LANA`I PLANNING COMMISSION
REGULAR MEETING
DECEMBER 17, 2008

APPROVED 01-21-09

The regular meeting of the Lana`i Planning Commission was called to order by Chair Sally Kaye at approximately 6:02 p.m., Wednesday, December 17, 2008, in the Lana`i High & Elementary School Cafeteria, Lana`i City, Hawaii.

A. CALL TO ORDER

Ms. Sally Kaye: Call the December 17th Lana`i Planning Commission meeting to order. Let the record show we have quorum with Commissioners Rabaino, Zigmond, Mano, Ruidas, Kaye, Endrina, Castillo and de Jetley. First on the agenda is the approval of the minutes from November 19th. I sent around some corrections. I know Bev did as well. Does anyone wants to make a motion?

B. APPROVAL OF THE MINUTES OF NOVEMBER 19, 2008 MEETING

Ms. Beverly Zigmond: I'll make a motion that we accept the minutes as amended.

Ms. Alberta de Jetley: I second the motion.

Ms. Kaye: Okay. Is there any discussion? Any additional corrections? Okay, all in favor? Motion carries. Minutes are adopted.

It was moved by Commissioner Beverly Zigmond, seconded by Commissioners Alberta de Jetley, then unanimously

VOTED: To approve the minutes of the November 19, 2008 meeting with the amendments as noted.

C. LANAI WATER WORKSHOP NO. 5

1. Castle & Cooke Resorts, LLC

Ms. Kaye: Next on the agenda is our, to this point, last Lana`i water workshop. Castle & Cooke is making a presentation tonight. I don't see Joe Kaakua. He put this off for a month because he was going to be here tonight. Is he not available?

Mr. Clay Rumbaoa: Good evening Madame Chair and Commissioners. My name is Clay Rumbaoa with Castle & Cooke, Development Department. Thank you for having us tonight. And as part of our workshop presentation, we've broken it down to three parts. The first part will be presented by Mr. Bryan Plunkett, Conservation Manager, who will talk about the forest up in the hale. The second part will be done by Mr. Les Jeremiah, our Golf

Superintendent. He'll talk about our efforts on the Manele Golf Course, Koele Golf Course and Cavendish. And the last part will be our water presentation, and Mr. Kaakua should be here. He's not here now, but I'd like have us start with the Conservation if you don't mind.

Ms. Kaye: Okay. Just one second then Clay, that sounds great. I see members of the public here. Let me just explain how this process is going to work tonight. The presentation is going to occur. If you have questions going along – Leilani, raise your hand, has some paper – you can submit them in writing. When the presentation is done, then the Commissioners will have first crack at asking questions. After which, we'll have public testimony. And everyone will have about three minutes to speak, and at which point you can talk to us about questions you'd like to have answered. And after that, we'll go back to the Commission to see if there are additional questions. Okay? Does that sound alright to everyone? Thank you Clay.

Mr. Rumbaoa: Okay, without further ado, I'd like to introduce Mr. Bryan Plunkett.

Mr. Bryan Plunkett: As was mentioned, Madame Chair, I'm Bryan Plunkett, the Conservation Manager for Castle & Cooke, as well as the Manager for the non-profit organization Lana`i Institute for the Environment. And I'll be talking about watershed protection work that has been accomplished up to now. And again if there's questions later on, we can address that.

So as you can see the watershed protection program includes fence construction. And 7.5 miles was increment one was completed some time in 2005. And as you see the cost is pretty expensive building fence, and more expensive now. And increment two, phase one, which is what is projected on the screen today, tonight, 3.5 miles – approximately $27 per foot – costing that $506,000. Increment two, phases two and three, that's in the process of trying to get a grant, and then Castle & Cooke will match the grant. Often times it's a Federal grant that requires a 25% matching of funds. And again, when increment two, phases two and three is completed, they will need three deer guards to complete the enclosure, and we hope to complete this project next year. Increment three, the last leg of the project, is 3.7 miles approximate that goes through many of gulches on the east slopes of Lana`i hale. And it's approximately costing $45 per foot. And again, we're looking at projected 2010. And depending on how quickly we can get grant money and matching funds.

Part of the watershed protection – once an enclosure is completed, the feral ungulate kicks in. As you can see the axis deer and the mouflon sheep are included in the first increment. And we have a night hunting permit. And we have, as shown on the screen, 16 Lana`i residents participate. We had some additions just recently. They signed up to help in this eradication process. And 117 axis deers and mouflon sheep – I don't have the exact

breakdown of axis deer or mouflon sheep –but mostly, axis deer. And most of this hunting is with the intent of retrieving the carcass and then salvaging the meat. So it's a win-win proposition when the residence go out and hunt, they get to keep the meat.

The final phase when we got rid of all the feral ungulates and they won't destroy the plants that you start, we're going to start the reforestation. And right now the evidence that resident hunting program, the damage control, the night hunting program is really kind of working. One of the hunters that recognized that the Uluhe on the slopes of the mountains are no longer showing any deer trails. In Kailena, we was looking the other day, and we recognized that there is really lack of deer running through these Uluhe ferns. So, it's showing an effect at this point. So when the reforestation program kicks in, our ongoing was planting just pine trees. They're less likely to be eaten by the deers. It's not one of their favorite foods. And we planted among the uluhe ferns, right at the ridge. And these pine trees, Cook Pines, is planted to replace the dying and weather beaten Cook Pine there. And we know that this is an important factor in capturing fog drip, so we have an ongoing program to go and plant more and more Cook Pines and the ridge along Munro Trail.

And also included in the reforestation efforts, the Koa Trees or the Native Hawaiian Koa. We're working on a small scale forest right now to plant some Koa Trees about 10 feet apart, and maybe some place down the line to plant them real close together that it will grow tall and big and we can harvest it and make a canoe out of it. That's way down the line. But that's part of the reforestation effort is to plant these Native Koa bidens. At current, we have Bishop Museum grant, a $20,000 grant, to plant about 2,000 Bidens all planted in the Awehi enclosures and in other areas where they can increase the population. And Bidens is an endangered species. And the A`ali`i is a common native plant that you see all over along side the Keomuku Road and Kaumalapau Road and Manele Road, they're growing every where. So that's really the main plant that we'd like to continue to propagate on the east side, the dryer side since they're more hardy and easier to grow.

The Loulu is an endangered species. The Kou, again, is an ocean plant, but it can survive in different areas within the city limits. Right now, we have some Koa trees that were propagated. We put a fence in and we're about to install the irrigation, so that small forest above Koele golf course is going to be started pretty soon. The Awehi enclosure, I'm not sure if you folks are familiar with it, but if you ever go down Awehi Road, you come on to the opening, once you pass the forest and it opens up on the corner, you see this fence. And it was built by DOFAW for the US Fish and Wildlife. About 232 Nau plants was planted there, but they all died. Even with a water system and all of the things that we tried to keep it going. So it wasn't the best project. So we're going to replace that with Ko`oko`olau, with the Bidens, and some A`ali`i and hopefully they'll survive. But what you're looking at on the screen there's the pine trees that have been planted – some of them over 10-years old, and they're slow growing because of the conditions. The soil

conditions are not the best. The winds are not the best environment. And in the back, if you if you look at the top photo, right in the back, the smaller pine trees, you see a band, a white ribbon. That's our fence, our seven foot fence, and the white ribbon is to protect from the `Ua`u, the Hawaiian Petrel, from hitting that fence when they fly in to nest.

In this past summer, we had six students from the Lana`i High & Elementary School. They worked with my staff, and we did some planting of pine trees up at the hale. We planted Koaia, Acacia Koaia, which is a dwarf native Hawaiian Koa in the Palawai Basin. We have a grass land reserve project that requires we have a wind break so we decided to plant some Koaia, Acacia Koaia. We had a lot in the nursery that wasn't being used by development, so we planted that as a wind break as well as a border to our grass land reserve. And using the students, we paid them a small stipend, which they blew real quickly. But they enjoyed it. We used them to, as I mentioned, planting pine trees up in the hale, planting the Koa trees. We collected Koa seeds. They collected some A`ali`i seeds and propagated it at our nursery at the old piggery. And as I mentioned, the grass land reserve program, it's about 4,800 acres in the Palawai Miki Basin and Pawili, the old piggery section. And part of the program requires that we have a fuel break. And a fuel break is different from a fire break in that you don't have bare ground on the surface. So they don't recommend bare ground because of soil erosion so we mow all these fuel breaks. But it didn't happen in the last fire because the winds were 40 miles an hour gust. But on normal conditions these are 40 foot fuel breaks that will work to stop the fire from jumping across and entering into more sensitive areas of the city.

And also part of the Conservation Natural Resources Department, we repair most of the roads and we receive a grant from the U. S. Fish and Wildlife. My predecessor Darryl Stokes got his grant and it was 75%-25% match, $50,000 grant to fix all of these access road. Basically it was to assist hunting efforts and anything that we can help hunting on Lana`i will help reduce the damage to the forest and all the areas that were sensitive for reforestation. So they gave us this money and we used it to fix all these different trails. The main trails, Munro trail, and Keomuku Road, Kaunalu, Awehi. We also in the past fixed all the trails that go up off of Keomuku Road - Waiwaiku, Puunene, Koalana`i. So all of these roads we fixed for not only the hunters, but for tourists and others who just want to travel and look at the beauty of Lana`i.

As you can see the grant monies that we received on this past year. U.S. Fish and Wildlife had a WHIP or private stewardship grant for $245,000 with a matching 25% by Castle & Cooke. The Maui County provided $100,000 with no matching. DOFAW provides a 50/50 match, $75,000 for the forest stewardship program. And as it shows that Castle & Cooke does the matching for these funds. So the $880,000 in the past year, which we spent.

As was mentioned that the road repairs, from the U. S. Fish and Wildlife it was called a Lana`i Hunting Initiative, East Lana`i Hunting Initiative. And we had two $50,000 grants.

We used up one in the previous year. And this year we took up the access from the last grant and this year's grant, and fixed the bulk of the roads that's used by everyone for recreation as well as hunting and tourists.

And that is it for me. Thank you.

Ms. Kaye: Okay Bryan, I'm sorry, since we're going to have three very separate presentations, I wonder if we could just keep you there for a second and ask a couple of a questions on the slides and then I'm sure the audience may have some questions for you later.

Mr. Plunkett: Okay.

Ms. Kaye: Okay. While your presentation is up. So Commissioners?

Ms. Zigmond: Madame Chair?

Ms. Kaye: Yeah.

Ms. Zigmond: Bryan, thank you that was very informative. My question is you said increment to phases two and three, currently there's no funding. You're anticipating a grant?

Mr. Plunkett: Yes, we applied WHIP program with NRCS, USDA, and that's another 75%-25% matching. They provide, right now, they're trying to adjust the dollar per foot which is real low. It's about $15 per foot. Because it is low, it's costing us $27 a foot just to construct it. And they know there's a disparity. It's an old ratio that they've been using so the person that I'm working with, James Eno, said he'll come back in January to work on this again, the WHIP program and see if we can get more money. But whatever they provide, then Castle & Cooke will match, and hopefully we have enough funds to finish the increment two.

Ms. Zigmond: My question was how likely are you going to get that funding given the fact that everybody is in a budget crunch these days?

Mr. Plunkett: The Feds I think can print a lot of money. There's no indication from the Federal side that there's a short fall.

Ms. Kaye: Could you just – I'm sorry - did you say WIC?

Mr. Plunkett: WHIP. It's the Wildlife Habitat Incentive Program.

Ms. Kaye: Okay, and that's a Federal Program?

Mr. Plunkett: Correct.

Ms. Kaye: So to follow up on Bev's question. Do you have budget for next year, or the year after to –? You have all your sources identified? At what point in your process?

Mr. Plunkett: Well, we joined the HAWP program which is Hawaii Association of Watershed Partners, and we're all in the same boat trying to find monies for our projects. And we're looking at the same tie. And where ever there is funds, we apply for and hopefully we get it. But Lana`i has always been high on the list because of the endangered species that we have. So if there's money out there and we apply for it, we should get it.

Ms. Kaye: And can I ask – you talked about the ribbon that's on the fence to protect the `Ua`u from hitting it. How many have been taken? Do you have any idea?

Mr. Plunkett: Jay Penniman would have a better idea. When they studied it, they did find `Ua`u's that were killed by the fence. That's why they put the ribbons in there. But I don't have the figure. Jay Penniman can answer that.

Ms. Kaye: Yeah, actually, we asked him that question last time. I just wondered if you had a different perspective because you're up there at different times.

Mr. Plunkett: We defer to Jay, the expert.

Ms. Kaye: The population of the feral ungulates, and the enclosure that you've already completed. What would you estimate that to be?

Mr. Plunkett: That's hard to say. We were hoping to have the DOFAW do their helicopter aerials, and we were going to ask them to do an extra survey, but they ran out of funds. So they had to do everything on the ground. So this year, this past year, they did a survey, a guestimate on the ground so we couldn't determine what was left in the fence. The fence area is so much gulches and forest, so it's really hard. We had just last month 97, I think, hunters, who are resident hunt that went into the first increment one, and they got only 15 deers out. So the population is dwindling. There's not much food there for the deer to eat. So we really want to get rid of them as quick as we can so that they don't eat other stuffs.

Ms. Kaye: Then I would like to ask you because I made note that when Jay gave his presentation he mentioned that you couldn't get too many hunters and that a real cooperative effort would be needed to keep this population down. And you mentioned that you have 16 hunters signed up. Are there any efforts to increase that number?

Mr. Plunkett: Well right now we had about four or six more added. But again, it's not an easy thing to go hunt up on the ridges and you have to hike. You can't just drive up and shoot one deer and throw it in your truck. You have to go out and retrieve it, de-bone it, pack it out. So as much as possible we encourage that. But we also know we can shoot the animal and not retrieve it if needed. So it's not an easy process. Even the local residents get a hard time.

Ms. Kaye: Okay, one of the presenters mentioned that hunters – and this is a quote – say in the safety zone, the population of the sheep mouflon is expanding rapidly, and I'm just wondering who monitors? Is this just DLNR?

Mr. Plunklett: The DLNR, DOFAW, and that's talking about the Palihua Road and along the met tower area so that's outside the watershed. But we're trying to address that, trying to change some things, work with them to make some changes. But Mr. Murdock put in that boundary, that large boundary, so we have to work around it.

Ms. Kaye: Thank you Bryan. Anybody have any additional questions for Bryan at this moment? Gerry?

Mr. Gerald Rabaino: Bryan, on your second increment, yeah, that you have over here, and you have phase, where the deer guard is located, you have one, two, three, on the fourth bench. My question to you, on the northern side of that area, how is the deer population versus the (phonetics) population of that section of the island? Has it increased and is there movement? Is there movement where you have those fences keeping them out of Lana`i hale area?

Mr. Plunkett: Right now the hunting in that area, on fourth bench and right above it, it's not enclosed yet. So the north side, which is increment one is enclosed. We're still hunting. We're allowing hunters to go at night, and anything comes down to the fence. And it's a real heavily forest area. It's not easy to hunt in that area. But night time, they may come down. The brush is right up against the fence so it's even hard to hunt at night. But we know that the deer population is constantly moving. Any time you put pressure, they move some place else. The weather changed, so they now moved down further towards the ocean so they don't have to come up so high. So they're constantly moving. You just can't keep going back and expect to shoot a deer every time at the same place.

Mr. Rabaino: Okay. I just wanted to know the movement going around. In your increment one, you have it completely fenced, right? So there's no movement from that area going east or west of Kuakili Ridge.

Mr. Plunkett: The ridge that the fence goes along is along North Haola, and it head right above Maunalei. So inside from the clubhouse at Koele, goes circling all the way down to

Maunalei, up North Haola and then around back down to Hi`i. That whole section – nothing is moving in or out, so it's contained in there. And we know that the hunting effort has affected the population. Now most of the hunting is done on the west side. I think people are afraid to go up on Munro trail at night. I don't know why. It's just a road.

Mr. Rabaino: On this map that I have here, under phase one proposed in increment three, you have blue line going to the northern side of the island, and I believe that side is just below Puuleleu enclosure.

Mr. Plunkett: Yes.

Mr. Rabaino: How is that area? Is the fence completed in that location?

Mr. Plunkett: No. That's the last phase. We're still surveying, ground surveying, and trying to map out the fence line. So we haven't even started. We're not even applying for money for that section because we've got increment two, phase one and two to complete, and that's 2.8 miles. But increment three, phase one, which is the last leg that will enclose the entire Lana`i hale, that's the hardest, the most expensive fence that's on that side because of the gulches. So that the $45 a foot – about $900,000 going cost to build that fence.

Mr. Rabaino: Because the last meeting that we had, it was mentioned by the individual that was giving the speech, he said they were eradicating the strawberry guava in order to save the lower foliage which is the ferns and et cetera below the pine trees in order to absorb water retention.

Mr. Plunkett: That's just a habitat conservation plan to mitigate the met tower, and Jay Penniman's crew is working on three acres, maximum six acres. And they're cutting out strawberry guava to allow the uluhe fern to reforest that area so it can become a habitat for `Ua`u. So that's just a small section. I mean Lana`i hale has acres and acres of that strawberry guava. So that's going to take a huge effort. After the feral ungulates removal, when we go into the reforestation phase, that's going to be part of it, to remove the alien species. And that's the number one problem because they grow so prolific and so tight that nothing grows underneath it or through it.

