

County of Maui Water  
Supply

BOARD OF WATER SUPPLY  
COUNTY OF MAUI  
CAPITAL PROGRAMS COMMITTEE MEETING

Taken at the David Trask Building, Conference Room 207,  
Wailuku, Maui, Hawaii, commencing at 9:05 a.m. on February 8,  
2001 pursuant to Notice.

REPORTED BY: GLORIA T. TAVARES, RPR/CSR #262

ATTENDANCE - Capital Programs Committee Meeting  
February 8, 2001

MEMBERS PRESENT:

Howard Nakamura, Chair  
Bob Takitani

Others present:

Jonathan Starr  
Orlando Tagorda

Staff present:

David Craddick, Director  
Herb Kogasaka  
Mike Quinn  
Shirley Falcon, Clerk

IWADO COURT REPORTERS, INC.

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CHAIRMAN NAKAMURA: We have a committee meeting.  
Interested parties can stay. If you are not involved and would  
not like to stay, I would like to ask you to permit us to call  
this meeting to order. It's 9:05 on Thursday, February 8,  
2001. We're meeting in the HGEA conference room, room 207 of  
the David Trask Jr. Office Building.

This is a meeting of the Capital Programs Committee

of the Board of Water Supply. Present are committee members Bob Takitani; myself, Howard Nakamura. Peter Rice committee member is excused. I would like to ask Shirley to introduce the other people present.

MS. FALCON: The staff present, we have David Craddick, Mike Quinn, Herb Kogasaka. From the public, Elliott Krash and Peter Stolle and Howard Fukushima as well as Jonathan Starr and Orlando Tagorda.

CHAIRMAN NAKAMURA: Thank you, Shirley. I would thank board members Starr and Tagorda for remaining to sit in and participate. We have a couple of items on the agenda; but before we start, is there any testimony from members of the public on either the items before the committee or on any issue you would like to comment on?

If not, first item on the agenda is Communication 01-03. It's a request from board member Jonathan Starr that a feasibility study be conducted for a new well Upcountry. I believe that you all have a copy of Mr. Starr's letter dated January 15, 2001 to Chairman Cravalho. This particular item is included in the budget for the present fiscal year.

Do you have any comment, David, before we ask board member Starr for his comments?

MR. CRADDICK: I just want to say here before we get going, at the risk of being admonished by the chair and committee, we also had a letter from somebody in the community, I gave it to Fran, and I didn't know she was leaving. It was a letter from Mark Sheehan supporting the request.

CHAIRMAN NAKAMURA: I guess she gave all of these copies to me. Let me pass that around. Committee chairman shares the concern of the board chairman about late communications; however, it is relevant.

Just a brief letter dated February 7, 2001 from Mark Sheehan, president of Maui Tomorrow, supporting Mr. Starr's request for a feasibility study. Also referencing his feeling regarding stream flow impact report. I suppose if it turns out to be relevant in terms of the feasibility study. So that communication will be accepted and placed on record.

MR. CRADDICK: As far as doing a well, I'm not really sure what they mean by a feasibility study and taking

Mr. Sheehan's letter into account, you need to have a well in order to answer Mr. Sheehan's letter. And I don't know what you would get out of a feasibility study unless you are talking about just comparing a well with surface water.

If you want to do that comparison, I have that right here for everybody. With a well at the currently located facility where we have a transmission system, tank, electricity, the cost is going to be -- is low as it could possibly be. The well is deep at that location; it's about -- it's going to be about 2,000 feet deep.

So the well is rather expensive; it would be a million dollars to drill the well plus another 900,000 for the controls and the pump. But when you compare that to getting an equivalent amount of water, surface water, you are talking about a six and a half million price difference, and the interest alone on that money for the length of the drought can pay for the operation of that well for a number of months.

So what you need is real information from a well. And as far as I know, there's only one way to get the real information from a well, that's to drill it.

CHAIRMAN NAKAMURA: Thank you, Mr. Craddick.

Mr. Starr, do you have anything you would like to say since this is your communication?

MR. STARR: Yes, sir, thank you for allowing me to participate here. I think that the director may have misunderstood what I was really asking for. And what my desire is, is that we engage a hydrogeologist, whether it would be Mr. Mink, who said they could do it quite quickly, a month or two, or one of the other eminent firms in our state to tell us where we would best be locating this well.

And also as Mr. Sheehan mentioned, to make sure that we don't do it in a way that would affect any streams, any stream flow anyplace. And then once we have that report, that it be basically taken to the next step, which is an EA. To my understanding, there's no need to do an EIS for this, but a simple environmental assessment will suffice.

And once we have that and the board's agreement as to where to drill, we could go ahead and drill the well and that will make the Upcountry system adequate and allow us to serve the people on the list and so on. So that's really my request, as expeditiously as possible we hire a hydrogeologist. It might be more efficient to use the firm of

Mink & Yuen because we are already under contract with them.

Perhaps it could be made part of the existing contract; otherwise, I don't know if we need to go out to bid. It's more your area of expertise on how we get the consultant to do the -- to tell us where the best place to go and then to get it done.

CHAIRMAN NAKAMURA: Thank you, Mr. Starr. Any other comments from members of the committee or members of the board? Mr. Takitani?

MR. TAKITANI: I would wholeheartedly support Mr. Starr's request. Obviously, I think we have a preference if there's any degree of uncertainty, that we would go toward the Pookela area where the facilities are already existing. But I think the main point is that we critically need groundwater, we need to do something. We have been sitting on this, I won't say idly, but we have not taken action and these droughts are becoming quarterly occurrences almost.

So we need to move forward and I don't know whether we need an EA in that area; but I do believe, as I understand Mr. Starr's request is for a location and a feasibility study as to where we can get the best quality water and quantity, and if we do that, then I could fully support. I believe we need that urgently in the Upcountry area. If all things are equal, we should proceed closest to the area that we have all our facilities in place.

So with that, I would move that we support a feasibility study with a fast-track movement toward implementation. This thing is just taking too long in getting a site selected. Let's get on with the task of getting groundwater Upcountry.

CHAIRMAN NAKAMURA: Thank you, Mr. Takitani. Any other comments? Mr. Tagorda?

MR. TAGORDA: I was sitting here as an observer, not to participate in any discussion, but like I said, I am for this underground water well Upcountry. We have been in many years so ineffective in trying to combat the drought problem Upcountry. There's only one reason we can mitigate those problems Upcountry, is to get that underground water. Thank you.

CHAIRMAN NAKAMURA: Okay. I think the chair shares the sentiment that has been expressed by Mr. Starr and Mr. Takitani and Mr. Tagorda. I believe there is consensus on a number of issues. Number one being that we do have a critical need to develop additional water sources Upcountry and that groundwater source would be a reliable source.

We do have funds appropriated in the present budget for such a project and I believe it is a consensus of those present that the most appropriate action is to retain the services of an appropriate consultant, hydrogeologist, as Mr. Starr has mentioned, to review the Upcountry area and to determine the optimum location for a new well, which may or may not be an existing location where the board has its facilities, but I think that we should look at all options and I believe that that would be the most expeditious way of moving this project forward.

Is that the consensus of those present? If that's the case, that is the recommendation of the committee. Mr. Craddick?

MR. CRADDICK: I think it would be helpful for the board to take a stance on whether they think this water would be able to be utilized any place other than Upcountry.

CHAIRMAN NAKAMURA: Mr. Craddick, I believe the appropriation is for a well to service the Upcountry area, that's the intent of the committee at this point, that's the priority. And the action of the committee by consensus and that we'll recommend to the board, although I'm not sure you need board action to proceed since you do have an appropriation, we can advise the board as to the action of the committee. But I think we should proceed as soon as possible to start to solicit the appropriate professional services.

MR. STARR: I want to comment that I was happy to see a letter from Mr. Sheehan from Maui Tomorrow because I know a number of people involved in Maui Tomorrow are the same people that have been involved with the coalition for the East Maui water resource.

I think by sending us this letter what they are saying is that they agree that the well should be built for Upcountry; that as long as the EA is done showing that it's not going to affect the groundwater, stream water, that they are not going to try to go and block this. I think that's kind of

the feeling I get from this, which is good.

So I do feel we should do the EA process, which is a fairly quick process, and if it does prove that the site that is recommended, that it will not affect the streams, I don't think we'll have much difficulty with people coming trying to block the project.

