ECONOMIC REGULATION AUTHORITY DRAFT REPORT

BULK WATER CHARGES FOR HARVEY WATER

RESPONSE FROM HARVEY WATER

JANUARY 2007

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INTRODUCTION AND OVERVIEW

Harvey Water appreciates the opportunity to comment on the Economic Regulation Authority Draft Report on Harvey Water Bulk Water Pricing.

In our view, the ERA has produced a report that identifies the significant issues. Discussion of those issues is well balanced, and the report appeals to us as a solid attempt to progress the debate of the issues – some of which are quite complex and especially challenging because of the absence of reliable or contemporary information.

As was generally anticipated from the outset of this review of bulk water charges, the treatment of dam safety expenditure is a core issue and has huge potential material impact for the irrigators. We acknowledge that the ERA makes some sound arguments on this issue, which take us closer to a practical resolution. However, we believe there are still some matters that are deserving of further consideration.

There are also some issues on which the ERA has invited further comment. We have responded where we have the capacity to do so in a way that adds to the discussion.

Harvey Water considers that:

1. The ERA has taken the appropriate, and consistent, approach to the valuation of the asset base. Harvey Water agrees with the proposition that the value of the assets as they stood at the commencement of the BWSA, should stay at zero, and then add into the asset base the value of capital works undertaken since then, with appropriate depreciation.

2. The asset base used in the Draft Report of $205 million requires some explanation. It is inconsistent with the observation above and the comment within the report that the overall expenditure on dam safety to this date is some $25 million. One possible explanation is that the $205 million includes the new Harvey Dam. This would be incorrect. The Water Corporation constructed the Harvey Dam as part of an arrangement which gave them access to much higher quality water out of Stirling Dam. The original BWSA recognised this and specifically removed Harvey Dam from the Agreement. This is a most important and materially significant issue, and interested parties are not able to make an informed comment until the basis of the number ($205 million) is explained.

3. The ERA has made the appropriate decision in stating a preference for the deprivals methodology over DORC.

4. The allocation of costs can most appropriately be made on the basis of the relative shares of entitlement held by those accessing the water in each dam. However the allocations shown in the Draft Report are not correct.

5. Dam safety costs are a potentially significant cost for irrigators, and the irrigators accept that they should bear a share of those costs – as committed to in the BWSA. However, in assessing an appropriate share of dam safety costs to be borne by irrigators, the ERA is urged to take account of:

- The reality that dam safety standards (ANCOLD Guidelines are defacto standards) are far in excess of community safety standards elsewhere;

- The Water Corporation has every incentive to, and will quite reasonably, over-spend on dam safety because of its corporate financial capacity, its monopoly position, and the potential legal exposure of its directors.

- The legacy costs inherent in the dam safety work now being done. Waroona Dam, for example, has leaked for as long as locals can remember so the need to refurbish the Dam has existed for decades.

- Dam safety expenditure has a large "public good" component, which should most appropriately be paid for from the public purse. The costs of dam safety are escalated by the changing climate which is said to bring a more variable rainfall characterised by occasional heavy intensive rainfall events. Applying an "impactor pays" approach would see responsibility resting with the public. At the same time, the beneficiaries of the dam safety program are wide spread and include a large component of public benefit. So from a "beneficiary pays" approach, there is also a case for public funding.

6. Dam safety costs should be kept separate from other costs and separately accounted for in water storage charges. This makes for greater transparency.

7. The ERA is appropriately concerned about the efficiency of capital investments in dam safety. It does not, however, follow that legacy costs cannot be recognised because it would lead to inefficient decisions. The existing CSO model for ensuring that services are delivered efficiently to meet government objectives should be used in addressing legacy costs where the Water Corporation is delivering services to meet a wider public good or standing obligation.

BENEFICIARIES OF DAMS AND DAM SAFETY

The ERA has accepted most of the argument about the spread of beneficiaries of dams. However, we think we should repeat our comment in the response to the issues paper about climate change and the public good nature of dam safety.

> Climate change is widely believed to be occurring as a result of the greenhouse effect which has created a warming, drying trend in certain parts of the world with an increase in more extreme weather events such as flash flooding. Plant growth in agriculture is a sink for greenhouse gases, particularly carbon dioxide, so its contribution to the problem is relatively small and is probably reducing it, compared to major industries, and other human activities such as driving motor cars.
>
> But the community, through its technical experts, are agreeing that different more stringent dam safety standards should apply with the higher costs to be borne by the industry, which in this case are narrowly seen to be irrigators. However, consistent with the principle of polluter pays, the impactors are those industries who are said to be ultimately causing the problem to a much greater degree. There is considerable unfairness in this approach which irrigators would like to see reflected in a clear and specific response by ERA to this point, preferably resulting in equitable apportionment of costs.
>
> Irrigators will not be the only ones living or working in the flood path, and neither will all irrigators have their farms there. Many other occupational groups live and work in the flood path, and they need to be recognized as receiving a benefit from improved dam safety.
>
> In addition there are other persons who will be occasional inhabitants of the flood path, and still others could be passing through it at any one time.

