

MEMORANDUM

To: EARIP Steering Committee Members and Stakeholders

From: Robert L. Gulley
Program Manager

Date: May 21, 2011

Subject: **Memorandum To Assist In Preparing For the June 9, 2011
EARIP Meeting**

I believe the discussions regarding funding at our meeting on May 17 were productive and perhaps may provide a way out of the current impasse. As we discussed, the Funding Work Group has been considering ways to reduce the cost of the Bottom-Up package while maintaining its protectiveness during Phase I. At the meeting, you heard two approaches to reducing the cost of the Bottom-Up package. The first would minimize the cost of this package by eliminating the VISPO element in the Bottom-Up package entirely and replacing its contribution to springflow protection with deeper pumping cuts during Stages IV and V of Critical Period Management (“CPM”). The second adjusts the triggers for VISPO to make the program more cost-effective but requires no changes to pumping as part of CPM.

This Memorandum describes the two approaches to reducing costs and analyzes their impact on Aquifer Management Fees (“AMF’s”). It then suggests a framework for using these approaches to see if we can break the current impasse.

BACKGROUND

1. Eliminating VISPO and Replacing It with Deeper Stage IV and V Pumping Cuts

Karl Dreher voiced concern that it appears all of the HCP funding will come from AMF’s and predicted his Board would be unlikely to approve a three-fold increase in AMFs as may be required if the full VISPO element were implemented.¹ Therefore, he suggested that the EARIP consider removing the VISPO element from the Bottom-Up package until it could be more easily paid for, and replacing it with deeper pumping cuts in Stage IV and Stage V to maintain the overall protectiveness of the package. He said that while the VISPO element remained an option, the pumping cuts would remain in place throughout the permit unless the VISPO element could be afforded (or, presumably, if it were replaced as part of the Phase II decision).

Karl made certain assumptions in his discussion of the potential savings that could be realized, including: (1) the entire cost of the Bottom-Up package would be borne by the pumpers; (2) the Edwards Aquifer Authority (“EAA”) Board would decide to terminate its policy of rebating the AMFs for water that had not been pumped by municipal and industrial users and to use that rebate to pay for the restoration and mitigation measures in the Bottom-Up package; and (3) SAWS would agree to absorb the depreciation and O&M costs associated with the operation of

¹ In making his remarks, Karl made clear that nothing he was suggesting had been approved by his Board and simply reflected his own thinking.

its ASR. Depending on whether these certain assumptions are realized, Dreher suggested the AMFs might have to be raised by only \$18/acre-foot.

HDR said that deeper pumping cuts would be needed in Stage IV and Stage V to replace the springflow protection provided by the VISPO element. Stage IV would require 43% cuts in the San Antonio pool and 45.6 % cuts in the Uvalde pool. Stage V would require 47% cuts in both pools. Karl discussed possible ways to ensure that smaller municipal utilities would have adequate water if the deeper cuts were implemented.² The amount of time in Stage IV would increase perhaps by as much as seven months in the San Antonio pool and nine months in the Uvalde pool compared to that anticipated with the VISPO element currently in the Bottom-Up package.

Prior to the next meeting, Dreher will provide a written description of his suggested approach.

2. Modifying the VISPO Element

The VISPO Work Group proposed a modified VISPO element that retained the 40,000 acre-foot target for the pumping cutbacks. As originally proposed, HDR assumed that all subscribers to the element would choose the ten-year option. In making its cost estimates, HDR also assumed that the VISPO-mandated pumping cuts would be triggered in each year of the permit even though the simulations over the historical record showed the element would be triggered only about 80 percent of the time using a 645 ft-msl J-17 trigger. Based on these worst-case assumptions, HDR attached a \$10,216,000 cost to the element. Subsequently, HDR said the cost should have been based on the modeled frequency, and that this change would lower the cost of the VISPO element to \$8,625,744. *See* Attachment 1.

The VISPO Work Group, working with HDR, made suggested changes to the triggers designed to make the element more cost-effective. First, the trigger for pumping cutbacks would be changed from September 1 to October 1. This change decreases the frequency that the pumping cutbacks would be triggered and should also decrease the number of times that the element would be triggered unnecessarily by heavy September rains. Second, the Work Group suggested that HDR assume that the subscribers to the 5- and 10-year options would split consistent with the expressions of interests, *i.e.*, 70 percent/30 percent.