CHAIRMAN NAKAMURA: Thank you, Mr. Starr. Let's move on to item B, status report on the FY 2001 Capital Improvement Program Budget. Chair had requested staff to prepare a status report to update the committee, as well as the board, on where we are on all of the projects which were -- for which funds were appropriated in the FY 2001 budget. The staff has prepared and circulated a summary.

Mr. Starr and Mr. Tagorda, have you received a copy of this?

MR. TAGORDA: Yes.

CHAIRMAN NAKAMURA: It's a summary dated February 2001.

MR. STARR: Just in the package today.

CHAIRMAN NAKAMURA: Okay. So Mr. Craddick, would you like to proceed? Are we dancing here? Who is going to carry the ball?

MR. CRADDICK: I can do it. I think Herb did a good job.

CHAIRMAN NAKAMURA: The water man is carrying the ball.

MR. CRADDICK: For the safe drinking water compliance, the Honokahau project is still kind of held up with some discussions with Maui Land & Pine. And the other items, soda ash project for lower Kula, Makawao, and Olinda are completed.

I will say just as another side on that, the state is telling us they don't want us to use these anymore, they want us to treat at the -- putting orthophosphates in at the treatment plant, and they were trying to tell us to do that, cease and desist immediately on this. I told them we need to go through our budget cycle and get the chemicals approved, because these chemicals had already been purchased and the others will be a budget item for next year.

CHAIRMAN NAKAMURA: The state is saying that this process is no longer acceptable?

MR. CRADDICK: Well, they say they don't believe it's going to work, without even having given it a real good try. The reason they are saying it won't work is because in order for it to work we have to get the pH up too high in the water system. And they are feeling that getting the pH up that high, even though it's not a regulated water parameter, having a pH of around 10 is not -- it doesn't make the water taste good.

We think we could get the pH around 8 by using orthophosphates. The problem is, is orthophosphates are not a normal chemical to be in your body, whereas soda ash is. That's normally in your body and would not hurt.

And the other problem with the orthophosphate is it will react with the corrosion materials that are currently inside the pipeline and will remove those out of the pipe. We feel we'll start having pipe leaks after that, because we know what bad shape the pipes are in Upcountry. But that is the direction they are pushing us in.

CHAIRMAN NAKAMURA: Any questions on the SDWA compliance items? Jonathan looks like he is dying to ask a question. Mr. Starr?

MR. STARR: In other words, the EPA said to stop using the soda ash?

MR. CRADDICK: We got a letter to that effect, but I responded back to them. We were under a compliance order that basically was up November 30th of last year. We had to have all of these things complete and we did. And --

MR. STARR: This is to keep the THMs down?

MR. CRADDICK: No, this is to address the lead and copper problem.

MR. STARR: Okay.

MR. CRADDICK: What happened after that, I mean like two weeks before the end of the compliance, we get this letter saying cease and desist, we want you to switch over to this

other chemical. Well, first of all, we have not budgeted for it. We held a meeting with them, it was December that we met with them -- early January, I think, first week of January we met with them.

Basically told them we would like to continue on with the program that we had in place. We're doing a lot more flushing. We basically -- during the drought, we had been flushing. That was a major part of the program, is in the dead end lines what happens is the water stagnates there and forms hydroxides which increase the pH. So we're flushing that out, and then we could add this soda ash in, which then hopefully would not have these high pH's in the system.

Anyways, they wanted us to immediately switch over. I told them we don't have the budget for it. We can't do it. Furthermore, the compliance order didn't say it had to work; it just said we had to do the soda ash and we did it. We felt that we were in compliance and they, I guess, finally agreed.

You want to say something?

MS. KRAFTSOW: It really was not a compliance order.

MR. CRADDICK: You haven't seen the compliance order; there is a compliance order.

MR. STARR: Can board members be given copies of the compliance order?

MR. CRADDICK: Yeah.

MR. STARR: I would like to understand this better, which I'll do on my own time, but it seems drastic to raise the pH for --

MR. CRADDICK: We're not trying to do that. We're not trying to do that. We're trying to keep it down. A lot of our problem is our tanks themselves, the tanks have not been cleaned in many, many years.

The guys yesterday completed a bypass around Pookela tank, so we can take it off line. Somehow when a new tank is designed -- you could not take one of the tanks off line to clean it out. So we had to build our own line around the tank. We have done that and we're now bypassing that and we'll get that tank cleaned out. Because we know there's a bunch of stuff in the bottom of the tank that is contributing to the pH --

MR. STARR: One more question. Didn't you find that the reason the Haiku well burned out was because the soda ash was being drawn down into the cooling system of the pump and that that had been responsible for the loss of that pump?

MR. CRADDICK: That was a theory of mine, but I found out we had not been adding the soda ash at that point, so whatever caused that problem, that was not it. We have done some things to avoid that.

CHAIRMAN NAKAMURA: And then on this Honokohau water project, it's basically -- the basic problem is the acquisition of the easements?

MR. CRADDICK: Not really. It's getting the sequence of operation. They didn't want our pump to be running when their pump was not running because they had a very small tank. So what would happen is, is their pump could keep starting and stopping if ours would run when their's wasn't running.

So in order to get this sequence of operations straightened out, that's basically what is holding it up. Because they had gone down, I believe, built a larger tank; they went from 10,000 to 100,000 gallons. So it's not much of an issue now.

MR. KOGASAKA: They're requesting we provide some plans and get the Maui Electric's plan to do that.

CHAIRMAN NAKAMURA: So this is at this point moving along, but it's not at a stalemate?

MR. KOGASAKA: That's right.

CHAIRMAN NAKAMURA: Any questions? David?

MR. CRADDICK: For the next one here, Iao, East Maui source development. I suspect with the board's decision to go with the 8-inch well, this will start moving a little quicker here.

CHAIRMAN NAKAMURA: Any questions? No. Okay. Wailuku shaft.

MR. CRADDICK: Wailuku shaft there, what is going on there, I think it's that Stanford Carr is waiting until this tank credits issue is resolved and that's not been resolved yet. So he's sitting waiting until that is resolved.

CHAIRMAN NAKAMURA: So on this one when you say prepared bid documents; that is, you will need to do that but it's not been initiated as of yet?

MR. CRADDICK: No, mainly because the land -- we have a right of entry but not for doing the permanent facility there.

CHAIRMAN NAKAMURA: And the intent is to replace the shaft with a traditional well; is that right?

MR. CRADDICK: Well, I think they would look at the feasibility of totally doing another well, utilizing that one as is or bringing the pump to the surface and utilizing it that way and without the tunnel. So there would have to be some feasibility looked at with that project.

We're just -- it's called this right here because we feel that well, we already know what it produces, and even though it may be a little more expensive to utilize that, it's no risk or very little risk. Let's put it that way.

CHAIRMAN NAKAMURA: Any questions on this item?

MR. TAKITANI: With the dropping of the sustainable yield or at least CWRM's position and spreadage of the pumpage, it's not completely alleviating the problem of rising chloride levels. Wouldn't the Wailuku shaft become more important as far as the utilization?

MR. CRADDICK: There's no question that getting the pumpage spread south of Iao stream is important however we do it. That's correct.

MR. TAKITANI: Do you have --

MR. CRADDICK: Keep in mind, we are using the well right now. There's no charge to use it. So whatever pumpage spreading we can utilize from that is currently going on and it does help out, mind you, because the chloride levels have dropped.

MR. TAKITANI: Where do we stand with the tank credit issue?

MR. CRADDICK: Good question.

CHAIRMAN NAKAMURA: The committee had acted on it in the past and the matter is still pending before the board, is my understanding.

Moving on, Waikapu mauka well. David?

MR. CRADDICK: I don't believe we have selected the consultant yet. We are still working with Stanford Carr. What we have done is we asked them to prepare all of the plans and specs for the controls because they would be putting a booster station in there to boost that water up to Wailuku Heights to service some of the upper elevation projects that they have.

Because of that booster pump, we wanted them to design all of the controls and all we would be doing is putting in the pump and that's a relatively simple job to get that done. Once we get things worked out with the development plan with Stanford Carr.

CHAIRMAN NAKAMURA: The \$80,000 is for plans or that's for the actual implementation of --

MR. CRADDICK: That's for plans and specs to put a pump in.

