source in the next five to 10 years, definitely. From the minute we inject we would expect our abstraction licence to be increased by at least the amount we are injecting. The abstraction licence does not wait for those water molecules to travel through; if we are putting water in here and pulling water out there, we are assuming that the molecules of water do not know where they came from and it is one for one. There is modelling that shows that when you inject in the very deep aquifers you could actually get a bounce-back effect that gives you more than one for one, depending on where you inject. If your injection is able to intercept water that would have been naturally flowing out to sea and hence not available, you could potentially—it has happened in Orange County in California—abstract marginally more water than the water you are injecting, because you are slowing down the rate of loss of water that you would normally not have had access to.

Hon ALISON XAMON: Pulling together what you have just told me, I want to see if I have this right. Assuming the trial is successful and passes all the hurdles you talked about, it will take about 18 months to actually establish an ongoing injection site, and you will be looking at approximately 2015-16 until you could look at extracting?

Mrs Murphy: No. The trial completes in December 2012, and we would be looking at 18 months’ construction from that period, which is mid-2013, and let us add six months for making sure that we have the appropriate approvals along the way. By the end of this year, if it is pretty clear that the trial is going well, we would start some of those approval

processes in parallel. We would aim to be starting to inject by the end of 2013, and we would be starting to abstract at about the same time. I am sorry, 2014; two years from the end of the 2012 trial we should have water coming out.

Hon ALISON XAMON: Now that you have explained that you are going to have parallel processes, it makes sense. Is there any concern that you may actually be jumping the gun on that? I understand the trial may be on track, and my understanding is that the indications at this point are that it is, but if it were to turn out that it was not ultimately viable or entirely appropriate, does that mean that Water Corporation is effectively taking a punt that the expenditure that it is going to put in at that period of time is actually going to ultimately be worthwhile? Because it sounds to me as though the building of that is premised on the hope that the trial—even though it may be an educated hope—is ultimately going to be successful.

[3.50 pm]

Mrs Murphy: The punt would be on our environmental approval application process. We would not physically build anything—I think we are not allowed to build anything—without environmental approval. There would not be physically pipes and filters and bores being constructed, but we would start the approval process in parallel. There would be some expenditure on that, but not —

Hon ALISON XAMON: But not infrastructure expenditure.

Mrs Murphy: No.

Hon ALISON XAMON: Thanks very much. Can I just also ask—I should have gone back to this before—can I please have the costings per kilolitre that it is considered. I suppose they are basically consistent to the cost per kilolitre of extraction from the Gngangara.

I am being very unclear. What I am after is what is expected at the end of the injection process that the cost per kilolitre of water is going to be as a result of that process. I am assuming it is higher than the cost of a straight out extraction from the Gngangara at the moment, because there is an extra process involved.

Mrs Murphy: Yes.

Hon ALISON XAMON: But could I please have a final costing? I am happy for you to take it on notice.

Mrs Murphy: I can give you a range of costs, because it is very difficult to be prescriptive, because there are a number of variables in how you calculate that. When you pull the water out and treat it, it is exactly the same as using our existing groundwater assets.

Hon ALISON XAMON: I understand that.

Mrs Murphy: The complexity lies in the fact that we have an existing allocation of water from the many aquifers that make up the Gngangara suite of aquifers. Over time—in fact when the second seawater desalination plant opens—we start the process of reducing that extraction level, so we would potentially have capacity in our existing groundwater extraction treatment processes that we would be looking to make up with this. The process to treat the waste water to a high enough level to inject in the aquifer is basically the seawater desalination process. However, it uses less energy than seawater desalination, because it is not quite as salty. At the moment the modelling shows that the costs are of the order of the same as seawater desalination.

Hon ALISON XAMON: So about \$2.10 a kilolitre generally?

Mrs Murphy: If you look at the out years, it is between \$2.10 and \$2.40 a kilolitre. The more existing assets that can be reused and the more likely it is to get more than a one-for-one abstraction trade-off, the more attractive groundwater replenishment becomes financially. It is very difficult to give you a specific answer to that question, because there are so many variables still out there. The generic process thinking is that, if it costs more and uses more energy than seawater desalination, it is not a viable option in the near term. If it costs less per kilolitre and uses less energy, then it is a viable option. At the moment the modelling going forward with our projected re-use of existing assets and our projected abstraction trade-offs has the price between \$2.10 and \$2.50 a kilolitre.

Hon ALISON XAMON: So it is comparable.

Mrs Murphy: Comparable, yes.

Hon ALISON XAMON: And then of course there are the environmental potential advantages in terms of —

Mrs Murphy: In terms of the local aquifer.

Hon ALISON XAMON: The local aquifer and what that means for the local wetlands. Thank you very much; that was very helpful. I could go all day, so I am just going to keep going until someone stops me. I have a question specifically about Perry Lakes. I just want to confirm that Water Corp will not be putting any money towards the Town of Cambridge's request to have the recycled water pumped into Perry Lakes for this coming year.

Hon HELEN MORTON: Once again, we are looking for this item in the budget.

Hon KEN TRAVERS: So are we; that is why we are asking.

Hon HELEN MORTON: We do not seem to think that it is a budget item. Consequently, it might not be an appropriate question.

The DEPUTY CHAIR: When you talk about the asset investment program in these words, I think that there are a number of phrases which could be used to cover the kinds of questions that are being asked. I think there is a lot of scope there. I think it is rare that we have the Water Corporation in. If it is difficulty answering a question or the discretion means that you should not be giving information, then that is fine, we can rule on that. I am willing to be very liberal in the interpretation of what is contained in these pages.

Hon KEN TRAVERS: Deputy Chairman, I would have thought that it is not unreasonable for members, because we are dealing with capital works, to be asking about projects that they think should be in capital works projects and are not in capital works projects. Just for the benefit of the minister, I guess the alternative would be for this committee to call the Water Corp back in for another hearing at another time to deal with all those issues. I would have thought that if we can deal with them today, it would be a lot more efficient for everyone's time.

Hon HELEN MORTON: With due respect, it is an estimates hearing. If you wanted to call the Water Corporation in for another hearing that was more wide-ranging than the budget papers, that would probably be inappropriate thing to do.

Hon KEN TRAVERS: What is not in the budget papers is still part of the budget papers.

Hon ALISON XAMON: Exactly. Can I just suggest that we are actually here to determine what Water Corporation is spending its money on. I do not think it is sufficient to say, "We have not put it in as a line item; therefore it cannot be asked about." We could come back to page 863 and generally ask about the overall appropriations for water, but as was rightly pointed out, we are trying to narrow it down to the activities of Water Corporation. The question I have just asked is pertaining specifically to Water Corporation. It is not in here. As Hon Ken Travers has pointed out, I think it potentially should be—or maybe I think it should not. The point is that I want to be able to ask about it.

Hon KEN TRAVERS: On this point as well, I think it is also worth noting that the original idea of the Perry Lakes recharge, as I understand it, was a Water Corporation suggestion, so I think for a member to be asking whether or not it is included in this budget—and maybe we are not able to see it and it is there—is not an unreasonable question.

The DEPUTY CHAIR: I am willing to rule as I ruled prior to the discussion. If it is that there is any difficulty, please advise and then we can make accommodation.

Hon HELEN MORTON: Can you be precise around the question now?

Hon ALISON XAMON: It is to do with the Town of Cambridge's request for waste water to be redirected into Perry Lakes, which I have no doubt at all that you are aware of. I was wondering whether there was any intention by Water Corporation, either in the next financial year for any future year to contribute moneys towards that.

Mrs Murphy: The discussions with the Town of Cambridge have been going on for many years. The proposal that they have is to take treated wastewater from the Subiaco Waste Water Treatment Plant and use it to create a buffer, which will slow the flow of groundwater down to replenish the lake. It does not displace scheme water or put any water into the scheme. Water Corporation is in recycling to have more water available. The benefit from the scheme is undoubtedly aesthetic and potentially environmental, but from the Water Corporation's point of view, as a commercial entity under the act, we get no more or less water.

Having put that to one side, we have worked closely with the Town of Cambridge on a number of areas. One is we have come up with a design that can be built for the amount of money the federal government is offering them. We have undertaken that. If they proceed with the project, we will do all of the construction works and take the risks on it not being at that amount of money. We will take the money that the federal government will pay to the Town of Cambridge and do the works for that amount of money and take that risk. We will make the treated wastewater available to the Town of Cambridge at no cost. Any water that we would have had to pump anywhere in any part of the process that no longer has to be pumped, we will credit them, if you like, with the power and the cost of any of those operations that are foregone. Any power consumption over and above that that is required to operate the scheme for the long haul, which is an operating cost, we are saying we are not reimbursing that, because there are a number of benefits to other entities, but not to the operation.

Hon ALISON XAMON: Do you have, or I am happy for you to take it on notice, the costs that you have estimated that it would be over and above—that cost you are referring to?

Mrs Murphy: It is of the order of \$55 000 per annum estimated at the moment.

[4.00 pm]

Hon ALISON XAMON: At the moment?

Mrs Murphy: Yes, which is the ongoing operation cost of electricity, or largely power costs. This is not to pump water to them, but this is for them to filter water to the level that needs to be filtered for them to infiltrate.

The DEPUTY CHAIR: Does that satisfy your question?

Hon ALISON XAMON: That one, yes.

The DEPUTY CHAIR: You do not need supplementary information?

Hon ALISON XAMON: No. I am impressed that you have managed to do that off the top of your head.

The DEPUTY CHAIR: Any further questions?

Hon ALISON XAMON: I am happy to come back.

The DEPUTY CHAIR: Thank you for answering that question, Mrs Murphy; that was helpful.

Hon SALLY TALBOT: My first question relates to page 876, under the asset investment program and works in progress, but I am afraid it comes under the same category as Hon Alison Xamon's question in that I am not quite sure where to find the answer, so perhaps you can help me. It is about the drainage review. We know that a large number of residents in the metropolitan area have just had letters from the Water Corporation informing them that the Water Corporation has been undertaking this drainage review. Can you tell us how long that review has been underway?

The DEPUTY CHAIR: Mrs Murphy.

Mrs Murphy: The review has been underway since 2007 when the by-laws were changed, which triggered the review.

Hon SALLY TALBOT: Who carried out the review?

The DEPUTY CHAIR: Mrs Murphy.

Mrs Murphy: Can I perhaps put some context around this. Prior to 2007, the requirements under the by-laws that covered drainage did not allow for land within a declared drainage area to be charged for drainage if it was zoned rural. That meant that every time there was a subdivision or a change or a new bit of land developed, the boundaries changed; and although, under the Water Corporation Act, the Water Corporation was required to bill everyone whose land was part of the drainage area for the drainage, there was a perpetual catch-up because every change had to be re-gazetted every time. In 2007 the by-laws were changed, so that the concept was that the boundaries would be drawn at the extent to which drainage would ever apply, and as new lots were created, they would be billed from creation in the same way that water and waste water services are billed; so you would never have this catching up. To do that, the Water Corporation had to go back and look at all the cadastral work and all the contour lines and calculate where the water flow would be. But, in parallel with that, there was also a need to look at the drainage infrastructure and the drainage catchments that were operated by local government, because the Water Corporation owns and operates the main drains that connect across different local government boundaries, so that local government assets that feed into our main drains require those areas to be included in part of the catchment. That work was a huge piece of work, and the end result of that is the now declared drainage boundaries, which now means that those are the areas that can ever, at the moment, be deemed to be feeding into those main drains. That was a lot of work that took quite a few years, and now it has been 10 years since the last drainage boundary changes. These drainage declared area boundaries are now locked in, and as properties are developed in that area, they will be charged. So, the change that has happened recently is that through that process, whereas previously approximately 280 000-odd customers were billed for drainage, another 13 000-odd customers are now included in the drainage areas, so that the costs of all of that drainage work will now be shared over more customers. That means that a number of individuals, especially those in the areas that have been developed largely in the last 10 years, are receiving a drainage notice for the first time. It does not mean that the drainage services have not been offered previously and did not exist; it is just that this is the first time that they have been billed for them.

Hon SALLY TALBOT: Your answer makes a great deal of sense to me in connection with areas such as the Shire of Murray and parts of Mandurah, for instance, my home turf. But I have with me a list of suburbs where people have been affected by the new drainage charge, and it includes places such as Perth, South Perth, Cambridge, Gosnells, Armadale and Canning. These are places that were developed years ago. From what you have just described, this relates solely to the metropolitan area, does it not? It does not relate to the regions.