Finally, the Work Group proposed using a 635 ft-msl trigger at J-17 rather than a 645 ft-msl trigger as had been originally proposed. HDR estimates that, with these changes, the frequency that cutbacks would be required would be about 33 percent of the time over the historical record. HDR found that the proposed trigger changes would reduce the cost of the VISPO element to \$4,172,000. *See* Attachment 2. HDR further stated that it had examined the changes to the triggers and believes that the proposed changes will not reduce the protectiveness of the Bottom-Up package.

ANALYSIS

² One option he discussed was having the Legislature allow leasing of base irrigation water to municipal within the same county during a drought. Assuming the Legislature would agree to make this change, it, of course, could not happen until 2013 and, thus, could not be relied on in the HCP to demonstrate that compliance with the deeper cuts were reasonably certain to occur.

As we discussed at the May 17 meeting, it was the hope that if the Bottom-Up package could be made less expensive without diminishing its protectiveness, it might be easier to resolve the funding issue. As we further discussed, the most realistic opportunity for significant cost reductions lies in the VISPO element of the Bottom-Up package.

Attachments 1 and 2 set out the cost savings that can be realized with the two approaches. The cost of the approach suggested by Karl reduces the cost of the VISPO element by \$8,625,744, *i.e.*, to zero. *See* Attachment 1. Assuming that Karl’s second and third assumptions are realized, the overall cost of replacing the VISPO element in the Bottom-Up package with deeper pumping cuts would be **\$8,973,000**, exclusive of consequential costs. *Id.*

The cost of the modified VISPO element is **\$4,172,000**. I believe it is reasonable to assume that, if Karl’s second and third assumptions are available if the VISPO element were replaced by pumping cuts, that they would also be available for the modified VISPO approach. If that is correct, then the overall cost of the Bottom-Up package with the modified VISPO element would be **\$13,145,000**.

In short, replacing the VISPO element with deeper pumping cuts reduces the cost of the Bottom-Up package by \$4,172,000 more than simply modifying VISPO approach.

The effect of the two approaches on the AMF/acre-foot is set out in the following Table.

IMPACT OF THE APPROACHES OF THE SIZE OF THE INCREASE IN AQUIFER MANAGEMENT FEES	
2010 Aquifer Management Fee ³	\$39
2010 Aquifer Management Fees	\$14,898,000
2010 Aquifer Management Fees (agricultural)	\$200,000
2010 Aquifer Management Fees Rebates	\$2,500,000
Fees Without Rebate	\$15,098,000
Additional fees needed to cover the Bottom-Up pkg with modified VISPO	\$13,145,001
Additional fees needed to cover the Bottom-Up pkg with no VISPO and deeper pumping cuts	\$8,973,000
Fee increase per acre-foot needed to cover the Bottom-Up pkg with modified VISPO ⁴	\$34.41
Fee increase per acre-foot needed to cover the Bottom-Up pkg with no VISPO and deeper pumping cuts	\$23.49
Difference in the AMF fee increase with no VISPO and deeper pumping cuts versus modifying VISPO	\$10.92

³ Assume 382,000 AF of permitted M&I; therefore a \$1 AMF generates approximately \$382,000 in revenue. Assume 100,000 AF of irrigation @\$2/AF generates \$200,000 in revenue.

⁴ If the EARIP gets an appropriation in the FWS budget of \$2 million to cover the cost of the refugia and bio-monitoring, the needed fee increase would be reduced by \$5.24 in AMF.

Replacing the VISPO element with deeper pumping cuts in the Bottom-Up package would require AMFs to be increased by \$23.49/acre-foot to cover the cost of the package.⁵ The total AMF/ acre-foot would be \$62.49/acre-foot (\$39 + \$23.49). Modifying the VISPO element would require AMFs to be increased by \$34.41/acre-foot to cover the cost of the package. The total AMF would be \$73.41/acre-foot (\$39 + \$34.41).⁶

In short, replacing the VISPO element with deeper pumping cuts reduces the increase in the AMFs needed to pay for the Bottom-Up package by \$10.92 compared to modifying the VISPO element. That savings, however, comes with a price - - deeper pumping cuts in CPM Stages IV and V.