CHAIRMAN NAKAMURA: Subsequently, we're going to need an appropriation for the actual installation?

MR. CRADDICK: That's right.

CHAIRMAN NAKAMURA: In a subsequent year?

MR. CRADDICK: Yes.

CHAIRMAN NAKAMURA: Are you saying that you are hoping not to expend these funds, that the private parties are going to expend these or are going to do the work?

MR. CRADDICK: A lot of that, you know, we hope that to be the case. Like especially the one right below it, the

transmission line, I believe we have -- Rojac is talking about putting that line in, and then we would just do a 50 percent reimbursement, because they are developing some kind of a project down by the Apana scrap yard there.

CHAIRMAN NAKAMURA: Basically, these two projects are somewhat on hold until you resolve the issues with the private parties?

MR. CRADDICK: Right.

CHAIRMAN NAKAMURA: The hope is that we would not need to expend all of the funds?

MR. CRADDICK: Right.

CHAIRMAN NAKAMURA: Any questions?

MR. TAKITANI: What's the capacity of the Waikapu well?

MR. CRADDICK: I believe we put a pump at 2 million gallons a day. That's what it was tested at. It tested very good at that level. That would be 1400 gpm. Possibly we could go higher but then we would be doing the same thing that we currently have at Mokuahau, the pumps there pump 4 million each one.

MR. KOGASAKA: Mokuahau pumps six.

MR. CRADDICK: Three, three, and four; right?

MR. KOGASAKA: Six, four and four.

MR. CRADDICK: Anyways, we don't want this same -- you know, taking a pump here at Mokuahau and then having the same capacity down here. What we're trying to do is get some of Mokuahau and some at Waikapu. What will eventually happen is we may have to decrease the pump size of Mokuahau.

CHAIRMAN NAKAMURA: But the purpose of this well is basically, again, to spread the pumpage within the aquifer; right?

MR. CRADDICK: Right. That's correct. It does provide additional water.

CHAIRMAN NAKAMURA: Any questions?  
Kanoa wells. David?

MR. CRADDICK: Kanoa wells 1 and 2. This contract actually is already going. Completion date for Kanoa 1 -- actually, we just had a discussion with the contractor yesterday and I guess the pump motor -- how long was that Herb, 18 weeks?

MR. KOGASAKA: Yes, 18 weeks.

MR. CRADDICK: So I guess somewhere in that order of magnitude, 20 weeks from now, say five months from now that should be finished. Kanoa 1 is supposed to be completed in May, and 2 is supposed to be completed in May of this year.

CHAIRMAN NAKAMURA: When you say -- I'm trying to recollect this -- when you say completion, on Kanoa 1, that well has been -- both of these wells have been drilled?

MR. CRADDICK: Yes.

CHAIRMAN NAKAMURA: And this is all the infrastructure necessary to put them on line. You have the temporary connection now; is that it?

MR. CRADDICK: We did the pipeline project for Kanoa No. 1 well already. We put the permanent pipe in. We have a temporary pump of our own in there that we're running with a diesel generator. We have got the air quality permit to run the generator.

We are in the process of getting the air quality permit for well No. 2. The pump is in there and everything is ready to go, and once we get that air quality permit, then we could start running that. So we could actually utilize that here in the not too distant future. But the job that is going on right now is for the pump control buildings and putting the permanent pump in the well.

CHAIRMAN NAKAMURA: For both Kanoa 1 and 2?

MR. CRADDICK: Right.

CHAIRMAN NAKAMURA: So when this project is

completed, that old Kanoa well project will be completed, all the permanent infrastructure, pipeline, everything will be in?

MR. CRADDICK: Everything will be in.

CHAIRMAN NAKAMURA: With the completion of this project?

MR. CRADDICK: Yeah. Including the final booster pump up at the tank. Those two blanked off booster pumps that were blanked off will have the final booster pumps in there.

CHAIRMAN NAKAMURA: When do you expect this all to be completed?

MR. CRADDICK: It should be no later than May or June of this year.

CHAIRMAN NAKAMURA: Any questions? Jonathan?

MR. STARR: This is a million dollar change order to add drainage swale?

MR. CRADDICK: I don't think it's a million dollars.

MR. STARR: Add \$1.1 million to add a drainage swale. That's what you're asking for.

MR. CRADDICK: No, it just says proposed change order is planned. It doesn't give an amount.

MR. STARR: We're budgeting a million one.

MR. CRADDICK: No.

MR. STARR: That's a lot of money for a drainage swale. That means bulldozer time.

MR. CRADDICK: No, Jonathan. The 1.1 million is for the wells. The drainage thing is for what, Herb?

MR. KOGASAKA: We have not had a price yet. It's a change order that we are trying to get a price on. We're trying to complete a design; we need to have this drainage swale added on to this project.

MR. STARR: The \$1,196,000, that was from a previous year?

MR. CRADDICK: No -- I don't think so. All it is --

MR. STARR: If you awarded the contract, it must have been for the previous year.

MR. CRADDICK: No, I don't think so. Anyways, the drainage thing, I'm going to estimate that it should be about \$30,000.

MR. STARR: I'm confused on why you have a million and one budget.

MR. CRADDICK: That was the budget, but the contract was for 1.2 million. So it was 100,000 more than what was budgeted. I think this one was just awarded in June before -- well, this is not part of the pipeline projects.

CHAIRMAN NAKAMURA: Mike, do you have any clarification to provide?

MR. QUINN: I show it as the current year budget of 1.1 million and we currently have 1.1 million encumbered, and there was another 100,000 in the budget, it looks like, from the water system development fund. That's the way we set up the budget -- appropriation initially, 1.1 million from the source fund and 100,000 from the water system development. So it looks like it's a current year appropriation and we have in fact encumbered the entire 1.1 million.

MR. KOGASAKA: The budgeted amount is 1.2 million.

CHAIRMAN NAKAMURA: Sorry?

MR. KOGASAKA: The budgeted amount is 1.2 million.

CHAIRMAN NAKAMURA: It should be 1.2 instead of 1.1?

MR. KOGASAKA: Yes.

MR. QUINN: There was another 100,000 taken from the water system fund to give you the 1.2.

CHAIRMAN NAKAMURA: If you have a change order for \$30,000 or any change order pretty much, you are going to be exceeding budget then?

MR. KOGASAKA: Yes, we would be --

MR. QUINN: You have to come back to the board.

MR. KOGASAKA: As soon as you get the prices and --

CHAIRMAN NAKAMURA: You want to move along, David, to No. 2?

MR. CRADDICK: Kupaa No. 2 well, I think we finally got things straightened out with -- first of all, we had -- in the last well when it was drilled, the consultant said they didn't think we would be able to get any more wells for producing additional water in the area that we had negotiated with Wailuku Agribusiness.

So we had the choice of putting one backup well in between Kanoa No. 1 and this Kupaa well that we already have there, which would only serve as backup or going further north and getting one that could actually provide additional source.

If we go on to the state property, we have to get state permission, and the state currently has it subleased to the Boy Scouts. We have sent letters to the Boy Scouts, they put in their approval. So we'll be sending a letter into the state to get access to the property. Once that happens, then we would get a jump going to get the well drilled.

CHAIRMAN NAKAMURA: Okay. Basically, Kupaa well No. 1 has been drilled but it's not in service, there's only infrastructure; right? And you are saying Kupaa 2, at this point it's the department's feeling that Kupaa 1 -- Kupaa 2 will not be pursued but these funds will be utilized to do an exploratory well in another location?

MR. CRADDICK: Right.

CHAIRMAN NAKAMURA: I would suggest that perhaps the department's plans should be presented to the board for their information. We can do it via this committee's report. You have a potential location for this new exploratory well?

MR. CRADDICK: We did -- the Boy Scouts subleased it to Buddy Nobriga. We did go out with him and find a spot that would not disturb his operation. We found a good location for the well. Subject to getting a consultant on board, there might be some minor adjustments because of pipeline issues. But we think we have a location that we can use.

CHAIRMAN NAKAMURA: The location so far has been determined by, basically by the department, not necessarily by the consultant or a geologist?

MR. CRADDICK: That's right.

CHAIRMAN NAKAMURA: Bob?

