

**MINUTES OF THE BRIEFING OF THE
BOARD OF LAND AND NATURAL RESOURCES**

on the

**Presentation by an Appraisal Expert on the Identification of Recognized Valuation
Methods of Water and Preliminary Findings on the Appropriate Valuation Method for the
East Maui Water License Areas**

DATE: Thursday, June 13, 2002
TIME: 10:00 a.m.
PLACE: Lanai High and Elementary School Cafeteria
555 Fraser Avenue
Lanai City, Hawaii 96763

MEMBERS:

Mr. Gilbert Coloma-Agaran	Ms. Kathryn Inouye
Dr. Fred Holschuh	Mr. Timothy Johns
Mr. Ted Yamamura	Ms. Lynn McCrory

STAFF:

Mr. Eric Hirano, Deputy	Ms. Dede Mamiya, Land Division
Ms. Linnel Nishioka, Deputy	Mr. Jason Koga, Land Division
Mr. Bill Wynhoff, Dept. of Attorney General	

OTHERS:

Mr. Tony Correia, Correia -Xavier, Inc.	Mr. Scott Matsuura, Alexander & Baldwin
Ms. Meredith Ching, Alexander & Baldwin	Mr. Garret Hew, East Maui Irrigation Co.

Chairperson Agaran opened the briefing. D. Mamiya introduced the speaker, Mr. Tony Correia, and explained Mr. Correia has been hired by the Department to brief the Board on the different valuation methods of water and to determine the short-term (revocable permit) and long-term (lease) rents for the East Maui water licenses.

Mr. Correia went through his Power Point presentation.

Mr. Correia gave an introduction of himself and his firm, Correia-Xavier, Inc., including their past assignments, appraisal clients, types of appraisal services, and bios on staff members.

Mr. Correia briefed the Board on the catalyst for today's briefing, the controversy over issuing water leases and permits to historic users seeking to transport water from East to Central Maui. Mr. Correia commented that this is an amazing system and could never be built today due to the legal, environmental, political constraints we have today.

Chairperson Agaran requested that Mr. Correia move to the valuation portions of his presentation.

Mr. Correia explained the appraisal assignment goal and objectives and assumptions.

Board Member Yamamura asked Mr. Correia to explain what is "water at the source." Mr. Correia responded that "water at the source" is water at the point of diversion. In this case, it is the individual streams in the license areas which is the source of water. This is pure rainfall flowing into streams and being diverted into the East Maui irrigation system. Board Member Yamamura said so you could have many water sources. Mr. Correia responded yes and, in the case of East Maui, most of it is diverted rainflow but some of it is spring-fed. So the springs are technically a different source of water. The rainfall is very flashy. Mr. Correia stated that one of the problems we'll talk about is that this system is merely a delivery system – you don't have any substantial storage ability which is a tremendous detriment because all you can do is catch it when it comes. In most water systems, storage is the primary component because water has no value unless you can do something with it. And the ability to store water is the thing that adds value to water.

Mr. Correia stated that when we talk about valuation, we're talking about just the water at the source at the point of diversion. We're not talking about diverted into the system but just at the point of diversion. He explained we're just talking about annual or long-term leases, not about anything in perpetuity; it's not a sale per se. Mr. Correia explained that there are typically three types of transfers. One is the spot market which is just immediate use. The annual, long-term leases are something we see in government entities infrequently. Most of transfers are permanent transfers because most of the uses of water are uses that demand stabilized, long-term water supplies.

Mr. Correia discussed "public good." Mr. Correia explained the concept of full cost pricing and the components of valuation (water at the source, storage/diversion system, and extraction).

Board Member Johns asked for a clarification of the green area, marginal cost, what is entailed in the service cost. Mr. Correia clarified that the green area represents the cost of the water, cost to the provider; the East Maui Irrigation District or whoever – what it costs them to get the water to the end user. The difference (the yellow area) is the value of the water to the user.

Mr. Correia described a project they just worked on, the Westlands Water District, and the basic components of cost. The bottom tier, \$20.8, is the contract price for the water; this would be the equivalent to the water at the source. The second tier, \$7.5, is an assessment on all water users for a restoration fund to fund environmental restoration projects.

Board Member Johns asked whether we are looking at the \$20.8; is that what the Board is supposed to be setting. Mr. Correia explained that we will be backing down to that cost of water at the source. Mr. Correia said we will try to establish what the upper tiers are, what the range of prices are that are feasible for end users to pay for the water and then what the different components of cost are and then back down to the value of the water at the source.