Mrs Murphy: It does relate solely to the metropolitan area, because regional drainage is not billed back to customers; it is covered by government through a CSO. So, it is a metropolitan area issue, yes. The other change that has occurred is that the extent and the operating mechanism of local government owned and operated drainage infrastructure have also been included in our network capacity. It is easier to do it with a picture, but what it means is that you may have had an area that historically drained through a local government network straight into the Swan River. What has happened in places such as East Perth, where there has been a lot of upgrade and changes to the area, is that now that does not happen in that way, and the local government drainage drains into a main drain of ours, which takes it to some other area. So, some of the changes where people have been billed where they were not previously billed are where they may have been in a small part of an old suburb that used to drain directly into a waterway or used to drain only into a council-operated drain, and now they go into one of the main drains and on. Similarly, where councils have a

compensating basin and they have been running that themselves, if that has an overflow into a main drain, which may be in the next suburb that we are managing, they will now be included. So it has been a one-off catch-up. It is a complicated story, and the communication has not been ideal.

Hon SALLY TALBOT: No. I think that is probably an understatement. What can we say, then, to people who are living in newer subdivisions and who may well have paid drainage infrastructure costs as part of their house and land package to the developers who have paid that cost to the Water Corporation? Many of these people surely have some justification for saying that they are being slugged twice.

Hon HELEN MORTON: I think you might need to rephrase the question, member.

Hon SALLY TALBOT: In the case of new subdivisions, property and land developers have often contributed to drainage infrastructure during the design and construction phases of those subdivisions, and they have passed those costs onto the homebuyers when the homebuyers bought the property. It now appears to those people that the Water Corporation is coming in and charging them twice for those services. They have already paid, because they have paid the costs that have been passed on by the property developer.

Hon HELEN MORTON: What is your question?

Hon SALLY TALBOT: How can you defend what is effectively a recharge, a double charging of somebody who has already been charged.

The DEPUTY CHAIR: Mrs Murphy.

Mrs Murphy: It is not a recharge. What has happened is that indeed the developers have invested in drainage, as have local government in most of those areas as well, and they have built and maintained the local drainage network. If that local drainage network then feeds into a main drain, and if the Water Corporation is responsible for moving that water out of that suburb, then they are included in the drainage boundaries and they pay their share of those main drains to be operated. It may be that in Ellenbrook, for example, the developer has put in some filtration systems to actually try to clean up drainage water as well, and they have invested and the block owners have contributed towards that, but then the water volume that comes through that whole process still has to be transmitted away. And so it is the share of the operation of the main drain that is the Water Corporation component. If that development does not feed into a main drain, then they will not be in a declared drainage area and we will not be levying such a charge.

The DEPUTY CHAIR: Mr Moore.

Mr Moore: I was just going to add that the local government also charge individual households for drainage rates as part of the local government rates, so that they cover the local government drainage area, as opposed to the main drains. The customers you are referring to may well have contributed to the construction of the infrastructure roads, drains and other things as part of their block charges, but they will then get charged by the local government a maintenance cost on those drains year by year.

[4.10 pm]

Hon SALLY TALBOT: So they are actually paying three times?

Mrs Murphy: They may be paying twice for that infrastructure, but none of that is to us. The only time they are paying to us is for the operation —

Hon SALLY TALBOT: Twice to you and once to somebody else.

Mrs Murphy: Ours is to take the water away. If the local infrastructure were all that was needed, they would not be levied for a drainage charge under the main drains component.

Hon KEN TRAVERS: I am trying to understand: is it a flat fee that is then divided, or does each individual area get a value calculated for that area and then that area is charged according to the costs of that particular area's cost of operating that main drain?

Mrs Murphy: No, it is a hybrid; it is not the latter. The aggregate cost of metropolitan area drainage and the aggregate cost of capital investment, depreciation, the return on asset and the cost of maintaining the drains is calculated and audited by the ERA, and from that the ERA sets a quantum of money that has to be recovered annually for drainage. That is divided up amongst everyone in the drainage areas, so you may, by coincidence, be in a drainage area where we have not spent any money that year, or you might be in a drainage area where we have spent significantly in excess of what we collect from you this year, so it is a shared obligation. However, it is not a flat fee; it is a rating process, so there is a flat minimum fee that everyone pays and then, depending on the gross rental value of your property as defined by the Valuer-General, you may pay slightly more than that.

Hon KEN TRAVERS: The point that Hon Sally Talbot raised in the beginning is that in some areas, developers may have spent significant amounts of money to minimise the amount of drainage that is required. There is still an overflow drainage, and they pick that up in the cost of their blocks. Those people are still going to be paying the same as

somebody else who lives in an area where the developer did no work or no-one has ever contributed to it, and those people are actually having to pick up a share of the costs compared to those who have never made a contribution.

Mrs Murphy: That is potentially true, but you could argue that in years where we get very little rainfall, the drainage is not needed as much as in years where we get heavier rainfall, and individuals who live on steeper slopes may need different drainage. The ERA's recommended model for pricing—Mr Werner can probably clarify this in more detail—and philosophy is that you calculate the aggregated cost and share it amongst everyone involved. I think the logistics of doing those other, more detailed calculations may outweigh the benefit. But that is the ERA model, and the ERA makes a recommendation to government for pricing, and that methodology has been accepted for many, many years.

Hon KEN TRAVERS: I just wanted to clarify in my own head that people can be effectively paying twice in those circumstances. That may be the simplest way to do it.

Mr Werner: Customers are not paying twice because you are dealing with different types of assets. When the developer passes on the costs in the blocks, it is the cost of putting the asset in, and the local authority charges a rate to maintain the drains, so they have costs that go with that. The Water Corporation only charges costs associated with main drains that we have made those investments in. We are not picking up the costs of any of the other assets; there is no double charging. There is an issue about: is there inequity between somebody who puts a lot of drainage water in versus somebody who puts less drainage water in? The charging does not differentiate amongst customers. It is not a big fee; it would be really a lot of work to go and figure out whether somebody should be paying \$90, somebody else should be paying \$80 and somebody else should be paying \$70. It is a cross subsidy between drainage customers; it is not something that comes back to the Water Corporation as extra revenue.

Hon KEN TRAVERS: Would there be times when developers actually do make improvements to the main drain and then give it to the Water Corporation free of charge as part of their development costs?

Mr Werner: Anything that developers give us across the board as contributed assets do not form part of the asset base, where the prices are charged upon. Any assets that are handed over to the Water Corporation do not form part of the asset base that our prices are determined on.

Hon KEN TRAVERS: No, but my point is: where the asset has been handed over, even though it may be operated by you now as a main drain, it was put in place by a developer then handed over to the Water Corporation free of charge as part of the requirements of the development. The people whose drainage goes into that drain are paying the same fee as those that might live five kilometres down the road whose drainage is going into a drain that the Water Corporation built 20 years ago, and you are picking up the capital costs and the maintenance costs of that.

Mrs Murphy: That is true, but the minimum drainage charge is \$85 per customer, and the average across all customers is \$93, so the difference is quite modest. To do the sort of calculation you are talking about with 300 000 affected customers is probably a case where the law of diminishing returns applies. If the ERA's recommendation is that, for that magnitude, the fairest way is to share that cost across all users, yes, it is possible that there is five dollars here or there between customers, if you were to calculate the volume of water, but over a long period, I think it would probably even out.

Hon SALLY TALBOT: I have another question about how you arrived at the method of setting the charge. I understood from what you just said that it is a percentage of gross rental value. What percentage is it?

Mr Werner: For residential customers it is 0.791c in the dollar of gross rental value.

Hon SALLY TALBOT: How did you arrive at that figure?

Mr Werner: Basically, there is a minimum charge. There is a database with all the customers' valuations in it, and it is a calculation of setting that rate so that when we strike the rate in the dollar, it raises the amount of money that has been approved.

Hon SALLY TALBOT: So you start with the amount you want to raise and then work it backwards to what percentage that is?

Mr Werner: That is right, yes. So any change in the valuations of properties have no effect on the average charge to customers.

Hon SALLY TALBOT: That is not how the Valuer-General works. In most cases when they work off GRV, they talk about a set percentage, do they not? Does that not seem to be putting the cart before the horse?

Mr Werner: In terms of the way we set our rates, it is for a revenue target. I understand that some of the other things are taxes, so they operate differently.

Hon SALLY TALBOT: You said that this review started in 2007, so it has been going on for four years. I do not think you actually told me who did the review. Was there a review panel? Was it outsourced? Were they people within Water Corporation?

Mrs Murphy: Through the minister, the Water Corporation's internal drainage planning team managed the process. They received input information from all the affected local councils about their existing infrastructure, where it tied in. They received all the cadastral details from electronic geospatial maps that provide with great accuracy what the ground contours are. They then modelled the water flows on those areas.

Hon SALLY TALBOT: Did you use any external consultants?

Mrs Murphy: I do not believe so.

Hon SALLY TALBOT: Was any public consultation undertaken?

Mrs Murphy: Not specifically, to my knowledge, but in respect of the Drainage Act and work in the drainage area, there has been no change in the philosophy of drainage. The potential gap is the fact that the new drainage boundaries took a while to be declared, which meant that there were people who had not been paying drainage for a period where they could have been, and so they were not expecting to get a bill. The drainage rules exist and have not changed, so there was not really anything to consult on.

[4.20 pm]

Hon SALLY TALBOT: With respect, it just sounds as if Water Corp has come up with a figure that represents what you call your revenue target and then you have worked out how you are going to get the money. You have already referred to the problems caused by lack of information—lack of communication, I think you said. By way of comment, I suggest that perhaps public consultation along the way over the four years would have helped.

Going to this question about the amount of information that has been around, is it correct that people received the letters from Water Corp before any information about the new charge was publicly available, for instance, on the website?

Mrs Murphy: Firstly, I wish to clarify that there is no new charge. The drainage charges are not new charges. Thirteen thousand customers have not paid them previously but there is no new charge per se.

Hon SALLY TALBOT: It is an extension of an existing charge.

Mrs Murphy: Secondly, the amount of money that is collected is not something that the Water Corp just decides on. The ERA sets the rules for what is in and what is out of that and how much should be collected. By having more people in the pool paying it, the net amount per person does not go up. It is not a matter of attracting more revenue by asking more people to pay; it is a matter of more equitably sharing the costs that have to be met amongst the people who perceive a benefit for it. That has to be made quite clear. The changes to the drainage charge are on our website with all our other charges and always have been. The letters informed householders who had not previously paid it that it would be in their next bill, which could be coming in July. It may have been somewhat naively phrased but the intent was to be transparent and give a heads up that this is a charge that they have not paid before that will be in their bill. The last thing we wanted to do was to have bills go out that just had charges in with no explanation. The initial letter was deficient in explanation. We have subsequently written to all of those customers who were affected with a more fulsome explanation of why they are now included in a drainage area when they may not have previously paid that.

I do not believe that public consultation would have necessarily made that much difference in calculating where the drainage areas are because that is a fact; it is not a debatable fact. The public consultation about the fact that we had not changed the boundaries for 10 years and we had not imposed these charges for a long period is perhaps unfortunate because there has been a lot of development and new suburbs and subdivisions in those 10 years and people who have not shared the drainage burden in that period now have to. I think the communication that we have done has been poor in the detail of what is in or out of the drainage charge but I am not sure that the calculation process of coming to that point was necessarily flawed in any way.

Hon SALLY TALBOT: Still on page 876, I turn to some of the country programs. Under "Works in Progress" is the line item "Country Water Sources and Distribution". What is that funding for, including the out years?

Mr Moore: That is for the whole system of country sources that we have to upgrade around the state and various distribution systems for a number of different sources in different towns throughout Western Australia. It is a bulk amount of money. We do not break it down in any greater detail at this stage. I have those lists.

Hon SALLY TALBOT: You do not break it down in any greater detail in the budget papers, but is it broken down elsewhere?

Mr Moore: Yes. It is quite a long list. I can give you the sort of —

Hon SALLY TALBOT: Is that information that could be provided as supplementary information?

Mr Moore: I can certainly provide it as supplementary. I can quote a lot of it for you now. It varies from things like a Yarragadee bore for Margaret River to extensions of the Broome bore field to tanks at Karratha and so on and so forth.

Hon SALLY TALBOT: I would like details of all the items that are included in that line. We are talking about \$178 million for this year, but I was also interested in the out years, too. It goes up to \$257 million in 2014–15. Can you provide that information for the out years as well?

Mr Moore: I believe so.

The DEPUTY CHAIR: Is that a document that is able to be tabled?

Mr Moore: Not immediately, no.

[*Supplementary Information No C5.*]

Hon SALLY TALBOT: I refer to the line item “Total Cost of Asset Investment Program” on page 877. My question here relates to estimated expenditure of \$860.7 million for 2011–12. Back in 2008, when the previous government left office, the forward estimates contained the commitment to spend in the region of \$1.7 billion on capital works. That figure seems to have gone down to the extent that it now stands at \$860.7 million, which I just mentioned. You have already outlined in various answers some of the dire circumstances that we are facing in Western Australia about the future supply of water. How is that cut in capital works expenditure justified?