DAM SAFETY EXPENDITURE

Harvey Water is happy to see the discussion in the ERA Report on risks of dam safety. Harvey Water endorses the view that the costs of compliance with ANCOLD guidelines are considerably out of line with what are considered to be appropriate levels of risk mitigation expenditures in other areas. Harvey Water also endorses the ERA's discussion and observations about the incentives for the Water Corporation which impel it to take a most conservative approach to risk minimisation. Harvey Water accepts that, in this regard, the Water Corporation is taking a correct prudential approach to managing its corporate and individual liabilities.

There has been considerable discussion about a possible difference between society's attitude to risks that carry the possibility of multiple deaths compared with risks resulting in single deaths – even though the total number of deaths over time may be equal.

The financial implications of this discussion in the report are well summarised in the graph at page 22 (Figure 3.4) – especially because of the rapidly diminishing returns to progressive increases in expenditure. The ERA's conclusion is worth repeating:

"However, the last $90 million (about 70 per cent of the then package of measures considered) appeared to offer safety reduction with an implied cost per fatality avoided of the order of $65 million."

As pointed out by the ERA, this number contrasts with numbers in the range of $2 to $3 million (and lower) for each statistical life saved in any one year, for other areas of risk such as health interventions and road accident risks.

Harvey Water is especially concerned that the conclusion of a potential over-spend of $90 million on dam safety upgrades does not draw a stronger response and recommendations for action from the ERA.

Harvey Water considers that there is a strong case for Western Australia to follow the lead of other Australian States and the ACT in enacting State-based legislation on dam safety. In this respect, Harvey Water is in agreement with the approach suggested by the Water Corporation in its submission at pages 8 and 9. The development of legislation is considered to be the most appropriate way to achieve a more rational approach to expenditure on dam safety in WA, and one that is more equitable relative to the levels of expenditure on public safety in other areas of activity.

The ERA has invited comment on whether there should be a separate charge to recover the irrigators' share of dam safety costs (Draft Report page 10). Harvey Water considers that dam safety costs should be kept separate from other costs and separately accounted for in water storage charges. This makes for greater transparency for all parties.

Harvey Water also suggests to the ERA that charges need to be predictable. Past experience of an absence of consultation by the Water Corporation on dam safety matters makes it especially important to note the need for arrangements under which there will be discussion

and real consultation well in advance of any major investment or operational decisions on dam safety. Harvey Water, together with other interested parties within the government, should be contacted at the time the Corporation is constructing its capital works program – which should give several years of advance notice of decisions which will flow through into bulk water storage charges.

RETURN ON IRRIGATION DAM ASSETS

The rate of return on assets is set at 5.6 %, which is the same as applies to the rest of the Corporation's urban and country assets.

There appears to be an inconsistency between the ERA comments in its report and the value placed on assets at 30 June 2006 of $205.6 million (Draft Report page 9); and the value for 1 July 2006 of $200.1 million (Draft Report Appendix Table A2.1).

> "The ERA's preliminary view is that the BWSA should be based on the upper bound pricing principle, using an appropriate estimate of the (deprival) asset value.
>
> Under the original BWSA, the implicit assumption was that the initial asset value was zero. In hindsight, this may have been an appropriate estimate of the initial asset value under the deprival value method given the uncertain magnitude of the future dam safety expenditure. **The ERA's preliminary view is that there is merit is assuming that the initial asset value at the time of the original BWSA is zero because this is not only consistent with the BWSA but it enables the rolled forward asset value to define an appropriate upper pricing bound that recognises efficient costs incurred since 1996 and is consistent with deprival value principles.**
>
> **The 30 June 2006 asset value can be calculated by starting with a zero initial asset value at the commencement of the BWSA in 1996,** adding the capital expenditure that has been incurred by the Corporation over the period of the agreement, subtracting depreciation and adjusting for inflation." From Draft Report page 9.)

Harvey Water reads this as saying that the asset value is arrived at by taking the asset value at the start of the BWSA in 1996 at zero. Then the costs of dam safety expenditure are added up and depreciated to give a current value for the asset. This would yield a number less than $25.4 which is the raw total of safety expenditure to date (Water Corporation submission page 4.)

However, later in the report, at page 9, the asset value is stated in the following way:

> The maximum asset value (i.e. the value obtained from adding all of the dam safety capital expenditure into the asset base) as at 30 June 2006 is $205.6 million (in real dollar values of 30 June 2006). It should be noted that this is the value for the portfolio of South West dams, including the dams from which Harvey Water accesses little or no water. (Draft Report page 9.)

Then, in the calculations of revenue requirements at Table A2.1, the ERA uses a figure of $200.1 million. In this Table the ERA is calculating a rate of return of 5.6% on its asset to give the $11.2 million. Remembering that the $205.6m includes dams from which Harvey Water gets little or no water – how do the numbers relate to each other? It is important to know.