MR. TAKITANI: David, about how much do we allocate for source development in the 2001 budget? And how much do you anticipate in 2002?

MR. CRADDICK: Didn't we have another one for actually putting the pump in the Kupaa No. 1 well?

MR. KOGASAKA: No.

MR. CRADDICK: That would be the one for next year then?

MR. KOGASAKA: Yes. That would be the pipeline. The transmission would be a substantial cost.

MR. CRADDICK: It would probably be somewhere in the million to million and a half range to get a pump in that well and be able to deliver it into the system.

MR. TAKITANI: What's the answer?

MR. CRADDICK: Well, we need that one and a half million next year, in next year's budget.

MR. TAKITANI: The question was how much was budgeted for source development for this fiscal year and how much do you anticipate for next year? Knowing that you don't know exactly, you are still budgeting; but source development obviously has become a very important item for the board and

with the situation with the Iao aquifer and the growth of South Maui, etc., where is all this water going to come from, where is the source? That's the bottom line questioning I'm asking.

MR. CRADDICK: The way we've got it is we're getting on slightly over a million gallons or 1 1/2 million gallons a day capacity for each year since 1997. So I think that's what we're shooting towards. Keeping in mind that we're only using three-quarters of a million gallons a day currently in the central system. So we're developing at a rate double what we're using. That's why we're able to cut back on Iao aquifer usage.

MR. TAKITANI: Mike, about how much have we budgeted for --

MR. QUINN: For that Iao, we budgeted \$2,598,000.

MR. TAKITANI: What about for East Maui?

MR. CRADDICK: There's nothing budgeted for East Maui until we get the EIS done.

MR. TAKITANI: You have --

MR. CRADDICK: That's an exploratory well. That's not a production well. And even if it was production size, it would not be able to be used until all the wells are drilled. I don't think you can count that as a source at any time in the near future.

MR. KOGASAKA: I believe it's -- to use that one for the monitor well. That was sized by the board in the last meeting so --

MR. TAKITANI: What about the drilling arrangement that we entered into with USGS to drill an exploratory well, that you could utilize that equipment, you can utilize that to drill in Maluhia?

MR. CRADDICK: We could. We are going to have something in next year's budget for that because this -- basically the first part of this year they did the well -- actually, most of last year they did the well on Molokai. The equipment is now being moved up to Keokea with Hawaiian Homes

and they are going to do one or two more wells there. Hopefully in the next six months.

Also one other thing, too, just for the board's interest, the state will also be drilling a well next year in the central system to add water to our system.

MR. TAKITANI: Where?

MR. CRADDICK: We expect -- and also in this Boy Scout camp area somewhere. Possibly a little higher elevation. They are doing it for their own project, for their own source development of their own project, but that's in the state's budget this year for their own project, based on their water use development plan.

CHAIRMAN NAKAMURA: Are you talking about fiscal year 2001?

MR. CRADDICK: Yes -- no, 2002.

CHAIRMAN NAKAMURA: 2002.

MR. TAKITANI: That's in the CWRM?

MR. CRADDICK: Yes. I think they are planning on doing another monitor well, too, somewhere. After they finish the one in Mahinahina, they will do another one somewhere in the central system.

CHAIRMAN NAKAMURA: It might be appropriate to ask them to make a presentation to the board as to what their plans are. It's an interesting -- it's something we have not -- it's something at least I had not heard of before.

MR. STARR: Is that first-come-first-serve?

MR. CRADDICK: That's what's going on.

MR. STARR: I don't think there's 3 million gallons in Maluhia.

MR. CRADDICK: Their well may have to be further north.

MR. STARR: Yeah, further north --

MR. CRADDICK: That's why we are wanting to go and stake out the ground.

CHAIRMAN NAKAMURA: Any other questions on this North Waihe'e?

MR. STARR: Since we're on the subject of this, I don't know looking ahead where our next source for central is realistically going to come from. It's probably going to come from Hamakuapoko when the EIS runs its course. I know that's wishful thinking now, but I would not be surprised if we can't get Hamakuapoko on line in the next six or eight months.

It would be good when that time comes we're ready to fast track in getting a pipeline and power to that, so H'poko could be run on to the central system and that should keep us in good shape for another year or two.

MR. CRADDICK: Hamakuapoko, I don't know if you remember the board chair said one time some time ago about, I know about the pipeline. There's currently two contracts with encumbered funds of about \$5 million for the pipeline for the Hamakuapoko wells.

Maui Electric, I believe, is ready to put the power in there. We just have not been pushing them to get the power in. We worked out a deal with HC&S. Obviously, the power will be cheaper, but it looks like the distribution line is a little more expensive with HC&S. So we have to just look at the economics of that issue there.

But if that EIS is completed, we will be able to get those Hamakuapoko wells on line in Central Maui and probably around 280 days from completion of the EIS. We may be looking at -- obviously, we'll have to pay whatever change order there is in the contract for cost escalation; but since the contract has been sitting there since 1994, the money is still encumbered and the bulk of it is being paid by the state.

CHAIRMAN NAKAMURA: Okay. Moving along, the drought project, David?

MR. CRADDICK: This one, the -- our understanding is that the request for the \$2 million from the state is sitting on the governor's desk. It was passed from budget to finance to the governor. If that is funded, we would not have to spend

this money. Now, I can't give you any guarantee that that's going to come off the governor's desk at this point, but that's what I know right now.

CHAIRMAN NAKAMURA: So the scope of this project, again, is to do what, David?

MR. CRADDICK: It's basically to do -- this 500,000 would only be to do the EIS for the reservoir, some site feasibility work and the environmental work to put a reservoir wherever they figure it was best.

CHAIRMAN NAKAMURA: And so how big would this -- is this reservoir proposed to be?

MR. CRADDICK: We're looking at 300 million gallons.

CHAIRMAN NAKAMURA: And you have a location preliminarily identified?

MR. CRADDICK: There was a study done back in '84, Herb, or '85 by Belt Collins (phonetic) that did identify a spot that would be large enough to hold a reservoir of that size.

CHAIRMAN NAKAMURA: So this would store raw water and this raw water would go into the treatment facility?

MR. CRADDICK: Right. If we got a reservoir of that size, it would take us up to near the full treatment plant capacity. So we wouldn't necessarily have to increase -- I mean, for peaking days, I guess we would have to add some plant capacity, but for average day capacity, the treatment plant would still be able to handle it.

CHAIRMAN NAKAMURA: So the \$500,000 would be for preliminary engineering and EIS, but if you got 2 million, it would encompass that plus the complete engineering design?

MR. CRADDICK: Yes.

CHAIRMAN NAKAMURA: Any questions on this? Pulehu well, David?

MR. CRADDICK: On that, our understanding is that we

should have the right of entry shortly. There was -- in the right of entry that they had given us, they wanted us to take responsibility for all water quality that we dealt with while we were testing the well and we were responsible for all the water quality after we tested the well even if we didn't use it, and basically I said that that was unacceptable.

We can take responsibility for what we do and that's all we'll take responsibility for. And I think corp counsel talked with their counsel and they agreed to change that in the right of entry. And once that happens -- well, we already bid out putting in the test pump in there.

We have a pump of our own that we can put in to test it. Once that happens, then we'll know, I guess, whether it's feasible to go ahead and do this. It does require a six mile pipeline. So that's a problem.

CHAIRMAN NAKAMURA: The landowner is A&B?

MR. CRADDICK: Yes. Basically it's been 25 years since the well was drilled and tested and I don't think it's a good idea to go ahead with the project without doing another test to get current information.

CHAIRMAN NAKAMURA: So you are finalizing the right of entry, once you do that, then you are going to test pump the well?

MR. CRADDICK: Right. That should all be completed before the end of this fiscal year.

CHAIRMAN NAKAMURA: Jonathan?

MR. STARR: I have grave doubts about this particular one. I went out there and took a look at it, it's low down right in the middle of the sugar plantation and it was drilled a long time ago and then instead of using it, they just capped it. They never wanted to use it for the plantation, which I assume they would have used it for that.

But the pipeline is going to cost a lot more than the drilling cost of a well at a suitable location. Power is two miles away. It seems to be in the wrong place. I would be really surprised if that gives us sweet, good water. We're fooling ourselves with this one.

MR. CRADDICK: We're not looking for good water;

we're looking for ag water.