Mr. Correia went back to explaining the components. The conveyance charges, \$16.5, is what it costs to physically move the water. The \$11.9 in red is overhead charges for the District's administration, etc. The value of the water, in this case the net price that the seller of the water received, in the winter, when there was a lot of water available, they were netting out about \$18. In the summer, when water is in very short supply, demand is high and they are profiting about \$73.2.

Mr. Correia discussed the methods of appraisal of water. Direct Sales Comparison – can look at direct sales and determine what the value of the water should be. It does not appear we have this luxury in Hawaii. Residual Approach – what we've been talking about; look at the viable price for the water to the end user and all the costs of diverting and transporting that water to the end user, then whatever is residual out of that is going to be the value of the water at the source. Development Cost – measure the value of developing an alternative source of water. In this case, those alternative sources have some problems (wells can generate large volumes of water, but the water is brackish and has high parts per million of salts) and would have to have some source of pure water to blend with the brackish water; so that would be a long-term viable use of the water. Income Capitalization – if the water can be sold or rented for a certain amount of money to an end user and we know what the costs are of providing the water to the user, then that gives us some sort of net income that can be capitalized. In most cases, that can be very valid, if you have a water market where people buy and sell water, then you can determine the value of the water to the end user and we can capitalize the net income available to the provider. Land Value Differentials – don't know if this will apply to East Maui. In many markets, one can find land that is sold with water and without water or with a different supply of water. The differences between those values should indicate the incremental value that the water has to the land.

Mr. Correia explained the general considerations in water valuation. Quantity – drives the value. Quality – of water delivered. Accessibility – of water; is there a system to move it. Reliability – this is big issue with flashy water flows in Maui; reliability is going to be lower because you do not have any storage facilities. Conveyance – ability to move water. Distance – that we have to convey it. Alternative Sources – if they are available; if there is some other way to develop a water supply, what would the cost of that be; that will set a ceiling for any value of water right. Development Costs – of alternative source. Desired Use – will drive the value of any water supply, water right; if using for higher use, the water value will be higher. Transfer Restrictions – both physical and legal; here in the islands, it would appear the legal constraints on transfer could be substantial.

Board Member Inouye asked why the general considerations included items (e.g., conveyance) that earlier were stated would not be part of the valuation. Mr. Correia explained that these are factors that are considered, that we will not be valuing the system, but we have to determine how far it has to be moved, what it's going to cost, because we're going to determine, in the residual analysis, the value of the water at the end user. We're trying to determine the water at the source, so we have to determine the costs that are involved in moving the water over the system. We're not valuing the system or East Maui irrigation district, but we are going to analyze the costs involved in moving the water to the end user where we can establish some sort of viable price and then back into what the value of the water at the source would be.

Mr. Correia suggested that the concept of rebuilding the existing conveyance system is a moot point because it could not be done. One of the things we have to consider is that anything we analyze, whether it is legally, physically possible and does it make sense economically.

Mr. Correia discontinued his Power Point presentation and there was an open discussion period with the Board Members and persons in the audience.

Mr. Correia explained that water has no value. The only thing that creates value in water is the ability to do something with it. If you can use it in an enterprise that is profitable, then the water has some inherent value. But you have to have some method of profitability. If the value of the water at the end of the system is \$100 and it costs \$100 to get it there, then people aren't going to take the water through the system. Most systems are held by public – public utilities, irrigation districts, water districts, canal companies, etc. So 90% of the systems in U.S. are operated as non-profits. So the system is operated at cost just as utility to provide water to some end users. By providing water to the end users at some price which is a price that allows them to make money in their enterprise, whether they're growing sugarcane or tomatoes, then they create value in the water. But there has to be a margin of profit. If the end use is not profitable, then the water may not have value for that particular application.

Board Member McCrory asked whether they could have profit in their final product but no profit in the water. Mr. Correia stated that if they have profit in that final product, that means there is some marginal cost available to increase the price of the water. So we would be assessing the final product. If that use is not profitable, then there'll probably be a transfer to another user that is profitable.

Board Member Johns asked how would he value future prices; if, for example, it's break-even today under agricultural operations, but it has future value for other uses of the water, how will that be incorporated into his evaluation; will the valuation only be on current use. Mr. Correia stated that we have to look at economic feasibility; we do the best that we can at projecting but we cannot predict the future.

Board Member Inouye asked whether, under the general considerations, conveyance refers to the ability to convey rather than the cost to convey. Mr. Correia responded it includes both. Physically and legally is there the ability to move the water from one point to another and if there is, then what is the cost of that movement.