Capital contribution

The ERA has reported that it will be looking further into the issue of whether the Harvey Water payment is a capital contribution.

> Harvey Water noted in its submission that it considers the dam safety contribution that it made in 2004/05 to be a capital contribution. Such contributions are typically deducted either from the regulatory asset value or from the cost of service to ensure that the owner does not receive a return on assets it has not funded. The ERA understands that there is some disagreement between the parties about whether the contribution was a capital contribution and will be investigating this matter further.

COST ALLOCATION ISSUES

Cost allocation issues - Method

Harvey Water agrees that the ERA has identified the main issues and that the broad principles being applied are the appropriate ones for the following discussions of cost allocation issues. Harvey Water remains of the view that the benefits of dam safety are distributed in a quite different way from the benefits of having the dams. However, it accepts that the ERA has given consideration to this view and has come to its own view on the question which, at least in part, recognises that there is a difference.

Harvey Water agrees that the allocation of costs can most appropriately be made on the basis of the relative shares of entitlement held by those accessing the water in each dam. However the allocations shown in the Draft Report need to be corrected (Figures 4.1 and 4.2 refer). For example, the Harvey (Weir) Dam no longer exists. Water from Stirling Dam has effectively been almost entirely transferred to the Water Corporation as an offset for the replacement supply from the new Harvey Dam – so Figure 4.2 should show a transfer from the Stirling Dam allocation to the (new) Harvey Dam allocation.

Additional considerations in the allocation of costs are the water trades that have been recently agreed to occur from Harvey Water to the Water Corporation. Under these agreements, the volume of entitlement in each of Stirling and Samson dam will decline to low levels and potentially Water Corporation will own a major share of the Logue Brook dam. Within a few years there could also be significant changes in the entitlements out of the Wellington Dam.

Cost allocation issues – Efficient Revenue

An important consideration in assessing the allocation of costs is an examination of whether the asset construction and operating costs of the Water Corporation are efficient. The MJA report offered the opinion that costs are efficient. We have no way of testing this opinion. However, we can observe that efficient outcomes would be surprising given the motivations that are inherent in the Corporation's business environment.

We consider that the question of efficiency has a number of significant components. The first is the efficiency with which the actual works are constructed. Given that the works are tendered on a competitive basis, we should assume that the contractors work efficiently. Then there is the question of whether the works being specified are the most efficient – and here there are some real doubts, as discussed later. Another component of efficiency is the actual operations of the dams. These are a relatively small part of the equation, so probably don't justify a lot of analysis. However, if they are based on the data represented in Figure 5.1, they, too, need to be corrected as already discussed for capital costs. Finally there is the two-part question of the efficiency of the Corporation's overheads and how they are allocated. We have some concerns in this regard and return to the issue later in this section.

The information contained in Figures 3.3 and 3.4 casts some light on the question of whether the works being specified are based on efficiency criteria. Expenditure on dam safety for the Waroona Dam would appear to be at a level that is quite inefficient. In terms of estimated risk exposure, we note that Waroona Dam has been moved from well outside the line to a long way inside it (Figure 3.3). This suggests that they have spent far too much – especially with reference to Figure 3.4. The implications of the information contained in these two Figures, very roughly applied, suggests that the safety improvements that would have been necessary to move the risk profile for the Dam well inside the line of acceptable risk is less than ten per cent of what was actually expended.

The opening asset value of $200.1 million (Draft Report Table A2.1), or $205.6 million (Draft Report page 9) requires some explanation. Values of this order appear inconsistent with the discussion in the draft report on the approach to the valuation of assets – that is that the value of assets is to be based on a value in 1996 of zero, with expenditure since then to be summed (with appropriate depreciation) to give a current value. This is set within a context of a move to "upper bound" pricing. The Report notes that the overall expenditure on dam safety to this date is some $25 million.

One possible explanation is that the $205 million includes the new Harvey Dam. This would be incorrect. The Water Corporation constructed the Harvey Dam as part of an arrangement which gave them access to much higher quality water out of Stirling Dam. The original BWSA recognised this and specifically removed Harvey Dam from the Agreement. This is a most important and materially significant issue, and interested parties are not able to make an informed comment until the basis of the number ($205 million) is explained.

A further issue concerns the Corporation's overheads and the way in which they are allocated. The Draft Report suggests that the allocation should be the same for all of the Corporation's dams. Harvey Water considers that the allocation of overheads should reflect the reality that the metropolitan and other dams that are sources of potable supplies are much more closely managed than irrigation dams. Potable water dams are monitored more closely and water quality must be analysed on a continuous basis. Security around the dams is also a significant difference, as potable water dams must be protected from chemicals and decaying animals and animal wastes.

Harvey Water can only illustrate the differences. It does not have the necessary information upon which to base a suggested allocation.

Cost allocation - Legacy costs

The advice provided to the ERA by ACIL Tasman addresses the issue of legacy costs. That advice appears to conclude, for a variety of reasons, that there is a legitimate legacy component to the dam safety costs. However, the advice is also saying that slavish application of the principle of legacy costs would lead to inefficient investment outcomes.