Mr. Rabaino: Thank you.

Mr. Plunkett: Thank you.

Mr. Stanley Ruidas: Bryan, you guys plan on putting water trucks below the watershed areas like for the animals to stay down side?

Mr. Plunkett: I have been having discussions on that and I know that in the past there are

water troughs from the south side of Munro trail going around to Naha. And those were broken, so we've been talking about trying to get it back up again. But the water source for those troughs, if we put it up on the south side, there is a water source. But on the north side, from Koolana`i going back, the Maunalei stream, the Maunalei water source has been damaged so there is no water source down that side. So unless we fix up Maunalei gulch water supply that goes into that tank and feeds down the gulch, there's no way we can get water to that side, unless we truck it in. And that is an expensive process. But there is other sources that's going on that it may happen.

Mr. Ruidas I would think, you know, like something potable water trucks with those black tubing running down you can branch out and feed the other water trucks.

Mr. Plunkett: Yeah, an estimate we got was $2,300,000.

Mr. Ruidas: For the system?

Mr. Plunkett: For the system.

Mr. Ruidas: So I figure – how much you think the deer drink? Maybe one water truck, 1,000 gallons a week. How much are you guy pay for water?

Mr. Plunkett: I don't know.

Mr. Ruidas: . . . *(Inaudible)* . . .. .

Mr. Plunkett: That's a thought. I mean, it's gone through our minds, and the figures were put out there. About $2,300,000 for a combination of things. The actual water trough system, I think, is about $250,000, but there's other things involved.

Mr. Ruidas: It seems to me, it wouldn't cost that much.

Mr. Plunkett: The Drisco pipe, we had an estimate just to run it from the stables, if there was a problem for feeding the current GMA. From the stables, are an inch and a half, that black pipe, to go 2. something. 2.1 mile is $20,000. So it's not cheap pipe. That pipe is expensive.

Mr. Ruidas: The water tank on top your duly? How much gallons?

Mr. Plunkett: That's 500 gallons.

Mr. Ruidas: It's 500 gallons. So you go out everyday, 500 gallons, without running that, that's probably cheaper.

Mr. Plunkett: Probably, but again, we need staff doing that.

Mr. Ruidas: Okay Bryan thanks.

Mr. Plunkett: You're welcome Stanley.

Ms. Kaye: Bryan, one quick question. Is it possible for you to email your slide presentation? We''ve been getting a record from every presenter, and the Planning Department keeps it for the record.

Mr. Plunkett: That's James Johnson's program.

Ms. Kaye: Yeah, if you could – you and I had been e-mailing so that's why I was suggested it. James, I'll give you my email. That would be great and then I'll forward it to the Planning Department. Second thing I wanted to say is we have heard from almost every presenter we had, from the USGS, through the Commission on Water Resources Management that your efforts and Jay Penniman's efforts are so critical to the future of this island, and I think that I can safely speak for the Commissions that if there's ever anything we could do to write a letter in support of your efforts. We actually had one former Commissioners recommend that any permit that came before this body should have an accompanying progress report on reforestation and your conservation efforts. So thank you very much.

Mr. Plunkett: Thank you. I appreciate your support.

Ms. Kaye: Commissioners, any other questions?

Mr. Les Jeremiah Jr.: Good evening to everyone. I'm the Golf Superintendent for the two golf courses on Lana`i, and Class A Member of a World Wide Organization of Golf Course Superintendent of America.

Ms. Kaye: Can you tell us your name please?

Mr. Jeremiah: My name is Les Jeremiah Jr..

Ms. Zigmond: . . .*(Inaudible) . . .*

Mr. Jeremiah: Les Jeremiah Jr. So I just put together this real brief informative things that we're doing on the golf courses, and just a chance to educate anyone that wants to know about what goes on the two golf courses here on Lana`i. So first of all, we're starting off with Cavendish. Cavendish, we went out and we upgraded a lot of the controllers on the Cavendish golf course. We know it's special to the community. So we went out. Before we put these clocks in place, it was really an older system, and we put these clocks in place

so we could better control the water. And right now our schedule basically is every four days on the Cavendish. And in general for growing turf or growing plants in general, you want to water deep and infrequent. So we're going every four days on the Cavendish golf course at this time.

Koele Golf Course totally supported by R1 water. We have a plant. Most of you guys know where the sewage treatment plant is. It's behind the HR Building Fire Station and the County plant. So Castle & Cooke, we have a contractor that turns the sewage water from the County into R2 stage water. But the County takes in raw sewage and then it converts into a stage which is called R2. And before it can be used on the golf course, it's turned into an R1 type of water. So anyway, that's our main source of water for Koele. Our only source of water for Koele.

We put some monies in to weather stations. I remember speaking in 2002 about this. And what it does is it collects data, about rainfall, rain wind, and just real technical with solar radiation and evaportranpiration – how much the water evaporates from the plant. How much it evaporates from the environment – and we take this data to help us manage the water on a daily basis.

What we also do and it's not really something that homeowners are aware of, but it's what we call soil surfactants. And because Koele is so limited with the water that we receive from the R1 plant, what it does is we will go ahead and apply this out with our sprayers on the golf courses, on the fairways and some of the greens and the t-boxes. And what it will do, it will actually take the water droplet and then enhances its ability to penetrate through the grass, organic massing down into the soil, and work its way downwards. So it's a pretty interesting stuff. And also we really tried to – we do take care of our pump stations, water wells and transfer pumps. It's a real complex process the way that the water is delivered to both of the golf courses. So they really have to be maintained at a high level. So we spend a lot of time and effort for that.

Irrigation summary of Manele. The main water supply for Manele is from a brackish well, or a few different well actually. A small percentage of the irrigation supply is reclaimed water which comes from a plant that's above our maintenance shop in the Manele District. And also we will spend money to add soil surfactants such as Tri Cure. It's just a name of a product. There's many different products on the market that will do the same thing. But to help us maximize the water that we're allowed on a daily basis. And then again, we need to spend money – we're taking care of our pumps and making sure that the water is delivered properly. Because if the pressure is not right, then the water is not being efficient on the golf course. The sprinklers aren't putting out what they need to be putting out, and we've had a lot of inefficiencies and we want to make sure we're putting the adequate amount of water every area that's assigned on the golf courses.

The sprinklers are not the kind of sprinklers that someone would just turn by hand, or hook up to a water hose, or something like. It's way more complex than that. Each of these heads range maybe $135 each or above. And what happens is the amazing thing with these heads is that – both the golf courses in times we have wind problems as you can see in the top picture here. There's adjustments, trajectories here, so if the wind, depending on where it's blowing, you can actually adjust the head to spray under windy areas so we can really maximize and be efficient with the water. So the technology on the heads for the golf courses in general is really stepping up. The nozzles, sometimes, certain areas, will need a little bit more water. So what we do is you can inter change these nozzles so they can put out more. Or maybe you're putting out too much, and maybe we can lessen the amount of water that goes down per certain amount of square feet. It's really amazing the technology that the manufacturers are coming up today and these times.

The irrigation satellites. Again, it's not a matter of a guy going out, hooking up to a water hose and just turning on spiquets. It's top of the line. We call it irrigation satellites. What this allows us to do is – you see the wires in here – these wires will end up being anywhere from 200 to 300 to 400 feet going out into the field to individual sprinkler head, and what we can do is individually adjust each sprinkler. If one needs 30 minutes, one needs 32, one needs 35, we'll be able to do it individually. So the technology in here is just great. The other thing is, let's say you see an area that needs to be watered 30 minutes depending on the soil type. It needs the 30 minutes but it just can't take it in all at once. This satellite, you can actually program it to let's say it needs 30 minutes. It can't take it all in at once, so what you can do is split it up, to water two intervals at 15 minutes. Come back an hour later or two hours later, to get that 30 minutes, but not being inefficient where the water is sheet flowing on the top. So the technology is very, very advanced compared to a residential type system, of even a hotel system.

What most of you guys don't know is that the two golf courses, and a lot of the high end golf courses, or most of the golf courses coming up in the State, run off a Microsoft base program. And we have to go to school for this to be trained by Microsoft certified technicians. But anyway, this computer controls each and every satellite in the field. Koele has over 30 of them, and Manele has over 60 of them I believe. And lets say we have rain, with a touch of a button, this shut downs every satellite and every sprinkler on the golf courses. So we can create programs depending the areas. We can forecast how long the water windows will be. If we wanted to start at six in the evening, or you want it to finish at 5:30. How much flow we'll be putting out at any given time. The time we start to the time we finish. And how much flow that we can program in that particular zone depending on the pipe sizing. The nozzle specifications. I mean, it goes on and on. It's just very, very state of the art technology that we work with along with a monthly service that we pay for. So if we have any questions or if anything goes wrong with it, we have a 24-hour technical support that can assist us with any crisis that may come about with power surges or whatever it may be.

So again, I'm just going to recap what the site pro does. It communicates with all of the satellites on the golf course. It's able to shut down all the programs that are running, or maybe just a certain zone of the golf course, or maybe just an individual satellite, or maybe just the individual sprinkler with a touch of a few taps of the mouse. The ability to adjust run times for sprinklers, for program, per assign grouping of programs. Again, we forecast your flow and look at the amount of water. So if I know that the utility company calls me and we've got a well that goes down. And they tell me that they're going to be running it. You can't run the water that you're normally allotted. You've got to cut it by 25%. With the tap of the mouse, I can reduce the water right across the course by 25%. So it's good stuff. It will collect the data up to a year or more based on the water that's been used. And at the Koele course we have it tied in with weather stations, so we can collect the data and match with rain fall all that good stuff that comes with the weather station. We can actually have that coincide with each other to actually make better decisions on water programs on the golf courses. You have the ability to program several months ahead if you want, which we don't do because the weather changes. It changes on a daily basis as you know. But you can do it if you wanted to. And then again the importance of understanding the pressure and flow that's available per zone. Depending on your pipe size because the golf course will change from four inch to six inch, to two inch, to half an inch. So the computer will know what zones where you can allow certain amount of flow in a certain amount of time and maximize its efforts. And again, both of the golf courses are on that system.

The ornamental ponds at Koele, to be specific. Manele has none. There's three irrigation storage ponds, two rainfall irrigation storage ponds, six ornamental ponds. And again the water is transferred from the sewage treatment plant behind the County plant all the way up to Koele, and then it's diverted into one of the three lakes depending on where we need the irrigation. We do not put water in the ornamental ponds when we start getting into times where we don't have water. It's strictly kept for the golf course and the needs of the turf and the plants. As you can see in the picture right here, the lake is starting to go down and they don't look that well, but we really take care of the water that we're allotted. And then the STP plant storage capacity is approximately about 10.5 million gallons of water which is the plant again behind the County plant.

You guys wonder you see some our machines on the road. You don't really see it on a hotel setting, or you don't see it in a landscape setting. But on the golf course, we mean business. We're covering a lot of acres and we need to do in a less amount of time possible. But water is one of the biggest assets of the golf course. So what we do, one of the practices we do is we'll aerify, and this is one of the units that we use here and we'll go through the fairways to penetrate areas because with grass, what will happen over time is that it will get thick, and it will develop what they call thatch. It's an organic mass layer, and what happens is the water would get lost in that and it's not maximizing. It's not efficient. So we'll have to go in there a few times a year and penetrate through that layer to maximize the water that we're allotted. . . *(Inaudible. Changed Cassette Tapes) . . .* and

we still to aerify and we don't want to devastate the surface. We'll go and do this type of method, or we'll go ahead and –. We have many different ways of doing it. This verti-drain here actually will drive a time down to anywhere from, I believe, it's four to 12 inches down so we can really can get the water down. For all of you guys growing grasses – I know a lot of the guys at the homestead called me and some of the people in the community called me. The idea is you want to drive your water down deep because what happens is your roots of your plant will want to go down and follow that water. So if you're keeping the water at the top inch, you're not developing any strength on your plants in general. So you want to drive that water down so the roots can chase it. And you gotta imagine the roots are like your feet. They're the foundation of your body so that provides the stability to strengthen the plant.

Another process that a lot of you guys are not familiar with is called verticutting. And what happens is the same process where the grass will get puffy, it creates this really organic mass layer underneath the top half of the grass, I mean, the top canopy of the grass. And this machine will go in and bring up this organic mass. So it's a pretty extensive process and we have to do it like three to six times a year. And what happens is we'll have to verticut with this machine, and then we'll have to come with vacuum to clean it up, and then we'll have to mow it on top of trying to provide a five star product for the guests that come to Lana`i. So it's a real challenge, but it has to be done again to maximize water and the nutrients that we put out because you want to drive everything downwards.

Mowing – Koele, as you know, is the golf course that really suffers with a small amount of water supply. And what happens is we'll do some real innovative things like sometimes the more you mow or the lower that you mow, the turf will actually stress more. So what we do is we actually raise the heights of the turf to minimize the water requirement. So sometimes that's not always desirable because, you know, golfers go out and they lose their balls. So it's kind of a delicate balance. But it has to be done. It may not be the most desirable playing condition, but again watching and maximizing the water that we put out on the golf courses.

Mower blades – this one that a lot of people don't understand either. It's that it's very important to keep your mower blade sharp. Homeowners, you might want to take note of this because if your blades are dull, just think about a wound on your arm. You cut yourself and you got a wound on your arm, what happens? You're susceptible to disease, you get weak, you may get sick. It's no different with turf. So what happens is I really got to be on top of my mechanics and I really push my supervisors to be on top of this one because it really jacks the water requirement up for the turf. So keeping the mower blades sharp is a big part, a big expense of the mechanic shop.

Fertility – we try to keep the turf on the high end, and fertilizers has really been sky rocketing in price lately because of the demands. And actually potassium has becoming

more and more (phonetics). It kind of relates to fertilizer cost. It's kind of going up. But it's important to keep the turf healthy so it can maximize the water use also, as well as withstand the traffic that we get from our guests. And then fertilizers, we will buy fertilizers that are specially coated that won't really require to water it initially. And this is a good rule of thumb to remember that fertilizer the cheaper it is usually the coating on the fertilizer will not last long. So the more expensive it is, it's usually the coating that you're buying. And what it does is it just prolongs the life of the fertilizer. You have a slower release over time. So the cheaper it is, it's not always that great because for one you've got to put a lot of water down to get it activated, and then you waste a lot of water. But in some situations that may work. But for us, we don't choose to go that way. So, thank you. That's all I have.

Ms. Kaye: Thank you very much Les. Commissioners, any questions for Les?

Ms. Zigmond: Madame Chair?

Ms. Kaye: Bev?

Ms. Zigmond: Les, one of your – thank you. That was interesting. One of your earlier slides talked about – you said Manele uses only brackish water with a little bit of reclaimed?

Mr. Jeremiah: The majority of its water supply is brackish. 1/7th of it coming from R1.

Ms. Zigmond: And what about potable water?

Mr. Jeremiah: No potable water. No potable water used, other than at my maintenance shop, and at the clubhouse.

Ms. Zigmond: Okay.

Ms. Kaye: Commissioners?

Mr. Ruidas: Les, you can turn off the projector? Koele, the rainfall ponds, which is that?

Mr. Jeremiah: That is the two fronting the clubhouse.

Mr. Ruidas: So, if the thing stay always full, how the thing going catch the rain?

Mr. Jeremiah: Actually, it's not always full. And what happens is those two ponds tie into one of our irrigation lakes. This is that lake that you see coming up Koele. So when we anticipate a rain like we did this past week, we will actually open the valve and we can drop that water into #9. So we can anticipate that and we can lower that lake that way. But

normally that lake, and I think we have some of the homeowners here who can vouch for those lakes not really being at their highest levels.

Mr. Ruidas: Yeah because maybe about 15 years ago I use to work for the golf course, and every time I see the water when it rains the thing just pouring out in the gulch and there's no water catchment and it just goes right down the gulch, wasted. So you guys have plans for any water catchment between Manele and Koele?

Mr. Jeremiah: We have ran some studies and have had some discussion and consultants come in, but we can refer that question with some of the guys that better handle that.

Mr. Ruidas: Okay, Les, thanks.

Mr. Rabaino: Referring to Manele, you said you use R1 water for the courses there. How much of that R1 water, or percentage of it, is used on the entire course in a course of a month?

Mr. Jeremiah: At Manele?

Mr. Rabaino: Yeah.

Mr. Jeremiah: Manele is about 1/7th of the water supply, at Manele, R1.

Mr. Rabaino: 1/7th?

Mr. Jeremiah: Yeah, about 1/7th.

Mr. Rabaino: Okay, my next question that is going to lead to recycled water. You know when they drain – when they drain the swimming pool at Manele, is there any chance – I know we discussed this two months ago – but for you, is there any chance that they use that recycled water? I mean that water that they drain from the pool for the courses?

Mr. Jeremiah: I'm sure it's something they thought about, but again we'd have to pass that question on to the guys, the powers that handle that.