MR. STARR: If we're looking for ag water, and we're going to have to pump it uphill and we're going to spend several million dollars to put a pipe to move it uphill, you know, to put power up over there, I don't know.

It seems like it would make a lot more sense to just go drill one where we want the water, which will probably be a little further uphill and a little further away from the salt and pollution in the central valley. I think the fact there's a hole there, you know, we're fooling ourselves. We'd be better off putting it where we -- you know, doing it properly where we want it rather than throwing good money after bad.

CHAIRMAN NAKAMURA: I would assume that once this process is complete, that the director will have an appropriate recommendation to the board. Mr. Craddick?

MR. CRADDICK: I think that's exactly what I was going to say. From this test we'll get a pretty good fix on the water quality, and I think, like Jonathan says, it probably will be cheaper for us to drill a well nearby our booster system, just like we would do for the well for the drinking water, get it near our booster system so we don't have this long transmission line.

The power is already there, everything is there; but we don't have to risk drilling another well when we already have one there. To do this test would be somewhere in the order of \$20,000, a relatively minor amount to get the test information.

MR. TAKITANI: When do you think you'll have sufficient data to make a conclusion?

MR. CRADDICK: If all goes well with the right of entry, we should have something before the end of this fiscal year. So another five months.

CHAIRMAN NAKAMURA: Okay. Anything else on that?

The next item is the Upcountry source development. I guess we have discussed this earlier and the recommendation is to engage an appropriate hydrogeologist to determine the most appropriate location. So I think we have dealt with this item. Mr. Starr?

MR. STARR: If there's any way we can even cut one more step out of it. I would like to ask whether this is something that could be tacked on to an existing contract we have with the hydrogeologist or are we going to have to put this out to --

CHAIRMAN NAKAMURA: Any comments on that? Mr. Corp Counsel?

MR. FUKUSHIMA: Did the earlier contract go out to bid?

MR. CRADDICK: Yes, it did.

MR. FUKUSHIMA: There are exceptions to going out to bid. I don't believe it would be appropriate to tack this on to the present project. But whether the exceptions to the procurement process, this I'm not sure. I would be doubtful that you can. I'm just wondering if the department is participating in this managed selection process that most of the other county is utilizing whereby you solicit --

MR. CRADDICK: We have already done that. We would have people that -- we have a list of people that could -- we could use for that already.

MR. FUKUSHIMA: And that is a process which is appropriate under the present procurement code, and utilizing that process I believe you could select --

MR. TAKITANI: Under the term of a drought emergency declared, we're able to not have the bid process enforced.

MR. CRADDICK: Just as an aside here, my main focus for Mink & Yuen is to get that East Maui plan done and to water their efforts down. Knowing they are already a small firm, to give them something else while that is still pending, I think is -- I would have to convince myself that they could move on this quickly and they would not be competing with themselves for resources.

CHAIRMAN NAKAMURA: I think the intent of the committee is to move this project along as quickly as possible and get the appropriate consultant on board as quickly as possible. So we can leave that to the department to determine

how that can best be done and we'll monitor your effort in accomplishing that, Mr. Director.

CHAIRMAN NAKAMURA: Waikamoi flume replacement project.

MR. CRADDICK: On that one, we ordered all the lumber. It's just a matter of scheduling the crews to get up there. They have been working on a number of projects regarding these laterals that have been breaking all over the place and getting the roads fixed up. As soon as that's completed, this is the project they are going on.

CHAIRMAN NAKAMURA: You say you ordered the material. Has it arrived?

MR. CRADDICK: Yes, it's arrived.

CHAIRMAN NAKAMURA: Any comments or questions?  
Alae tank replacement.

MR. KOGASAKA: We need to complete the -- review the preliminary engineering report to our satisfaction before we can proceed.

CHAIRMAN NAKAMURA: So you have a consultant working on this?

MR. KOGASAKA: Yes. They have prepared a preliminary engineering report and we need to satisfy ourselves that that site would be appropriate.

MR. TAKITANI: How large a tank is that?

MR. KOGASAKA: I believe it's a 1 million gallon tank. It was 1 million.

MR. CRADDICK: To tell you the truth, Herb -- the tank that's there right now is 2 million, but obviously we don't need a 2 million gallon tank there, especially with the dual line project going in. We won't have to put a 2 million gallon tank in. Whether it was 1 million or a half million, I don't recall off the top of my head.

MR. KOGASAKA: Right now it's either half million or

1 million. I believe it's 1 million.

CHAIRMAN NAKAMURA: So this 50,000, Herb, that was for the design or is that for land acquisition?

MR. KOGASAKA: Land acquisition was allotted for it. We don't have a price for it. We wanted to budget something so we have something we can use for negotiations.

CHAIRMAN NAKAMURA: And then so next year you are going to have to come in for money for construction or in a subsequent year?

MR. KOGASAKA: Yes.

CHAIRMAN NAKAMURA: You don't have construction funds yet?

MR. KOGASAKA: No, we don't.

CHAIRMAN NAKAMURA: Is the engineering design coming out of this 50,000 or that was a prior years' appropriation?

MR. KOGASAKA: That's the prior year appropriation, yes.

CHAIRMAN NAKAMURA: Any questions or comments on this? Pulehuiki tank replacement.

MR. CRADDICK: On that one, we just have a worn-out tank there. Pulehuiki Road, that needs to be replaced. This is the design work that -- to do a design there.

CHAIRMAN NAKAMURA: So this has not yet been initiated in terms of design?

MR. KOGASAKA: It's not initiated yet, that's true, but we scheduled it for this January.

CHAIRMAN NAKAMURA: Sorry?

MR. KOGASAKA: It was scheduled for January.

CHAIRMAN NAKAMURA: You have not started the consultant selection process then?

MR. KOGASAKA: No, we haven't.

CHAIRMAN NAKAMURA: Incidentally, how long is that consultant selection process normally, to go through that, the entire --

MR. CRADDICK: I think it can be as quick or as slow as we want it to be. What we do at the beginning of the year, we'll advertize to get people that are interested in the jobs that we have and so we have a list of all these people, and then what we'll do is we'll pick five of them to get a detailed proposal from them. That usually takes about 30 days.

MR. KOGASAKA: Yes.

MR. CRADDICK: So the following 30 days we could theoretically have a contract with them.

CHAIRMAN NAKAMURA: Ulumalu water system.

MR. CRADDICK: That project there is pretty well designed and ready to go to bid. We still have the \$295,000 loan issue, that has to be resolved, and that is the -- right now it's the driving force behind the project. It has to be completed before we can go to bid.

CHAIRMAN NAKAMURA: What is the status of that issue?

MR. CRADDICK: We're trying to get a bond counsel that is not going to charge us more than the loan that we're getting or a substantial portion of the loan that we're getting.

CHAIRMAN NAKAMURA: That's been pending for some time, then, that issue, as I recall.

MR. CRADDICK: Yeah, yeah, basically, I guess. I don't know, Howard may have more insight. But what the short story is, is that corp counsel did not feel that they were able to give the legal opinion that the RUS needed. And if we want to go with who the counsel currently has, which is Orrick & Harrington, they want it somewhere in the order of \$60,000 for a \$295,000 issuance.

The board did say they wanted to go the revenue bond

way, so we're working towards that end. And what it looks like they have done in other places, it's something similar to the state revolving loan fund, where instead of issuing bonds, we get a loan with the same guarantees that you would give under a revenue bond. And it's those guarantees that have been troubling.

MR. FUKUSHIMA: If I may, Mr. Chairman, there have been discussions, and I just got on this fairly recently, when I say recently, I mean this week. But there have been discussions as to whether a revenue bond was the appropriate way to go. The primary concern that our office had, and Ms. Davis pointed out, was if we used Harrington as bond counsel, it would cost a considerable amount of money.

It was our idea or our position that perhaps -- and taking into account the cost of bond counsel -- that perhaps it would be easier, less expensive to utilize a process that is already in place and that's the G.O. Bonds. Although they would cost a little bit more, but when you are talking about the amount of \$300,000, the G.O. Bond is what, 6 percent?

MR. CRADDICK: Howard, you don't have a choice in this. The G.O. bond goes to RUS, they buy it, the interest rate is fixed. It's only the cost of issuance that we're talking about. Nobody else can buy these bonds. If you don't take the loan with them, then all the grant money you lose.