The ACIL Tasman advice paper makes some important points which appear to have been lost in the ERA Draft Report.

"Overall, the ERA considers that the dam safety expenditure that is appropriate when considered along with wider opportunities for improvements in life safety could possibly be regarded as legacy costs. However, a separate issue is the extent to which these legacy costs should be paid for by users or by the Government. In the case of dam safety expenditure,

these costs are, at least in principle, avoidable costs. That is, the decision to use the water from the irrigation dams (whether by Harvey Water or the Corporation) needs to be based on the costs of accessing that water, which appropriately includes the efficient costs of dam safety. Given that the application of the legacy argument could result in inefficient outcomes, the ERA's preliminary view is that charges should not be reduced by a legacy component." (Draft Report page 38).

Harvey Water accepts the proposition that, while there is a large component of legacy costs in the dam safety program, a decision now that all dam safety costs should be borne by government will lead to inefficient investment decisions. At the same time, Harvey Water rejects the proposition, contained in both the ACIL Tasman paper and the Draft Report, that inefficient outcomes must be the result. Firstly, this concern can only refer to future investments in dam safety, not past investments.

Further to this concern about inefficient outcomes is the need to recognise that the Harvey irrigators are not the major client group for the dam safety expenditure. The model that is used for CSO expenditures, where the Water Corporation is creating capital assets and delivering services to meet government objectives, can also be applied here. The efficiency of CSO expenditures is governed by the CSO agreement that is negotiated between the Treasury, on behalf of government, and the Water Corporation. Harvey Water suggests that the same method can by employed in this situation where dam safety expenditures are being undertaken to meet a specified wider public good.

Total expenditure under the dam safety program to date is $25.4 million (Water Corporation submission, page 4). Consistent with what ACIL Tasman appears to be saying in its advice paper, there is a strong case for most or all of this expenditure to be treated as legacy costs.

The ERA invites comment on how legacy costs should be accounted for (Draft Report page 38). Harvey Water considers that legacy costs should be very clearly identified for both past dam safety expenditures and for projected future expenditures. In addition, Harvey Water urges that financial responsibility for these be placed with the Treasury and that Treasury be charged with responsibility for negotiating efficient outcomes – as it currently does for other CSO expenditures undertaken to meet the government's specific social and economic objectives and commitments.

Cost allocation – recreational benefits

For some considerable time it has been recognised that the estimates of recreation value of south west irrigation dams are based on one piece of dated analysis. The new research that has been undertaken under the aegis of this current review has not contributed in any significant way to this situation.

The ERA has invited comment on its analysis, at pages 40 and 41, where it has developed a cost allocation paradigm. Harvey Water considers that the analysis be the ERA is well based and makes for a useful and rational allocation mechanism. The logic is well argued.

While Harvey Water endorses the general logic of the proposed allocation method, there is one component of the analysis which will tend to give an under-estimation of the recreational value. The point of difference is that the recreation benefits include passive as well as active use of the water body. As well as active water based sports, such as canoeing and water

skiing, there are passive uses such as the use of dam precincts for socialising and picnics – made attractive by the local climate and ambience.

These more passive uses of the water, properly managed, are entirely compatible with the dam water being of potable quality without special treatment. There are picnic areas and tourist bus visits at the metropolitan and other dams that service the potable water needs of the State.

It should also be noted in this context that recent public discussions on Logue Brook dam accepted a figure supported by CALM of 65, 000 visits per year to that dam. This is well above any other previous estimates and indicates the high level of recreational value which can be applied to other similar dams.

IRRIGATORS' ABILITY TO PAY

Here are the Harvey comments from the submission in response to the ERA issues paper:

> Determining affordability is basically impossible as not all irrigators are the same and neither are market conditions from year to year.
>
> The affordability of water is quite different for beef, dairy, perennial and annual horticultural enterprises as their capital investments, cost structures, returns and sensitivity to water supply are markedly different in terms of production.
>
> Likewise, as price takers in the food market place, irrigators face very different prices for their products depending on local, Australian and international markets. What may be an affordable price for water one year maybe completely unaffordable the next year. In general agricultural businesses do not have significant capacity to quickly turn on or off according to market circumstances.
>
> What any business seeks is the greatest possible degree of certainty in costs or changes in costs so that production systems and budgets can be developed, if possible, to return a profit which will keep them in business.
>
> For example, an increase of each $75 000 for DS costs applied to Harvey Water will have to be passed on to irrigators and will result in the increase of fixed costs for water of $1 per Megalitre. Irrigators currently pay $43.59 per Megalitre (the real cost is actually closer to $55/ML) of which $22.05 per Megalitre is a fixed charge. The issue of whether this is a high or low price for water must be considered against the returns and profits made by irrigators from that water. Harvey Water believes that market conditions are such at present that profitability is low in irrigated agriculture and so further cost increases need to be kept to a minimum.
>
> It needs to be clearly recognised and can be stated again that irrigators do not have the ability to simply pass on production cost increases down the supply chain as can occur in many other industries and businesses. They have to try to absorb them as the retail oligopoly in food prevents irrigators obtaining a reasonable share of profits in the supply chain.
>
> Irrigators would be prepared to pay full unsubsidised costs for water and Dam Safety as envisaged by economic theorists if they were able to pass those costs on down the supply chain, but, as discussed in the section on cost sharing, they can't.
>
> An irrigator effectively operates to convert water into food and it is the final consumer who actually consumes the water; eg a lettuce is over 90% water.
>
> Over the 10 years since privatisation of Harvey Water the Perth CPI has increased by 21.6% and this has been reflected in input costs passed on directly to irrigators. Over the same period, the average farm gate price of milk has decreased from 35cents/litre to 29 cents/litre. While other food products such as fruit and vegetables may not now have a lower farm-gate price to the irrigator they certainly have not kept pace with