Mr. Rabaino: Okay. In your presentation, you also said there were types of soils. How many types of soils do you have at Manele Bay golf courses in the different locations because it's on the slopes going upwards to the signature holes?

Mr. Jeremiah: This is at Manele?

Mr. Rabaino: Yes. All refers to Manele, excluded Koele.

Mr. Jeremiah: It's basically about three different types. The greens, the t-boxes are of sand base; and the fairways in general are of a clay base; and the short (phonetics) we have like a clay loam mixture. A clay loam is kind of a mixture of clay with some roughs in it, some sand fines, a combined type of soil. That's about it.

Mr. Rabaino: Okay, how much is the penetration of the water seeping into the ground since you (phonetics) and the other areas of the golf course?

Mr. Jeremiah: Our desirable penetration into the soil is an inch. So what we'll do in that practice is we'll actually go out and we'll water a designated area and we'll actually probe it down into the soil to make sure that we meet those standards.

Mr. Rabaino: Okay, you referred something to this phrase – 25% is cut down from water usage – meaning is it that the R1 water that you're cutting the usage? Because you're just stating earlier that potable water is not used at Manele Bay courses.

Mr. Jeremiah: Yeah, we do not use potable water.

Mr. Rabaino: Okay, so what do you use? Maybe I misunderstood you or I got the phrase wrong – 25% cut down water usage – what are you referring to? What is that 25%? Less irrigation or is 25% of evaporation during the peak by season? Are you referring to the summer months or during the dry spells?

Mr. Jeremiah: I don't recall saying that.

Ms. Kaye: I'm sorry Les to interrupt you, but I think what Gerry is referring to is you made a comment with your machinery that if, for example, a well went down, and you got a call saying cut back.

Mr. Jeremiah: Okay, I understand. What happens is again, if the utilities will call us, and Rocky or Joe will call us and say you can not water tonight or you need to reduce your water down, what happens is the computer – it's just the daily allotment that we're allowed to use – the computer. It's based on a 100%. So if you go 30 minutes, the budget – it's called a budget – it's a 100%. So with a tap of a mouse, you can take that down to 75% and it will automatically calculate the 3,000 or 4,000 sprinklers we have there and cut it right across the board. That's coming off that particular day that we need to do that.

Mr. Rabaino: My last one, you talked about Koele, the ornament ponds. Down at Manele you have one visible and most noticeable reservoir. Do you have any more down there besides that one that is visible?

Mr. Jeremiah: The one at Manele that is strictly an irrigation supply pond. At Koele, it's

ornamental, which means it's used for the aesthetics of the golf course to kind of enhance it's beauty.

Mr. Rabaino: So that's the only existing down there?

Mr. Jeremiah: That's the only one at Manele.

Mr. Rabaino: Okay, now, I'm going to read something from my August. It says "establish of dual system and alternative source including possible desalination landscaping conservation and on going forward." Anything going forward from 2009 regarding if there is any talk of desalination?

Mr. Jeremiah: I know I've heard something about that, but I'm not in a position to comment on that. I'm sure there's Joe or some other power that can comment on that.

Mr. Rabaino: Thank you.

Mr. Matthew Mano: How's it Les. You know who I am right?

Mr. Jeremiah: Yeah.

Mr. Mano: Do you guys have any idea of a future plan to extend your storage capacity for your treatment plant?

Mr. Jeremiah: Again, I know that we've had discussions, actually discussions and consultants come in. But again I'm not in a position to comment on the future of that. But I know we've had some extensive discussions about it, and I know it's important. But again I'm not in the position to comment on that.

Mr. Mano: Thanks Les.

Ms. de Jetley: You know during the development phase, when we were planning these golf courses and the hotels, jobs were always a real important issues that these hotels and the golf courses would provide jobs. You know, you grew up here on Lana`i?

Mr. Jeremiah: No, unfortunately not.

Ms. de Jetley: You're not from Lana`i. So if a young person wanted to get that kind of training that they needed to do what you're doing and to work with all of the computer equipment that you need to work with now, what would you suggest that they do? And is there any onsite training now? You have an intern program to train?

Mr. Jeremiah: We do have an internship program that we have offered. And I know we, Doug and I, have discussed it in the past. But there is a lot of online courses that you can take - Rutgers University has some. I'm a product of the University of Hawaii on Oahu with the community college branch. So yeah, unfortunately on Lana`i, you don't have much, but there is so many different other entities that you can gain the knowledge from. Landscape, CLT program, which is on Maui so you can get trained in irrigation. Arborist – there's many different – the MELP. I'm sure you're aware of MELP. But there's a lot of online opportunities, and I'd be glad to talk to anybody who'd be interested. And I'm sure Doug and I, we can talk about creating a program here on Lana`i to help the local people here. I don't think that would be a problem.

Ms. Zigmond: Can I follow up on that please? You said you have an internship program here. Could you describe it and who is it aimed at?

Mr. Jeremiah: Basically an internship is the time they have to spend in order to get their degree. And unfortunately, on Lana`i, there are no local college other than the community college which has no relative turf program or agricultural program.

Ms. Zigmond: So you're not really like working with the school for instance?

Mr. Jeremiah: I have been working and have been in touch with the University of Hawaii liaison to get the State of Hawaii involved, but that person has left the University of Hawaii. But I am the Vice-President of the Hawaii Golf Superintendent of Hawaii, and we see a big need to further the education on the islands. And I'm bringing that concern to them. But again, it's easier said than done.

Ms. Zigmond: I mean, for the local kids, not necessarily the State kids or the mainland kids, but the local kids.

Mr. Jeremiah: Like I said, I'm sure we can start here and working on – not necessarily internships, but at least getting involved, having them come out on the golf course – I'd be glad to ride around with them and educate them on what goes on. This is a really interesting field, and there's some good money to be made, whether it's on Oahu, in the States. I know we've been growing some great golf guys here so I'm sure we can do some thing on the ergonomics sides. But again, Doug and I can discuss that.

Ms. Kaye: Okay, I have a question. It's just based on the last three that were asked. Gerry asked you a question, and you said the powers that handle it, would answer that question. Who is that?

Mr. Jeremiah: Again, James is one of the guys. I'll let Clay talk.

Mr. Rumbaoa: What question was that?

Ms. Zigmond: Specifically about when the swimming pool is drained, using it for the golf course.

Mr. Rumbaoa: It hasn't been done. But if it does drain, it will be combined with the effluent from the hotel to dilute it and it will get pumped or fed down to the pumping station down at Hulopoe Beach or get pumped to the treatment plant. So it would be recycled and be reused at the golf course. And I wanted to follow up on the question that Commissioner Rabaino had in terms of the percentage of the R1 water from Manele that's used on the golf course. I believe it's 100%. The 1/7th that Les mentioned is just 1/7th of the overall, if you add that up with the 60 that's used for brackish. And the other question that Commissioner Mano had in terms of the expansion for the waste water treatment plant. The waste water treatment plant here in the city is owned by the County of Maui, so you probably need to ask them on that. The one that's owned by Castle & Cooke at Manele, it was expanded, I think, in the middle 1990's. It was initially 90,000, now it's up to 140,000 gallons. So right now that volume provides the needs for the Manele Project District.

Ms. Kaye: Just a follow up before you run away Clay. You said Maui County would be, but they don't own the land. So Maui County can't.

Mr. Rumbaoa: That's right. They don't own the land, but they operate the system. So in terms of when it needs to expand, they make that decision.

Ms. Kaye: Who?

Mr. Rumbaoa: Maui County.

Ms. Kaye: And are they just – they would have to come to you and ask to have more land deeded over or leased or what?

Mr. Rumbaoa: They would probably –. The determination of when the expansion would occur would depend on loading. So right now from what I understand, they have enough capacity to handle the effluent coming from Lana`i City and Koele.

Ms. Kaye: I'm sorry Matt's not here because I don't think that was his issue. I think it was in periods of rain there's insufficient –. Matt, Clay was just addressing your questions about expansion and saying that would be a Maui County decision. I then followed up with a question about Maui County doesn't own the land. And Clay has just offered the opinion that you've got enough storage. You don't need anymore. And I thought you had an issue expressed in past meetings about needing more storage at your plant.

Mr. Mano: It's not really our plant because they do the treatment. And during the past years, we have all these storm and raining seasons, a lot of the water has been wasted in our plant because they can't hold it. They have fulfilled their 10.5 million gallons reservoir plus what's up at Koele. And that's why I asked the question.

Ms. Kaye; So this isn't a Maui County decision. This is your decision?

Mr. Mano: Your guys decision.

Mr. Rumbaoa: In terms of expanding it? No, I think it's a County decision. And plus that treatment plant there has a lot of sediment that you could probably increase your capacity by dredging the bottom of that pond.

Mr. Mano: No, I'm talking about when you guys take water from us. You guys fulfill your 10.5 million gallon on a rainy season, and then the waste that we hold gets spilled into our perk ponds which is wasted at least five million gallons during the rainy season. That's what I'm asking. I'm asking if you guys are willing to build another reservoir so that when rainy season come you guys won't take water. You guys have enough water in your reservoir to hold your water. So that was my question.

Mr. Rumbaoa: So the reservoir you're talking about is the R1?

Mr. Mano: The R1. 10.5, correct? Don't mind me, asthma. Anyway, during the rainy season we have noticed because I work in the County plant – we have noticed that when your guys reservoirs are full, you guys are not taking water. We have to spill it out or because DOH says our dividers, the water can't pass the dividers because it will short circuit your plant. We follow DOH rules, so we waste water in our perk ponds because you guys can't take it. And for years, we have seen million of gallons of waste water being wasted because you guys couldn't take it. Because if you guys do another reservoir, a five million gallon reservoir, you guys probably could have 50 million gallons during the rainy season.

Mr. Rumbaoa: I would have to defer to that. I'm not familiar with the over flows you're talking about. So rather than go into details and speculate, I'd have to pass on that.

Ms. Kaye: And defer to whom? Clay, who would be appropriate person to ask that question of?

Mr. Rumbaoa: It would be in our division, our development division, so –

Ms. Kaye: So that is you.

Mr. Rumbaoa: That would be me, us and our water utility. Because the R1 plant there is under our water utility, correct.

Ms. Kaye: Okay. Thank you.

Ms. Zigmond: Would you get back to us on that?

Mr. Rumbaoa: Could you put that question in writing to the Planning Department and to us so we know exactly what you're asking?

Ms. Kaye: Okay, Les, just to clarify Alberta's question, your answer to Alberta's question, how many interns have you proposed through your program, and how often is it offered during the year?

Mr. Jeremiah: Actually, we're just kicking that off from 2006.

Ms. Kaye: What does that mean? You started in –

Mr. Jeremiah: We've actually had three. Only three interns so far from 2005.

Ms. Kaye: What percentage of your staff are Lana`i folks?

Mr. Jeremiah: 100%.

Ms. Kaye: Nobody was imported like you to work here? I mean they might live here now.

Mr. Jeremiah: No. Everybody is 100%.

Ms. Kaye: And who's Doug that you keep referring to?

Mr. Jeremiah: The Director of Golf.

Ms. Kaye: Doug?

Mr. Jeremiah: Doug Stevens.

Ms. Kaye: Thank you. Okay, I have just a couple of questions on your presentation. The weather stations that you refer to was very high tech. And I'm on a bunch of list serves from USGS around the State, and there's never any data from Lana`i. Is it possible to provide that data to USGS or someone who keeps this kind of rainfall data so we're included? We're always omitted from everybody.

Mr. Jeremiah: Yeah, I notice we always miss that weather deal on channel four. I don't see a problem with that.

Ms. Kaye: Well with your permission then, we had a previous person here from USGS to make a presentation. I'll follow up on that and see.

Mr. Jeremiah: Actually somebody contacted me a while back about that, and I had discussions. I'm not sure it's the same committee, but the same purpose of providing information for the State.

Ms. Kaye: I badger them all the time that we're left off. Okay, this is the coconut wireless, I have heard, and when you use homeowners, that's pretty much everybody sitting around the table here, so please don't use that to just refer to people who live at Manele and Koele. But those who do live in that area have mentioned several times that there are an enormous number of broken and leaking pipes around that area, some of them on the golf course. Am I to understand from what you said tonight that those have been addressed and have all been fixed?

Mr. Jeremiah: The company has taken steps to improve the water system at Manele. As you guys can see when you're driving down some breaker tanks that haven't been there before. And that was a big piece of the equation.

Ms. Kaye: That was done two years ago though. I think these were more recent observations.

Mr. Jeremiah: Again, not to say that the golf course is perfect. Lines will break as it will in the City. There's a water line that's broken right now that runs to the golf course but it's actually the City line. So we're going to have problems. We're going to have problems.

Ms. Kaye: So when you go forward, is it your budget that addresses those issues?

Mr. Jeremiah: Yes.

Ms. Kaye: And it's submitted to whom?

Mr. Jeremiah: The corporate people.

Ms. Kaye: Along with everybody else?

Mr. Jeremiah: Yeah. Every year we go through that process.

Ms. Kaye: So when you propose a budget, are you then going right along with or in

conjunction with the Conservation Department, the Utilities Department? Are you all fighting for the same limited budget?

Mr. Jeremiah: We all have our own individual budgets and we're trying to definitely have a better synergy between the departments. But we all have our own individual budgets that we're held accountable for. And we want to make sure we're being as efficient with our money as possible, especially this time and age.

Ms. Kaye: Okay, when was your irrigation satellite installed?

Mr. Jeremiah: With the golf courses at Koele was 1989, and Manele was 1993. And right now, Manele is in the process of an upgrade.

Ms. Kaye: Is there any interaction between the data that looked very sophisticated in your slide show that's collected from that, and the data that shows up on the periodic water report which is pretty draconian and hard to read? Do you submit your data to the utilities and then they incorporate that?

Mr. Jeremiah: Yeah, there are some people that we were required to send that over to on a monthly basis. So we'll do it both ways to check. We'll do it by the computer and we will also check our own meters to see where we're at. Computers make mistakes, but they've been pretty accurate.

Ms. Kaye: Along the lines of we don't show up anywhere on State figures probably over the last 12 months there's been numerous articles about the State is in a drought. But because there's no data from here, it's never really discussed. In your opinion, have you seen drier. Are you taking more conservation measures say over the last five years, or maybe you have not been here that long, however long you have been here.

Mr. Jeremiah: I've been with the Company seven, and definitely year over year, there's been some variances in rainfall specifically for Koele side. But I have seen a change in it being more drier. But this year has been kind of a generous year, I have to admit to that. But in general, it's been a challenge to provide a quality product to our guest.

Ms. Kaye: This Tri-Cure product that you talked about. I tend to walk really early in the morning up around the golf course and back down around to the City, and the other day just coincidentally I saw somebody head to foot wrapped up with goggles and a mask and gloves and a truck. And it was depositing a bright green chemical. Is that Tri-Cure?

Mr. Jeremiah: What day was that?

Ms. Kaye: I'm guessing within the last seven days. It was two days after the big rain.

Mr. Jeremiah: Actually that was a fungicide treatment that we put on the turf because we have a very sensitive grass.

Ms. Kaye: And how long does that have to sit before someone can go on it uncovered?

Mr. Jeremiah: Maybe about 45 minutes to an hour.

Ms. Kaye: Is that all?

Mr. Jeremiah: Yeah.

Ms. Kaye: Okay, thank you. That's all I had. Anybody have any other questions for Les?

Ms. Darlene Endrina: I wanted to get back to the intern program. You said it started in 2006, and you worked with three people. How are you looking for people or how are any young people here is going to even know that exists?

Mr. Jeremiah: When they first started off the internship program, there's a website that's really popular within the turf industry. It's called turfnet.

Ms. Endrina: Right. But how would somebody hear about that? I had no idea until this was brought up this evening. Do our high school kids know?

Mr. Jeremiah: We had. It's kind of a trial run to see how it worked. And again I have been in discussions with the liaison with the University of Hawaii to get the State involved. Then he moved on so we have another hurdle with that.

Ms. Endrina: But you started in 2006.

Mr. Jeremiah: In 2005.

Ms. Endrina: We're a couple of minutes from 2009.

Mr. Jeremiah: It was kind of a trial run, and we couldn't find anybody in the State. I know for a fact we tried to look for someone in the State. We contacted the University of Hawaii, but we couldn't get anyone. So we had some people from out of state come to try the program.

Ms. Endrina: So it wasn't Lana`i people then?

Mr. Jeremiah: Unfortunately it wasn't. And again we don't have a turf program on Lana`i. But it's something that Doug and I can discuss.

Ms. Endrina: I think that would have been a real good idea.

Mr. Jeremiah: – with the career counselors here.

Ms. Endrina: Because I don't know about anybody else, but I assumed it was three Lana`i people or kids. So it was not? I think that would be something that's really needed.

Mr. Jeremiah: But we're 100% open minded to that.

Ms. Endrina: Thank you.

Ms. Kaye: Okay, I guess that's it. Thank you very much Les.