Mrs Murphy: There are myriad reasons. Clearly the detail of a capital program in the fourth year, when you consider we are running about 2 500 projects at any point in time, is obviously subject to getting more closely defined as we get nearer to the time. We have certainly been looking at that. With issues to do with trying to keep state debt as low as possible, we have looked very closely at what can reasonably be deferred and what can be brought forward. We have moved through the whole asset investment program of what realistically needs to be done at what stage. This provides our best estimate at present of what needs to be done in that time frame.

Hon SALLY TALBOT: It is about half the amount in four years; it is a halving of the amount. When I look at the capital works listed on the previous page, 876, none of this is new work. Where is Water Corp’s investment in the budget papers? Where is the new investment?

Mr Hughes: It might help to reconcile some numbers with us. We may have to do that outside with a supplementary question. The May 2008 budget for the 2011–12 total asset program was \$790.7 million; the May 2009 figure was \$684 million; the May 2010 figure was \$679 million; and the May 2011 figure—the one we are now reviewing—is \$860.7 million. This is the largest 2011–12 budget for the last four years. The May 2007 budget, I am not sure if you were referring to that, would not have had a figure for 2011–12.

Hon SALLY TALBOT: I missed that last bit.

Mr Hughes: The May 2007 budget would not have had a figure for the 2011–12 financial year. I am not quite sure what date you are referring to. Perhaps we could have that clarified.

Mrs Murphy: Some things have moved forward; some things have moved back.

Hon SALLY TALBOT: If I put in an additional question at the end of this session, I will clarify that.

[4.30 pm]

Mr Hughes: From our perspective, this 2011–12 budget is the largest in the past four state budgets.

Hon SALLY TALBOT: I will give you a breakdown of that \$1.7 billion and ask you to do a comparison.

Mr Hughes: Thank you.

Hon SALLY TALBOT: My final question relates in a sense to my first question, which is about the drainage charges and the extra bill many people are paying. How does the Water Corporation deal with customers experiencing difficulties paying their bill? Can you tell us please how many people have contacted the Water Corporation in this financial year, 2010–11, and expressed difficulties about paying their bills.

Mrs Murphy: We can give you that information precisely. We have a number of levels of people having such conversations. When our bills go out often a number of people ring up and discuss different ways of paying their bills that do not necessarily need a formal program. Some people miss one payment and we send a reminder letter and then they pay. That is not necessarily through a payment program. There are other people who are unable to pay their bills and who enter into a formal payment agreement. If they are in a hardship scheme, it goes through the HUGS arrangement that exists for people who are really having difficulty. There are different gradations of the type of help provided to people paying their bills. It is a fairly broad term.

We certainly work actively with our customers if they have a problem by encouraging them to enter into a scheme and not be late paying their bills and thus incurring interest charges. There are a whole lot of levels in answer to that question, but we can provide a formal answer.

Hon SALLY TALBOT: That would be good. I understand those differences in, if you like, the degree of difficulty being expressed. My question was going to be phrased in terms of how many people have contacted you regarding difficulties paying a bill compared with the number who have had notices advising them that their water would be cut due to non-payment of their bills. I have that question relating to this current year and the previous year. Do you want me to go through it so you are clear?

I will quickly read the whole question. How many people have contacted the Water Corporation expressing difficulties paying their bills this financial year; how many people have contacted you with the same expression of difficulty over the past three financial years; how many customers have had notices advising that their water would be cut due to non-payment of bills this financial year, and in the past three years; how many customers have had their water cut off in the past financial year due to non-payment of bills; and how many customers have had their water cut off in the past three financial years due to non-payment of bills? There is a certain logic there.

Mr Moore: We do not cut off people's water at all. If people have not contacted us to make arrangements, as part of the process of debt recovery we restrict water—usually for only a short period—quite late in the process. We can provide you with the number of people that has occurred with but no people at all have had their water cut off.

Hon SALLY TALBOT: That is fine. Can you rephrase that to reflect perhaps that they are subject to water restrictions?

Mr Moore: On a temporary basis; certainly.

[*Supplementary Information No C6.*]

Hon LIZ BEHJAT: I refer to the southern seawater desalination plant under “Asset Investment Program” on page 786. In 2011–12 the estimated expenditure is \$113 million. There is nothing in the forward estimates for that. Is that project now nearing its time to be commissioned? Do we have an expected start date for that? I assume the answer will be yes but I want an update on what is happening with it.

Mrs Murphy: The southern seawater desalination plant is in commissioning at the moment. Its contractual completion date is the end of this year. We are planning to have water out into the scheme a while before that.

Hon LIZ BEHJAT: At the end of the financial year?

Mrs Murphy: No, at the end of this calendar year. It is well ahead of budget at the moment and it is also well ahead of schedule. We are hoping to have water into the scheme before summer, hopefully by August or September, to have some water start going into the scheme so that we will be able to have that water in the network for this summer coming.

Hon LIZ BEHJAT: That is good. Moving into my electorate of North Metropolitan, the Carabooda storage reservoir has an estimated total cost of \$19.9 million over the last two years and again there is nothing there into the forward years. I am not familiar with that project; I probably should be. Can you just give me an update? Is that a new facility there or is it an upgraded existing facility or is it maintenance work?

Mr Moore: There is a new facility to service the Alkimos area. It is a storage reservoir that will take water in that northern corridor and provide the servicing for that further northern corridor.

Hon LIZ BEHJAT: Is that for irrigation?

Mr Moore: No, for domestic water.

Hon LIZ BEHJAT: Sorry?

Mr Moore: Domestic.

Hon LIZ BEHJAT: Domestic, sorry I am having difficulty hearing today, I apologise. For domestic water?

Mr Moore: Yes, it is part of the extension of the water scheme to the north to pick up the new Alkimos area and those areas.

Hon LIZ BEHJAT: I have a couple of other small questions referring to page 872 of the *Budget Statements*, under “Details of Controlled Grants and Subsidies”. There are just a couple of things there that I am, again, not familiar with. The Premier's water foundation —

The DEPUTY CHAIR: Page 872. We are actually on the Water Corporation now Hon Liz Behjat, rather than the Department of Water.

Hon LIZ BEHJAT: Have I strayed into an area that I should not have?

The DEPUTY CHAIR: I am being very flexible, so can you rephrase the question so we can include it within the Water Corporation—or is that totally out? I will give you a little bit of time just to reflect

Hon KEN TRAVERS: Ask how the Department of Water's policy will affect the Water Corporation!

The DEPUTY CHAIR: I will give you a little bit of time just to reflect on that if you would like, Hon Liz Behjat and we will see whether you can mould it into the Water Corporation numbers.

Hon KEN TRAVERS: Let us go back to the recycling trial that is going on. If it does not go ahead, what are the alternative sources?

Mrs Murphy: For the Perth water supply?

Hon KEN TRAVERS: Yes.

Mrs Murphy: Well, there are a number of options, but they become increasingly expensive as you work through the list. The first option is the southern seawater desalination plant, which we are commissioning at the moment. We already have environmental approval and the infrastructure in place in the ocean for the next tranche of that, to take it to 100 gegalitres from the 50 gegalitres that it is currently built for, so there is the opportunity to expand that plant. There is also obviously the opportunity to look at desalination in a number of other areas up the coast, and we have a number of sites that have been potentially explored and a number of options in that. As part of this developed area moves north, there are some other groundwater areas that have not been accessed at the moment, some at Eglington and further north. They do not make sense if you have to pump it a long way, but if the development is local they could be used locally. We also have been doing water trading with irrigators in the Harvey area and we have contributed capital towards them piping their own source so that we can trade water with them. If you do not get any rain or run off, that is of limited value, but it does give us more water.

[4.40 pm]

We have also been looking at recycling to displace potable re-use. For example, the Kwinana recycling plant is to displace water that is supplied to industry in the Kwinana area. They can use recycled wastewater for that and let water go back into the scheme. We also believe that demand management is a critical part of moving forward and that a lot of the growth in the state's water needs can be absorbed by reducing per capita demand. We proved through the recent summer's Target 60 campaign that the community, without suffering adversely, can save water. Our intent is to work with our community to try to embed those water savings in our business as usual. It is really important that we continue to treat the reduction of per capita water use as equally important as building new sources. We have to do probably both, and we have to get the recycling right as well.

Hon KEN TRAVERS: With the recycling of the Harvey water —

Mrs Murphy: It is reallocation.

Hon KEN TRAVERS: Yes, reallocation; I am sorry. Are there enough dams suitable for drinking water supply that the corporation can take that water from? Originally the corporation needed, as part of that water, to trade it out of the Logue Brook dam, which is no longer suitable for potable water. In managing that demand, what quantity of water is available from the dams that are suitable for potable water?

Mrs Murphy: Assuming average rainfall, which is a big assumption —

Hon KEN TRAVERS: It is a huge assumption.

Mrs Murphy: Yes. Lloyd can probably talk to this in more detail, but we are working with the Harvey irrigators to swap around; we will swap our allocation in Logue Brook for an allocation they have in a dam that is suitable. In terms of dam capacity, yes. If last winter becomes the new normal, then all bets are off and we will be rethinking a whole lot of issues. In the last 10 years we have been seen the drying climate take two thirds of the surface water we used to receive from the rain. We used to get 300-plus gegalitres average run-off; in the last 10 years that is down to about 100. Even with the second desal plant coming on stream, that 100 gegalitres from desalination is half of what we have lost in the last 10 years. Last year we lost the hundred; we basically got next to nothing—10 or 11 gegalitres. If that was a one-off very dry year and part of a fluctuation on a generally drying trend, then the trading and irrigation swaps make sense. If that is the new normal going forward, and our winter so far has been not much to write home about, we will have to rethink the whole thing. It is not just an issue of public water supply; it is an issue of whether we have industry and irrigation in Harvey. The issue of the drying climate is critical to the Water Corporation because our chief product is the product that falls from the sky, but it is an issue for the whole community. Believe me, if last winter is the normal winter going forward, we are the least of your worries.

Hon KEN TRAVERS: I completely agree. I was the shadow Minister for Water many years ago. I remember briefings on the water level, and it goes down every year. It gets quite scary.

Mrs Murphy: We are not cheerful people, tragically.

Hon KEN TRAVERS: The corporation has those little graphs that show if it is over capacity for so many years. How long will we be over capacity as a result of stage 1 of Binningup coming on stream, and when do we need that next quantum leap in a source to take over from Binningup? I do realise that one of the problems of Binningup coming on stream is that there will be a cutback on what can be drawn out of Gnangara. Although the corporation gets 15 gegalitres out of Binningup, I am not sure it would be a net figure because it has to replace what it is taking out of Gnangara. What is the time line for that next source?

Mrs Murphy: We were basing our projections on the 10-year average run-off, which we thought to be very low. On that basis it was 2015. As I said, if last year is normal and that is what we are going to have in the future, it is now.

Hon KEN TRAVERS: So it needs to be up and running by 2015?

Mrs Murphy: No. It is in 2015 that we need to make the call on the new source, that is, if the 10-year average run-off is in fact there.

Hon KEN TRAVERS: Do you do any modelling on long-term weather predictions?

Mrs Murphy: We do. But consistently, modelling is all about looking backwards to look forwards and every time we look backwards to look forwards it is wrong.

Hon KEN TRAVERS: That is why I am talking about looking forward in terms of using weather forecasters to give us an idea.

Mrs Murphy: Yes, we do.

Hon KEN TRAVERS: I know they now predict for two or three years whether they expect to have dry, wet —

Mrs Murphy: Yes, a 50 per cent chance of above average rainfall.

Hon KEN TRAVERS: So a 50 per cent chance of being average or below.

Mrs Murphy: Surprisingly, yes. There is a lot of discussion, but no-one has yet given us anything that appears to be a bankable number going forward.

Hon KEN TRAVERS: So you are saying that you can make the decision in 2015. When would you then expect to have the source up and running?

Mrs Murphy: Two years later. With most of these issues, we would endeavour to come to government with proposals that are deliverable in a reasonably short time frame. As I said, the very dry winter from last year has really played havoc with the planning processes and has brought forward a lot of decision making. We are watching as we go into this winter. If this winter is very, very dry, there will be —

Hon KEN TRAVERS: In terms of that risk factor, that 2015 date will need to be brought in.

Mrs Murphy: Yes, brought forward quite aggressively. But I put it to you that it will also play havoc with the Wheatbelt and with the farming industry, Kings Park and Alcoa —

Hon KEN TRAVERS: And all of the South West community.

Mrs Murphy: — and our entire South West community. I think there is a wider public debate about climate that needs to occur.

Hon KEN TRAVERS: I guess this is sort of a proxy for that broader debate in some respects, because it is nice and easy to quantify it in terms of the work that the Water Corporation is doing. If it is required to be brought forward because of those weather patterns, what sort of volume would we require to get us to the next step? Would we be talking about another 50 gigalitres? Is that the sort of quantum that we would need to be looking at as a source?