inflation. This data needs to be considered when DS and Water Storage Charges are developed.

The ERA might also like to reflect that deregulation of the dairy industry has already delivered it's economic rationalist pound of flesh from the Harvey Water Irrigation Area and consider what effects further input cost increases will have and whether they are fair, reasonable or even desirable.

ERA Model of irrigator profitability

Harvey Water is not able to replicate the model of farm profitability used by the ERA in its Draft Report. Without being able to model the impact on the outputs from the model, the following comments are offered on the assumptions used in construction of the model.

The ERA is assuming dairy prices will stay constant in real terms over the near and distant future. The ABARE latest outlook (2006) anticipates some severe reductions in returns for dairy products. "Between 2005-06 and 2010-2011, world prices for the main dairy commodities are projected to fall in real terms by as much as 25 per cent, as growth in export supplies outstrip import demand." (page 84).

Butter prices are expected to fall 23 per cent; skim milk powder 22 per cent, whole milk powder 19 per cent; and cheese 25 per cent. The domestic milk price is expected to fall 12 per cent. (page 85.)

It has been argued that because Western Australian producers sell onto a domestic market, they are largely immune from world markets and therefore will not be impacted by the expected falls in world prices. In reality, WA producers produce more than just whole milk. Some 60 per cent of production goes to manufactured milk, of which about a third is exported.

In any event, with efficient transport systems and no artificial barriers to trade between States, the Western Australian producers are in competition with their eastern states counterparts – as is evidenced on a daily basis by the origins of product on Western Australian supermarket shelves. The expected falls in world prices will have a direct, and then a knock-on effect on WA farmers as producers in the east look for new markets.

Analysis of sensitivity to water price

An analysis of the potential impact that increased water prices might have on the profitability of farms was undertaken by a dairy farm management consultant in 2005. The study was entitled South-West Yarragadee Economic Issues Study – Dairy and was conducted by Primary Consulting Services of Australind.

The study analysed the situation for a large scale irrigation farm milking 500 cows, with 200 hectares of irrigated pastures and 300 hectares of dryland area. This synthetic farm represents a large and well resourced farm by local standards.

The study calculated that a Harvey irrigator, paying current water costs, would have a gross margin of $848 a hectare and a profit of $186 a hectare, which represents a return on assets of 1.28 per cent. In the constructed farm budget, expenditure on irrigation water is $90,750 – again this is high by local standards.

The Australian Bureau of Agriculture and Resource Economics (ABARE) produces an annual report of its survey of farm revenue, costs and profitability. In the latest report, March 2006, ABARE reports that average farm income for dairy farmers in WA is estimated at $435,300 for 2005-06. After allowance for operating costs, but without any provision for the farmer's management and labour, profit is estimated at $41,600. This analysis does not provide for any debt servicing.

The ERA uses a figure in its Draft Report, based on survey work by the Department of Agriculture and Food, of irrigation costs representing 5.4% of all operating costs (Draft Report page 54). This information can be used to estimate the impacts that rising prices for irrigation water will have on the profitability of the average WA dairy farm.