Mr. Rumbaoa: Good evening again Commissioners. Before I bring Mr. Joe Kaakua up here, I just wanted to let everyone know that Mr. Kaakua has re-retired as of this past Monday, and he's been kind enough to come today to do his final act for the Castle & Cooke Company and provide his presentation. So I wanted to thank Mr. Kaakua for his short two years of service with Castle & Cooke. He did many wonderful things for the Company, and again, thank you very much. With that, we do have a replacement and he's here tonight. I'd like to introduce to you Mr. John Stubbart. Please stand. John joined us yesterday. He's hit the ground running. John was born and raised here in Hawaii. He's an alumnus of Punahou School in Honolulu, and he has a Bachelor's of Science degree from Brigham Young University in Provo, Utah. John has over 30 years of experience of managing hotel properties, bank facilities, and he's owned his own company, water-utility company on the Big Island and on Kauai. So he comes to us with very high credentials and we look forward to a lot of good things from him. So again, without further adieu, I'd like to introduce Mr. Joe Kaakua.

Mr. Joe Kaakua: Good evening. I have an answer to that last question regarding the reservoir for the Koele. Shall I do it now or later? Matt's question. Later. Remind me. This is on the Lana`i Water Company. I was formerly the Director for the Department of Utilities. Presently John Stubbart is the Director. We run four companies. The Utilities Department oversees management of water resources for the entire island of Lana`i. We basically provide the man power for these companies.

We'll start with Lana`i Holdings. Lana`i Holdings Inc. operates/maintains the water sources, the pumps, the wells, the motors. Lana`i Holdings sell water to Lana`i Water Company. And Lana`i Water Company maintains, repairs, transmission distribution systems, storage facilities. We bill customers. We set up customer accounts and we collect payments. We have two other companies, Manele Water Resources which operates and maintains the waste water treatment plant in Manele. We operate three pump stations there, the sewer collection systems. We also treat water to R1 quality and we sell that to the golf course.

Management of Manele of Water Resources, we sub it out to Aqua Engineering, and they actually manage Manele Water Resources. We do the billing and we do major repairs or capital replacements or upgrades. Koele Water Reclamation Facility is up here. It takes effluent from the County plants, and we treat it to R1 to irrigate the Koele golf course. The Koele Water Facility is also managed by Aqua Engineering. They also maintain pump stations at Koele, Lalakoa, and Kanepuu. So that's pretty much the responsibility of the utilities.

This is a map of the island. We have several water systems here. In the City, around here, Lana`i City and Koele, we have two potable water systems. Lana`i City is served by a well, I believe right there, well #6. It serves Lana`i City. Above Lana`i City is Koele Water System which is served by well #8. And that's a small system serving the villas, the lodge and the clubhouse. Those are two different systems, two different reservoirs, elevations service zones. The third potable system is in Manele, down here, and that's served by well #4, some where right here. Well #4, and there's a shaft up there also. Shaft, well #3 and well #2. Water goes into a Hi`i tank. It's a silver tank on the hill. You can see if from Manele Road. And water goes down to Manele, through three breaker tanks to break the pressure, and it serves this system. That's a third potable system. Our fourth system we have is a brackish water system served by three wells, wells #9, #1 and #14. That takes water down to an open reservoirs, a 15 million gallon reservoir. And we break pressure through two breaker tanks, and that serves irrigation needs of Manele and the golf course.

Also we have the mains in the Palawai Basin. Those are old mains. It use to serve the old plantation. I believe we have up to 14 miles of mains over there. That water source is well #4. The shaft down Hi`i, and it serves the Gardens, Alberta's area, airport – fire protection to the airport and fire protection for MECo. Because water sits in the pipes and there's so much pipes, we consider that non-potable, so it's used for fire protection only.

This is another view. This is Palawai Basin. Well #4. Shaft #3, Well #2, and the water comes down this way down to Manele. And again this is Lana`i City and well #6 is over here, and Koele system is up there. This is a schematic of the water system. Okay, we'll start at the top. This is the waste water treatment plant. There's a R1 in the reservoir and that goes to the golf. Just below that, this is our brackish water system, our non-potable water system. We have well 9, #1, and #14, goes through a 15 million gallon reservoir. It's an open reservoir. It's metered. It goes through – this is incorrect – we replaced the pressure reducing wells with breaker tanks. And it goes to residential, landscaping and also the golf course. This is the system I talked about earlier, well #2, shaft #3 – I'm sorry, well #4, shaft #3, well #2. There's a covered reservoir, and the Hi`i tank is the silver tank up on the hill. Again, it goes through three breaker tanks and a service serving Manele, all of Manele.

Again, this is the Koele system I guess. Well #3 collapsed in 2006. We tried to rehabilitate

the well. It was not successful. Currently we are drilling a new well. It is about 95% complete. They drilled a well, put in a casing in, grouted the casing, and in January they'll do a seven-day pump test to see what kind of water we'll get out there – the quantity of water.

There's a well #8 somewhere. The mute is in the way. Trust me, this is well #8. Koele tank serves the Lodge and the Clubhouse. At the very bottom, we have well #6, and that serves Lana`i City. Also there's a small line that goes out to the airport and down to Kaumalapau and the Harbor. At the very bottom, we have the waste water treatment plant at Koele. They have an R1 reservoir, and that goes directly to the golf course and Koele.

This is a visual of our SCADA system. We can just see the status. SCADA stands for Supervisory Control Acquisition and Data Acquisition. And it pretty much tells us the levels of our facilities, so we know what's emergency, where we have to run out there, turn off the values or pumps. So this is Hi`i tank. This is the line going down to Manele basically. Hi`i tank level. Breaker tank #1, #2, and #3. The levels are all good. These all depend on one another. When Hi`i gets low, we run out, Rocky will run out and turn on the well for it.

These are information on breaker tanks, and there's no electricity here. They have solar panels and it shows us how the batteries are doing. I think the other day it was overcast but batteries weren't doing so good. So we've got to run out there and try to facilitate. Here's another picture of the same thing. It's easier to read. This is a picture tank levels. Again, this is our new two million gallon tank that we put in service this year. Koele tank, Hi`i and the three breaker tanks. This is the reservoir in Manele. . . *(Inaudible. Changed Cassette Tapes.) . . .*

This is a picture of the well status of well #6, #8, #3 is out of service. It needs to be redone. A similar picture. Again, this is our SCADA. Pardon? A bigger picture. This is the utility shop, wells #6 and #8. The two million gallon tank. This is the old tank. The new tank is sitting up there by well #6, but it shows the same thing, the status. The Manele reservoir breaker tanks, Kaumalapau tank. This is a visual of our Manele reservoir and these two pumps are on. These are pictures of our tanks. These are water facilities. Well #6 – this is the well here. This is the coordinator. That's our control station. This is our well #8 above Koele. The pump station, same thing. This is the pump, the piping. This is well #3 that's under construction. This is well #9 on the way to Manele. This is well #14. Well #14 is run by generators. We have two pump stations run by generators, so if there's an electrical outage we have water. Well #14 is, of course, a brackish water. Well #8 is a potable water well. This is Hi`i tank – I'm sure you're familiar with it – it's a landmark. This is our 15 million gallon reservoir here. There's an overflow right around there, and there's some lines to tell you what height it's at. This is our stand pipe going down to Manele, and it's a brackish water system. That's where we fill our water tanks for dust control in construction. This is a picture of our breaker tanks. Breaker tank again is to reduce

pressure, break pressure.

Storage facilities – Lana`i City – two million gallon tank put into service this year. Koele tank. Hi`i. And this is our potable breaker tanks. We have three of them. The first one is 100,000 gallons. The next one is 100,000 gallons. And the lowest one is 300,000 gallons. Most of the service comes from the third breaker tank and we have something that's off the second. This is the brackish tanks. We have the reservoir and two breaker tanks. These, I went over these already, the Hi`i tank, Manele tank. Manele, the waste water treatment plant has an R1 tank. It's an open reservoir, and 2.8 million. And the Koele has an R1 tank, 10 million gallons. We also have about 19,000 of transmission mains between Koele and Hi`i – 19,000 feet of main. From Hi`i to the breaker, breaker tank #1, 15,000 feet of 12-inch mains. Palawai Basin we have 41,000 feet of mains. On DLNR side, another 35,000. So we have a lot of mains. A lot of them are old. So we have a lot of mains to maintain. This is the line coming from Hi`i tank. I think it's marvel, however it's abandoned now. We replaced it.

This is a view of some our wells. This is well #2. Let me look for a better well. I'm skipping well #2 because well #2 is actually in a shaft, and I'll go over that later. Well #4 is our major contributor to Manele. Ground elevation up there is 2,300 feet. The depth is 1,149 feet. Pump elevation is a little above the bottom, that would be 1,253 feet. Static water level is about 1,500 feet. We want to make sure that water level is above the pump elevation so that's information for this well. Well #6, similar, ground elevation is 1,910 up there. The depth is 600 feet. Pump elevation is 864 – 863. And sewer water level is above that. This is data for well #8. Again ground elevation 1,902. The depth 412 – depth elevation. Pump elevation is 863. Sewer water level is 949. This is well #1. Well #1 is one of our brackish water wells, and that's the data. Ground elevation 1,200; depth 1,200; pump elevation 516; sewer water level is 666. And this is another data for well #9. Ground elevation 1,400 feet; depth elevation 37; pump elevation 466; and static water level is 671.

When we go and measure this, a lot of this data is provided when we install pumps. When we change out the pumps, you know, sometimes the data changes, like the pump elevation changes. But when we actually go down and measure them, we take it from the ground elevation at the top and we run down and we take it to the water levels. So we actually measure this distance.

This is well #14. Can I just go through here? Lana`i well #3. This is a video of the well that we drilled, and we sent a camera down to see what it looks like. It's all part of the well drilling process. So this is the top. The lights you see at the bottom is the water. We're approaching the water. The camera just went through the water. This is the water. It's still going down. Besides going down, it stops I believe every 40 feet and it does a 360 degree spin. This is a 360 degree spin. That is just rough formations. The number there is a depth, so there –

Ms. Zigmond: . . .*(Inaudible. Did not speak into the microphone.)* . . .

Mr. Kaakua: I think it's 24-inch. They start with small and then they ream it out wider and wider. There's another picture here. What you saw was just well #4. Later we'll go in with the casing, a solid casing on the top and perforated base casing on the bottom. So when we install a pump, it sucks water up through the perforate casing. Here it is. And I think you're in the perforated casing. And that's the water. The earlier picture was a well #3. This picture is actually a different well. And that's it.

Ms. Kaye: Thank you Joe. I'm sure you're going to benefit from being the last in a list of many presenters who deferred questions for you, for tonight, so if you want to take a chair. Commissioners?

Mr. Kaakua: Thank you.

Ms. Zigmond: Madame Chair?

Ms. Kaye: Yes?

Ms. Zigmond: Joe, thanks for coming and doing this even though you're retired. I'm sure Mr. Stubbart appreciates that. Please don't go away, we have many questions for you and you'll need the microphone. Thank you. Could you tell me when the SCADA system was first put on line?

Mr. Kaakua: No I can't. It was there when I arrived two years ago. There was a phase one of the SCADA. Probably it was initiated four years ago. Two years ago they completed the first part. Right now we're finishing up phase two which is remote on and off.

Ms. Zigmond: Which is what, sorry?

Mr. Kaakua: Remote on and off. To turn on the pump and turn it off remotely.

Ms. Zigmond: Okay. I have a question on that – I'm sorry that there's all this distraction in the background – when Butch Gima made his presentation and I'm quoting from what he handed out. He said, "up until a few years ago most of the data reported on the periodic water report was collected and documented by hand. The SCADA system has improved their data collection and reporting system. The reporting of the data continues to be fine tuned. Ultimately the accuracy and the accountability of the data is based on trust as there is no checks and balances built into the recording system." I'm having some trouble getting numbers to jive, and I'm wondering first of all if the SCADA system contributes in anyway to either the numbers that go into the periodic water table or the quarterly report that you all provide to the County?

Mr. Kaakua: Not really. The data we provide on the periodic water reports is actually metered pumpage from our well sources. So all our well sources we record, we write down manually the meter readings. SCADA provides the levels, water levels of tanks and condition of pumps on and off. But, for the water report, we're actually getting a metered data from every pump from every well. We get that. Actually we have data for the 15 million gallon tank because there's always levels for that on the water report. But actually we go out there and we get the level. The question at one time was the chlorides. There was an issue with chlorides. So now we have three people doing chlorides and we average it. We take samples from wells #1, 9, 14, and actually other wells, and we send it to Food Quality Labs. We send it to Tom Nance. And we do our own chloride test mainly because of this question of accuracy and checks so on that, we do an average of three samples.

Ms. Zigmond: So other than on the chloride levels, what sort of checks and balances for accuracy are in place?

Mr. Kaakua: Well, we read the meter. We have a meter reader who reads the meter reading. We've had issues when the meter spins around and hits another digit. Sometimes things goes off so another person records the meter readings into the spread sheet. Sometimes he'll find something wrong. I send it to other people before we issue it to see if there are inconsistencies, if there's changes. This past year we've had troubles with our transducers. And our transducers, we lower it down the well and what it measures is it measures the height of the water level. And we've had problems with transducers in that water getting in there and they're giving us incorrect information. So the gather of the information sometimes doesn't know when there's a jump or there's a change that doesn't make sense. So the only check we have is internal. You know, either myself or another person in the office. Seeing the jump and why it changed and things like that. That's the only check we have internally. But I think this year, we changed up four transducers within the past year because of bad readings. That's the only check we have. If the things go off, we find out why. Is it an instrument failure? Is something actually happening to the water levels?

Ms. Zigmond: I'm going to let other Commissioners take a turn first because I have a whole lot of questions on how numbers are derived because like I say I'm having a hard time and maybe it's not a good math day for me. I don't know, but I'm just not having numbers add up. But before I relinquish the mic and I will come back to that because it's really important to me. Could we have a copy of your presentation and the previous presentation too – I don't know that anybody requested that?

Ms. Kaye: I assume James would send all three.

Ms. Zigmond: Okay, I just want to put that on record. Could we have all three presentation please? Thank you.

Ms. Kaye: Okay, Commissioners? Gerry? And I have some too.

Mr. Kaakua: Can I comment on the periodic water report?

Ms. Kaye: We're going to have some specific questions for you so that's your call.

Mr. Kaakua: Okay, the periodic water report was very strictly – it was established with strict numbers and very little leeway of control. So I don't think there was any changes at all in how we do the numbers.

Ms. Zigmond: That wasn't my issue. It was –

Mr. Kaakua: I'm just saying that.

Ms. Zigmond: Okay.

Mr. Kaakua: I'm just following up what the previous guys did.

Ms. Kaye: Okay, in that vein, I'm going to follow up on what the previous guy in your position did two years ago when he came to the Planning Commission. And I'm just going to ask you for a status, very short, on some of the references that he made. This was Cliff Jamille when he appeared before the Planning Commission in October of 2006. First, he said wells #5 and #7 were slated to come online as soon as they were rehabbed. This is no longer happening or is this in future plans?

Mr. Kaakua: As soon as they are rehab?

Ms. Kaye: Yes.

Mr. Kaakua: Not in the near future. Okay, not in the near future, but it's not out of the picture completely. It's a possibility in terms of well #7. As far as well #5, it's one of the next wells. So it's not, you know, it's within the horizon.

Ms. Kaye: He also mentioned that to have wells #2 and #4 feed back to Koele or the City if a need should arise, "you need an emergency mobile pumping unit." Do we have such a thing?

Mr. Kaakua: Yes we do.

Ms. Kaye: Okay. #2 he said that it was – this was two years ago – plan to bring pumping unit above grade and locate a discharge piping above the ground. It's an older unit we want to replace as soon as possible. Has that been done?

Mr. Kaakua: No, and I believe you're speaking about the shaft, well #2.

Ms. Kaye: Yeah.

Mr. Kaakua: No. It's one of the plans. It has not been done.

Ms. Kaye: Do we have a time frame?

Mr. Kaakua: No.

Ms. Kaye: #3, drilled and will be online, you said at one of the last Water Advisory Committee meetings, you said it was going to be a year before it was operational and that's not what I understood you to say tonight.

Mr. Kaakua: Are we talking about well #3?

Ms. Kaye: #3. The new well #3. Perhaps I misunderstood you at the Water Advisory Committee. Just tell us when it might be operational.

Mr. Kaakua: We're working on it next year. It will probably be done in '10.

Ms. Kaye: So it will be another year. Okay. For well #6, he said that he had plans to replace a long horizontal line that's part of the old plantation system, bring more up to date control values and have a new chlorinating system and a blow off value.

Mr. Kaakua: Well #6?

Ms. Kaye: Yeah.

Mr. Kaakua: We have a new chlorinating system right now. We do not have a dump value.

Ms. Kaye: Any plans for that?

Mr. Kaakua: Yes.

Ms. Kaye: At what point in time? If you know.

Mr. Kaakua: Three years down the road. Two or three years. I'm not really sure.

Ms. Kaye: Then for Hi`i tank, he said it was 1950's item, it seen better days, in the process of taking the tank and starting design of a new two million gallon tank, want to get out of a situation of neoprene rubber cover over the reservoir. What is the status of that?

Mr. Kaakua: The Hi`i tank, we did go in and surveyed the steal thickness. We looked at whether it was worth repairing or we would have to replace it. We're quite surprised that the corrosion is kind of cosmetic – I was surprised too – and consultants said repair it. So we have proposals in to repair the area of the floor, sides and roof. And contracts should go out next year, '09.