MR. FUKUSHIMA: Whatever the case may be, we thought it would be appropriate to compare the cost of issuing a revenue bond or this revolving loan idea, which, in fact, our bond counsel has already offered the opinion that the type of loan agreement is essentially a Chapter 49 agreement which is a revenue bond under the HRS.

The problems with the revenue bond is that you are going to have to get rate commitments from both counsel, as well as the mayor, to make sure that there is sufficient funds available for the repayment of the loan. So our suggestion was to be in the analysis or a comparison between issuing of this revenue bond/revolving fund loan type of idea versus a G.O. bond so that the board would have a better handle on which way it really wanted to go.

I think when the revenue bond was first suggested, everybody didn't really know what it entailed, how much it would cost, etc., and so in light of that, we thought the best thing to do would be to analyze revenue versus G.O. Bond.

Mr. Craddick, in my conversations with him yesterday, thought he could get bond counsel at a very reasonable rate, and I was a little skeptical whether he could or not. But Mr. Craddick was going to investigate potential costs involved with a revenue bond. So that's where we stand now.

CHAIRMAN NAKAMURA: Okay. Any questions?

MR. FUKUSHIMA: Or comments? Or suggestions? I'm not sure if the board is set or so convinced that a revenue bond is the way to go that it's not going to change its mind, I don't know.

CHAIRMAN NAKAMURA: Speaking for myself, one of the reasons the revenue bond came up was because it seemed appropriate in the light of how the loan was to be paid back, which was to be paid back through the rate process, and it certainly looked like revenues. But I think the board would certainly have to look at the options of what corp counsel reviews, what those options are and the cost and benefits of the options. But I don't think the board has closed its mind to it. That's my opinion.

MR. CRADDICK: Actually, the bond is being paid back by the people in the Ulumalu Peahi area. It's not paid back by our rates.

CHAIRMAN NAKAMURA: That's what I meant.

MR. CRADDICK: It's just that when you issue a revenue bond, there's certain rate covenants you have to put in there that say you have to have sufficient rates to cover it. This is such a minor issue, I don't want to speak for Mike, you can ask Mike himself, but those kind of covenants are not an issue in this particular case for such a small amount.

CHAIRMAN NAKAMURA: The point is whether or not the board will consider an alternative to the revenue bond which they previously indicated was a preference, and I think options should be presented to the board, together with the appropriate justifications for the board to deal with.

MR. FUKUSHIMA: As a suggestion, I would think that if the cost between a revenue bond versus a G.O. bond are

fairly close, that we have got a lot of experience and we have worked with Harrington for a couple of years. Frankly, it would be a heck of a lot easier than going to territory that myself or other attorneys in the office have not particularly worked on.

CHAIRMAN NAKAMURA: Well, we'll look forward to an appropriate recommendation from corp counsel and the director on this issue.

Pipeline replacement. There's a number of pipeline replacement projects, so the chair's suggestion is rather than go into each of them in great detail, if there are any projects of significance that the department would like to point out to the committee, or if there are projects that committee members or board members have questions on, we can deal with those, but I don't know that it's necessary to go over these individually.

Any projects, Herb or David, that are particularly noteworthy that you need to bring any information to the committee?

MR. CRADDICK: We got a letter from David Goode the other day, saying that they were going to be delaying some of the projects that we were working with public works on and I'm not exactly positive which ones those are on there, but I know there is one in Kihei there. I think that --

MR. KOGASAKA: South Kihei Road, phase IV has been put on hold.

MR. CRADDICK: That's on page 5.

MR. KOGASAKA: I think we're asking for appropriation the next fiscal year.

CHAIRMAN NAKAMURA: Sorry?

MR. KOGASAKA: We'll be requesting appropriations for that project in the next fiscal year. This would be for construction, they anticipate they'll be able to do it next fiscal year.

CHAIRMAN NAKAMURA: So if public works is not ready to proceed, your intent would be to defer the project until such time that they are ready to proceed?

MR. KOGASAKA: Yes. We expended funds for a portion of the design funds at this time already.

MR. TAKITANI: Just for reference, Mike, what was the total pipeline request for the EA, how much --

MR. QUINN: The total budget was, for pipeline replacement, it was 5.8 million -- 5,865,000.

MR. TAKITANI: How much --

MR. QUINN: Year to date expended is roughly 2 million.

CHAIRMAN NAKAMURA: We authorized somewhat in excess of 3 million, is my recollection.

MR. QUINN: That's correct. At the last CIP meeting.

CHAIRMAN NAKAMURA: At the last CIP meeting. Are any of these projects going to be coming up for approval by the committee and the board within the next month or so? Or have you pretty much asked for authorization on whatever you can handle for the rest of the year?

MR. KOGASAKA: I would like to request funding for some additional pipeline design projects.

CHAIRMAN NAKAMURA: Which projects are those? Maybe you can identify them now.

MR. CRADDICK: Ainakula?

MR. KOGASAKA: That's for construction.

MR. CRADDICK: I thought you said you wanted to add in a PRV or something in there?

MR. KOGASAKA: Yes.

MR. CRADDICK: That one may be less than \$10,000. We're currently negotiating. If it's less than 10,000, we don't necessarily need to come to you. But that's one.

MR. KOGASAKA: The Ainakula project is next. I

believe the funds -- that's not budgeted yet. That's the one we would like to go to the construction -- I have April here.

CHAIRMAN NAKAMURA: So you are going to be asking for authorization for construction on that?

MR. KOGASAKA: Yes.

CHAIRMAN NAKAMURA: We don't have authorization on that yet, Mike?

MR. QUINN: You mean in terms of -- no, we don't.

CHAIRMAN NAKAMURA: In any event, I would suggest that you prepare your list as soon as possible, Herb.

MR. KOGASAKA: Okay.

CHAIRMAN NAKAMURA: Because it's going to be too late for the February board meeting, but I would think that you would want it for the March board meeting; and so in order for that to happen, you probably need to get it on the agenda on the February board meeting so that it can be referred to committee for recommendation back in March. So you don't have much time.

MR. KOGASAKA: Okay.

MR. TAKITANI: One question. When is that new accounting procedure going to be taking place where you have to now account for your depreciation in any financial statements?

MR. CRADDICK: I think it will be in this fiscal year; right?

MR. QUINN: What will be required is -- we already conformed to it, first of all. In a sense, we depreciated all our assets.

I think one of the key items, though, that is a little bit of concern is that in the allotted summary portion of the notes, we have to make a statement as to basically condition of those assets, and I guess the implications or the thrust of GASB 34 is to let the public know whether you are sufficiently keeping your assets up-to-date and in good shape, and that leads to all sorts of things, whether the rates are

sufficient to do that.

MR. TAKITANI: That's what I was leading up to.

MR. QUINN: So somehow we'll have to do a lot of thought of how we'll present that to the public.

MR. TAKITANI: That was the next question. How far are we falling behind? Because I heard the astronomical figure of how many millions of dollars we need for replacement. And how far are we falling behind?

MR. QUINN: I think that brings into play the system replacement analysis that we had done by a consultant, which is going on 25 years, at least initially what we were going to do. It clearly shows that our current revenue stream will not support that kind of well. Those kind of fiscal requirements going out. Even after maybe two or three years, then something will have to be done, if we want to meet those replacement requirements.

MR. TAKITANI: My concern is, I see every night on TV the Board of Water Supply, Honolulu Board of Supply in the news where some main line is broken and constantly in that situation to repair -- the pipeline replacement. I don't think we're that far off from being in that same condition now.

MR. QUINN: I think the other boards --

MR. CRADDICK: TV crews just aren't as accessible here.

MR. QUINN: Specifically, the Big Island and Kauai are seriously addressing this situation, witnessing a tremendous increase in rates that they are imposing. It's out at public hearing right now. We're talking about increases on the order of 30, 40 percent. Really significant increases they are proposing. I think we're going to be faced with a -- shortly, not this year or next, but certainly following that.

MR. CRADDICK: We still have one more year to go on the rate increase. We'll be covered through that.

MR. TAKITANI: We certainly need to look at the drought situation as far as having drought pricing or whatever

we end up calling that thing.

MR. CRADDICK: Yes, there's no doubt about that.