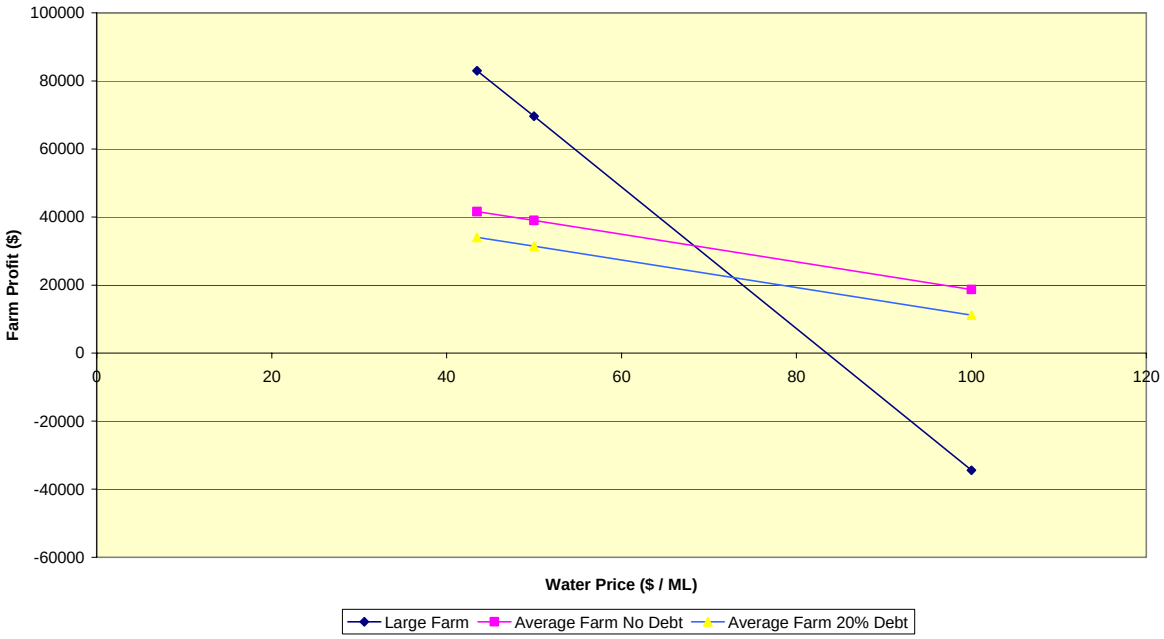
The figure of 5.4% used above and in the ERA report as a percentage of irrigation costs in a dairy farm budget, is only a partial recognition of the cost of irrigation water. Water costs are not the same as the costs of irrigation. Irrigators argue that there is a lot of capital investment to allow efficient irrigation (laser leveling etc) and that for surface irrigation, which is the main form of dairy irrigation, there are many hours of physical effort needed to actually manage the application of each irrigation watering.

This is one of those farm labour costs which is often undervalued. For example, an irrigator might be awake for about 18 hours a day supervising and managing his irrigation over 2 to 4 days depending on area for 10 to 12 times a year. Usually this is not valued at appropriate labour rates and often not costed. These sorts of costs are additional to those used in the calculations.

Because a debt free farm is not the normal situation, the budgets used in this exercise are given more realism by replicating the calculations for a farm that has a modest debt load of 20% of the total value of assets.

The results of the analysis are shown in Figure 1. The calculations illustrate the potential impact on farm profitability, of increasing water prices for a large farm, an average farm assuming it is debt free, and then an average farm assuming a debt load equivalent to 20% of total asset value. At first sight, the results appear counter-intuitive with the impact being more pronounced for the more financially robust large farm. However, the large farm is a considerably more intensive user of irrigation water, with irrigation water representing some 18% of all operating costs.

Figure 1: Impact of water prices on farm profitability



Implementation of the ERA proposals would yield an average water charge of $65 per ML. At this price, the farm budget for an average farm, assuming a modest level of debt, shows an untenable position. At this water price the farmer is earning less than $30,000 a year for his management, labour, and as a return on capital. About the same sort of return one of his children might earn in a fast food store!

While these models are representative of realistic farm circumstances, the results illustrated in Figure 1 cannot be interpreted as predictive. The farms are likely to undergo a severe restructure of their operations in response to the higher costs for water, so that they will use less water. The restructured farms will also have a lower asset value. The form of the restructure is not predicted here. However, the restructuring can only mitigate the reduction in profits and asset value – it cannot fully offset it.

Another aspect to be considered is that the actual cost of the irrigation water is higher than the posted price of $43.50 per ML. When account is taken of the reduced reliability of the supply, the true cost has been calculated by Harvey Water to be $55 per ML.

Another aspect of affordability relates to water quality. Irrigators who are served by the Wellington Dam supply, are anticipated to see a $10 per ML increase in their water price (Draft Report Table 2.5). Without negating any of the comments made already about the basis for these increases, irrigators in this area simply cannot afford any increase in the price of a resource that is already over-priced having regard for its quality. Harvey Water suggests that when the ERA has reviewed its analysis and decided on a recommended price path for farmers in the Collie district, that it include suspension of any increases until such time as the water quality is improved to under 500 parts per million of salt.

SMOOTHED REVENUE

The ERA has invited comment on whether the revenue should be smoothed or variable, and whether Harvey Water has a preference.

Harvey Water considers that an "adjustable smoothed" approach is desirable. A smoothed approach is attractive because it provides for predictability. However, the disadvantage of a smoothed approach is that it potentially introduces inefficiencies because of the risks involved for both the service provider and the customer. The service provider will tend to set a higher charge to cover the risk of some unforeseen cost. At the same time, the customer will not receive the benefit of efficiency savings that were not anticipated at the time the price path was set.

The Harvey Water preference is for a smoothed price that can be re-negotiated periodically in the light of new cost information.