Ms. Kaye: That's the tank?

Mr. Kaakua: That's the Hi`i tank.

Ms. Kaye: Right. And the reservoir is not being used at all?

Mr. Kaakua: The reservoir is being used, but it's not being – we haven't looked at replacing the reservoir, the covered reservoir.

Ms. Kaye: Why do you think he thought that wasn't?

Mr. Kaakua: I don't know. I don't know.

Ms. Kaye: But in your opinion, you don't think that's an imminent need?

Mr. Kaakua: We haven't had any issues with the covered reservoir.

Ms. Kaye: Okay. A related question that came up as a result to me, as a result of the fire that we recently had, is the Hi`i tank line, or is the line from the tank down to Manele is above ground. Correct?

Mr. Kaakua: Correct.

Ms. Kaye: And one of the fire fighters expressed concern that had a fire gone in that direction, the pipe would have been toast.

Mr. Kaakua: That's correct. That's my concern also.

Ms. Kaye: Okay. Any plans to put it underground? That's the sole source for the Manele area right?

Mr. Kaakua: Yes, and no. Some area where it is above ground and it's leveled ground, we're going to try and bury it, throw some dirt over it. The area that's going down the hill, you know, if you put dirt it's just going to run away. So we're looking at a 50 foot clearance, I guess, both sides of the –

Ms. Kaye: Fire break.

Mr. Kaakua: – fire break. The supplier has said as long as you don't have stuff growing over the pipe, the fire will pass. Who knows.

Ms. Kaye: But it's not flammable? The pipe material itself is not flammable?

Mr. Kaakua: Yes, it's plastic. It is.

Ms. Kaye: It is flammable. When was that line laid?

Mr. Kaakua: Last year.

Ms. Kaye: I'm sorry if nobody has any objections, I'm just continue because our point is to make a record. Roy Hardy from the Commission on Water Resource Management mentioned the need for deep monitor well in order to utilize his – and the Commission will recognize this – RAM 2 modeling. It's a robust analytical model. Do you have comment on that? I understand we don't have any deep monitor wells here.

Mr. Kaakua: Actually we have three monitor wells. It's actually old wells that we have monitors in them, so we monitor the water levels. The monitor wells we're using now are #5, #3, and #7.

Ms. Kaye: How often are they checked?

Mr. Kaakua: We have recorders on there, so I think like three months – three or four months.

Ms. Kaye: Every three or four months.

Mr. Kaakua: Yeah. We go up and pull it up and we down load the data. We do have data going back to, I believe, April/May of this year for the three wells.

Ms. Kaye: Nothing before that?

Mr. Kaakua: That is when we put it in.

Ms. Kaye: I see.

Mr. Kaakua: We just did it this year.

Ms. Kaye: So, he just wasn't aware that you've done it? He made a pretty big deal not to

have a deep –

Mr. Kaakua: Roy?

Ms. Kaye: Yeah.

Mr. Kaakua: Apparently not. Yeah, we just did it.

Ms. Kaye: Okay, Ellen Kraftsow, when she came from the Maui County Department of Water Supply, said that on Maui, for every public water system they have a cost at every tank and pressure zone what it costs to actually serve the water. She said we couldn't do that here, but estimated that water is approximately $1.87 for City and Koele; $1.48 for Manele; and $1.25 for brackish. Were those estimates sound about right to you since you do the billing?

Mr. Kaakua: No.

Ms. Kaye: No. Okay. What are they? What's a better –?

Mr. Kaakua: The Water Company purchases water from Lana`i Holdings at $2.80-something – around there – $2.84 a thousand gallons. You know, the PUC company is buying and selling water to Lana`i Water Company. So we operate at a loss. We sell it at $1.10 a gallon – a thousand gallons at $1.10. We plan to go to the PUC and have an increase in that rate.

Ms. Kaye: I'm sure that's something that Cliff Jamille said over two years ago too, and I'm just curious what's the hold up? Especially for, not only for tiered rates for potable water, but you don't charge anything for brackish and that's the biggest consumption.

Mr. Kaakua: We're filing with the PUC December 26th – so a week from – next Friday.

Ms. Kaye: Good. For both tiers – for potable and –?

Mr. Kaakua: No. We've been working on the brackish water with PUC for quite a while. After we file the brackish, then we're going to start working on the potable.

Ms. Kaye: You can't do them simultaneously?

Mr. Kaakua: Our decision was not to do it simultaneous.

Ms. Kaye: Any reason?

Mr. Kaakua: I think work load. I think we're spending a lot of time on the brackish and we just want to get that done first.

Ms. Kaye: Okay. Ellen also referenced in her presentation, from the oversight she has, that the levels in several wells seemed to be declining. Would you agree with that?

Mr. Kaakua: Yes.

Ms. Kaye: Okay. Which wells which you say that would apply to?

Mr. Kaakua: Well #8. Well #6, we had an issue with #6 this year and we decided to manage the running times of the well to six hours a day – seven hours a day, excuse me – and at this time, I think we started back in May of this year. But at this time, you know, the results have been pretty favorable. Besides, limiting operating times, we monitor the water levels daily. So actually we're watching it and it's been coming up slowly. It's not going to move right away. So well #6 has been favorable. We're had a history of well #8 going down and we're watching that also, monitoring it daily. Well #9 we had issues last year with water levels going down. For us, this year has been pretty good. You know, we talk about drought, but our water levels and our pumpage has been pretty good.

Ms. Kaye: I'm going to ask you to clarify something because earlier, and this maybe a misconception that I've carried forward, you mentioned that #6 is City, #8 is Koele.

Mr. Kaakua: Yes.

Ms. Kaye: I thought #8 and #6 interchangeably could serve both areas. Is that not true?

Mr. Kaakua: That's correct. It's not true. #8 is a little higher in elevation so we can drop water down from #8 into #6, but we can not move water from #6 up to #8. So it's kind of like a one-way. I doesn't go both ways.

Ms. Kaye: So #8 which feeds Koele exclusively.

Mr. Kaakua: Yes.

Ms. Kaye: Now, if you had trouble with that, there's no possibility to pump between, up hill?

Mr. Kaakua: Then we use the emergency fire pumps.

Ms. Kaye: Okay.

Mr. Kaakua: Or, when we complete well #3, then well #3 can serve well #8, and also drop

water down to well #6.

Ms. Kaye: I think that was one of the things that your predecessor talked about making the system redundant and being able to go backwards and forward so that was almost two and a half years ago. It's interesting to see that it's still out there. Okay, water levels, one thing you just said, I know in the Water Advisory Committee meetings I really struggled with the highs and lows on the water report, and something that Roy Hardy said when he was here about having air lines and two values and the lowest correspond when the pump is on, the high corresponds to when the pump is off. Jog my memory that we had a Planning Commission site visit and part of that was around all the wells. And the water utility staff at that time talked about having a chart recorder in each well, and I completely forgot about that. That's what has always stuck in my mind as this is a day to day basis, according to the minutes from, I think it was October 16, 2006. This is a device that gives you what your well levels are on a daily basis. Correct?

Mr. Kaakua: Yes.

Ms. Kaye: So when you move then to the periodic water report which just shows a high and low that has no correlation to what your daily –. I mean you just pick arbitrarily the highest number for the month and the lowest number for the month and that's what you report?

Mr. Kaakua: No. When your pump is off, your water level is what they call at static. When you turn your pump on, it's like a straw. When you suck the straw, you have this draw down where the water level kind of draws down. And depending on the water compartment that we have here in the high level aquifer, it may draw down as far as 50 feet when the pump is running. And then when you turn it off, it will bounce back up. Not immediately. Slowly. In a matter of 10 minutes or even longer. It will bounce back up to the static water level. So the two levels you look at is your bases – these are your static – because that's your water level, I guess, throughout. And then when you turn it on, then you have the lower level which is a draw down level. And in some areas if you have a good, good soil foundation, your draw down level will be maybe a foot or two. That's a good well. If it drops 50 feet, 60 feet right a way, it's not really that great. But it doesn't mean you can not pump it. So that's the difference between static, or the high and the low. So it's a draw down.

Ms. Kaye: But if you – and I remember we had this conversation because your predecessor described it as a storage space and you lost storage feet. If start at 90 and it goes down, and you draw down to 85, and it comes back to 87, you've a lost three feet of what we called storage. I think we're saying the same thing. I guess my question is if you really wanted to monitor the health of any given well, that chart recorder that you're staff talked about a couple of years ago on our site visit would be much more accurate than the highs and lows. Correct?

Mr. Kaakua: I like the highs and lows personally.

Ms. Kaye: Because?

Mr. Kaakua: Because it's a clear number. The chart recorder would just give you, you know, another piece of paper because it would a round thing, and then you have variations. I think you want to know the highest and the lowest because everything will be in between.

Ms. Kaye: Mr. McOmber, who I'm afraid has left us, when he testified at one of the former presentation, said and several other people said, and I know you would agree with this, there's two aquifers (sections) here, one leeward, one windward. And he characterized the 2.3 million gallons a day that we're currently at as coming primary from the leeward side. There are no wells on the windward side, or is there just one that's one the (phonetics) before.

Mr. Kaakua: I believe you refer the windward side as Maunalei? Okay. We have wells in Maunalei. We have two tunnels. We have Maunalei shaft. I think we have two shafts. The two tunnels in the valley flow water. The shaft has not been used for quite a while. There's a pump in there. There should be electricity. But we have things in Maunalei valley. We have facilities there.

Ms. Kaye: No, I don't think that was his point. I think he was saying – and Dr. Juvik talked about this last month when he was here that the fog drip comes at a certain elevation. It's most effect at a certain elevation. And that the aquifer can be really sort of divided into a leeward side and a windward side, and there are no – I'm just asking if you have any wells. I understood you didn't on the windward side. They're all on the leeward side.

Mr. Kaakua: Our wells are all what I showed you this evening. I'm not really clear what is windward and leeward. It's not that I don't want to answer you. I thought Maunalei was windward. Most of the division of the sustainables or the withdrawals, whether there has been an issue, I would defer that for me to either Roy or we have a ground water study, model study, under way, which is using Roy's model and other data to find out the best locations for wells.

Ms. Kaye: That's what pretty much what Roy said, I just wondered if you would agree that differentiation was accurate. There was an MOA signed in 1987 that said that going forward every well would have a back up generator. Do all the wells have back up generators?

Mr. Kaakua: We have a portable generator and that's it. I mean every well station doesn't have a generator, but we have a portable generator on hand if needed. Also as I mentioned, some wells are run by generators. And I believe we have access to more than

one portable generator.

Ms. Kaye: In 1995, there was ordinance passed, No. 2411, and I've asked everybody else that has come on this, I'm not just picking on you, that the ordinance as a condition I think if the Land Use changed, required the Company at that time to request a cooperative monitoring agreement with the USGS to enhance data gathering and analysis for the island's water resources. I asked Gordon Tribble when he was here and he said as far as he knew that hadn't been done. Do you have any different information?

Mr. Kaakua: We monitor some rain gauges. I'm not sure where it goes, the information.

Ms. Kaye: Well the USGS said that they don't get any information from here.

Mr. Kaakua: Okay.

Ms. Kaye: So I guess your answer is that that hasn't been done.

Mr. Kaakua: I guess there's nothing going to them.

Ms. Kaye: Mr. Reilly at a past presentation strongly asked this body to ask the Company when they came, the utilities Company, how long your CIP plan goes out – that his understanding is that it's only been a one year plan, and wondered if – he asked us to ask if you have any kind of five to 10 years strategic infrastructure improvement plan.

Mr. Kaakua: The plan we do put together is actually a budgetary plan, and the budget goes for, I believe, five years. Five years as far as capital improvements.

Ms. Kaye: And is that five year amount, once it's submitted, approved for the five year period or just the year at the time? Maybe that's what he meant.

Mr. Kaakua: The budget is approved as a five year plan.

Ms. Kaye: Could you tell us the status of #15, new well #15?

Mr. Kaakua: #15 is following well #3.

Ms. Kaye: And a time frame for that?

Mr. Kaakua: A time frame, I believe, is 2010.

Ms. Kaye: Okay, so two years from now. Okay because the next item on our agenda is a communication. It's a six-months compliance report from Castle & Cooke as a condition

of a permit extension. And I have to say that there's some difference in the numbers from the PWR and what was submitted to us in that communication. I don't know if you want to field that question or not. Any questions regarding that? I know Bev, I think you said you wanted to follow up with some questions on that. Okay, I'm done. Thank you Joe.

Ms. Zigmond: So, you said well #3 was going to be 2010, and #15 also in 2010?

Mr. Kaakua: Yes. Completion of well #3, and starting of well #15.

Ms. Zigmond: Oh, starting. Actually Chair Kaye asked a lot of the question I was going to, so thank you Sally. Talking about data collection, I'm going from the September minutes and Gordon Tribble says, "I know that Castle & Cooke would talk at one point about hiring someone to collect information on how much water is being pumped in different wells." Is that happening?

Mr. Kaakua: Yes.

Ms. Zigmond: Okay, who's doing that?

Mr. Kaakua: Our meter reader. You want a name? Kimo (phonetics.)

Ms. Zigmond: No, they're talking about – I don't think that's quite what they're talking about. I think this was more of an ongoing study kind of thing not just taking the meter readings. So was that no then?

Mr. Kaakua: Your question was are we taking data from our wells? Collecting data? Gathering data?

Ms. Zigmond: It says collecting information. I think the steps to be taking would be to make sure you have a network in place to collect information on the climatology and to collect information on how much is being pumped in different wells, with the water levels in those wells and nearby wells. I'm just trying to get a bigger picture.

Mr. Kaakua: We collect data on the well pumpage, and the water levels. Climatology – our meter reader also checks the rain gauges. I'm sure where that goes – where his information on the rain gauges go. John, you can follow up on that, but it's not, for me personally, it's not a pressing issue on the monitoring of rainfall.

Ms. Zigmond: Alright, I'm going to go back to the numbers thing. I looked at the quarterly usage report and the periodic water report, and one thing I don't understand is why the quarters in those two reports have different numbers of days in them. It seems . . .*(Changed Cassette Tapes) . . .* details not consistent between those two reports.

Mr. Kaakua: There are two different reports. The PWR is a 28-day cycle. Every 28 days they go and they read the pumpage, and basically we're recording the pumpage. The quarterly report is consumption or billed. Our consumption is driven by our billing which is a two month billing normally except for in Manele we have brackish water which we do not charge but we still read the meter. But with brackish water, we read it monthly so the time period is never going to match because one is 28-days, the other is 30 or up to 60, and one sometimes it goes to 70 or 80 days. So they're looking at two different things. One is consumption and one is pumpage. The only way you correlate the two is to bring it down to usage per day. So you'd have to divide it by the 28-days or the number of days in the period. That's the only way you can compare the two numbers. Again, the quarterly report was set up for a certain reason and to read certain things. I'm not sure what the purpose is. We just follow, we do the readings and put it in there. If I knew what the purpose was, maybe we can get something that you're really interested in.

Ms. Kaye: Maybe we can pursue that at the Water Advisory Committee because to follow up on Bev's question, the ordinance that requires the quarterly report.

Mr. Kaakua: Yeah, it's very specific.

Ms. Kaye: It's very specific, but it deals with the same – your only sources of non-potable water are #1, 9, and 14. And what came out – what was put in the third quarter report to County Council had a certain amount of usage. And you go to the same period on the periodic water report, and there's 51 million gallons difference. So it maybe that it's different periods, different ways of tracking, but that's a significant difference. So I think maybe not to solve tonight, but it's something we should definitely work on because it's apples and oranges.

Mr. Kaakua: It is and there's another ingredient that I don't want to really get into today, tonight, and that is the differences on unaccounted water. Unaccounted water –

Ms. Kaye: You know, I took your difference, and I took away your 15 million gallons reservoir and I gave you 12% system loss, and I still came out with 31 million gallons difference. That's huge.

Mr. Kaakua: Yeah, there's a lot of numbers in there.

Ms. Kaye: You're welcome and thank you, maybe next Water Advisory Committee we can work on that.

Ms. Zigmond: Yeah, there's a lot of differences, and one of the difficulties I have is well, #1, numbers not adding up as in the past. Every time we get a table or a figure or whatever with numbers in it, they don't add up. And the big difference is that you and Sally are

talking about which I alluded to, I have a hard reconciling all that when Castle & Cooke is coming before us with applications. And I have all of these questions in my mind and I can't get anything to add up and there's these huge discrepancies. How are we suppose to make an informed decision? So if somebody could address that relatively soon, I think we would all really be happy. Thank you.

Ms. Kaye: Okay, Commissioners, additional questions?

Mr. Ruidas: Joe, you mentioned fire protection from the Palawai Basin line coming down?

Mr. Kaakua: Yeah, MECo and Airport.

Mr. Ruidas: MECo, Airport – Alberta, your farm – when your mains break, in the last four months, what was the duration and the frequency of the breaks? Estimate.

Mr. Kaakua: Estimate. Aggregate or each break?

Mr. Ruidas: A round about ball – ball park.