MR. TAKITANI: The concern is, you know, we never bring it up. The other systems are subsidizing greatly the Upcountry system. At some point in time that really needs to be addressed and we need to be looking at the whole structure there.

MR. QUINN: As does the expansion side, the water system development, we should be also thinking seriously of taking another look at that. I know the board took a look at it earlier last year, was it? About a year ago.

CHAIRMAN NAKAMURA: Any other comments on pipeline replacement?

MR. KOGASAKA: Yes. I would like to talk about a Paukukalo waterline project. And we stopped -- we have deleted the portion of where the archeological areas are located, we have taken that out of the contract and we would like to complete that portion by hiring an archeologist and taking this out of the contract and completing the work by department personnel, if possible. We would need to go through the procurement process with the archeologist for -- or an archeological consultant.

CHAIRMAN NAKAMURA: I don't know what the answer to that is. I guess that's something you need to take up with corp counsel. As far as -- I think the committee is -- how you proceed with the project is really kind of an administrative function as long as you are doing it within the budget. So if a decision is made to do it in house and to terminate the contract, I don't think board action is required. Mr. Takitani, do you agree with that?

MR. CRADDICK: What he is talking about is archeologist work. We can't do that in house.

CHAIRMAN NAKAMURA: I know, I realize that. But all I'm saying is that if it's within the contracted amount. And how you get the archeologist is your --

MR. CRADDICK: It's not within the budgeted amount.

CHAIRMAN NAKAMURA: Well then, if you have to come back to the board, you need to submit a formal request.

MR. KOGASAKA: The remedial measures that were presented to the board, is the archeological amounts approved or --

CHAIRMAN NAKAMURA: I don't recall what the action of the board was. I know it was in the finance committee, is my recollection, and the finance committee did take some kind of action, but what that action was I'm not sure.

MR. QUINN: I guess I show no money available for that project at this point. It's either spent or encumbered. I guess, Herb, you need additional money to complete this?

MR. KOGASAKA: Yes.

MR. QUINN: He is trying to respond to your question, Mr. Chairman, that he may be coming back.

CHAIRMAN NAKAMURA: You need to make that request. If you need additional funding for whatever purpose, you need to make the request. Any other comments on these projects? Herb?

MR. KOGASAKA: I would like to raise the issue that the project on the Upper Kula transmission line, Ulupalakua to Kanaio, options on the --

CHAIRMAN NAKAMURA: My comment on this is that this says the department presented options to the Capital Programs Committee and that is in our current statement. There's nothing that was presented to the Capital Programs Committee. As far as there may have been some discussions with individual members; however, my recollection is that there has never been any kind of a formal request for action on this project.

MR. CRADDICK: We'll do that then.

CHAIRMAN NAKAMURA: Suggested at the appropriate --

MR. CRADDICK: Yeah.

CHAIRMAN NAKAMURA: Okay. Any other questions or comments? Jonathan?

MR. STARR: I want to take up with where Bob left off before. In some casual conversations I had with a number of council members, they're all kind of asking, you know, How are you doing for money? I said we need an increase, and they said to do it this year, don't come back to us next year, election year.

I really feel that this is the year to act and that they'll treat it favorably. So whether we go after the development fees or rates, my feeling is we should go after both and settle for one -- a good increase in one of them or something. I don't know, this is the committee -- how to start the ball rolling, but I think we should.

CHAIRMAN NAKAMURA: I think these items are presently Mr. Rice's finance committee, both the study on -- the reserve study is there, together with -- I believe there's some other financial issues in the committee that would impact on the rates and the fees. That's probably the appropriate location for that discussion. Not wanting to take Mr. Rice's prerogative.

Any other questions or comments? One question, what is the status of that Molokai project, that Iliahi stream resurfacing?

MR. KOGASAKA: We're going to try to get informal repropoals for the resurfacing work and contract with them, the paving company.

CHAIRMAN NAKAMURA: I thought we had a proposal.

MR. KOGASAKA: I think --

MR. CRADDICK: There's a time limit on that.

MR. KOGASAKA: I think we need three proposals. We were able to get two. Anyway, we're pursuing that paving contract.

MR. CRADDICK: What it is, Howard, there's a time limit, and with the added cost, it takes it over the 25,000 that we could have issued with the requisition. Now we have to make a contract. So if we can't get the third price, then we'll actually have to make a new contract for it. We can't do it by requisition anymore. But I will say -- well, anyways,

never mind, I won't say. That's what we're doing.

CHAIRMAN NAKAMURA: Okay. Perhaps corporation counsel can help you again determine the most expeditious way of moving ahead.

Let's move to page 6, reliability. David?

MR. CRADDICK: I believe that generator, the specs are ready for that, so that should be going to bid shortly.

CHAIRMAN NAKAMURA: What was the -- these have no estimated costs?

MR. CRADDICK: That was \$100,000, I believe, that generator.

CHAIRMAN NAKAMURA: \$100,000?

MR. CRADDICK: Yes. Is that the bid item there?

MR. QUINN: We budgeted 100 for it.

CHAIRMAN NAKAMURA: The specs are prepared and you are ready to go out to bid?

MR. CRADDICK: Right. On the Keanae well, Herb?

MR. KOGASAKA: The designing is being worked on right now and we hope to go to bid by the end of this fiscal year, if not sooner.

CHAIRMAN NAKAMURA: What is the amount on this?

MR. QUINN: 200 in the appropriation.

CHAIRMAN NAKAMURA: 200. Any questions on these reliability projects?

Facilities. Maybe you can give us the dollar amounts for all of these projects.

MR. CRADDICK: I believe all three of those were around the order of \$50,000.

MR. KOGASAKA: Chlorination retrofit was 40,000.

CHAIRMAN NAKAMURA: What's the status?

MR. CRADDICK: I'm pretty sure that one was complete. The Alaeloa one was complete.

CHAIRMAN NAKAMURA: Is that right, Mike?

MR. QUINN: I still show a balance of 40,000 available. Alaeloa?

MR. CRADDICK: Yeah. I'm pretty sure that one is complete.

MR. KOGASAKA: Next one.

CHAIRMAN NAKAMURA: What is this, complete or is it not complete?

MR. CRADDICK: It may be that just the materials are ordered and it's not installed yet.

CHAIRMAN NAKAMURA: And then Napili well A.

MR. QUINN: 35,000 budgeted. 35,000 still available.

MR. KOGASAKA: That's not completed yet. We're working on that GAC band right now. And they were going to do the work.

MR. CRADDICK: Under that contract.

CHAIRMAN NAKAMURA: Kahana Valley.

MR. QUINN: \$50,000 appropriated, still out there.

CHAIRMAN NAKAMURA: Is there anything happening on this? Are you hoping that it dies and goes away?

MR. CRADDICK: That's what we're hoping.

CHAIRMAN NAKAMURA: The issue. I'm not making any reference to any personalities. Nothing is happening on this?

MR. KOGASAKA: No, we have been contacted by the person. We're trying to work on finding time to work on that.

CHAIRMAN NAKAMURA: Is this something that the department has to try to resolve, or is this something that the corp counsel needs to resolve, or both?

MR. CRADDICK: What it is, is he's trying to get us to resurvey the state property and give him some portion of it and do some surveying for land that belongs to his wife. It's up near our intake in the valley, and because he never had a survey on it, he wants to know where it is. And they don't really have anything to do with our facilities down there.

The only thing is, is that we have a pipeline that apparently is not in our easement, and quite frankly, what we should be doing is using this money to condemn where the pipeline is, because it's not -- it will cost us the whole \$50,000 to dig it up and relocate the thing where he wants it relocated.

MR. KOGASAKA: I think we need to make an easement map, that's one of the items. But there are numerous other items that he has requested.

CHAIRMAN NAKAMURA: Any questions on these items? Efficiency. Give us the dollar amounts.

MR. QUINN: I show two appropriations of \$30,000 still available for the manhole key system and a \$40,000 appropriation still available for the flow meter installation. So \$70,000 for those. Money is still available as far as my records go.

CHAIRMAN NAKAMURA: Status?

MR. KOGASAKA: We have not gotten anything on that yet. We need to select the site, the appropriate site.

CHAIRMAN NAKAMURA: What's the nature of this project?

MR. CRADDICK: Flow metering in the system in order to track our water loss and stuff like that within the system, so we know if past this point so much water is going by, and we're billing 90 percent of that or 75 percent of that or whatever.