Mrs Murphy: It is “how long is a piece of string?” We have an option to test everything else against, which is that the second tranche of the southern seawater desal plant was competitively bid at the same time as the first tranche was. We have on the table a competitively bid current price, which gives us a known cost for the next 50 gigalitres of water from that source. So what we will be doing through that process is, as we look at options, we will be comparing them with that. It gives you at least one known in a sea of unknowns.

Hon KEN TRAVERS: Do we have a quantum of what would be the cheapest price that we would be looking at to provide that 50 gigalitres in terms of total capital cost?

Mrs Murphy: For the southern seawater desal plant? Yes. At the moment, as I said, that is the benchmark.

Hon KEN TRAVERS: What is that figure?

Mrs Murphy: It is \$450 million-ish.

Hon KEN TRAVERS: Basically, if it does not rain heavily over this current winter, somewhere into next year's budget we would expect to add around \$450 million. You may be able to find some cheaper ones as you progress it, but it is probably of that quantum.

Mrs Murphy: Potentially, yes, or something of that order.

Hon KEN TRAVERS: The other one was the recycling and reinjection trial. I know that you mentioned a range of environmental issues and economics and all of that, but I would have thought that the other one is the social acceptance of it. What work is being done on the social acceptance side of it? I am still sceptical about it, to be honest. I would have thought there might be some other ways we could use that recycling.

Mrs Murphy: You know that we are doing the trial at Beenyup. We have a visitor centre that is attached to our Beenyup waste water treatment plant. We have a visitor centre at the site and we have been working with schools and community groups and encouraging them to come and have a look at it. We have done quite a lot of public consultation. We have a regular newsletter that goes out to key stakeholders. We will talk at anything on groundwater recycling to try

to get the public debate going. In parallel with our regulators in health, environment and water, there is a wider discussion going on with a lot of the stakeholders that they are interacting with as well.

[4.50 pm]

I guess what we have tried to do is be very transparent and never use cute language—we do not call it anything other than it is—and try to be very open about the whole process. We are very mindful of what has happened in Queensland in recent years where billions of dollars have been invested in wastewater recycling facilities that are basically mothballed at the moment because it rained and the public view switched. We do not believe that that model of bringing things on in a rush as a kneejerk is sustainable, so we need to bring the community on slowly. The fact that we are injecting the water into an aquifer—people kind of understand that it goes through the sand to be extracted, so there is another barrier, a sand filter, if you like. I think there is a reasonable public acceptance of that, but we do need to move slowly through that process. We are doing community surveys and quite a lot of work as well to try to measure what that community sentiment is.

Hon ALISON XAMON: Can I make a comment on that? The Greens' position in terms of support for recycling options as a way forward is, I think, well and truly on the record. Can I say, every time I still get quoted in the paper as supporting recycling options, I will get a flurry of phone calls from people in the public saying how much they object to my support for what they virtually see as toilet-to-tap options. It is almost as though they see a singular pipe that is going—I will say that I think that public knowledge and understanding of this, particularly in comparison to recycling and how it happens around other parts of Australia and around other parts of the world, is actually fairly low. I think that certainly getting some comparative information out there would be really beneficial, because people really do not seem to understand the role that it actually plays globally, in Perth anyway.

The DEPUTY CHAIR: Taken as a helpful comment.

Mrs Murphy: Any suggestions on how to influence the media will be gratefully accepted.

Hon ALISON XAMON: It is not necessarily the media that complain. I think generally there is a lack of understanding about the role of water recycling and what it actually means. I am not joking; people talk as though we are actually asking them to drink straight out of the toilet bowl.

Mrs Murphy: I do not think Alston cartoons help us with that either.

Hon ALISON XAMON: Cartoons along those lines certainly do not help.

Mrs Murphy: We certainly feature this strongly in our waterways school program and our view is that these sort of behaviour changes are probably intergenerational.

Hon ALISON XAMON: I think you are so right. I think you are really on the money there. Certainly, when I talk to younger people, they take it as a given. But certainly my generation and older with days of spending summers running through the sprinklers maybe do not have quite as critical understanding of how low on water we actually are.

Hon HELEN MORTON: Thank you for the comments.

Hon KEN TRAVERS: I think back to on the east coast they were going down a similar path. One of the dangers, of course, is that you go down there with a program like that and then the nature of the community is that their opposition will show up at the last moment and you have then got to go for a more expensive option because you have to do it at the last minute. I think that is what tended to happen on the east coast; they put their eggs in the basket of recycling and everyone might be happy to explore the concept of recycling, but the danger I see is that you reach a point of no return and then you have got to go to a very expensive option if there is a massive community backlash to the concept of recycling. My view is that it is one of those things that if you are going to progress it, you have got to be progressing it as an add-on or a bonus that allows you to sort of do extras in terms of putting water back into the environment rather than as your major sources, until at least you are confident that there is community acceptance. I think that until it is done on a widespread basis, you cannot be guaranteed of that community acceptance. That is my political advert for the afternoon.

The DEPUTY CHAIR: Another helpful comment.

Mrs Murphy: The Water Corporation absolutely agrees with the sentiment of that. The good thing about this program is that it could be augmented gradually. If we did not face the drying climate as extremely as we do, in an ideal situation you would potentially inject seven gigalitres and then maybe two years later start to up that and gradually increase it and maybe have a 10-year program of investment and increasing injection and abstraction and you would use that to kind of balance out your other ground water abstraction levels so that you are actually balancing the whole ecosystem network and looking more holistically. That would be the ideal world. We are nervous about knee-jerking to accelerate in a ridiculous way; to accelerate a little bit is perhaps not —

Hon KEN TRAVERS: And that is the danger. If people start seeing it as an alternative next major source, then I think that is where you run the real risk. There was, I guess, some media commentary—I am not necessarily suggesting it was

what the minister intended to convey—around the sense that the suggestion was being put there that this was going to become the next major source a couple of weeks ago, and I think that would be very dangerous.

Hon ALISON XAMON: Yes, it is not helpful. You need to bring the public along with you, plus you need to ensure you are following due diligence. I understand that there has been a lot of care put into this trial, and I certainly support that, but there are always the issues around the contaminants that potentially could end up in our groundwater sources. I think it is absolutely imperative that we stay true to the integrity of those trials.

Hon HELEN MORTON: We have had a lot of discussion, and I have really appreciated the interaction, but I think we really do need to get back to asking questions related to the budget papers.

Hon KEN TRAVERS: I am keen to get back to my questions on the budget.

The CHAIRMAN: Point taken; I was just about to revert. That is fine. Hon Ken Travers, have you completed your questions?

Hon KEN TRAVERS: No, I have not, and this does follow on.

When desal 1 comes on-stream, I am not sure by what amount you have to reduce your take from Gngangara mound—maybe you could tell us that what that is. I guess the other side I am interested in is that the proposal is currently out that would see areas that currently sit above the drawdown area of various bores on the Gngangara mound having their land uses changed, so being moved out of P1 and into probably P3 at best, but having either urban or industrial development or commercial development put on top of it. Are you able to give us any idea of what impact that might have on your abilities to draw water and, ultimately, your need for other more expensive sources to be added at some point in the future?

Hon HELEN MORTON: I am advised that all of that question that you have asked relates to the Department of Water portfolio, so it is not appropriate for the Water Corporation to give that response.

Hon KEN TRAVERS: No, because I am asking about the impacts on the Water Corporation's budget. If those land uses are changed and the Water Corporation no longer has the ability to access water from a number of spots on Gngangara mound as a result of those changes, what impact will it have on the budget of the Water Corporation? That is what I am asking. It will have an impact; it has to have an impact. One of them, I suspect, will be that some of the bores will no longer be able to be used, and others will be at risk if there is pollution, which is why we have a P1, P2 and P3 system. What impact in terms of Water Corporation's modelling will it have? That is what I am asking. Have they not done any work in that regard? If they have not done any work, that might be the answer.

Mrs Murphy: It would depend on what changes are made. It depends what assets and where and what would happen. We apply to our regulator for an abstraction licence, so we cannot really tell what is going to happen in the future. Those land use planning decisions are part of the water regulatory framework. We can tell you the answer if you tell us exactly which bores and what is happening.

Hon KEN TRAVERS: The bores underneath the area that is being considered for rezoning to industrial land in the Pinjar south industrial area, and the bores that sit under the land as part of the "East Wanneroo Structure Plan" that are proposed for that land use above those bores to be converted. What will the impact be? I am sure you have done the modelling. I know the Water Corporation, and I am sure you have looked at what impact those land use changes would have on your operations in terms of your ability to draw down the water.

The CHAIRMAN: Can I just ask a question? Is this just too hypothetical?

Mrs Murphy: It is.

Hon HELEN MORTON: It is far too hypothetical.

The CHAIRMAN: Is it too hypothetical to respond to that question?

Mrs Murphy: Yes.

Mr Moore: The only comment I would like to make, if I could, is that we have been working with the planning groups on the areas they are considering. Although some of the areas are going to be re-gazetted from P1 to P3, they are outside the zones of the bores that are of concern to us. Pretty largely, as I understand it—I say as I understand it—they are not going to have an influence on what we can extract.

Hon KEN TRAVERS: That is fine.

My final question about desal 1 is: as well as the construction of the desalination plant, is there any other infrastructure that would be required for that plant to be brought on-stream into the Perth water supply, so pipelines or whatever to connect it?

[5.00 pm]

Mrs Murphy: The answer to that depends on how much water you get out of the southern dams. If the southern dams produce water at the level that they historically did, and you wanted to get a 100 gegalitres out of the desal plant, going

back long-term history, you would need to duplicate the pipeline from the south, which is of the order of \$600 million. However, the southern dams do not produce the water that they use to produce 50, 40, 30 years ago and therefore it could be phased quite dramatically. You could actually build the plant and leave the decision about the augmentation of the pipelines until a later date, or potentially manage water so that you use dam water more locally in the south; that is, you manage it in a different way and postpone that decision for quite a long time.

Hon KEN TRAVERS: Out of interest, are water pipelines similar to gas pipelines where you do not actually have to dual the whole thing but can do it in bits?

Mrs Murphy: Yes; you can do it in bits.

Hon KEN TRAVERS: It can be done in stages?

Mrs Murphy: Sort of. Not as much because the water is not compressible.

Hon KEN TRAVERS: Yes.

Mr Moore: I was just going to, effectively, say the same thing; that is, you can duplicate bits of it, put pump pressure on it and get more capacity, but not nearly as much as you can do with a gas pipeline.

Mrs Murphy: Water is tragically incompressible and heavy, and no-one wants to pay for it. It is not like gas.

Hon KEN TRAVERS: I feel that I am about to get a budget paper dropped on my head if I do not yield to Hon Alison Xamon.

The DEPUTY CHAIR: You cannot see her face, like I can!

Hon ALISON XAMON: You must be psychic, Hon Ken Travers.

Hon KEN TRAVERS: I could feel your eyes on the back of my head.

Hon ALISON XAMON: Thank you, Mr Chair. I have a grab bag of questions that I want to ask.

I want to refer to the water optimisation trials. I want to know whether any money ended up going towards that in the last year and whether anything —

Mrs Murphy: The water pressure optimisation trials?

Hon ALISON XAMON: The water pressure optimisation trials; I am sorry—it has been a long time waiting! Is there anything in the forward budget—I am assuming that the trial has been completed—to actually roll out that initiative. I suppose that is the first part of the question: is there any money?

Hon KEN TRAVERS: If I had known that you were going to ask my next question, I would have yielded sooner.

Hon ALISON XAMON: You asked a bunch of mine.

Mrs Murphy: The budget papers for the Water Corporation only contain our capital expenditure.

Hon ALISON XAMON: Yes.

Mrs Murphy: So there is no money, or very little money, in our capital expenditure for that, but we do have some operational—there is some—but a lot of the expenditure going forward is in operational ways of doing business. Our intent is to keep rolling out the trial. We are finalising —

Hon ALISON XAMON: So you are still treating it like a trial?

Mrs Murphy: No.

Hon ALISON XAMON: Okay, the initiative.

Mrs Murphy: To look at pressure management in areas where we believe it can deliver a reduction in leakage without a problem for our customers.

Hon ALISON XAMON: So are you looking at doing that in the next financial year?

Mrs Murphy: Yes.

Hon ALISON XAMON: I am happy to take on notice which areas you are identifying as well for the next phase. You can do my area if you like. I am fine.

Mr Moore: The first bit I can answer; the second bit on which areas is a bit more difficult.

Currently, we have a contract in place with a consultancy looking at various areas around the metropolitan area to identify the highest priority areas for the future. We would expect to have that work completed towards the end of this calendar year and that will lead us to a position then that we can start choosing which areas we start working on next.