Mr. Kaakua: Basically for each break, we take a day to drain and a day to repair and fix, and then turn it back on. That's the best we got. We tried doing it one day – turn off the water, drain and do the repairs – we couldn't do it. So the shortest time is two days. And the longest was three weeks. But actually we cut that down. That was just one occurrence. I think now, the longest would be, I think the longest we had was four days or something.

Mr. Ruidas: So in that time, in those areas don't have water for fire protection.

Mr. Kaakua: That's right.

Mr. Ruidas: So if a fire was to happen –

Mr. Kaakua: We're in trouble.

Mr. Ruidas: The next one is what type of water disinfection system you got?

Mr. Kaakua: Right now we have chlorine. We have calcium hypo-chloride, which are the tablets, and right now we're trying to move into sodium hypo-chloride which is a liquid bleach.

Mr. Ruidas: That's for potable water?

Mr. Kaakua: Potable water, yes. We only do potable. We're not interested in the waste water.

Mr. Ruidas: This may seem like a funny question but you do that to disinfect bacteria?

Mr. Kaakua: Yes.

Mr. Ruidas: And all kind of other stuff? How does that get introduced into the system?

Mr. Kaakua: It can be introduced cross connections. Cross connections is one. Main breaks, when the pipe is open to the air. Actually, a relief value, you know where you have air coming in where you take the water out of the pipe, you can stuff something in. But the disinfection is actually a Federal requirement or State requirement. We have to do that. We have to chlorinate.

Mr. Ruidas: I was just wondering if the source was tainted with anything.

Mr. Kaakua: Not usually. Usually it's a distribution system, or it can be the reservoir, you know, reservoir screen, fence screens, broken –

Mr. Ruidas: So it's like a system error then?

Mr. Kaakua: Pardon?

Mr. Ruidas: A system error?

Mr. Kaakua: System error – well we sample for bacteria, I think regularly, and we send it to the Department of Health for testing. And if we get hits then we go out, we sample it right away. For us, and we have had hits, and our thoughts was a sampling area. Actually a sampling area we had was at Hulopoe Beach Park, we had all kinds of junk around there. So what we did is we did another sampling tube or site that we could lock it up so it wouldn't get contaminated. That's the only hits we had since I was here was that one area. So we've been pretty good.

Mr. Ruidas: Next one is you guys ever looked into inline turbine systems for power generations?

Mr. Kaakua: Yes. I think some people were looking at it this year. You know, we had a big push to go green. Personally, I don't want to complicate the water system. You know, I don't want to throw high pressure. You know they're looking at putting 600 pounds of pressure in doing this and that. You know, I'm more concerned over a reliable operation of the water system. So we have looked at it. I'm not for it, but you've got to talk to John

here.

Mr. Ruidas: We'll get John next. How much will Maunalei system cost to be repair and be online?

Mr. Kaakua: Pardon?

Mr. Ruidas: Maunalei system.

Mr. Kaakua: Yes?

Mr. Ruidas: How much would that cost to be repaired?

Mr. Kaakua: To repair what?

Mr. Ruidas: To repair the lines and to be in service?

Mr. Kaakua: It depends on the break and the difficulty of getting at the pipe. It's hard to put a cost. The only thing I can tell you is probably time, days, and man power. Sometimes we get at it within a day, less than an eight hour period. We've had some breaks.

Mr. Ruidas: No, Maunalei.

Mr. Kaakua: I'm sorry. I'm thinking of Manele. I'm sorry. What's the question again?

Mr. Ruidas: Maunalei water, how much would that cost to be put in service or is that being looked or feasible or what?

Mr. Kaakua: We looked at repairing the main break and fittings amounted to – our first estimate was at $700, and after that it's just man power. I don't know. Four people, eight hours a day – $700 for man power. That's just an estimate. How much does it cost to repair our main in Maunalei?

Mr. Ruidas: Yeah, from there to here, for City use. Maunalei water system.

Mr. Kaakua: How much it takes to run a new line? Is that your question?

Mr. Ruidas: Yeah, to put into operation again.

Mr. Kaakua: We got several things you can look at. I'm not going to answer it today. It's just too large. The best source probably the shaft. We've got to run electricity. There's no electricity. The shaft, confined place to find space. We've got to put blowers in. We don't

really have a cable car. You're not going to run up and down there. You've got to turn it on and off you know, so we have a cable car system. Pretty much, we're looking at all new mains, that's my opinion. You know, if you're going to spend money, make it last. And then the mains got to come up, and there's another pump station there, push it up over the mountain. I heard that guy put it in. Personally, all new stuff, I would say. Now the pump station, for me, it looked frozen. So you're looking at a pump station, the shaft, cable cars, electricity –

Mr. Ruidas: So it was looked at?

Mr. Kaakua: $10 plus mil – $15 mil – I mean it's just a rough.

Mr. Ruidas: Okay.

Mr. Kaakua: Don't quote me. Right now, for me, it's not feasible.

Mr. Ruidas: I guess my question is actually for John, since you're leaving, your billing as far the bill coming out in the main, you think you guys can use something more nicer? It's just a thought.

Mr. Kaakua: Glossy?

Mr. Ruidas: Well not so plain that it looks like trash, you just throw them away.

Mr. Kaakua: We can look into that. It will come after the rate increase. When we increase the rates, we'll give you nicer bill.

Mr. Ruidas: And that's all I got for you. Thanks Joe.

Mr. Mano: How's it Joe?

Mr. Kaakua: All right Matt. . . .

Mr. Mano: *(Inaudible. Mechanical problems with the audio equipment)* . . . and thanks for hiring my son. Anyway, his wife knows my wife, but anyway, let's get to business. Anyway, you talked about the wells down at Maunalei and all those pipes and the pump station that can you tell – probably you can't – I don't know who can, but can you tell me when did they shut that well down?

Mr. Kaakua: I don't know.

Mr. Mano: Anybody know? Rocky?

Mr. Kaakua: We got PWR's going back to '90's.

Mr. Mano: Maunalei, before your time.

Mr. Rocky Sanches: I've been with the Water Company since 1994, 15 to 16 years, and it's been out of service since then. I'm sorry, my name is Rocky Sanches. I'm the lead man for the Lana`i Water Company. I work for Joe.

Mr. Mano: Well, now you work for John.

Mr. Sanches: I work for John now.

Mr. Mano: Thanks Rock. My next question because you stated that they needed a cable car, confined space, pump station which we did put it in Dole time. I mean we use to up keep all those lines. We use to come down with rope and weld every line, every year when the season start. So I know that pump station and I know everything about Maunalei, and all the pump station stations that has your trolleys that goes into the mountain because we use to put all the generators in. We use to put all the pumps in. We use to help do all the pipe lines on this island because I was a welder. I was a maintenance construction mechanic for Dole Company. And at such time, even Letty would know because when Maunalei was running, there was one person that run that pump station. He lived down there year after year and he would check all the wells late at night, walk in the back, all the way in the back. You know where I'm talking about, there's on well way in the back. And also that two wells that goes down into the mountain. I want to know something because you said because it's a confined space, and because they need a trolley, is that a Department of Health issue?

Mr. Kaakua: It's a safety issue. OSHA.

Mr. Mano: So OSHA actually said that you have to put it in?

Mr. Kaakua: Actually they say you need a vent, the vent, the blowers. You need blowers in there. You need air sniffers to make sure there's oxygen down there. I don't know if they said you need a cable car, but I would think you need a means to go down there. I ain't no young guy, but going down and up is tough for me.

Mr. Mano: I know. We use to walk there too. So you're saying then, OSHA will enforce this, correct?

Mr. Kaakua: Yes.

Mr. Mano: And they have stated it in writing to your Company that they will enforce it?

Mr. Kaakua: Yes. Well, our safety officer has stated that.

Mr. Mano: Okay. That was just a question. Because he asked how much it would cost to do the pipe lines. Your Hi`i tank, you guys changed every pipeline?

Mr. Kaakua: That's correct.

Mr. Mano: From the tank all the way down?

Mr. Kaakua: Down to the bottom of the hill, yes.

Mr. Mano: All the way down to Palawai – bottom of the hill?

Mr. Kaakua: Yeah. At the bottom of the hill.

Mr. Mano: I know you stated that you were amazed about the tank because of the condition of the tank because you guys went in and you guys seen the floors and you guys seen the walls. So, my question, in corrosion, how corroded is that thing?

Mr. Kaakua: What we did is we had people come in and actually scan the thicken of the metal. So there's some areas where it has corroded. And how corroded? To answer you, it would actually be a number. And I don't have it here, but the number was fairly good considering the age of the tank. And then the bad areas was only one spot. It wasn't all over. But I would say 80% of the tank is really good. And of course, the steal they used back then was a lot thicker than they got now so we're quite surprised. There's just some areas they have to cut out and redo.

Mr. Mano: That was a reminder. My question was with the R1 plant. Was it because you said you were going to answer that question. So I'll remind you. That was my question. All I asked was it possible that the Company had future plans in putting in another reservoir that would hold approximately 10 million gallons. That's all I asked.

Mr. Kaakua: I think someone looked at it, and when I first came in, in '07, I also looked at it also. Mainly because we've got this two million gallon tank sitting up there that's abandoned. We looked at it. It wasn't feasible. In the summer months, we need water for the Koele. We don't have water. Even the County – the County tank you'd think – hot summer they use more water, but somehow they're not flushing their toilets because actually we shut down in the summer. We don't even pump any water up sometimes because we've got nothing. Our tank is empty. Our R1 reservoir is empty, so sometimes we shut down. So we have problems taking water from the County. Their affluent to us goes down. So to answer your question, we did look at it. I did look at it. It doesn't mean we can not look at it again, but I did look at it last year.

Mr. Mano: The only reason why I asked that question because during your rainy season, when you guys fill up your 10 million gallon tank, your reservoir, and then you guys fill up Koele, and your highest pond, I know holds a couple of million gallons in the highest pond. When you guys are full and we can not send water to you guys, it ends up in our perk pond. And one year, we estimated five million gallons wasted waste water. And that's why we asked the question because every time when you guys need water, somehow aqua and County points the finger at the problems that maybe the County has evaporation with all of this. But when you look at the bigger picture, if there was a rainy season time when everything stocks and if there was another reservoir, you guys would have at least 15 to 20 million gallons reserved. Because every year we see this. I see this because I work outside. I got to mow that ponds, and I can not go in two of the ponds if the water keeps being wasted from our pond. We got written up by DOH because of our center divider. We can not have the water past the divider because it will short circuit the sewer water. So what we have to do is we got to waste it. We got to open the flood gates and send it to our perk ponds. Now to me, that's waste. I'm mean, I'm using the word literally, waste water, but that's waste when you guys can actually save that water. And if Lana`i Company every thinks about, I think you guys should look at a future plan about this because rainy season has come often lately. It has come often. And the last time we had the big rain was that 40-days of rain in Kauai. If you guys remembered that, that was a lot of water, and we got some of that water. And I know John worked in Kauai so he's seen a lot of water, and Kauai is still getting it. And we're still getting water. And that's why I asked the question because there's too many fingers being pointed. And we know that our ponds need dredging, but with our economy today, there's no money.

Mr. Kaakua: We're in the same place.

Mr. Mano: So, look at the whole picture. This was brought up to me 10 years ago. I've been with the County for 14 years. We've always said it, if you guys had another reservoir you guys would have enough water to take you through the summer months. It's possible. But nobody was willing to spend the money. Nobody was willing to spend the money to save the water, to water your golf course. But they were willing to spend the money to build new homes, multi-million dollar homes and everything else. It's hard especially when you sit and we look at the numbers of the water. It's hard when I see water being wasted and nobody does anything, and yet you guys are still asking for an extension for water. It's hard. I work with the wastewater. I see it come, and I see it go. And my job will never end. I'm like a mortician. People got to shit everyday. Thanks Joe. Thank you Joe.

Mr. Kaakua: I looked at it. We can look at it again. We can always look at it. The water all goes to Koele golf course. Eventually, they're the ones that are going to have – that's their capital expenditure.

Mr. Mano: Joe, thanks for being patient with my partner.

Ms. Zigmond: I have two other questions. Would you speak to any conservation methods that are maybe being employed right now and ones that are being explored? And the second question is would you speak to any ideas about catchment?

Mr. Kaakua: I'll start the second on first. We don't do catchment because we don't have a lot of surface water. Actually, our surface water catchment, not roof catchment. Are you talking about catching water from the roof? Is that the question? I haven't looked at that at all. As far as conservation, we have some guys in Castle & Cooke that are – I think they run the nurseries. And their task, a way of cutting down their water usage in the nurseries – Kevin, can you answer that Kevin? Kevin Humphrey, he was tasked to try and cut back some of the water uses.

Mr. Kevin Humphrey: Kevin Humphrey, Castle & Cooke, or community member. The question you asked about some of the things we looked in probably two years ago with Mililani. We looked at – we had a sustainability department, not a department, a couple of people kind of working on some catchment things. And some of things we came up with that Joe probably doesn't know about is that we were looking at just catching water off the roofs of buildings, schools, properties that we owned, and it calculates out to, for every inch of rain water that comes down, you can catch about 625 gallons. And I don't know if any of you guys are doing it on your own personal houses, but if you're not, I highly recommend it because we do get a lot of rain and precipitation that we can catch and use for irrigation. Also on the nursery part, we have been tasked, after going through the budget meetings, to cut down on our water. So what we're going to try to do for the Lodge at Koele, the nurseries, is to automate them. They're not as automated as we would like them to be right now. Using more of the technology that we have today, moisture readers to – like I say, when we get rain, we don't have to manually go in to shut these systems off. They'll basically read the climates and basically function on their own. So we do have plans in 2009 to get a system at Koele, the nursery here in the City and down at Manele.

Ms. Kaye: I want to ask you a question.

Mr. Humphrey: Yes, Ma`am. Go ahead.

Ms. Kaye: How should I say this – the homeowners association which is not inclusive of us here in town, precludes and prohibits catchment systems on the properties.

Mr. Humphrey: That's fine. That's fine, I guess.

Ms. Kaye: I mean, do you object to that?

Mr. Humphrey: I really don't.

Ms. Kaye: If a home owner that bought into one of the areas wanted to put up a catchment system, would you support that as well?

Mr. Humphrey: You would have to go to the homeowner association and I'm not a part of that.

Ms. Kaye: Well, I understand you're not.

Mr. Humphrey: Yes, Ma`am.

Ms. Kaye: But you're advocating it for town but not else where.

Mr. Humphrey: I'm advocating it for anybody who would like to do it.

Ms. Kaye: Who'd do it.

Mr. Humphrey: Right. So it's individuals that like to be motivated and then jump on that and take the opportunity to catch some water.

Ms. Kaye: I got it. Thanks.

Ms. Zigmond: But for those of us who don't own our house – my question was actually aimed at what is Castle & Cooke – have they looked into it into any catchment?

Mr. Humphrey: No, Ma`am, not to my knowledge. So if you want to ask Joe, I don't know. I just know on a personal level, and I think that's where it starts. Like I said, I catch water, I don't own my house, but I catch for my garden. So like I said, I highly recommend it. At least look into it. It might not be for you, but it works for my family.

Ms. Zigmond: So you live in a Company housing.

Mr. Humphrey: Yes. Ma`am.

Ms. Zigmond: You can alter that Company house?

Mr. Humphrey: No Ma`am. I just catch water that comes off the roof. A little guard, it falls into a bucket. It waters my garden. It's pretty simple.

Ms. Zigmond: Yeah, well, it would be nice if we could have that too. Thank you Kevin.

Mr. Humphrey: You're welcome. Any other questions? Have a good evening.

Ms. Kaye: Okay, if we have no more questions from the Commissioners, I think we should at this point – it's getting a little long to be sitting – just have public testimony. Any questions? Leilani, did anybody submit written questions? No. Okay. So we're now into public testimony. And Joe, before you run away, we have a present for you. It's called *Who's Water Is it? The Unquenchable Thirst of a Water Hungry World."* It's a series of essays on the shrinking global source of water. We thought you would enjoy it in your retirement. So we'll pass that along to you for your days of pleasure. Okay, we have two people signed up to testify. Ron I think has left. Okay, Pat, you would be next up. Anybody else wants to ask questions or testify, please feel free.

Mr. Fairfax "Pat" Reilly: Thank you Chair Kaye and Commissioners. I'll extend my thanks to Joe also for his service to Lana`i. As you recognized this was a long night, and any consideration for the public to be able to make testimony at some points along the way, I think it would be useful and that would be the end of us. So, maybe for later on.

I also wanted to report that Lester did talk to me. And I think the concept of intern may have different meanings for different people. Often people, the interns I believe they're talking about are people already enrolled in professional programs. But we do have students in the school that are interested in environmental studies and some things, and so that would be, I don't know if you call that an intern. That would be a different kind of relationship. So that's doable if the Company is open to those kinds of relationships.

I guess the challenge for the Commission I see is how to take all this complex information and transmit it to the next Commission as people come and go. How you apply to this complex knowledge to a permit that comes before you, I think needs to be framed in a certain way that's easy to access the data that you need to make quality decisions about projects. I emphasize once again that this Lana`i Water Use and Development Plan must come forward to completion because that's where it suppose to all come together I hope. And I don't know how to bug the County anymore, but at least put it on the record that I hope the Commission continues to ask for the completed Lana`i Water Use and Development Plan update, particularly as we go into the Community Plan for the next 30-years.