Board Member Johns explained that you take the price and back out the contract price. The number he gives us is not going to include conveyance, but he will look at conveyance in backing those numbers out.

Mr. Correia explained that if you're allowing a downstream user to take water and you're not allowing East Maui Irrigation to divert the water, then that becomes another diversion downstream and that's another diverted use.

Chairperson Agaran asked Mr. Correia whether the timetable to complete his work was enough time given what he learned on his brief tour of the system. Mr. Correia stated he had no idea and another problem is his attempts to interpret our water law and the confusion that reigns. He requested an extension of the deadline. He stated that the uncertainties in the case law make it very difficult because to establish any market, you have to have the rules of the marketplace and he doesn't know whether we can clearly say what those rules are at this point.

Board Member Johns asked whether Mr. Correia is going to look at how the Board of Water Supply prices water because we don't have a market here like Colorado, California or Arizona. Mr. Correia stated he has been assembling some of that information on other pricing models. But everything he's looked at so far, he couldn't say these are market values. They are just regulated values that have been established somehow and you can't say this is a willing buyer and a willing seller. It does not appear that we have any pure market data here.

Board Member Johns asked how he goes about selecting the appraisal method. Mr. Correia responded that he looks at them all. He went on to say that it would appear that we're not going to be able to do any direct sales comparison because we don't have any market sales. In some cases, we'll just toss them out if we don't have the data to do them. In other cases, we may have to go through the exercise to determine whether it's a viable approach. We consider them all. We apply the ones that work and we end up with what we feel would be the best approach to the valuation.

Chairperson Agaran asked what the effect of historic pricing of leases is. Mr. Correia stated that those will only have an impact if he considered them as market evidence and from everything he's seen so far, he can't consider them as market evidence. They've been based on negotiation or on appraised value and the appraisals are based on the best possible available information, but there wasn't any good information available. Until you establish a water market, then you'll be able to establish market values. In the interim, all we can do is the types of things we're talking about.

Board Member Johns asked whether Mr. Correia was saying that even an auction might not work because there is no market. Mr. Correia said that in the case of East Maui, there is only one probable end user, there is only one transportation system and the transportation system is owned by a private enterprise, so who else is going to bid at auction. An auction works if you have a population of viable users, if there's a number of users who can use the auctioned product, they'll set a market price at auction. But if you only have one entity which controls the supply system, then an auction is not a market tool.

Board Member Johns questioned whether there'll ever be, because of our unique situation, a market and whether it's more appropriate to use a regulated industry approach to pricing as opposed to trying to determine what the market might look like. Mr. Correia stated that as he understands Hawaii's water laws, he doesn't know whether we'll ever be able to determine market value for water. We do not have a pure market; Mr. Correia will give his opinion of market value using alternative techniques. In most cases, the market acts as a test or proof of the opinions of value.

Board Member Yamamura said in this case, Mr. Correia is assuming conveyance using the existing system which he earlier stated couldn't possibly be rebuilt today. So that whatever value Mr. Correia comes up with, it is the value to A&B and EMI and not market value. To find market value, if you're assuming use of A&B and EMI's conveyance system, he doesn't know how Mr. Correia will determine that.

Board Member Inouye asked why is the Water Commission not handling this. Chairperson Agaran stated the authority to lease out the water is with this Board. The Water Commission regulates the use of water and sets the in-stream flow standards. They will tell us how much the Board can sell. The licenses will be issued conditioned on the in-stream flow standards, so there is a possibility that the water in the license would be cut back.

Chairperson Agaran commented that Mr. Correia should submit what timeline he feels he can complete the report.

Chairperson Agaran asked if there was anyone else who wanted to speak on this item.

E. Hirano made a statement that the appraiser should be aware there could be differences in opinion in alternative sources, development cost, etc.

Discussion ensued between the Board Members and M. Ching and G. Hew regarding the cost of operating the system.

Mr. Correia stated that he's going to be looking at valuation in the current situation based on the history. If we're going to change the amount of water that will be allowed to be diverted, that will impact the value. The less water that is available, the price of the water is going to go up.

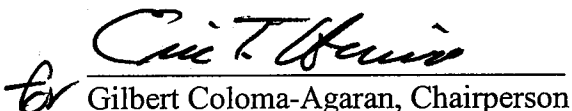
Chairperson Agaran closed the briefing.

Respectfully Submitted,



Dede Mamiya
Land Division Administrator

Approved for Submittal:


Gilbert Coloma-Agaran, Chairperson