Hon ALISON XAMON: Are you anticipating that once those areas are identified that you will actually be looking at that in early 2012 or are you imagining that that is going to go into the following financial year?

Mr Moore: No; I would hope that we would start looking at—it does not mean necessarily physically on the ground, but looking at because there is a lot of planning and community consultation that goes with these things—in early 2012.

Hon ALISON XAMON: Okay. But it is something that is looking at going into the future.

Mr Moore: Yes.

Hon ALISON XAMON: I also listened with keen interest to your response to Hon Ken Travers' question about identified future water sources. In particular, I was very interested to hear you talking about the Kwinana industrial recycling. How far advanced is thinking about that? Is it something that is just an idea at this point?

Mrs Murphy: No; it has been operating since 2006.

Hon ALISON XAMON: Why were you talking about it as an additional water source?

Mrs Murphy: Because the foundation customer for that plant was Hismelt. Hismelt then went into care and maintenance, and so we had a plant without a customer. We have now got more customers for that plant, so we can actually use the plant at full capacity. Our intent for the future is to augment that plant and displace more water in the Kwinana area.

Hon ALISON XAMON: How many gigalitres are we talking about per annum?

Mrs Murphy: Six.

Hon ALISON XAMON: That is not an inconsiderable amount.

Mrs Murphy: No.

Hon ALISON XAMON: How much does that generally cost per kilolitre? How much is that estimated to be?

Mrs Murphy: Because we sell to commercial customers, with the way the ERA recommends our pricing, they have to pay the cost, so it is a commercial transaction. What is the cost per kilolitre?

Hon ALISON XAMON: Is it cheaper than desalination? That is the question.

Mrs Murphy: Yes, but remember that it is not potable water that we are selling.

Hon ALISON XAMON: But, having said that, it is still water that is still useful. If they are not reliant on the scheme, that is a benefit for everyone.

Mr Werner: For industrial purposes, it is better than scheme water, because it has a lower salinity. It is a better product for the industries that can benefit from that lower salinity. They can use it more times in their processes because of that.

Mrs Murphy: But it has pathogens in it so you cannot drink it.

Hon KEN TRAVERS: Give it to the Greens.

Hon ALISON XAMON: Thank you very much. I am quite happy to not drink industrial waste water.

Can I ask, then, because I am just looking at this now and it seems like an obvious way to be proceeding, what is the likely time frame before you are looking at the maximum of six gigalitres use? You are saying that it is on track.

Mrs Murphy: We need customers.

Hon ALISON XAMON: Sorry?

Mrs Murphy: For the six gigalitres we are selling now.

Hon ALISON XAMON: The six gigalitres you are selling now.

Mrs Murphy: The original six gigalitres we are selling now, yes.

Hon ALISON XAMON: What is the maximum amount that you are foreseeing you could use as part of this scheme?

Mr Werner: The existing plant of six gigalitres, as Sue said, the major customer closed down, and we are in the process of reselling that water, and customers are taking that. We think we have pretty much got the existing plant set up. It is actually going to the next expansion. I think there is another four gigalitres—it is in that order.

Hon ALISON XAMON: What is the time frame for that?

Mr Werner: We need to get customers signed up to do that. One of the problems with recycled water is, if Hismelt closes down, you cannot just say, "I will just sell it to another customer."

Hon ALISON XAMON: Hon Ken Travers suggests selling it to the Greens.

Mr Werner: There are different sets of customer risks associated with recycled water. It is a different proposition. You have to have dedicated pipes. It is actually very expensive to distribute it around. The existing customers are actually quite close to the plant. It is not like there is a broad spectrum of customers out there that you can address. The problem of expanding it is finding the customers who are willing to commit to paying for the expansion.

Hon ALISON XAMON: Certainly. I picked up on it because it was cited as a potential future water source, so that is why I was particularly interested. Can I also just ask: you are indicating now that the second stage of the desal will be pumping into the system around August or September. Referring back to the ERA principles in relation to cost-reflective pricing, are you anticipating, then, that people are going to see an increase in their water charges, or are you thinking that that has already been absorbed? The reason I say that is because, as we know, it is more expensive than drawing from the Gngangara or from our dams. People are going to start using this water. Are their bills going to go up as a result?

[5.10 pm]

Mr Werner: The cost of that desalination plant is factored into the existing price path that the ERA recommended in its 2009 inquiry, so that has already been included in those price increases.

Hon ALISON XAMON: So that is —

Hon HELEN MORTON: The answer is no.

Hon ALISON XAMON: Thank you; that is what I was trying to ascertain. Are customers effectively already paying for the cost of that infrastructure?

Hon HELEN MORTON: I think the response was that the costs have already been incorporated into the price range that the ERA has recommended.

Mrs Murphy: Going forward.

Hon KEN TRAVERS: The other desal plants, like the second stage of Binningup, or even your reinjection on a larger scale, are they factored in or would they need to be factored in in terms of future price rises?

Mr Werner: The second stage of Binningup is not in the capital program at the moment; it is not in those price paths.

Hon ALISON XAMON: I turn to the budget papers —

Hon HELEN MORTON: This would be a first for the afternoon, I think!

Hon ALISON XAMON: I am sorry—I am out of order! On page 876 under “Regulated Program Future Estimates Global Allocations — Regulated Business”, why is that figure so low compared to the figures on either side? Could you just explain?

Mr Moore: I will comment without providing detail because the detail is miles long. It is an eon of very small projects. What we have tried to do is document—they are pretty large chunks of money, granted—the bigger projects where we have made some commentary on it. Where we have got a global allocation like that, it is the vast amount of small projects we do. We have at any one time some 2 000 capital projects on the go. We do not try to document all of those in budget papers of this nature. That global allocation is to cover a lot of that sort of work.

Hon ALISON XAMON: Is that the sorts of things like pipe repair and minor —

Mr Moore: Pipeline extensions, it covers our IT budget, other budgets within the organisation that go with that—so, some sort of corporate-type budgets, vehicles and things of that nature—but pipelines and pumped extensions around different areas, yes. There is a whole vast amount of stuff that goes into that sort of \$200 million.

Hon ALISON XAMON: No worries. The next question is: why is it so low for the coming year? It seems like it is actually quite out of sync with what appear to be ongoing costs.

Mrs Murphy: It is because it is a catch-up number, so if in other years specific line items have been mentioned—you will see that the “Country Water Sources and Distribution” number goes up, and that is because we have some large projects in the Pilbara that are going into that bucket, so it is a whole bucket of things. What we are saying is, “Okay, these are the ones we’re specifying and these are the odds and sods on the end.” It is not like it is a thing that has gone down; it is a descriptor and more things are in a different descriptor.

Hon ALISON XAMON: That is fine; that explains it. Also, “Support Programs — Capital Overheads Capital Support Cost” on the same page, I was just wondering if you could explain what that money is for. What are those programs?

Mr Moore: That money is to pay people like me.

Hon ALISON XAMON: So you want a wage!

Mr Moore: I need to be paid.

Hon KEN TRAVERS: You are doing all right there!

Mr Moore: I wish I was, Ken; that would solve a lot of things like retirement! But that money is basically the overhead that works on the capital program, so it is a portion of our overhead costs in the business that we cannot directly attribute to projects that support the capital program.

Hon ALISON XAMON: I want to ask another question as well. About an hour and a half ago, you were answering a question for Hon Ken Travers and you mentioned something about an additional water source that was up north.

Mrs Murphy: At Eglinton?

Hon ALISON XAMON: No. You actually said there were potential sources up north, and then you basically indicated that you might not be able to speak further about it. I got the impression that it might have been commercial-in-confidence, but I want to know whether by any chance it referred to the tapping of the northern Yarragadee.

Mrs Murphy: We already tap parts of it. It depends on your definition of the northern Yarragadee.

Hon ALISON XAMON: I actually mean the very north part or the north portion.

Mrs Murphy: That is always a possibility. I think in our “Water Forever” document, which lists most of our future sources, that is in there on the 20-year horizon, but there are also ground —

Hon ALISON XAMON: Can I ask what sort of pool you are talking about from there? I was under the impression that it could be anything up to 50 gigs, but is that what is on the table?

Mrs Murphy: The analysis, the drilling and the research is not complete by any means. There is still a lot of work to be done on that.

Hon ALISON XAMON: I would agree.

Mrs Murphy: I do not know off the top of my head what it is. My sense is that it is 20 or 30 gegalitres that is in the “Water Forever” document, but obviously if it is in a 20-year source, a lot of work has to be done in the next 20 years before you can make that call.

Hon ALISON XAMON: So, at this point would you say that the groundwork has not been done and it is not something that is on the table in the immediate future?

Mrs Murphy: No, but we would welcome the drilling to be done and anyone who wants to progress that. I think the Department of Water is looking at some options in that space to better understand the aquifer and what the water quality is. There are some areas that are quite salty and areas that are quite hot; and from where you would actually extract it, a whole lot of work would have to be done.

Hon ALISON XAMON: We have had a lot of discussions about water recycling, and we have been mainly focusing on the aquifer reinjection trial, but obviously there are other forms of water recycling as well. Is there any initiative in place to increase fit-for-purpose water recycling? For example, I am thinking of ovals. A lot of country towns are doing this ordinarily as a matter of course. I do not think that we do it anywhere near enough in the metropolitan area. We could learn from their example, but is there anything on the cards in order to increase the proportion of fit-for-purpose recycling?

Mrs Murphy: As you rightly point out, it is done in most country areas for a number of reasons. One is that there is no other disposal mechanism; and, two, it is a beneficial disposal mechanism, so it is a win-win. In Perth, one of the limitations is that we rely on groundwater quite heavily for drinking-water purposes. Putting very lightly treated waste water, which is what tends to happen in country areas, onto the ground could compromise your drinking water source. There is a different set of groundwater conditions that we are operating in; so, that has to be borne in mind. The biggest competitor to using recycled water for those sorts of purposes is the availability of cheap groundwater. And if a council or anyone has access to cheap groundwater of their own, then for them to buy waste water from us—our policy is to make treated waste water available at the plant at no cost for public good—a council would be then expected to move that water to where they needed it and that generally would have a cost that is greater than groundwater. So, there is no incentive —

Hon ALISON XAMON: To protect our groundwater supply?

Mrs Murphy: Yes, although it may not protect them if only partially treated or lightly treated waste water is being put on them. So, it is not a simple kind of argument; there also needs to be analysis done of what the costs are. Our view is that there already is a reticulated sewerage system, which already takes waste water to the waste water treatment plants. As the Water Corporation, we add most value recycling at the big end of town in using the existing infrastructure in an efficient way; so, to run duplicate reticulation systems across Perth is not an efficient use of resources. However, smaller, more local recycling schemes do make sense. They are not normally through the Water Corporation. So, sewer mining is available; people are welcome to access the sewers and use that water if they can make it stack up for their own purposes. But there are two inhibitors. One is the use of the cheap, abundant local groundwater; and the second is the fact that there are protection requirements on those areas. So, it is never a simple black-and-white solution. If there were easy ways to cheaply recycle and displace scheme water, we would do them in a flash.

[5.20 pm]

Hon ALISON XAMON: While I am on water recycling, there is also, of course, the ultimate form of localised water recycling, which is backyard grey water recycling. I have already asked a question about the cost per kilolitre associated

with the subsidising of backyard grey water systems. Is that information likely to be included in the data that I asked for earlier?

Mrs Murphy: It could be. We have had done the cost per kilolitre for backyard grey water recycling systems. All of this data—one year out-of-date costs—are in our “Water Forever” document, which is very much in the public domain. That is always an option for people.

Hon ALISON XAMON: It is an option for people, but that means that individuals are assuming that cost, in the same way that people now have to assume the cost of photovoltaics if they want to go down that path. I am aware that the federal government recently axed the grey water subsidies federally. So, at this point, there is no suggestion that the subsidisation of backyard grey water systems is an initiative that is on the cards.

Mrs Murphy: No. There was a subsidy some years back, but very few people took it up. I cannot remember the number, but it was about 20; it was a very small number. The analysis that was done on those customers was that their actual scheme water use went up. Some of the results that came out of Queensland during the dry period in southern Queensland indicated that people felt they had a social licence to use water more prolifically in their house, because they were using that water twice. From our point of view, it is not in our suite of recommended options, for a variety of reasons. We believe, as I said, that we add value at the big end of town. If individuals want to do it, fantastic. But the cost-benefit analysis, on our numbers, does not stack up.

Hon ALISON XAMON: As we go into summer, with the ever-increasing prospect of complete water restrictions, I suspect that it is an option that will become more appealing for Perth people.