Secondly, somebody has already mentioned the economic decline and think we're all aware that on this island we're going to suffer next year some severe impacts. And I would guess that would true for the Corporation which would mean their capital investment into all these projects may be very limited particularly in water and environment. My suggestion is if the Federal stimulus package comes down from the new administration, they're saying if you have projects ready, they will be funded and that this community and organizations be sure they have their project ready to be able to take advantage of these Federal dollars that are going to come to the State. Because if the project isn't ready to go, we could get –. You know, when you look at all the projects that were presented tonight and the

possibilities, this island could access some those Federal dollars. And so that would have to happen through the Governor's Office, through the County, through everything. But we should be ready for any major projects that would be prepared to go with Federal dollars, and that should be community effort.

I was impressed with the amount of technology particularly that was used on the golf course. And Commissioner Kaye mentioned it or alluded to it, why in the world that technology can't measure the amount of water in our system. Again that would be an investment. But when you look at the computerized technology that's available to the golf course, to me, there's no reason that such a system can't be placed on the water transmission system to have very accurate current long term data available. I think I am familiar with a 13-month periodic water report which was a condition for the Manele Project District at the time of the golf course. And that was a strange animal, but that's probably difficult to change. But that doesn't mean you can't have another set of water information that makes more sense, and is more accurate. They just have to comply with the conditions, so let them go ahead and do that. But I agree. Create a data collecting system that makes sense, and where the numbers all add up.

Lastly, I will say, when you look at your next item under communications and when you add up – they're asking to continue the 400,000 gallons per day limit for the build out. The numbers really don't add up, and maybe 100,000 gallons here or 100,000 gallons there don't make a whole lot of difference. But it does make a difference in terms of planning. And for me, when you look 30-years out, we all have to have a vision of where this community is going economically. And if it continues to build houses, and there is a drought. I mean, I see the national weather service and USGS puts in the paper that Lana`i is under mild-drought conditions. So we know there's a drought. That's a historical thing is that you guys, we have to plan. If we have a limited amount of water and are only using so many wells, how best to use that water to the advantage of all of us. And my own view personally is that if 75% of the water is strictly going for irrigation in a desert area, maybe they ought to change the vegetation system. And I am impressed that these people are considering trying to reduce the amount of water because if no more wells are added and we're limited 2.3 million gallons per day, then what's going to happen? Will there be any opportunities for agriculture or any other kinds of businesses apart from the Corporation where individuals actually can start their own businesses and maybe have a life different than just being completely dependent on the Corporation. Thank you very much. I appreciate your work. Thank you.

Ms. Kaye: Good points Pat. Thank you very much. Commissioners, any questions or comments for Pat? Any other public testimony comments? I believe we'll take a 10-minute break before we move on to the next agenda item.

(The Lana`i Planning Commission recessed at approximately 9:00 p.m., and

reconvened at approximately 9:10 p.m.)

D. COMMUNICATIONS

1. November 7, 2008 Semi-Annual Report submitted by Castle & Cooke Resorts, LLC regarding the project irrigation demand associated with the Residential and Multi-Family Development at Manele, TMK: 4-9-017:001, 002, 003, 004, 005, and 4-9-002:049, Manele, Island of Lanai. (95/SM1-015) (95/PH2-001) (D. Dias) (Report previously distributed for the November 19, 2008 meeting.)
The Commission may provide comments on the report.

Ms. Kaye: Okay guys, next on the agenda is a Communication item. It's the second semi-annual report submitted by Castle & Cooke. Pardon? We were tasked with reviewing this communication and coming up with comments. Our Planner Danny Dias is here, and I don't know how many other people would wish to comment on this. I know I have a few comments to make. Danny I think we'll see what kind of comments come out and then you and I can work on how to frame them. There is, as we did last time, an option for anyone from the Company that submitted this report if they want to respond tonight they can. This is not something we vote on. This isn't something we approve or disapprove. This is just something that we – it's information and for a little background, it was imposed as a condition to get a five year extension. It was, I think, imposed at November of last year. So we're into fulfilling the first year of a five year extension. So there's four years left. And it's a work in progress. Every time they do it, we come up with things that we think could use a little more clarification. So that's what where we are about tonight. So Commissioners?

Ms. Zigmond: I don't know who am I directing this to.

Ms. Kaye: Actually you're directing it to Danny. But again Mr. Bumbar is sitting in the audience and he did sign the letter, so if he chose to respond tonight he could.

Ms. Zigmond: Okay, I'd really like to get some information. And by the way Mr. Bumbar, you are "Senior Vice-President" and not "Senoir Vice-President" according to this letter. I just wanted to point that out.

On page #2 of the letter, after the little table, it says, "the quarterly average for single family and multi-family in 2008 is 129,098 gallons per day." I would like to know how that figure was derived.

Mr. Rumbaoa: Good evening again Commissioners. I also signed that letter so I'll go

ahead and respond to that. That 129,098 gallons per day was derived by you take quarter one, quarter two, quarter three – you add for quarter one, the single family to the multi family so that gives a sum there. You take quarter two, you do the same thing, you get a sum there. Quarter three, same thing, you add single family to multi family, and then you divide that by three, and that gives you the quarterly average of 129,098.

Ms. Zigmond: I'm not sure that I got the same thing, but while I – let me ask you another question then, then I will redo my calculations. Under the use type for single family, it says 2,385 gallons per day. I had an occasion to look at the DCCR and in there it said something about 1,000 gallons per day being the maximum. So I'm wondering how we can go from 1,000 to 2,385?

Mr. Rumbaoa: Well that use type of 2,385 was determined by taking the daily average.

Ms. Zigmond: No, that's not what I'm saying. I'm saying if you're coming up with that number 2,385 gallons per day, and according to the DCCR, it says 1,000 gallons per day allowed only.

Mr. Rumbaoa: Yes, that's correct. But also that number was derived again by using the homes that was built. So if we take all the improved lots that's out there which is about 52, that number will come down. So there's several ways to determine that number. So what we did again that use was based on the homes that are using the water and we have these unimproved lots. So if you take all the unimproved lots and add that on with the homes, then that number will come down.

Ms. Kaye: Okay, I have to follow up on that because 2,385 gallons per day is what 15 homes are using.

Mr. Rumbaoa: That's the average. Yes.

Ms. Kaye: Yes, if that's the average, so that leaves a balance of approximately I thought 115 properties, if used to that extent, how is that number going to come down?

Mr. Rumbaoa: How is that number going to come down? I don't know. Those are used by the homeowners.

Ms. Kaye: The Declaration of Covenant Conditions and Restrictions (DCCR) clearly states that homeowners are limited to 1,000 gallons per day. But you're saying they're averaging 2,300, so how do you?

Mr. Rumbaoa: We are – this is for irrigation – in the process, we're filing a PUC rate case where we will limit a tier system. And as they exceed the 1,000 gallons per day, there will

be increase charges for that. So that's one avenue that we're pursing to possibly bringing that average rate down.

Ms. Kaye: And if a particular 114 homeowners come on board and they just don't care about the money, they're willing to pay for it, how are you going to stop them?

Mr. Rumbaoa: I don't know. That's the option we're using right now. So when that happens, I can't tell you.

Ms. Kaye: Can I follow up on that for a second Bev? I'm sorry. It seems to me that – first of all let's acknowledge the easy one – you stated in this and I'm sorry Clay you of course did sign this as well that you attached a letter from David Blaine. It wasn't attached so we don't have that. So that's one comment Danny and I'd like to see that cured before the next six month report. If we could have that sent to the Planning Department so the Commissioners could get a copy of it.

Ms. Zigmond: And following right on with that Sally, you say that the SMA application is too big to include. Can you just reference the pages that speaks to the water.

Mr. Rumbaoa: Okay.

Ms. Zigmond: I mean, I certainly don't need 300 pages to take home, but just the pertinent stuff please. . .

Mr. Rumbaoa: . . .*(Inaudible. Changed Cassette Tapes.). . .*

Ms. Kaye: So we got that worked out. We'll get the copy of the letter that was suppose to be attached that wasn't, and you guys will figure out how much of the SMA application pertains to non-potable use and provide it to us shortly – not waiting six months.

Mr. Rumbaoa: Okay.

Ms. Kaye: We'll check next month to see whether the Planning Department has received it. As long as we're on this, you're letter back in May and this one again used much of the same language that you're entitled in this phase, I think, to 166 single family and 54 multi-family or a total of 220. And then combined with that, your projected irrigation demand from what was filed in 1995 was 400,000 gallons per day, and that does not include the Palms, correct?

Mr. Rumbaoa: That's correct.

Ms. Kaye: Okay, so if you take the 15 single-family homes that are using 2,385 gallons per

day, if 151 completed single-family homes use this, I came up to 395,910 gallons per day. Similarly, if 53 multi-family units are using 1,762 gallons per day, if there's 54, you come up with 95,148. That total is 491,000. That's 91,000 gallons per day over what you're saying your demand was projected to be. And if that is so, why? I mean, you based this on saying you're going to stay within that allocation.

Mr. Rumbaoa: That's correct.

Ms. Kaye: So clearly these numbers don't bear that out. So again, this isn't something you necessary need to answer tonight, but going forward, as Bev said earlier, you want to come for permits, your numbers are not necessarily making sense. They change. So I would think you'd want, on the next report, back up your allegations if that's going to go down – if those numbers are going to go down.

Mr. Rumbaoa: Okay.

Ms. Kaye: Because if you worked that out, it ends up being 33 million gallons a year over what you say you wanted in 1995, or thought you would use in 1995.

Mr. Rumbaoa: That's correct. And during that potential or those remaining build outs in our projections, that's probably could be in five years or thereabouts, and based on our water use and development plan, I believe we potentially will introduce alternative water source.

Ms. Kaye: Well I've heard that for at least the last four years that I've been back, and I know that there's certain triggers built into the Water Use and Development Plan. But the prevailing – and I say this to our new person on island – the prevailing answer has been consistently when we need it, we'll find it. It's never been shown to us as when we hit this point, we're going to do x. When we hit that point, we're going to do y.

Mr. Rumbaoa: Right.

Ms. Kaye: So just so we know that's out there. Bev, did you want to take it back at this point?

Ms. Zigmond: Yeah and this might just be matter of semantics, but I think it would make it a little more clear. Going back to the table, you answered the question on how you got the daily average. You said you added quarter one, quarter two, quarter three and divided by three. To me that would give a quarter average and not a daily average. A daily average would be to add those figures up and divide it by the number of days in those quarters. And so that's misleading again. You see what I'm talking about?

Mr. Rumbaoa: I'm just following the format that was reported in the quarterly report, so I

just wanted to be consistent in terms of representing our numbers consistent with how it's recorded in the quarterly report.

Ms. Zigmond: But it doesn't make sense. I mean, it's not a daily average. It's really not a daily average if you derived those numbers the way you told me you did. So it's confusing. It might be consistent, but it's consistently confusing.

Ms. Kaye: Commissioners?

Ms. Zigmond: Regarding the developing of other non-potable sources and you speak of well #15 obtain a drilling permit. How long is a permit for?

Mr. Rumbaoa: Once you obtain it, it's good to go. It doesn't expire.

Ms. Zigmond: There's no expiration? Okay.

Ms. Kaye: Excuse me, I have to correct you on that one Clay because we asked Commission on Water Resources Management that and they said two years from date of application.

Mr. Rumbaoa: To complete the drilling? Okay, that could be, but, yes, I'm not positive. But once you obtain a drilling permit, the way I understand it, that allows you to go ahead and start your well and however long it takes you to complete it. I mean I can verify that.

Ms. Zigmond: Actually I remember now that you say that. It was two years.

Ms. Kaye: Yeah, I guess to follow up on that, your answer in this letter is very non specific as it was six months ago. So I would request that at the next six month period that you provide a more specific time table because to apply for a permit, in my mind, does not constitute continuing to develop which is what this condition specifically requires. It requires more than I'm just going to get the permit.

Mr. Rumbaoa: Okay.

Ms. Kaye: Okay. Bev? Okay, I have just a comment to make and then you can address it now or address it later, but the quarterly report that's required by ordinance combined with, compared to, the figures from the periodic water report for the same period show a significant difference to me. And I'm just going to put this on the record for three quarters, #1, #9, and #14, the only non-potable sources drew down 247 million gallons and some change. If you subtract what was sent to the golf course, which is a 161 and change, you end up with 86 million gallons drawn out of those three wells for the first three quarters. But if you add your numbers from the quarterly report, I get 95 million, so there's a discrepancy.

I think that's fairly significant. So, again, we have this quarterly report, we have the periodic water report, if there's someway to make these numbers consistent so we don't have to send a lot of time trying to figure out, yeah, doubling checking and trying to figure out what we don't know, would be really helpful.

Mr. Rumbaoa: Okay, point well taken. We'll take a look into that.

Ms. Kaye: Thank you Clay. Okay, and then I'm just going to go down. On 3b, you indicated that the same amount of properties actually using irrigation water was the answer to a. The last count that I had was 15 single-family homes were completed. There is in fact though one house that's completed and I think metered down there, but it's not using water yet. I don't think it's drawing. It's got a sign on it, Hugh Starr or something like that. I mean, there are properties down there that are metered for water, but not drawing any yet. Yes?

Mr. Rumbaoa: Yes.

Ms. Kaye: Okay, so then this answer isn't strictly correct. So maybe if we could have a differentiation. You keep saying – you said that there weren't any properties that were metered that were not drawing water, and I believe that is the case.

Mr. Rumbaoa: Yeah, that response was again based on the quarterly reports, so you're correct. There's a property there that has a meter, but it's not receiving any water.

Ms. Kaye: Okay. Well that would be helpful to know, just so we have clear picture. I mean that is what this is all about. It's just to get a clear picture of what the irrigation is being used and what is going to be required.

3d, if there's 166 total lots there and you take away the 15 improved and the 37 unimproved, what's the status of 114 left? You very kindly – thank you very much for the map, it's very helpful – but what is the status of the 114 that are not? I mean are they just unimproved lots? They're just graded?

Mr. Rumbaoa: That's correct.

Ms. Kaye: No meters?

Mr. Rumbaoa: That's correct.

Ms. Kaye: Okay. And so if anything changes between now and the next six months, you'll –

Mr. Rumbaoa: We will add that in there.

Ms. Kaye: And 3e, the amount of irrigation water being used in the common area. You only gave us third quarter. So was there some reason why you left the second quarter out because this is a six month reporting period?

Mr. Rumbaoa: We just gave you the latest from the quarterly report at that time, so third quarter. I mean, we could have added the first, second, third quarter, but we just gave you the third quarter, the latest at that time, at the time of this writing.

Ms. Kaye: Okay, then I'm going to request that the next report you do, it's for the six month period. Because you consistently gave six months and then gave us all three quarters, but for this, you only gave us the one quarter. So really the condition ask for a six month report for everything.

Mr. Rumbaoa: Okay.

Ms. Kaye: And that's it for me. Commissioners, any other comments or questions? Do you want a minute or two?

Mr. Dias: Okay, so what I got was basically the letter from David Blaine wasn't attached, and you want the pages from the SMA report that have to do with water calculations and you folks want that as soon as possible. For clarification, there's a lot of discussion about the water table and these figures. The clarification, is that something you folks want before the next report or –?

Ms. Endrina: Yes. If at all possible before the next report. It seems that we spend a lot of time, a lot of time, trying to decipher these numbers, when Chair Sally had said, we shouldn't have to be doing that. You know, we should be able to look at quickly in one example and it should be correct. Two and two equals four. So to have this not come out, it seems that every time we meet, it's extremely frustrating and time consuming. So I would prefer, I don't know, but I would prefer as soon as possible versus waiting for the next.

Mr. Dias: Okay, that's fair.

Ms. Endrina: Thank you.

Mr. Dias: To repeat that, the letter from David Blaine, pages from the SMA report dealing specifically with water, and the clarification with project irrigation demand – that table and those figures – you want that as soon as possible. For the next report, I believe, there needs to be further clarification and a more specific response regarding the question of having to with the development of other non-potable sources. You folks want a –

Ms. Kaye: Wait Danny. To clarify, the only other additional source which is the foundation of this permit extension condition was – the only thing that has been offered to us is well #15. So assuming that's the only source they're looking at going forward, then we would want a more specific status report of the development of that, and of course any other additional sources. But that goes without saying I would think.

Mr. Dias: And also there's a question you had Sally about the response regarding 3a, 3d, and 3e, and I don't know if that was something that he answered to your satisfaction. But regarding 3a, I wrote down that they need to differentiate between properties using water and properties with meters but using water, in the next report. Regarding 3d, the status of the remaining 114 lots – I know he said there's no meters and they're unimproved – I don't know if that satisfies.

Ms. Kaye: Yeah, I think that Clay graciously agreed to tell us if that changes.

Mr. Dias: Okay, and last, 3e, the next report should have figures for a six month period not just for the most recent quarter. Thanks.