SPECIFIC RESPONSES TO INDIVIDUAL PRELIMINARY VIEWS & ISSUES FOR FURTHER CONSIDERATION RAISED BY ERA.

1. HW recognises that NWI speaks of moving towards upper bound pricing but that in some cases, it would be necessary to provide a degree of CSO. HW has always been at or above lower bound pricing and seeks no special favours other than to remark that such movement should be over a phase in period and should conform to Australia wide practice. HW also feels the need for independent checking of reported costs of operating and maintaining irrigation dams

2. HW agrees with the zero asset value as at 30 June 2006 but prefers, for the sake of transparency to our shareholders, that DSP costs and operating costs be kept separate.

3. See 1 above.

4. This is a matter of significant concern for HW. Tax advice given to us is that any payments do represent a capital contribution which should then logically end with HW owning a share of the dams. Neither HW nor Water Corporation see this as a sensible or desirable outcome. As such a payment is not tax deductible either, this has an added financial impact on the cooperative.

5. See 2 above.

6. HW has requested the greatest possible certainty in relation to future costs and so leans to the smoothed approach. However it is our understanding that this approach needs agreement or acceptance of what future expenditure may be. We don't believe that this is by any means certain, not least because the outcomes of this inquiry may directly affect expenditure. Therefore we seek a smoothed model which allows for future variations in expenditure for whatever reasons and the ability to react to these by either recouping extra payments or increasing under payments. Alternatively the time frame for the smoothed payment agreement could be limited to the reasonably foreseeable future. This seems like a partially smoothed model, which seems more appropriate given the time frame envisaged.

7. HW agrees that there has been diminishing returns with extra expenditure as demonstrated in Fig 3.4 and believes that the efficiency of capital expenditure argument proposed by WC does not completely outweigh this outcome. It is not fair and reasonable for the benefits to accrue to one organisation at the expense of the other. We also note that Figure 3.3 on p 19 suggests that there has been considerable overspend on Waroona dam which now appears to be much further below the ALARP line than theory and the ANCOLD guidelines would suggest. HW does not believe it should be expected to pay for this extra investment.

8. Fully agree. There is significant sound analysis shown which supports this view.

9. HW accepts this as a legitimate comment but also notes that varying interpretations of legal liability would likely have to be tested in court in the event

of an unwanted situation and it is rational for directors to avoid the risk of a contestable outcome if at all possible.

10. HW takes a slightly more cynical view that an event such as a dam failure is something which would be of considerable interest to the media, particularly the visual media, even if the loss of life or damage is small. In these cases the media excites public comment and concern that would not happen if it were not a bit spectacular. This is not to argue that the collapse of public infrastructure is not a matter of concern because it legitimately raises questions about other similar infrastructure. For example, the flooding of the Kwinana Freeway in 2001, (which coincidentally trapped Dr Jim Gill in the ensuing traffic jam on his way back from opening the new Harvey Dam), caused massive public disruption and attention over a relatively short period, was not actually a major threat to life but made great TV and print media copy. Compare that to the recent floods in Esperance where the local people were saying everything is OK after a couple of days but the media were insistent that it was a disaster. Our point is that it is where and when an incident happens that influences society's aversion to risk. A lot of money was spent very quickly to fix up the Kwinana Freeway event and we doubt that Esperance will receive the same sort of attention. To put it another way, there would be a great deal more concern if dam supplying potable water were to fail than one which just supplied irrigation water.

11. HW fully agrees that if we owned the dams we would look very, very carefully at what was absolutely necessary before we embarked on an expenditure regime as has been proposed. However, we do accept that we would ultimately have to adopt something similar to the (evolving) ANCID guidelines.

12. HW believes that this makes rational sense but also recognises that such an outcome is not achieved simply and easily if attempts in other jurisdictions are anything to go by. Nonetheless it is a reasonable objective for government.

13. HW supports the concept of a wider Office of Safety or Risk Management to provide information and back-up to any risk management regulation, rather than one just devoted to dam safety.

14. HW strongly supports this view, but refers to items 12 and 13 for the processes and difficulties that are associated with achieving this very desirable end.

15. HW has always accepted that it has the responsibility to contribute to the management of dams which, *inter alia*, supply our irrigation water. As always the issue is the amount of our relative contribution. HW repeats here our strong opinion that the major cause of the increase in DS costs since 1996 (from $17 m to at least $130 m currently) has been the evolving ANCOLD guidelines in response to more dangerous weather events resulting in greater risks to the public. There is universal scientific agreement that these changes in climate are due to global warming as a result of increased greenhouse gas production. A list of the major producers of greenhouse gases does not include irrigated agriculture as it is well recognised that the growth of plants is a sink for greenhouse gases. It is therefore legitimate for HW to question, as stridently as is necessary, why irrigators are being expected to carry the costs which have been caused by other sectors of society? In most jurisdictions, the principle of "the polluter pays" is well

established and agreed. HW expects to see a full analysis and response to this matter from ERA in their final report and notes that HW will pursue it vigorously. HW has noted that for reasons of transparency (or unbundling of costs) to our shareholder irrigators we would prefer that the costs of water storage (WSC/BWSA) are kept separate from DS costs. This does not mean that DS costs could not be part of the new WSC but that they should certainly be separately identifiable.