I now want to ask about a specific issue to do with my region. I am in the East Metropolitan Region. Developments are proposed in Stoneville and Parkerville, and also potentially around Wattle Grove. Looking again at “Works in Progress”, there is not anything in the budget to indicate whether there will be an upgrade of water infrastructure in those areas. I am thinking particularly of Stoneville and Parkerville. A lot of the residents in that area are very concerned about whether an upgrade of water infrastructure will be required to facilitate those developments. Part of that—Mrs Murphy touched on this a bit earlier in answer to the questions from Hon Sally Talbot—is whether the developers will be expected to chip in for the upgrades that will be required to facilitate those new developments.

Hon HELEN MORTON: Mr Moore will answer that question.

Mr Moore: I think the areas the member is referring to are Stoneville, Parkerville and parts of Giddegannup.

Hon ALISON XAMON: Yes, I am, but I have also been speaking to residents, particularly around the Mundaring region, who are concerned, firstly, about the development occurring at all; and who are concerned, secondly, about the associated upgrading of infrastructure that will be required. I am not talking about the water treatment plant; I am talking about waste water treatment plants and the like. I notice that this is not mentioned as part of any future works in progress or anything like that.

Mrs Murphy: Is the member’s question asking for confirmation that it is not in the budget papers?

Hon ALISON XAMON: Yes, and whether it is anticipated that the Water Corporation will be involved in the development of that in the future; and, if so, when. I also want to know whether the developers will be required to chip in for that. I am asking the same question for Wattle Grove.

Mr Moore: For the area that the member is referring to, there is no allocation of money for that. The discussion that we have had with the developers thus far has been around whether the developers will develop their own waste water treatment plant. Water is not the major issue. The issue is waste water. At the moment, that is resting with the developers and discussions that they are having with the Department of Planning about the necessity for sewerage systems in those development areas.

Hon ALISON XAMON: Are you anticipating that if that development were to proceed, the developers would be responsible for incurring the cost for that additional infrastructure? If the WAPC determines that it is necessary in order for the subdivision to proceed, the Water Corporation would not incur that cost?

Mr Moore: For those particular areas, they are not anywhere near the currently available sewerage schemes, and they would probably require their own waste water scheme. We have said that, as far as we are concerned, we do not have the capital to put that in. The developments are somewhat isolated, and if they are of sufficient scale that they can justify putting their own scheme in, we have indicated that we are not even necessarily chasing the operating licence for it. They are within our operating licences areas, from that point of view, and we are quite happy if the developers want to put a scheme in and run it as their own scheme, but they are not anywhere near the frontal development for waste water.

Hon ALISON XAMON: Would the same apply for Wattle Grove? My understanding is that proposals around development at Wattle Grove are nowhere near as advanced as they are with the Stoneville development, but it is still potentially there. Again, I am raising these questions in response to issues that have been raised with me repeatedly by local residents in both those areas. That is why I am bringing it to estimates.

Mr Moore: I am not quite as familiar with the Wattle Grove area; some of that is industrial land, but —

Hon ALISON XAMON: No, we are actually talking about semi-rural that is potentially going to be rezoned into various types of residential.

Mr Moore: Okay; then I am not in a position to comment on that.

Hon ALISON XAMON: Okay.

Hon KEN TRAVERS: I refer to page 876 and the line item, “Regulated Program Future Estimates Global Allocations—Regulated Business”. I am interested in whether any of that money there is for expansion of the emergency reserve capacity for waste water treatment plants, in the event of catastrophic power failure, and if it is not there, whether it is somewhere else in the budget. I just thought that might be a good place to start.

Mrs Murphy: No, most of it is done.

Hon KEN TRAVERS: Are we now confident that we have enough reserve capacity in the event of —

Mrs Murphy: Reserve power generation capacity—is that what you mean?

Hon KEN TRAVERS: Either power generation, or reserve capacity.

Mrs Murphy: Or storage?

Hon KEN TRAVERS: Both. When we had the hailstorm back in 2010, I believe it put the system under a fair bit of stress. As a result of that, is there any work going on to increase that capacity to ensure that we are always able to handle the worst —

Mrs Murphy: There would be some in there; it would not be much.

Mr Moore: There is a little bit in there, but in respect of the event we had with the hailstorm in 2010, we would never believe that we would be able to put enough infrastructure in to protect against that sort of catastrophic environment. The bigger pump stations and other areas now have their own backup power situation. Sorry; I thought the original question related to waste water treatment plants.

Hon KEN TRAVERS: I guess I was looking at the waste water treatment plants. As I understand it, you have storage points at the collection point at the pump station; you also need to have the capacity at the waste water treatment plants as well to take some period of volume coming in before. The event could occur anywhere along the system, so I was trying to get a global picture.

Mr Moore: Our system is not like some other systems; it is not a combined stormwater sewerage system. It is purely a sewerage system, so it is a closed system in that regard. Even in an event like the hail event, we would not expect additional flows into it just because of the rainfall and runoff. What happened in that event is we had a lot of backup because of loss of power to many of the pump stations. As I said, for most of the large pump stations, we now have backup power, and even on that occasion we had a number of generators available to us to take to the smaller pump stations so we could operate those. The problem we had at the time was we lost all the control systems, so we were not sure which power stations were out of power and therefore which ones had to be addressed first, but we would not have backup power at all at the pump stations; it is just too expensive.

[5.30 pm]

Hon KEN TRAVERS: Did the loss of the control system require any further work to be done to avoid it from happening again? You put in the supervisory control and data acquisition system a number of years ago.

Mr Moore: We have had a lot of discussions with Western Power about how quickly the power can be reconnected because we are dependent on the power system. It has a battery backup and all the rest of it, but that event was on such a large scale that some of those systems were bound to get knocked out in the process. We try to work with Western Power to minimise that by being on various circuits for these things. When there is a failure of that size, it will always require a lot of manned backup.

Hon KEN TRAVERS: I understand that. When events of that size occur, it gives you a pressure test that allows you to look at and whether there are things you need to do. The point of my question is whether you identified that things needed to be done as a result of that and whether is there any money in the budget to do those things.

Mr Moore: The things that were identified as a result of the debrief have largely been done and we have protected against future events as much as we can.

Hon KEN TRAVERS: We have been talking a lot about recycling. Is there any recycling in place for the treated water that comes out of the Alkimos plant?

Mr Moore: The Alkimos plant is a relatively small plant at 40 megalitres a day. There is no recycling potential from it right now because the volumes are too small. The land has been set aside so that recycling can be considered in the future, depending on what type of recycling it is. It could be anything from the groundwater replenishment that we are

doing at Beenyup or local recycling. Land has been set aside for that in a planning sense but it is not in place at the moment.

Hon KEN TRAVERS: If before you reinjected it you wanted to go down the path of reverse osmosis microfiltration and ultraviolet light and the rest of it —

Mr Moore: There is sufficient land there for that.

Hon KEN TRAVERS: Within the buffer areas is there still plenty of room to do that?

Mr Moore: Yes.

Hon KEN TRAVERS: I assume funding for that would come out of the capitalised support costs. Is any work being done on the future planning? I would have thought that a new plant is the first place where you would take up the challenge to recycle the water rather than pump it out to sea, as is currently done.

Mrs Murphy: Yes, but we need reasonable flows to make it viable. There is very little flow in there at the moment. As it ramps up, that will become more viable. There are a few decision points. A lot of work has been done on options, but if the groundwater replenishment is successful, that will be the highest use for us. The highest use is to use treated waste water for the displacement of scheme water or, better still, to add it to the scheme water. That is what we will endeavour to look at. There is also the possibility of third-pipe schemes. The developers are looking at a lot of options. Whatever options the developers put in, we do not ever want to make it so that recycled water cannot be used in those schemes. The aim is to keep as many options open as possible. There is room in the plant. The incoming power sources are sized to make all those things possible. We will have to keep the suite of options on the table.

Hon KEN TRAVERS: If you go for the third-pipe scheme, will you not have the same problem because a lot of the area is P3 and you will put bore fields through it anyway?

Mr Moore: You would have to treat the water at a reasonable level to use it as a third-pipe scheme or you could inject into the aquifer to get local bounce-back and allow a shared bore scheme to access some of that water. A number of things are being discussed at the moment.

Hon KEN TRAVERS: The councils in the northern corridor and also in the City of Swan are having problems getting allocations for their parks and reserves. I understand the complexities of the groundwater scheme, but it always struck me that there could be some way to effectively allow a second-pipe scheme to go into areas that are effectively downstream of the bore field that may allow you to draw out more water upstream in terms of the banking effect. That water could be quickly replenished by putting it through the parks at a lower level of treatment. Is any work being done on that?

Mrs Murphy: Yes, we have been looking at it. It is in the preliminary modelling stage at the moment. The other alternative is to do a far lesser treatment and use it, as the Shire of Cambridge is suggesting, to create a buffer to let the other groundwater bank up and then get the allocation for its groundwater to run its parks in a way that the shires are much more used to operating. They have a skill set to run in that way. They do not have a skill set to operate recycled schemes. A lot of things are being looked at. It will be a while before there are sufficient volumes of waste water to make that viable.

Hon KEN TRAVERS: That is right but, equally, if you leave it too late to put second pipe schemes in, it will be very difficult. If you plan for it and put the pipe schemes in now as part of laying the trenches for your first pipe, that would make it significantly cheaper than trying to retrofit it. The advantage of Alkimos is that you have a new treatment plant basically servicing a greenfields site. I am not sure that there would ever be anywhere quite as orderly a way of doing that. To get to a lot of the other sites, you have to go through established areas. If there was ever a place to do it, it would be at Alkimos.

Mrs Murphy: Developers will develop those schemes, not the Water Corporation. The developers will make their own call on how they want that to work.

Hon SALLY TALBOT: Again, I cannot give a reference because I am asking for the reference. I want to ask about the Peel waste water re-use scheme project, which I believe is a Water Corp venture.

Mr Moore: The scheme I think you are referring to is a scheme that we have been talking to Alcoa about.

Hon SALLY TALBOT: That is the one.

Mr Moore: There are a couple of proponents at the moment. We have been in discussions with Alcoa for some time about using re-use water from our Gordon Road waste water treatment plant. Those discussions are ongoing. At the moment I think Alcoa is trucking water from the waste water treatment plant. It is also trucking water from the bore at Ravenswood because of a shortage of water this year. The Peel Development Commission is also looking at a couple of schemes in that area for re-use water—effluent—to be brought into the area. We have specifically been working with Alcoa on the Gordon Road to Alcoa scheme.

Hon SALLY TALBOT: I think you have put your finger on the nub of my confusion. The Peel Development Commission budget papers states —

The Commission has worked with Government and industry to deliver the Peel Waste Water Reuse Scheme Project that will enable access to nonclimate dependent sources of water and secure the future for agriculture and industry. Stage One of the project includes a pipeline from the Gordon Road wastewater treatment plant to Pinjarra, and a new wastewater treatment plant at Nambeelup.

Mr Moore: The new waste water treatment plant at Nambeelup that it is referring to is in the industrial area that is being planned.

Hon SALLY TALBOT: Yes, that is right, and that has been very much welcomed. Is that being funded by Water Corp?

Mr Moore: It is very embryonic in its discussion. We are aware that there has been some planning but it is not determined whether it will be a Water Corp plant or others at this stage because it will largely be for industrial use. We are still having discussions with the Peel Development Commission.

Hon SALLY TALBOT: Is there any reference to this in any of the forward estimates? Has any money been identified?

Mr Moore: Not from our point of view.

Hon SALLY TALBOT: Do you have any point of view about what it might involve?

Mr Moore: Only very vaguely. I cannot give you any real detail.

Hon SALLY TALBOT: What would the vague number be?

Mr Moore: I have no idea of the number. I have a rough idea of where it is going to be and I could show you on a plan where they are thinking about putting it but I do not have any details or numbers, or timing for that matter. It is really dependent on whether the industrial area gets up and how quickly it gets up.

Hon SALLY TALBOT: It has been gazetted as an industrial area for many years.

Mr Moore: It depends on who takes it up and when the demand is there.

[5.40 pm]

Hon SALLY TALBOT: That is the waste water treatment plant at Nambeelup. What about the pipeline from Gordon Road to Pinjarra?

Mr Moore: As I say, there have been active discussions between Water Corporation and Alcoa for some time about them constructing a pipeline from Gordon Road to their plant at Pinjarra. More recently, the Peel Development Commission is looking at the opportunity for a larger pipe that will have inputs possibly from that industrial area into the pipe to take water to the Pinjarra area either for use by Alcoa or potentially agriculture. Those discussions are quite early on in the development at this stage.

Hon SALLY TALBOT: Is there also some talk about extending it as far as Woodman Point?

Mr Moore: They are having some discussions on that opportunity, yes.

Mrs Murphy: Just to be clear: the Water Corporation's responsibility is we would make the water available, or sell the water, depending on whether it is for public good or a commercial use, at the gate of the waste water treatment plant. None of these pipelines are proposed to be constructed or owned or operated by the Water Corporation.