Ms. Kaye: Thank you Danny. Thank you Clay very much. Next is our open Lana`i projects – sorry – workshop by the County Department of Housing and Human Concerns scheduled for February 18th. This constitutes the Director's Report, so Joe?

E. DIRECTOR'S REPORT

1. Past Commission Chair's request to discuss the following:

The feasibility of changing the zoning of the remaining 65 acres of land donated to the County of Maui by Castle & Cooke for affordable housing. The change would go from its current zoning to the appropriate type of zoning that would make the land ready to be improved.

Workshop by County Department of Housing and Human Concerns scheduled for the February 18, 2009 meeting.

Mr. Alueta: Did you have any additional questions? You said open reports?

Ms. Kaye: Yeah, the very first one, Joe, the workshop. Do we need to know anything more than that except that we got a letter saying it's going to be scheduled for the February meeting?

Mr. Alueta: Right, no, nothing else on that. Sorry.

2. Open Lana`i Applications Report.

Ms. Kaye: Okay. Don't go away because next is open applications report, and I believe there are some questions. We had several requests carried over from last month when Mr. Hunt was here and you weren't, and he offered that you would come prepared to speak to this.

Ms. Zigmond: Actually Danny had said that he was going to do it.

Mr. Alueta: Correct. I went through the minutes just now and I discussed it with Danny to make sure –

Ms. Kaye: Okay then, so we're all ready to rock and roll. Good deal!

Mr. Dias: Thank Joe. I'm sorry, the only thing I could remember was a question that Gerry had on the Land Court Consolidation.

Ms. Zigmond: I had them and actually here's the minutes. It says, Mr. Dias: "To be honest, I can't really talk about the specifics because I don't think I really started processing . . . but I'll look into it," and I was asking about the Land Court Consolidation.

Mr. Dias: Okay.

Ms. Zigmond: And there's two items on there.

Mr. Dias: I have some copies.

Mr. Rabaino: I was asking the starting date – the Miki Basin Heavy Industrial.

Mr. Dias: Okay, I only have three copies of this, but I'll give one per table here. If you turn to the last page. This is just a really small subdivision. It's actually not really – it's not much, but if you go to the last page there's that site plan. And Clay can jump in if I'm saying anything wrong here. I didn't get all the details for what's going on. I did ask the applicant to submit like a full on application with more information. This is all I have, but I did have a phone conversation with Shelly Barfield I believe and if you look at the site plan, it's basically just one lot. It's approximately 35,000 square feet in size. And if you look above the lot there's two easements – easements one and four – and basically this subdivision is just taking out that dotted line portion, the old property line. That's the existing lot and what I believe is to make room for that easement. If you look there's that black solid line kind of curving, that's going to be the new property line.

Mr. Rabaino: Where is this location? You have Hulopoe Drive. Are you referring down to Manele? Lot 65.

Mr. Dias: I don't know if Clay can answer that.

Mr. Rumbaoa: That's correct. It's lot 65. You have Hulopoe Drive and then there's that road that kind of goes up which is also called Hulopoe Drive. Actually, it's an easement – yeah.

Ms. Kaye: Clay if I may? If you look on the map that Clay gave us with his letter, you can see lot 65 and you can see the curve line and you can see that you're trying to change this to preserve an easement, is that correct? Yeah. Everybody with us?

Mr. Rabaino: This is right above the hotel? So what's your move?

Mr. Alueta: This is just information to provide you with clarity on what the item was. This is not an item for action nor was it agenda. So I don't want to get the Board too far off on the sunshine law provisions. Thank you.

Ms. Zigmond: Then I have a question on another project, the Lana`i Recycling and the Koele Project District.

Mr. Rabaino: Danny, going back to lot #65, what are you referring here? From the old property line to the current drawing, are you saying because they did that way of the easement one and the easement four, you're telling us this is the new proposal according to this map? Are you asking us to approve it?

Mr. Dias: No, this is something – it's just an administrative approval. But because you folks are asking about it, that's why I'm showing it to you folks. But this is something that I don't think you folks are going to even see. It stays within the Department. I mean, considering how small it is, it's not something –

Mr. Rabaino: So in other words, this is a courtesy map?

Mr. Dias: Yeah because it was brought up during the last meeting.

Ms. Kaye: Actually this open projects report is a very useful tool so we don't get blind sided. You have an agenda, it's on it, and then you only get that one night. At least this way, we get to see what's coming. Why is it on there twice with two different numbers?

Mr. Dias: Yeah, I caught that too tonight. I think it's only because there's two different tax map keys involved, but it's the same thing.

Ms. Kaye: Okay.

Ms. Zigmond: And the Lana`i Recycling is an Accessory Use Permit, right? ACC, that's what that is?

Mr. Dias: Yeah, and that's another planner so I don't really know what's going on with that. But Accessory Use Permit comes before the Commission, right? I'm pretty sure it does, yeah. So at some point in time, it will come here.

Ms. Zigmond: And I'm sorry, I'm looking at my handy dandy KIVA file names here and I'm not seeing DSA which is the Koele Project District Flexible Design Standard.

Mr. Dias: That's a Development Service Administration. They do like building permits. I'm just going to guess here, but I've seen these things before. Usually because they handle like subdivision reviews, building permits and so forth, sometimes they will give us something for us to comment on, and it's flexible design standards. They're probably asking us does this meet project district requirements and so forth.

Mr. Rabaino: Danny, going back to mine one, the Miki Basin Heavy. The past two meetings, you have the entry date here, and you have the completion date. The other column is when is the start date? That's the question of the past two meetings. When will they begin this project?

Mr. Dias: You mean the applicant? When will the applicant begin the project? Okay, we don't really know that. The entry date is when it comes into the Department. Completion date would be when the permit is finally approved. So as far as your question, that really depends. I'm sure the applicant has a certain date that they want to do it by. Usually that date, I think, is going to be included in the report, and I think you folks are going to review this next month.

Ms. Kaye: Yeah, Gerry, it's on our agenda next month.

Mr. Dias: So at that point, you can ask that question. But the start date, that's really arbitrary and we don't really know. I mean, they're always as soon possible, but you know, funding and all of this other stuff comes into play.

Mr. Rabaino: But the other one is the land court consolidation, and it is suppose to be at Koele? Where is that referring to?

Mr. Dias: That's the same one as we were talking about earlier. For some reason – it does the list by TMK and I guess there's at least two TMK's involved, but it's actually the same project.

Mr. Rabaino: Wouldn't it be fair for us, the Commission, that you would have the site at least attached to this? Am I asking too much? No?

Mr. Dias: To have the site plan attached to the open project list?

Mr. Alueta: I'm just leery about how far we go into it because it's not an agenda item. It's more like an item to provide you as a courtesy to provide you with an open status of potential projects. It's kind of like our "niele" list, just so you know what's going on. As the Chair mentioned about not being broad sided. And we do this, it's more like if somebody comes up and says hey there's some thing going on down the road, you have an idea of sort of what's going on. It's more to keep you – the coconut wireless a little better – high end. And just to explain, as you project district for phase III, you have approval for phase I and II, and then phase III is administrative, handled by the department. And what we check for is just to see if it's consistent with what was approved during phase I and II. And because these are just more a subdivision and either a lot consolidation or re-subdivision, we just make sure that the density requirements and some other issues as far as uses were granted during the phase II. So it's really an administrative stuff. It's just to double check on things.

Ms. de Jetley: Joe, I wanted to ask since this is just informational. Do you think next month you could give us on update on what's happening with the Lana`i Dialysis Center at the Lana`i Community Hospital?

Mr. Alueta: Is that an permit?

Ms. de Jetley: It's an open project. Yeah.

Mr. Alueta: Yeah. Dialysis or Recycling Center? I'm sorry.

Ms. de Jetley: The Dialysis. Is that a landscaping? No.

Mr. Alueta: I don't even see it. LPA. Yeah, that's pretty straight forward. You just want to know what?

Ms. de Jetley: We just want to know what's happening with it. Where is it in the line up?

Mr. Alueta: Again, this is a landscaping permit as far as from the Planning Department, all I can say is that they're at their building permit stage and they're just reviewing landscaping for their parking lot. That's what an LPA stands for. So that's the only interaction that the Department will be involved.

Ms. de Jetley: But I was told that the reason their project wasn't done and it's still sitting

there unfinished is because they don't have a building permit for a storage unit. And that they had to have an EIS on it.

Mr. Alueta: The Planning Department wouldn't be involved in that part. The only thing that we're involved with this one is apparently they do have a building permit in, and as part of your building permit, you're going to show your parking requirement. And part of your parking requirement, pursuant to 19.36 of the Maui County Code, you're going to show a landscaping plan for that parking lot. And the Planning Department is charged with reviewing landscaping plans. We handle 19, Title 19, so we're going to review for the parking requirements. So that's why an LPA is involved. As far as the construction, reviewing the building permit, as far as construction, we don't do building permits in our office, except for Code requirements to ensure that it meets the zoning, and then anything with Title 19, we would handle. But as far as plumbing, electrical, whether or not they were triggered an EIS or an EA because they're using grant money, that would be determined by the lead agency, and the Department of Planning would most likely not be the lead agency. It would probably be Human Concerns or whoever who was giving them funding. In this case, we're at the tail end. Weren't not at the beginning entitlement stage. We're only at the back end during the building permit stage. So I can only give you an update on the landscaping plan which normally takes about two weeks to do. It takes a day if you get, you look at, you count the trees, make sure they're the right species and that's it. So this should come off your list by the next meeting.

Mr. Ruidas: Joe? Lana`i wind farm – what is the EAC on that wind farm project?

Mr. Alueta: They're in an EA consulting. That means we're a commenting agency on the EA. So they've submitted like a draft, either a preliminary draft comments for EA or a full blown EA that we're commenting on, that the Department is reviewing.

Ms. Kaye: Can I add?

Mr. Ruidas: That would pass here?

Mr. Alueta: No, unless there's a trigger that requires. Unless the EA is being done in relationship to a permit that you have an oversight for. The only EA's that normally gets submitted to the Planning Commission because they're the authority would be SMA. And I doubt it's in the SMA.

Ms. Kaye: Part of it will be. But can I ask for some clarification? They've already filed a draft, an EIS notice, and I'm very confused. In fact the commenting period was up at the end of November. So I'm very confused why they'd be troubling you with an EA.

Mr. Alueta: EAC, just means EA comments. It's just an internal KIVA tracking system. We

had to assign it something where we're being asked to comment on it.

Ms. Kaye: So are you commenting on the same document that's been circulating around Lana`i?

Mr. Alueta: Yes. I'm pretty sure that it would be the exact same document.

Ms. Kaye: It's very big.

Mr. Alueta: Yeah, it just means –. EAC means that's it's an EA. Whether it's an EIS or an Environmental Assessment (EA) and the C means that we're a commenting agency. And all we're doing is providing comments and we're not somehow the lead agency or the accepting authority. In some cases, the Department, the Planning Department, itself is the accepting authority for the County or for the Planning Commission.

Ms. Kaye: Right, I got that, but I'm glad you clarified that. I always thought it was a two tiered process. You went for an EA and then if was found insufficient, then you had to do an EIS. And so I was confused because I know they've already acknowledged they have to do an EIS.

Mr. Alueta: Right, you can jump ahead and just do an EA. But like I said, that's just an internal code that says we're commenting on some type of EA document whether it's an EIS or an EA.

Ms. Kaye: Last little question – the first two have Castle & Cooke Resorts, and the third one has Castle & Cooke Homes. Is that a typo or are those two different legal entities applying for these projects?

Mr. Alueta: The way the application came in – you're talking about the Miki Basin – the Miki Basin is Castle & Cooke LLC, and it looks like the Wind Farm Project it was some how a different company called Castle & Cooke Homes Hawaii. I don't know

Ms. Kaye: Interesting.

Ms. Zigmond: Just to make a comment on the wind farm thing. In the preliminary notice, they had mentioned all the agencies that they were going to request comments from, and the Lana`i Planning Commission was on there. If they do or not is another story, but we were in there. I mean, it's just for comment.

Ms. Kaye: Any other questions on open projects?

Mr. Alueta: Do you want me to check on that to see it you –?

Ms. Zigmond: . . .*(Inaudible. Did not speak into a microphone.)* . . .

Mr. Alueta: But were you officially a commenting agency? Okay, let me go back and make sure this EAC, that it comes in, maybe it was addressed to you, but I highly – if it's addressed to the Planning Department, it's ours, we comment on it. But I'll double check to see if another document came in with a cover letter indicating that they wanted us to take it to you for them for comments. That is possible. That does happen, so I'll follow up with Clayton.

Ms. Zigmond: Thanks. There was a list about that long of agencies they were going to ask for comments supposedly.

3. Public hearing on the following application scheduled for the January 21, 2009 meeting:

CASTLE & COOKE RESORTS, LLC requesting land use changes for the Miki Basin Industrial Land Use Changes. (J. Prutch)

Ms. Kaye: The next item in Communication is a public hearing on an application which we have not seen. Requesting land use changes for the Miki Basin Land Use Changes. And I sent over an e-mail asking for clarification of whether we're looking at land use changes to previous land use changes or was that just a bad sentence?

Mr. Alueta: As you know from your Community Plan, Miki Basin has a certain acreages, and we did one for the generating plant, for MECo's generating plant, and then there's another section for the industrial area. I worked on, I think, both of them years ago, so it's been awhile. But I'm not sure if all acreages were accommodated in those entitlements at that time when they did the change in zoning to be consistent with the Community Plan. So if they did, it may be an amendment. But we'll follow up with you. I don't think it would be an expansion unless there's still land within the Community Plan designated area.

Ms. Kaye: So this is scheduled for public hearing next month.

Mr. Alueta: Correct. And it's not designated as to what it is.

Ms. Kaye: Exactly.

Mr. Alueta: Well it would be a change in zoning regardless of how it is. If it's an amendment to the existing one, it would be a change in zoning, and it would make reference to that.

4. Future Water Workshops

Ms. Kaye: Future water workshops. I'm not sure if anybody else has come up with any other applicants, but we can –

Ms. Zigmond: *. . .(Inaudible. Did not speak into the microphone.) . . .*

Ms. Kaye: We did. Joe, I'm not sure how we handle that, but we did talk last meeting about asking Kepa Maly, who's the Director of the Cultural Heritage Center here to make a presentation on water. He is very versed in historic water places and water names. I don't mean to make more work for you, but how can we easily invite him? Colleen was doing this before.

Mr. Alueta: After she left, I did all the contact to set up, but that was based on your list that you had given her. So my understanding, I believe tonight was the last one.

Ms. Kaye: Well it was, but there was always an opportunity to keep going. So how about we agree that I will send you Kepa's contact information and you can just shoot out that letter and he can schedule himself with you. Is that okay?

Mr. Alueta: Yes. If that's what you want, then just e-mail me and at this point in time I'll take care of it from there.

5. Scheduling of Public Hearing for Council Resolution concerning allowing for solar energy generating sources as a permitted use in the County Ag. District for the February meeting.

Ms. Kaye: Thank you so much. And last we have – well almost last – the public hearing for Council Resolution. I assume you're going to do this in February as well? This is the County cleaning up after itself and making formal what they informally pulled off with the solar farm?

Mr. Alueta: I'm trying to write notes on something else. What is the question again now? Scheduling a public hearing?

Ms. Kaye: It was just a clarification. I'm assuming that #5, under Communication Item, is scheduling for February, the Resolution that's in our packet today, that formally removes any kind of Special Use Permit procedure for solar activities on Ag land as a matter of County zoning. It's in here.

Mr. Alueta: Yes. The Resolution is basically mimicking the State Act 31 or Act 36 – that came down – which allowed for solar plants within agricultural lands, specially to E and D, so that's very important. And it does not apply to other lands. And this is from the County side, so as you know, the one that was granted approval here, it was based on the fact that it was specifically a minor utility. And so this would basically eliminate any type of – it would allow any type of solar array system within substandard agricultural lands regardless of size. So if they wanted to do a larger facility somewhere, they could do one without any County permits other than the standard electrical, but it would remove the Land Use issues.

Ms. Kaye: Okay, so that's one for February as well. Anyone want to add anything for the January 21st meeting? Anyone knows if they're not going to be here? Everyone is planning on attending? Happy Birthday! No? Okay, good work everybody. Thank you very much. We'll see you next month. Have a good holiday!

6. Agenda items for the January 21, 2009 meeting.

F. NEXT REGULAR MEETING DATE: January 21, 2009

G. ADJOURNMENT

There being no further discussion brought forward to the Commission, the meeting was adjourned at approximately 10:00 p.m.

Respectfully transmitted by,

LEILANI A. RAMORAN-QUEMADO
Secretary to Boards and Commissions I

RECORD OF ATTENDANCE

PRESENT:

Sally Kaye, Chair
Stanley Ruidas, Vice-Chair
Beverly Zigmond
Alberta de Jetley
Matthew Mano
Gerry Rabaino
Leticia Castillo
Darlene Endrina

EXCUSED:

Dwight Gamulo

OTHERS:

Joseph Alueta, Administrative Planning Officer
Danny Dias, Staff Planner
James Giroux, Deputy, Corporation Counsel