16. This is the core question from HW's point of view and we have already made some points about this in previous paras and submissions. The critical aspect from an individual irrigator's point of view is that they are willing to pay the full costs that any strictly economic analysis says they should pay, as long as they have the ability to pass this business input cost along the supply chain to final consumers, like other sectors of the economy. To do otherwise is simply iniquitous and inequitable and will be bitterly resented by irrigators. Unfortunately the reality is that irrigators are largely unable to pass on costs because of the "irrigators as price takers" market structure which prevails in agriculture, aided and abetted by the ACCC. In other parts of this submission we provide examples of the effects of increased costs on dairy farms using models. HW irrigators would be pleased if the ERA recognised that a return on capital of 5.6% as enjoyed by Water Corp should also be available to them. We also note that the market conditions, input cost structures, annual price variability and so on are different for the various different enterprises in the irrigation area. In our view there is no year-on-year, enterprise-on-enterprise consistent cost which can be passed on. It must therefore be a more subjective figure which attempts to balance the many variabilities. We also ask that ERA make a clear response to the issues raised in this para.

17. This is a tricky one which we are not sure we interpret correctly so our comments are subject to that caveat. We understand the view to have agreed that the legendary "line-in-the-sand" has been drawn with respect to legacy costs however it is not totally clear to what date this applies. Is it 1996 or 2006? We need more info!!

18. HW is satisfied with the approach suggested for Logue Brook Dam but notes that information presented to the public consultations on the dam says that there are 65 000 visitors to the dam each year. CALM was involved in developing this number and should be consulted. This number of visitors should be included in the calculations if it hasn't already been done.

19. HW has no problem with the application of the ratio provided the same methodology used to work out the number of visitors to LBD is applied to the other dams.

20. HW believes that there are net benefits from flood mitigation as local councils and governments seek to take advantage from the desirable locations adjacent to dams and approve closer development. This trend is likely to increase with increasing population flows to local towns. HW also points out that councils and government should also expect to take responsibility for the costs and management of risks associated with these developments.

21. HW believes that we have addressed this matter in large part in our responses to 15, 18, 19, & 20 above and has sought a specific response from ERA on 15. Obviously as the trade of water from HW to the IWSS progresses (17.1 GL from Stirling, Samson and possibly Logue and then later on 22 GL from Wellington) there will be a decreasing liability for the associated costs to HW. This is well understood by both HW and WC. We endorse the further comments by ERA on the allocation of costs and look forward to their intended amplification of the matter.

22. HW endorses the ERA conclusions on non-irrigation customers.

23. While there is logic in allocating costs according to the water allocations in the dams, the fact that there are other impactors and beneficiaries who don't have allocations makes this approach less inclusive. HW believes that the matters we have raised about impactors and beneficiaries as well as legacy costs and the amount of recent DS expenditure means that another formula or method is needed which can include these variables. In simple terms, the total reasonable costs for DS for each dam could be divided on a proportionate or percentage basis for each of the stakeholders, or their substitutes when stakeholders don't have a clear individual identity. The basis for deciding the liability could be related to benefit as previously described for recreators and entitlement to water for irrigators. For greenhouse gas producers the benefit is the cost avoided from implementing the new ANCOLD risk management guidelines as a result of climate change.

24. HW notes that a number of assumptions (4) have been made about Water Corporation costs and suggests that these assumptions need to be confirmed as they have the capacity to significantly affect the costs to be attributed. For example HW notes that the reported cost (Fig 5.1) of operating the new Harvey dam is $350 000 which seems remarkably high at first glance. It is our view that these costs should be carefully reviewed so that the operating costs applied relate directly to dam safety or water storage and not to other costs such as public amenity maintenance, for example.

25. HW agrees that this is a matter which we can negotiate with WC. Our preference is for a fixed charge for water storage because of the transparency although we recognise that it has associated downsides for HW.

26. Harvey Water has provided some estimates of the potential impact of increased water prices on farmer profitability. Even though irrigation water represents an average six per cent of farmer costs, there are some farms for which it is much higher and for these there will be need to restructure the farm. Even for the average farm, as identified by ABARE, the increase in costs will result in farmers earning less than adequate wages. Such farms earn no return on their capital investment and become highly vulnerable to any other adverse circumstance – such as the ABARE projection of 25 per cent falls in returns for some dairy products.

    Harvey Water is most concerned at the potential consequences of any significant further restructuring of the irrigation industry. It could, for instance, mean that some of the distribution assets become redundant. The potential impact can only be assessed when the size and timing of the increase in water prices is known,

and, as already discussed, there are some questions yet to be answered in the ERA's analysis in the Draft Report. When the recommended price increase and its timing is known, it might then be useful to conduct a survey of likely irrigator reactions.