What is also apparent from this analysis is that the effectiveness of reducing the cost of the package really significantly affected by the second and third assumptions that Karl made rather than by whether you eliminate or modify the VISPO element.⁷ Foremost is the assumption that SAWS will absorb the cost of the depreciation and O&M for the operation of its ASR. This assumption alone reduces the cost of the package by \$6,250,000 (\$3.22 million in depreciation and O&M, \$3.08 million).

The amount of the rebate paid by EAA in 2010 is \$3,733,898.⁸ If EAA were to terminate the policy of rebating the AMFs and use that rebate to pay for the restoration and mitigation measures and the 2010 rebate costs are typical, they should come close to covering the cost of the restoration and mitigation measures (\$3,909,597).

SUGGESTED APPROACH

The reality is that we may be running out of options for reaching consensus on the funding issue. I believe, however, that the two approaches set out here may provide a framework for breaking the impasse. The costs probably cannot be significantly reduced any lower than they are in these approaches. Moreover, they provide two distinct approaches: one with lower costs but deeper pumping cuts; the other higher costs but no changes to pumping.

I suggest that the place to start is with Karl's second and third assumptions. Is SAWS willing to absorb, in the absence of getting a funding mechanism such as a sales tax passed, some or all of the depreciation and O&M for the use of its ASR? Is the EAA Board likely to terminate the

⁵ This increase in AMF/acre-foot is higher than Dreher predicted. Based on my discussions with Dreher, this discrepancy may be due to the possibility that Dreher also intended to do away with the current municipal conservation program. If this is part of the assumptions, HDR will need to evaluate how much the pumping cuts will have to be increased.

⁶ Neither approach covers the cost of the initial year costs (\$10,291,000 in start-up costs and \$2,578,597 in annual costs of the refugia, bio-monitoring and LID/water quality costs). These costs presumably could be covered by phasing in some of the AMFs increases in January 2012, phasing the start of some actions, and by possible funding by FWS and/or the money that Senator Hegar has requested in the budget for the EARIP for the biennium.

⁷ Karl's first assumption that the entire cost of the bottom up package would be borne by the pumpers may actually be too conservative. GBRA, Dow Chemical, Invista Chemical, and the City of Victoria have stated that they believe that they may be able to get approval to contribute pay up \$200,000 annually.

⁸ I understand that some additional rebate claims are being held pending resolution of compliance issues.

policy of rebating the AMFs and use that rebate to pay for the restoration and mitigation measures in the Bottom-Up package?⁹

If we can resolve these issues, we should then turn to the question of which of the two approaches discussed above are acceptable to make the Bottom-Up package less expensive. If one of these options is acceptable, we will know what costs we are looking at and can tackle the issue of what level of contribution from the non-pumpers, if any, beyond what has been offered is necessary to resolve the issue.

In considering these questions, the EARIP needs to be mindful of Dreher's admonition that the EARIP cannot assume that the EAA Board will just rubber stamp the EARIP's recommendations and his concern that his Board will be very sensitive to the cost of the Bottom-Up package. The EARIP, however, will be abdicating its statutory responsibility and rendering this four year process superfluous if it simply bases its recommendations on what it believes that the EAA Board is likely to do or not do. **This is not to advocate one approach over the other.** Both have the potential to achieve the protectiveness of the original VISPO program. Thus, both are acceptable options for the HCP. I simply wanted to remind you that the EARIP has an independent statutory responsibility to make its recommendations and should do so based on the open, transparent, consensus-based process that the stakeholders committed to follow. Then the EAA Board will reach its independent decision as whether to accept the recommendations.

CONCLUSION

Senator Hegar's message was quite clear - - the Endangered Species Act issue must be resolved by December 31, 2012. It can either be resolved by the region through the EARIP or by the EAA Board. The EAA cannot wait too much longer to begin working on an HCP if we are not going to be able to fulfill our obligations. Karl said his Board is having a workshop on June 24-26 to discuss the EARIP and what it must do if the EARIP is not going to complete the HCP. We should have the funding issue resolved, or very close to resolved, by that workshop or be prepared to tell EAA to finish our job. The task is not going to get any easier or the issues become any clearer than they are now.

I am sending you this memorandum now to assist you in preparing for the all-important June 9 meeting.

⁹ The EAA Board would probably also need to eliminate the "contract down" option with respect to AMFs.