Hon SALLY TALBOT: That was going to be the next part of my question.

Mrs Murphy: We are the source of the treated waste water, and that is the end of our —

Hon SALLY TALBOT: You would charge Alcoa, for example?

Mrs Murphy: Yes.

Hon SALLY TALBOT: If Alcoa ended up as the end user, you would charge them for the water, but you would not actually provide the pipes to take the water there—that would be entirely privately funded?

Mrs Murphy: Yes.

Mr Moore: Yes.

Hon SALLY TALBOT: There is nothing under the state agreement that involves the carriage of water to the site?

Mr Moore: Not that I am aware of, no. There have been no discussions under the state agreement in that regard. It has purely been development of commercial propositions.

Hon SALLY TALBOT: My other question relates to the two references to royalties for regions money on page 877. I take you first of all to the Pilbara line item under "New Works" where it says "Pilbara—Port Hedland Wastewater

Treatment Plant Relocation”, \$42 million. Footnote (a) says, “Capital works funded from the Royalties for Regions Fund.” How much of that \$42 million is capital works?

Mrs Murphy: All.

Hon SALLY TALBOT: All of it?

Mrs Murphy: Yes. In Port Hedland, there are currently two waste water treatment plants. One of them is in the middle of an area that future planning for Port Hedland now deems would be more appropriate to be used for residential accommodation and to be developed. We will need to upgrade those plants in the future, but the plant that they are seeking to relocate is a perfectly viable plant. The extra over-cost of doing all the augmentation in the other plant, and building the pipelines into it—remember they are recycling schemes, so pipelines in Port Hedland have to go into the plant and out of the plant as well—are being funded by royalties for regions. The intent, when that land is developed in the future, is that there will be an income stream from that land that will pay back potentially some of that money, if not all.

Hon SALLY TALBOT: Pay it back to whom?

Mrs Murphy: To the state.

Hon SALLY TALBOT: So the whole \$42 million is capital?

Mrs Murphy: Yes.

Hon SALLY TALBOT: Which part of the royalties for regions fund does it come from?

Mrs Murphy: I have no idea, I am sorry. I do not know that —

The DEPUTY CHAIR: I suspect it is the infrastructure fund, but I cannot be sure myself.

Hon SALLY TALBOT: Did you apply for royalties for regions money for those capital works?

Mrs Murphy: No; but with that particular project there has been a lot of discussions under the Pilbara Cities banner about ways to plan for Port Hedland’s future. It was put to us by the Pilbara development—Chris Adams’ office, whatever they are called. The proposal was put: would we move our waste water treatment plant? We said, “We’ll do anything if you pay for it” basically. They said, “How much?” That is where this came from. We are spending significantly more than that on upgrading the other waste water treatment plant, but the costs that are unique to moving the plant are the ones that the royalties for regions fund cover.

Hon SALLY TALBOT: I have noticed, in other references through the budget papers to royalties for regions, that it is normal to identify which particular fund it came from. I am sure Mr Deputy Chair would agree with me there. That is indeed the case with footnote (b) on that page, which was the second part of my question. The draw-downs from the royalties for regions fund is just under \$2 million for 2010–11 from the regional infrastructure and headworks fund. What did that go towards; how was that spent?

Mr Moore: That money was for the upgrade of the Roebourne waste water treatment plant, which is partly provided for from royalties for regions to enable further land development in Roebourne.

Hon SALLY TALBOT: Is that the same sort of issue—that is, it did not have enough capacity?

Mr Moore: No this was a capacity upgrade. It was the NASH subdivision. There is a new subdivision going in on behalf the state. This was to enable the upgrade of the wastewater treatment plant to provide capacity for it.

Hon SALLY TALBOT: Again I ask: did you apply for funding from royalties for regions?

Mrs Murphy: It was through the NASH development. A shortfall was indicated and a whole lot of discussions took place around planning. We were asked what the cost would be to bring forward the upgrade of the plant from many years into the future. I assume we put in a formal application to make the process work. We have not gone through a round of applying. It is in the whole Pilbara Cities planning that has been happening across many arms of government and the private sector.

Hon SALLY TALBOT: Is there a difference between the two; are you pretty sure that for that Roebourne capacity increase, you put in a formal submission?

Mrs Murphy: I can check. To be honest, I do not know the answer to that question.

Hon SALLY TALBOT: Can we take that as supplementary. Was a formal application for funding made to the regional infrastructure and head works fund for the \$1.957 million drawdown for the royalties for regions fund?

[*Supplementary Information No C7.*]

Hon SALLY TALBOT: If I have understood you correctly, in the case of the Pilbara headland plant relocation, no application for money was received; it was an offer from royalties for regions.

Mrs Murphy: We will have to check. It is possible that under the procedural requirements we had to fill in some sort of application somewhere along the line. I do not know the answer to that. We have an internal business case and there is a business case for the entire Pilbara Cities changes, so it would have been part of that.

Hon SALLY TALBOT: Presumably it would not have been your business case to relocate the waste water treatment plant.

Mrs Murphy: No. Generally, a process has to take place for money to change hands. I am pretty confident that would have happened, but I have no idea what that process is.

Hon SALLY TALBOT: Perhaps that can be a second question. Was a formal application made for royalties for regions funding from the Water Corporation for the relocation of the Pilbara–Port Hedland wastewater treatment plant?

[Supplementary Information No C8.]

Hon KEN TRAVERS: We talked earlier about, I think, the trial of the reduction in pressure in the Shelley area. Do we have an estimation on what leakages occur each year from the Water Corporation mains?

Mrs Murphy: We know what we meter in and what the aggregate of our customer meters are. There is a difference between those two numbers. That difference is made up of metering error, water supplied for fire hydrants and fire fighting purposes and leakages in that as well.

Hon KEN TRAVERS: And theft along the way as well, potentially.

Mrs Murphy: I do think that is a huge problem in the metropolitan area. I do not have the figures with me. We can come up with them. They are audited every year and in the benchmarking document that our regulator produces.

[5.50 pm]

The real benefit in the pressure reduction is that it is not only leaks on our side of the meter but any leaks on the other side of the meter as well. It saves our customers money as well as the Water Corporation, so it is a bit of a win-win. It does however sometimes cause issues. Our operating licence mandates the minimum water pressure we can supply and we supply it well above that to virtually all of our customers. So when a pressure reduction takes place, although people are still receiving water at the pressure that they are entitled to, sometimes it is different from what they had before and they see evidence of the difference in the way their sprinklers operate or perhaps the pressure in the shower in the upstairs part of the home. There are some customer issues that have to be engaged very carefully through the process. Whilst there are savings in water—we do need to make those and we do need to keep running on those leak programs—we have to be very careful that we adequately communicate with our customers every step of the way on that one.

Hon KEN TRAVERS: I think there is a problem with Subiaco Oval at the moment in terms of getting water pressure to the top tier of that, isn't there? I do not know that you have put a water pressure reduction test around Subiaco Oval.

Mrs Murphy: No, we have not and that can happen for a variety of reasons, some of which are on our side of the meter and some of which are on the customer side of the meter.

Hon KEN TRAVERS: Do you have a budget for leak detection to try to detect leaks across the system?

Mrs Murphy: We do but what we have tried to do in the last couple of years is target the leak detection in schemes that are under stress the most with some priority. There is a limit to what you can do with the resources that we have. It is not a very exact science. The complexity of our scheme makes it difficult at times because we do not have very many parts of the scheme—which is good in one way—that is supplied from just one pipe. There is quite a lot of engineering to get the system right to drop the pressure in an area without some unexpected consequences. So, we do but we are also limited to what we can do in any particular time frame.

Hon KEN TRAVERS: When I was listening to the earlier questions by Hon Alison Xamon about the trial and you were talking about rolling it out and continuing to apply that technology, again, is there a specific budget that you have for doing that; and, if so, what is the budget for that work?

Mrs Murphy: I do not know off the top of my head.

Mr Moore: Do you mean the pressure reduction trial?

Hon KEN TRAVERS: Yes, the whole issue of, you have done the trial but expanding and reducing to pick the areas and reduce the pressure in areas.

Mr Moore: We have a small amount of capital in the budget going forward for that with the aim of doing one or two areas a year over the next few years. As I said before, we are out with an engineering consultant at the moment looking at a number of areas across the metropolitan area that are supplied with reasonably high pressure to determine which are the most appropriate areas to address.

Hon KEN TRAVERS: Could we take it on notice what the budget is. I guess the other thing I am interested in is for the water that you save through that process, are we able to quantify a value on it so you can actually produce an extra kilolitre for a dollar a kilolitre as opposed to \$2.10 for desalination?

Mrs Murphy: Yes, we do have those numbers.

Hon KEN TRAVERS: I would be interested to know what sort of value we would be able to get in terms of for every dollar spent the amount of water we would get.

Mrs Murphy: Yes, the aim is that those calculations are supposed to be done as we go so that we can only do pressure reduction where it makes sense. If it is going to cost a huge amount of money, we are not going to do it because it does not deliver much saving. We have got those numbers.

Mr Moore: Yes. We can supply them as supplementary.

The DEPUTY CHAIR: I think that we have two there now. The first one, Hon Ken Travers, was for?

Hon KEN TRAVERS: The amount that has been spent on leak detection. The other was the amount in the budget for progressing the rolling out of the pressure reduction and what it works out at on a per kilolitre basis for the water saved or the water that is not lost.

[Supplementary Information No C9.]

Hon KEN TRAVERS: Do we have a total budget for how much was spent on water recycling proposals and initiatives?

Mrs Murphy: I do not have those numbers. Does the member mean the operating budget or capital budget, or what exactly?

Hon KEN TRAVERS: It is more about expansion, so it would be capital; although I suspect that sometimes it may come under recurrent. Does the Water Corporation have a budget to progress new recycling initiatives?

Mrs Murphy: Not specifically. We have a requirement under our act to act commercially, so where there is a commercial opportunity for us to sell or treat waste water, we will always do that. The second criterion is if it is a beneficial use to our scheme, so that we get more water in the scheme—displaced water—or it becomes a cheap option for us to get, whether through savings in water or getting more water into the scheme it has the same net effect. That is our priority, so we treat it on a case-by-case basis. In country areas where it is a way of disposing of treated waste water, there is a different set of rules than in an area where we have a perfectly viable and economic way of disposing of treated waste water and it has to be costed as having a beneficial use. I realise that is going round in a circle; it does not fit into a bucket on its own. We have a planning group that is looking specifically at recycled water options and fit-for-purpose water options in a planning sense. They are often part of other projects and they will be scattered all through the budget.

Hon KEN TRAVERS: I think Hon Alison Xamon asked a question earlier about the other options in the north. I thought I heard Ms Murphy refer to other sites for desalination.

Mrs Murphy: Yes.

Hon KEN TRAVERS: Where is the Water Corporation looking for other desal plants in the north metropolitan area?

Mr Moore: I do not think we are in a position to divulge that.

Mrs Murphy: We are still doing a lot of planning work on that. We have a linear scheme at the moment, and Perth is a kind of linear city. We want to balance our infrastructure with sources at the ends, if we can possibly do that.

Hon KEN TRAVERS: It is not cheap to shift water.

Mrs Murphy: No. As Perth grows north, the concept of having a water source north of Perth is sensible planning. Obviously putting a desal plant north of Perth feeding in to balance it out makes perfect sense. We do not own a site, and we have looked at a number of options for where they could possibly go. There are myriad sites. Our Water Forever document has a whole heap of areas that are laid out as possibilities, but we do not have it. I cannot give the member a specific answer to that.

Hon ALISON XAMON: The Water Corporation does not own land yet.

Mrs Murphy: This is not in the estimates period by any stretch of the imagination.

Hon ALISON XAMON: We should focus on demand reduction again.

Mrs Murphy: Sure. The cheapest water we supply is the water that we do not supply.

Hon ALISON XAMON: I could not agree more. If only we had the bill to deal with that!

Hon KEN TRAVERS: It will be interesting to see the bill. I think that the bill the minister was promising last year has finally got into the other place, or is that the one that is still coming?

Hon HELEN MORTON: I do remember the bill, but I do not know if it has been tabled in the other place yet.

Hon KEN TRAVERS: The minister kept telling us that was going to cover all the issues around demand reduction.

Hon ALISON XAMON: Which it does not, by the way.

Hon HELEN MORTON: Hon Alison Xamon should just wait and see. It will do everything I said it would do.

The DEPUTY CHAIR: What is the question?

Hon KEN TRAVERS: The issue was raised and Ms Murphy is absolutely right: the water we do not use is the cheapest water. I asked a policy question of the minister about when we would see the legislative framework to back that up to support the Water Corporation in its budget. I suspect I saw a bit of play across the room that suggests there may be some commercial negotiations going on about some of those things, and the Water Corporation is not necessarily able to divulge them completely to us. The Mundaring treatment plant was done as a public–private partnership. Is the Water Corporation considering doing any of the projects in the budget as a PPP, privatisation, contracting out or whatever? I am aware of the desal plant and the structure there. Are there any in which the corporation is looking at the option of public–private partnerships in any of their various forms? I am talking about the major projects.