Basically, what has really been going on is the crew has been fairly well used up and getting those two Kanoa wells

operational and keeping them operational, because we are running them on diesel generators, so it's taking time doing that, that things have fallen by the wayside.

CHAIRMAN NAKAMURA: The funds are to acquire the meters and to have our own staff install them?

MR. CRADDICK: Right. I believe they might have the meters already. I think it's more the manhole, things like that, getting it installed.

CHAIRMAN NAKAMURA: The manhole?

MR. CRADDICK: You have to dig down --

MR. TAKITANI: Mr. Chair, one question along that line. What is the figure we're currently thinking for and unaccounted for water -- the electronic metering system, the badger meter was supposed to help us identify the areas of water loss. Where do we stand on that?

MR. CRADDICK: Using real gross numbers for the annual report, what's pumped versus what we bill for is around 9 percent. I think Ellen is showing different numbers in more detailed studies, but generally overall system wide it's about 9 percent. For some reason Molokai is extremely high up in the 20 percent range. Some systems are lower than that.

CHAIRMAN NAKAMURA: Hydraulic model.

MR. QUINN: I show \$200,000 appropriated and \$37,890 expended to date.

MS. KRAFTSOW: We accepted the phase one initial construction of the model report in January and we have drafted the specs for the calibration and expect to bid them in March, or actually, bid them within the -- send them out for bid within the next few months -- a few weeks rather.

MR. CRADDICK: And awarded in March.

MS. KRAFTSOW: Yes.

CHAIRMAN NAKAMURA: You expect to expend all of these funds?

MS. KRAFTSOW: Yeah, actually, right now it's looking like -- it should be pretty close, maybe even go over a little, but we'll try not to. We're looking at possibly breaking it into phases because they -- in discussions with the consultant, they think it's a bit much to bite off all at once, what we're trying to do. So we may break it into a two-year project.

CHAIRMAN NAKAMURA: What will be the benefit to the department upon completion?

MS. KRAFTSOW: Many benefits. I think ultimately we'll be able to look at what happens when we put certain pipes on or take certain pipes off or size different tanks differently. We're having a demand model constructed also, we'll be able to tie the two together and look at the scenarios for demand growth and pricing structures.

It should be -- I would think it would be very beneficial both for project planning and design and for maybe eventually developing cost estimates, rates.

CHAIRMAN NAKAMURA: Any questions on this? SCADA system.

MR. QUINN: A current year appropriation of 50,000 and \$39,338 still available.

CHAIRMAN NAKAMURA: Status?

MR. KOGASAKA: They are installing the SCADA system in different water districts. I'm not too sure how far along they are right now.

MR. CRADDICK: They are working in the Upcountry area right now. I'm sure the bulk of that will be spent by the end of the year.

CHAIRMAN NAKAMURA: What information does this provide?

MR. CRADDICK: It's not -- well, it monitors the entire water system. Other than Upcountry, that's the last place we have not completed. It gives the tank -- we can operate the pumps from wherever. The way it works is this is monitoring the system, the alarm comes in, somebody can check

why there's the alarm, like if a tank is starting to go low, we catch it before the thing goes empty and do something about it, hopefully.

It saves the guys from having to drive out and look at the tank and see what's wrong. And you can see it right there on the screen. I guess the big advantages of it over other SCADA systems is you don't have to have somebody sitting there at the table looking at it. It actually notifies you, comes up on the pager, the guys have laptops, they open them up and see what's going on and maybe correct it right from wherever they happen to be.

So it allowed us to take time -- what has shown up on the time sheets previously as miscellaneous work, going to look at the tank and things like that, to doing -- actually doing maintenance type of work. For instance, we got that paving machine and we have this vacuum to go and actually do maintenance work on the valves, which has really never been done before in the system.

We're actually able to get the guys to do real maintenance work instead of -- the analogy would be the chicken running around with its head cut off.

CHAIRMAN NAKAMURA: Any questions or comments?  
Alternate energy sources.

MR. QUINN: Appropriated 500,000, still available.

MR. CRADDICK: The estimate, like I said -- we said was 900,000 and I can't really justify spending any part of that for that amount of money. Now, if we see that the improvements that they are talking about for Hamakuapoko can carry on to Kamole weir by only adding, say, a couple of hundred thousand more, then it may be worth it. But they have not completed the study on what they need to do for Kamole weir.

CHAIRMAN NAKAMURA: Jonathan?

MR. STARR: Where is that coming from?

MR. CRADDICK: Puunene Mill.

MR. STARR: They are not running it from Puunene, it has to be somewhere -- I assume it's in Paia.

MR. CRADDICK: To tell you the truth, I don't know enough.

CHAIRMAN NAKAMURA: So you've proceeded to the point of having them identify their potential locations where they can provide power and you've identified the locations where you need power?

MR. CRADDICK: Yes.

CHAIRMAN NAKAMURA: And they have come up with some specific proposals to provide power to those locations?

MR. CRADDICK: Right.

CHAIRMAN NAKAMURA: The estimated cost of that is 900,000?

MR. CRADDICK: For Hamakuapoko and Pulehu area.

CHAIRMAN NAKAMURA: Do we have an analysis as to what our savings would be?

MR. CRADDICK: Well, the Hamakuapoko wells are -- total installed capacity horsepower is 500 horsepower, so it wouldn't justify just the interest alone on that other money under the current operating range, it would not justify doing it. You need to get something to Kamole weir and then do some study at that point.

CHAIRMAN NAKAMURA: At this point, it's kind of basically stalled, or is anything really happening?

MR. CRADDICK: I think they are looking at Kamole weir on what they can do, but we're talking about two megawatts of power there. So that's a fairly substantial demand when that's on line.

CHAIRMAN NAKAMURA: So this is still ongoing then?

MR. CRADDICK: Believe me, their study is very detailed. They are very detailed down to the nuts and bolts that they need to put all of this in. The work they have done has been quite extensive so far, but they are the ones doing it.

CHAIRMAN NAKAMURA: HC&S is doing it.

MR. CRADDICK: Right. It's not costing us anything to get that. I suppose we can go out and hire somebody to go do that if we wanted to move it faster.

CHAIRMAN NAKAMURA: Any questions or comments?

MR. TAKITANI: Is this looking at alternate sources also, not only fossil fuel?

MR. CRADDICK: All of these we would be required to have our own standby backup power. It's not firm power that we're getting from them. So that issue is still there. But we do have the two megawatt generator at Kamole weir. We do have generators for Hamakuapoko. So it's not an issue. We do have the generators already for the facilities.

CHAIRMAN NAKAMURA: Any other questions or comments on this CIP status report? The chair's intent would be to do this perhaps orderly, Herb and Mike. And as I said, I think if you have projects that you need authorization on the pipeline replacement, I suggest you initiate those relatively quickly. Jonathan?

MR. STARR: There's one item I seem to be missing. Wasn't there a new well for Hana in --

MR. CRADDICK: I know we said we would hold up on that until we had a chance to talk with Hana Ranch and now people are talking to them on their own. Different people talking.

CHAIRMAN NAKAMURA: There was an issue on location; right?

MR. CRADDICK: Yes, because it doesn't make sense for us to do a well when there's already one there. If we could just work to integrate the system there, which one to provide backup for the other. There's not any big demand there. It's more just integration of the system to utilize each other's facilities and give them the comfort level, you know, if they want to do some kind of subdivision, that we're not going to say no, you can't use the water from the well.

CHAIRMAN NAKAMURA: One general question, David. In terms of the capital improvement program, is there one agency

that is in the department that is responsible for overseeing the entire program or is it basically separated out to different entities once the budget is approved?

MR. CRADDICK: There are things that are different entities. Some things are with the field operations people or plant operations, but the bulk of it is with engineering. Those meter things, things like that would be with plant operations, and SCADA is with plant operations. Soda ash retrofit, plant operations.

CHAIRMAN NAKAMURA: The general responsibility for seeing to it that the projects are implemented or to oversee the process, would you say that's engineering?

MR. CRADDICK: Yes.

CHAIRMAN NAKAMURA: Okay. Any other questions or comments? If not, thank you for coming. The meeting is adjourned. (The deposition concluded at 10:50 a.m.)

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