[6.00 pm]

Mrs Murphy: For every project, we look at the risks and try to work out the best way to deliver it. We have a suite of options for doing so, from the competitive alliance–type processes that we have used for our desal plants right through to a full PPP and then going back to the other extreme in us designing, building and owning them ourselves. In this suite of projects, probably the only one that we are foreshadowing vaguely as being a PPP is the east Rockingham waste water treatment plant. We still have to do the analysis on the options and compare that with some of the self-perform costs, but one of the options for that is that it becomes a source of treated waste water for recycling in the area, which is a commercial opportunity potentially for the private sector. So if the private sector were to develop the plant, it would charge us so much a kilolitre to treat waste water and we would charge it so much a kilolitre to put it in our outfall; and, if it could find a beneficial use and sell that water to a third party, so be it. We are looking to see whether that is attractive to the private sector, and we have had some preliminary discussions to see whether there is an appetite for it. It is no good having a PPP option if nobody wants to be a part of it.

Hon KEN TRAVERS: I think you were saying earlier that you are still trying to find customers from your existing recycling plant at Woodman Point. I would have thought that you are really talking about a fairly similar market for east Rockingham.

Mrs Murphy: The advantage is that nothing is built there yet. In the same way that you alluded to with Alkimos, if it is a greenfields development, the recycling for industry becomes a lot more viable. As Lloyd was saying, one of the problems in the Kwinana strip is that to get from one plant to another, you have to go over other people's land, so the problems with easements becomes quite complex.

Mr Moore: The other comment, if I could, on the east Rockingham site is that it is in the heavy industrial area, which is not yet inhabited by industry. There is a possibility that high water use industries come into that, so it still remains a possibility.

Hon KEN TRAVERS: Because there is an option of cheaper water.

Mr Moore: Yes.

Mrs Murphy: It gives water certainty, which is attractive to those industries.

Hon KEN TRAVERS: Is the Water Corporation continuing to do any work on accessing the south west Yarragadee for the public water supply?

Mrs Murphy: The public water supply for Perth? No. But we are already using the south west Yarragadee for the public supply in some towns in the South West. Bunbury and Busselton use it for the supply of the Aquwest–Bunbury Water Board.

Hon KEN TRAVERS: People are still constantly suggesting that it is a future source.

Hon ALISON XAMON: One person!

Hon KEN TRAVERS: One person; that is fine. I am just asking the question. Do not get me wrong; I am not proposing that it be used as a source.

Hon HELEN MORTON: Are you that one person?

Hon ALISON XAMON: No.

Hon KEN TRAVERS: It is someone I have quite a bit of respect for, not that I always agree with him on everything he says and does. There is certainly no doubt that I have an awful lot of respect for that person, so I am not going to trash his reputation even when I do not agree with him. There is that constant suggestion that it is still a future source for Perth's water supply. Is the Water Corporation considering that as a future source for Perth's water supply?

Mrs Murphy: No.

Hon ALISON XAMON: Good.

Hon KEN TRAVERS: That is good. I wanted to hear it from them, not from you, Hon Alison Xamon! We talked about the northern Yarragadee, but are you doing any hydrological work at the moment in that area to the north of Perth around Gingin and further north?

Mr Moore: There is a definitional issue. North of Moore River —

Hon KEN TRAVERS: I think you have bore fields until about Gingin. Are you doing any hydrological work in the area to the north of that?

Mr Moore: We are not doing anything specifically there, no.

Mrs Murphy: I believe the Department of Water may be; I do not know.

Hon ALISON XAMON: I believe it is private contractors that have been looking at it and DoW is eyeing it off.

Hon KEN TRAVERS: Which gets us started on another issue as well—why, when you have got a well-run government-owned entity, you would want to increase the risk of going to the private sector for some things when you have got an organisation that has done it very well for over 100 years—but anyway, that is another —

Hon HELEN MORTON: Thanks for the comment.

Hon KEN TRAVERS: So long as you keep it that way, minister, I will happily compliment you on it. It is an organisation that has stood the test of time under many governments; let us just hope it is never put under risk by any—that is all I can say. I guess I want to go back to the Alkimos waste water treatment plant. We talked about having an area reserved for the potential, but have you started doing any geological studies to examine the likelihood of that waste water reinjection into the Leederville aquifer around that area?

Mrs Murphy: Very preliminary.

Mr Moore: Not in that particular area at this stage; no. It is an area where there will be a future bore field. We do have some knowledge of the groundwater in the area, but we would start looking at where the reinjection point is once you started thinking about the actual development of a plant. As Sue said earlier, there are several options that you could look at. You could look at injecting at or near the plant or alternatively treating the water and taking it inland and injecting it further into the—what is called the Gnangara mound, but the Yarragadee further inland than the plant. At this stage it is too early to sort of determine where you might do it.

Hon KEN TRAVERS: Again, I just wanted to go back to the issue I talked about a little earlier about those areas that sit where there is potential planning decisions that would change P1 to P3. As I understand it, the bores that we are talking about—certainly on current extraction you are drawing about 17 gigalitres from the bores that would site under the area of the East Wanneroo structure plan and the Pinjar South industrial area. It has been upped to 17 gigalitres, which I would have thought is a fairly significant amount to be—so I do want to sort of ask whether or not you can maybe take it on notice to have a look at what work you have done about the impacts that that might have on your requirements for future capital or asset investment if you were, you know—I would have thought the area under the industrial area, you would have to pretty much shut it down completely, but even the areas in East Wanneroo it is going to change dramatically and it means you have got to factor in a risk factor if it is in P3 as opposed to P1, I would have thought, so what impact that would have, because it does worry me that the volumes —

Mrs Murphy: So it is about what are the impacts of the zoning changes in that area.

Hon KEN TRAVERS: On your asset investment programs —

Mrs Murphy: If there is a planning change that has a material impact on our asset viability, we will be protesting loud and clear.

Hon KEN TRAVERS: Certainly the old Water Corporation always defended their assets.

Mrs Murphy: We swotted up on the budget, not on the future planning changes in those areas, sorry.

[Supplementary Information No C10.]

Hon KEN TRAVERS: I am interested to get a sense of what impact that would have on your supply, because I assume changing from P3 to P1 does have an impact in terms of how you manage your assets.

Mr Moore: You have got to be more active in managing the catchment, I guess, than the P1. We would much prefer to see things remain P1, but some of our existing groundwater areas, Gwelup, for argument's sake, a number of the bores there are in housing estates or even in light industrial areas. So you can survive quite comfortably with them in those environments. It is not desirable, but it means that you have got to manage the catchment a lot better. You have got to make sure that there are no contaminating industries in the catchments and things of that nature.

Hon KEN TRAVERS: There is clearly an increased risk and that is the issue about managing the risk. You may still be able to use the water, but there is a constant risk. There was an excellent report that—Minister Day was actually a

member of the select committee that looked at it and I think they were the ones that first recommended the whole idea of making sure we reserve the areas in perpetuity that sit above the mound that we require for water. That is why I find it fascinating that we are now going back to start having that creep into those areas that were identified.

[6.10 pm]

Once you start that creep, you will not stop it; it will continue up and down the whole of the Gngangara mound, and I think that is the other danger. I do not know whether you could quantify that as a risk, but I would have thought it was a significant potential risk as well once you reopen the debate on the whole of the Gngangara mound. How much do you have to drop your take from the Gngangara mound once the desal at Binningup comes on stream?

Mr Moore: This year we are taking 165 gigalitres out of the Gngangara mound—that includes the Jandakot area as well. The current rules indicate that we can take that in abnormal situations, but in normal situations between 145 gigalitres and about 105 gigalitres, on an average of 120 gigalitres. We have been taking more than 120 gigalitres since about 2001, and hence when Binningup desal plant comes online we will be trying to move back towards that 120 gigalitres, weather permitting, on an average. We want to be getting back to some years below the 120 gigalitres, which is desirable for the 120-gigalitre average, clearly.

Hon KEN TRAVERS: I think you are supposed to try to allow some sort of recharge, are you not?

Mr Moore: That is the intent of having an average of 120 gigalitres in the longer term; in some years you will take up to the 145 gigalitres, and other years below the 120 gigalitres so that there is that sort of balance then. They are the rules as they apply today, but that is based on a balance of the Yarragadee, Leederville and the superficial. We are currently having discussions with the Department of Water about how that balance should sit in the future. It may be that some of those rules will change in the future if we extract more from, say, the Yarragadee and less from the superficial. But the immediate term, when it comes online, is to try to move back towards the 120 gigalitres average more than we have currently been since the 2001 period, and certainly with a maximum of 145 gigalitres.

Hon KEN TRAVERS: So are you confident now that you have the modelling right for the interaction between all of the different layers of that aquifer?

Mr Moore: Are we confident in groundwater modelling is always a challenging question. I think between ourselves and DOW there is a reasonable confidence on the modelling, yes.

Hon ALISON XAMON: On that note, though, are you suggesting that the Water Corporation may still be going in and applying for the full extraction of 145 gigalitres for the coming summer months?

Mr Moore: Sorry; for 145 gigalitres?

Hon ALISON XAMON: Because you would have to think that that is going to kill the mound.

Mr Moore: Sorry; did you say 145 gigalitres?

Hon ALISON XAMON: Yes. What I am hearing you say is that once Binningup is actually producing you are hoping to even it out at about 120 gigalitres—I hear that—but it sounds like there still might be an option to go for the full 145-gigalitre extraction in the coming year.

Mr Moore: Yes, absolutely.

Mrs Murphy: It has been an exceptionally dry year, yes.

Hon ALISON XAMON: The trouble is of course that we, potentially, are going to have an exceptionally dry winter again; that is always a risk, and it is not looking particularly flash at the moment. The trouble is then, of course, we are going to have a mound that is going to be once again compounded by the double whammy of minimal rainfall and what I would argue is an unsustainable extraction.

The DEPUTY CHAIR: What is the question?

Hon ALISON XAMON: Is it looking at this point like you are actually going to be going in and asking for 145 gigalitres?

Mr Moore: For the coming extraction year, if the winter is as it is, and bearing in mind that Binningup does not come on until the end of the year, we quite likely will be asking for 145 gigalitres or more again.

Hon ALISON XAMON: I think a lot of people were hoping that Binningup coming on board would actually mean that that would not happen for quite a while.

Mr Moore: I can tell you that from the Water Corporation point of view, we are also hoping that we have a winter that beats all winters. If it does not, we will have a problem.

Hon KEN TRAVERS: In terms of your long-term weather forecasting predictions—I know you do them—what is your prediction for this winter and next winter?

Mr Moore: When you say we do them, we do not actually do them.

Hon KEN TRAVERS: Well, you monitor them.

Mr Moore: We have spoken to the weather bureau, and the best comment it has made thus far is that for the winter this year, there is a 20 per cent probability of average rainfall. That was its last long-term forecast. It has not forecast anything for the winter after this at all.

Hon KEN TRAVERS: So we have a 20 per cent chance of getting to it.

Mr Moore: A 20 per cent chance of getting —

Hon KEN TRAVERS: So an 80 per cent chance that we will not make the long-term average this winter.

Mr Moore: That is correct.

Hon KEN TRAVERS: That says to me that we should be looking at desal, the next major source, well before 2015.

Mrs Murphy: Yes—probably.

Hon KEN TRAVERS: Yes—probably!

The DEPUTY CHAIR: I think that brings us to the conclusion, on that pessimistic note. I am afraid you are in the business in which the only reality check is after it rains.

Hon KEN TRAVERS: They may want to make a final response. I thought that —

Hon ALISON XAMON: No, they do not; they agreed.

The DEPUTY CHAIR: I think that we have heard it; I am afraid.

Thank you very much for working with us for the three hours this afternoon.

Hon HELEN MORTON: Without a break!

The DEPUTY CHAIR: Oh; I forgot!

Hon HELEN MORTON: Yes; I thought so.

The DEPUTY CHAIR: I am not used to them. I am sorry.

The committee will forward any additional questions it has to you via the minister in writing in the next couple of days, together with the transcript of evidence, which includes the questions you have taken on notice. If members have any further unasked questions, I ask them to submit these to the committee clerk at the close of this hearing. Responses to these questions will be requested within 10 working days of receipt of the questions. Should there be difficulty and the agency be unable to meet this due date, would you please advise the committee in writing as soon as possible before the due date. The advice is to include specific reasons as to why the due date cannot be met.

I apologise for missing a break, but on behalf of the committee, thank you very much for your attendance.

Hearing concluded at 6.16 pm
